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Flora of Dominica, Part 2: Dicotyledoneae

Dan H. Nicolson

with Robert A. DeFilipps, Alice C. Nicolson,
and Others

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ABSTRACT

Nicolson, Dan H., with Robert A. DeFilipps, Alice C. Nicolson, and others. Flora of Dominica, Part 2: Dicotyledoneae. *Smithsonian Contributions to Botany*, number 77, 274 pages, 1991.—This completes the coverage of the vascular plants of Dominica. The introduction recapitulates and updates botanical information of Part 1 (Hodge, 1954). The main text begins with an artificial (identification) key to dicotyledonous families. Taxa are arranged alphabetically within the hierarchy, families, then genera within families and species within genera. Keys are provided when more than one taxon is involved. Each species has a restricted synonymy, vernacular name(s) (if known), short description, general distribution, local habitat with localities and collections. Notes are sometimes appended involving biology, nomenclature, usage, etc. The synonymy also references critical works concerning the species.

Part 1 accounted for 32 families, 190 genera, and 382 species. Part 2 accounts for 123 families, 482 genera, and 844 species. In other words, Dominica has a vascular flora of about 155 families, 672 genera, and 1226 species.

There is one novelty: a new combination, *Ilex macfadyenii* subsp. *ovata* (Grisebach) Nicolson.

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Flora of Dominica, Part 2: Dicotyledoneae

Dan H. Nicolson

Introduction

As explained in "Acknowledgments," I have summarized information from Dr. Hodge's preface to Part 1 of the *Flora of Dominica* (1954). The summary covers environmental factors (physiography, soils, climate), vegetation (seven plant communities, including a key), and additions to his list of plant collectors.

PHYSIOGRAPHY

Dominica, lying between the French islands of Guadeloupe and Martinique, is about 28 miles (45 km) long and 15 (24 km) miles wide (304 sq. miles or 1088 km^2), centered at 15°25'N, 61°20'W. It is very rugged with a central volcanic axis with several subdivisions. In the north, standing alone, is an old volcanic peak, Morne au Diable (2826 ft or 861 m), with 1000 ft (305 m) cliffs to the north. Farther south is the highest mountain, Morne Diablotins (4700 ft or 1433 m) with associated peaks. The peak was named for the diablotins, Black-capped Petrels (*Pterodroma hasitata*), that used to nest in cliffs near the summit (cf. Wingate, 1964), now only known from Hispaniola. Morne Diablotins is relatively easy to climb (from Syndicate Estate) but the associated mountains are inaccessible. These taper to a central dissected plateau drained to the west by the Layou and, to the east, by the Pegoua and Castle Bruce rivers.

The central area is dominated by the steep Morne Trois Pitons (4600 ft or 1402 m). To the south lies Morne Micotrin (or Macaque) with the associated lakes, Boeri and Freshwater. A road goes from Roseau up the shoulder of Micotrin to Freshwater Lake, becoming a trail that descends to Rosalie Bay on the east coast. A trail leads from Laudat to the Valley of Desolation with its famous Boiling Lake. Farther south is the inaccessible Morne Watt (4075 ft or 1242 m), accessible Morne Anglais (3683 ft or 1223 m, also called Couliaboune) and Morne Plat Pays (2636 ft or 803 m). At the southern end are high sea-cliffs.

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SOILS

A Red Earth clay soil covers much of the wet interior. It is highly leached, acid, poorly aerated and water-logged (with tree roots mainly confined to a dense surface mat). It is, agriculturally, highly infertile.

The Yellow and Brown Earths are commonest and most important for agriculture. The former is without stones and the latter a stony clay, but both are young and fertile. They are found on the slopes of Diablotins, the adjoining northern part of the Layou Valley, and south of a line drawn from Rosalie to Roseau.

The Shoal Soils of the dry west coast have poor agricultural qualities.

In some areas, such as north of Trois Pitons, there is a light, friable, stoneless clay underlaid by a cemented "hardpan" that results in very poor drainage and poor agricultural characteristics.

CLIMATE

In general, Dominica has a drier season from mid-January to mid-June and wetter season from mid-June to mid-January. As the northeast trade winds move over the central mountain axis, rainfall increases, with the result that the eastern (Atlantic or windward) side gets more rain than the western (Caribbean or leeward) side, the latter being in the "rain shadow."

The wetter season tends to have an autumnal "break" (mid-September to mid-November), characterized by clear days with heavy showers at night. This "break" tends to be a windless, doldrum-type of weather.

Rains are nearly always heavy, often short with intermittent sunshine. At times the rains are torrential and rivers rise to amazing and destructive heights. Dominicans comment that "the rivers have come down."

Hurricanes are "in season" from July to September; they originate east of Dominica and usually miss the island or lack full strength. Nonetheless, Hurricane David of 1979 was the most destructive to ever hit Dominica. According to White

(1979), David's winds reached 240 km/hr (150 miles/hr), damaged 80% of the forests, destroyed 100% of the banana crop, felled or defoliated 95% of the coconut trees, and left 70% of the population homeless.

VEGETATION

The following key (from Hodge) is basically physiognomic and defines seven communities (woodlands, forests). It should be recognized that these communities intergrade and that the key defines well-developed communities. Two communities keyed out by Hodge have been dropped, Semi-evergreen Forests and Lower Montane Forests. The former is transitional between Deciduous Forests and Evergreen Forests. The latter is transitional between Evergreen Forests and Montane Forests.

It should be noted that the key assumes that humans have not made changes. In many cases, human influence creates different communities of secondary or weedy nature that are, in effect, modifications of the otherwise primary, undisturbed communities that are keyed out.

Key to Major Plant Communities on Dominica

1. Tree growth <10 meters high.
   2. Trees microphyllous, often thorny . . . . 3. ***Dry Scrub***
   2. Trees normal-leaved, rarely thorny.
      3. Windswept seashore with few epiphytes . . . . . 2. ***Littoral***
      3. Windswept mountain summits and ridges with many epiphytes . . . . . 7. ***Elfin***
1. Tree growth >10 meters high.
   4. Deciduous trees forming >25% of top stratum . . . . . 4. ***Deciduous***
   4. Forest evergreen (<25% of top stratum deciduous).
      5. Inundated with fresh water . . . . . 1. ***Swamp***
      5. Non-inundated forest with continuous canopy >20 m high.
         6. Trees in 3–4 strata; dominants >40 m; leaves mostly compound . . . . . 5. ***Rainforest***
         6. Trees in 2 strata; dominants <40 m; leaves mostly simple . . . . . 6. ***Montane Rainforest***

The following discussion proceeds from the lower to higher elevations.

1. *Swamp Forest:* This community is very localized because of the lack of extensive low swampland. In its climax form it is dominated by *Pterocarpus officinalis*, as along the Indian River (just south of Portsmouth) and near the beach along the north coast.

Secondary (disturbed) swamp forests, such as that of the Cabrits Swamp, are dominated by *Annona glabra* and *Chrysobalanus icaco* and grade into sedges, a fern (*Acrostichum danaeifolium*), and, sometimes, an erect, thorny aroid (*Montrichardia arborescens*). A few mangrove plants have recently been found in the Cabrits Swamp, the first record for Dominica.

2. *Littoral Woodland:* Along the windward (Atlantic) coast is a narrow belt of shrubby woodland that is constantly swept by winds and salt-spray "training" branches down-wind. The dominants are *Coccoloba uvifera* (raisin-bord-de-mer), *Chrysobalanus icaco* (z'icaque), and *Erithalis fruticosa* (bois chandelle).

Elsewhere on the island, beachs have such pioneers as *Ipomoea pes-caprae* (beach morning-glory), *Canavalia rosea* (horse-bean), and *Vigna luteola*, not to mention the ubiquitous *Chrysobalanus icaco*, *Coccoloba uvifera*, and *Thespesia populnea*. In a few locations, such as Scotts Head in the southwest corner, *Hippomane mancinella* (manchineel) occurs. It has a virulent, milky sap that causes severe reactions on contact.

3. *Dry Scrub Woodland:* Between the seashore and the inland rainforests along the leeward (Caribbean) coast, there is a low tropical woodland characterized by microphyllous, deciduous, often thorny species. This is well developed on the Cabrits, Morne au Diable, Scotts Head, and Pointe Ronde. This woodland is in leaf from June to January and "naked" from March, the beginning of the flowering season. Flowering ends by May and new vegetative growth begins.

No other area has so many showy-flowered species, including such legumes as yellow *Haematoxylum campechianum* (logwood), red *Sabinea carinalis* (bois carib, endemic to Dominica), pink *Calliandra tergemina*, and purple (*Lonchocarpus benthamianus*). One of the notable trees is *Bursera simaruba* (gommier rouge) with reddish exfoliating bark. A characteristic vine is yellow *Stigmaphyllum puberum*, also red-and black-seeded *Abrus precatorius* (crab's eyes), and prickly *Mimosa casta*. True epiphytes are restricted to *Tillandsia*.

Much of the Dry Scrub Woodland has gone to crops and grazing, resulting in a predominance of weedy grasses (*Panicum*, *Paspalum*, and others), sedges, and legumes (*Crotalaria*, *Desmodium*, etc.). Other prominent genera are *Lantana*, *Euphorbia*, *Phyllanthus*, *Sida*, etc.

The Grand Savanne (Grande Savane), midway on west coast above Salisbury, is probably the island's most recent lava flow. It is a 1 square mile (2.59 km^2) expanse of grasslands and open scrub. Fires and shallow, extremely porous soil seem to control its open aspect. The sea-cliffs have a number of interesting plants, including Cactaceae, *Agave*, brilliant red-flowered *Pitcairnia gracilis*, and even the rare and primitive fern ally, *Psilotum nudum*.

4. *Deciduous Forest:* This community is transitional between the lower Dry Scrub and the higher Evergreen Rainforest. Hodge notes that some of the "index" species, such as the palm *Rhyticocos amara* and large-leaved *Coccoloba venosa*, also occur on the windward (Atlantic) side, unlike the species of the true Dry Scrub. Hodge also refers to this as a

secondary forest, noting it has been reduced by man and is not a climax community. Hodge notes diverse components as *Pithecellobium jupunba* (bois cicerou), *Swartzia simplex* (z'oranger), *Andira inermis* (angelin), *Cedrela odorata* (acajou), *Myrcia splendens* ('ti feuille), *Daphnopsis caribaea* (bois piment), *Byrsonima spicata* (bois tan), *Calophyllum antillanum* (galba), *Buchenavia tetraphylla* (z'olivier), and a fern, *Blechnum occidentale*, here a dominant.

Hodge's key separates a Semi-Evergreen Seasonal Forest from the true Deciduous Forest, noting that the former has trees in three strata with less than 1/3 of the top stratum being deciduous. The latter has trees in only two strata with more than 1/3 of the top stratum being deciduous.

5. *Rainforest Proper:* This is the most luxuriant and extensive of all forests on Dominica, lying roughly at 1000–2500 ft (305–762 m). The luxuriance is the result of abundant rain averaging from 175 inches or 440 cm (Sylvania) to 300 inches or 760 cm (Laudat). Much of the soil is a heavy red earth underlaid by an impervious hardpan, reflected by the shallow root systems of the trees. The forest floor is quite open and easy to traverse, except for the exposed root systems of the big trees. The canopy is usually closed overhead by the highest trees, ~100 ft (30 m). Beneath them is a layer of medium trees 40–80 ft (12–24 m) tall. A lower stratum of small trees 15–40 ft tall comes next. The bottom stratum is of herbs and shrubs, often dominated by suppressed (low light conditions) seedlings of the trees.

Among the common canopy trees are *Dacryodes excelsa* (bois gommier), *Sloanea caribaea* (chataignier 'ti feuille), *Sloanea dentata* (chataignier grande feuille), *Talauma dodecapetala* (bois pin), *Ormosia monosperma* (caconier), *Pouteria semecarpifolia* (contrevent), *Chimarrhis cymosa* (bois rivière), and *Dussia martinicensis* (pommier). The forest is sometimes called a *Sloanea-Dacryodes* association after its most conspicuous dominants.

Among the trees of second stratum are *Tapura antillana* (bois côte), *Amanoa caribaea* (carapite), *Sterculia caribaea* (mahot cochon), *Licania ternatensis* (bois diable), *Symplocos martinicensis* (graines bleues), *Richeria grandis* (bois bandé), *Guatteria caribaea* (bois violin), and *Inga ingoides* (pois doux marron). The bois diable, so called because of its hard wood, is much sought for making the finest charcoal.

Among the trees of the third stratum are *Chrysophyllum argenteum* (bouis), *Faramea occidentalis* (café marron), *Ixora ferrea* (bois pichette), *Marila racemosa* (cachiman falaise), *Heisteria coccinea* (bois perdrix), and *Cordia laevigata* (coco poule).

The shrubs of the lowest stratum include common and showy *Palicourea crocea, Psychotria uliginosa, Psychotria urbaniana* (including *Cephaelis swartzii*), and *Stylogyne canaliculata.* Ferns abound (including a spiny tree-fern, *Cyathea muricata*, often supporting colonies of the filmy fern, *Trichomanes polypodioides*) and terrestrial orchids are to be found.

There are many lianas, often difficult to identify because their leaves and flowers are high in the canopy. Among these are *Marcgravia, Hillia parasitica,* and *Blakea pulverulenta.* Epiphytes are abundant, also often out-of-reach, if not out-of-sight. One interesting one is *Clusia major* (kaklin), which begins as a epiphyte and sends down strong roots that eventually can strangle the host.

In some poorly drained areas at higher elevations one finds stands of stilt-rooted trees known as mang, *Tovomita plumieri* (mang rouge) and *Symphonia globulifera* (mang blanc).

When the rainforest canopy is opened by tree falls many species of forest edges and river banks move in. Among these are cré-cré (many species of melastomes, including *Miconia* and *Conostegia*), *Inga laurina* (pois doux), *Inga ingoides* (pois doux marron), *Cecropia peltata* (bois canon), *Simarouba amara* (bois blanc), and *Chimarrhis cymosa* (bois rivière).

The commonest shrubs include white-spiked *Gonzalagunia hirsuta* (bois cabrit), *Palicourea crocea* (with yellow flowers on showy red pedicels), and magenta-flowered *Odontonema nitidum* (bois crapaud), *Piper* (doctor bush), and *Psidium guava* (guava).

Weedy herbs include *Ageratum conyzoides, Emilia sonchifolia, Bidens, Desmodium, Stachytarpheta,* and *Alternanthera.* Razor-grass (*Scleria secans*) can make impenetrable thickets. On bare slopes are several ferns, scrambling *Dicranopteris bifida, Cyathea arborea* (a weedy tree-fern), *Lycopodium cernuum* (club-moss), and the gold-fern (*Pityrogramma calomelanos*).

6. *Montane Rainforest:* This community forms a transition from the midland Rainforest proper and the Elfin Woodland of windswept summits. It occurs on or near exposed mountain ridges or summits of lesser peaks. One of the characteristic species is *Cyrilla racemiflora* (bois rouge). Tree trunks are mossy but otherwise free of epiphytes. The dominant trees are *Podocarpus coriaceus* (raisinier montagne) and *Richeria grandis* (bois bandé). Prominent species cited by Hodge are *Byrsonima trinitensis* (mauricif), *Tovomita plumieri* (mang rouge), and *Ilex macfadyenii* ('ti citron). A fiercely spiny fern, *Cyathea imrayana,* is a hazard to the stumbling botanist reaching for support.

Hodge's key differentiates the Lower Montane Rainforest, with dominant trees ~30 m tall, from the true Montane Forest, with dominant trees ~20 m tall.

7. *Elfin Woodland:* This is a low, impenetrable thicket-like forest in which the leaves, branches, and tree trunks are covered with epiphyllous hepatics and dripping mats of mosses, sometimes called a Cloud Forest or Mossy Forest. It occurs on the summits and upper slopes of the highest mountains and is well-developed on the summits of Diablotins and Trois Pitons. On slopes one must climb through the trees and on the summits the woodland is virtually impassable without a path unless one can walk on upper branches.

The Elfin Woodland probably has more species that are endemic or have extremely restricted distributions than any

other community on Dominica. The dominant tree is *Clusia mangle* (kaklin) which, unlike its strangler relation (*C. major*), is free-living. Trees include palms such as *Prestoea montana* (including *Euterpe globosa* sensu auctt.) and *Geonoma dussiana* (including *G. hodgeorum*) as well as melastomes (*Charianthus* and *Miconia*), Araliaceae (*Schefflera attenuata* and *Oreopanax dussii*, the latter a new record), *Weinmannia pinnata*, and *Ilex macfadyenii* subsp. *ovata* ('ti citron).

Terrestrial herbs are *Psychotria aubletiana* (including *Cephaelis axillaris*) with axillary clusters of white flowers and blue fruits, *Viola stipularis*, *Relbunium guadalupense*, and *Lobelia stricta*. Tiny *Tibouchina ornata*, with showy purple flowers, occurs here.

There are several kinds of epiphytes. Among the woody kinds are *Symphysia racemosa* and *Psychotria guadalupensis*. Bromeliads are represented by the giant *Glomeropitcairnia penduliflora* and the commonest is *Guzmania plumieri*. Many epiphytic ferns are to be found.

Additional Plant Collectors on Dominica

Hodge (1954:44–50) reviewed the history of botanical exploration of Dominica up to Richard Howard's trip in 1950. The following list adds collectors known to me who were not mentioned by Hodge. The location of collections is noted so far as known. The abbreviation "(dupl.)," associated with some Bredin-Archbold-Smithsonian collectors, denotes substantial numbers of duplicates at US still being distributed.

Hodge mentions that Ramage (1888–1889) appears to be the first to ascend Dominica's highest peak, Morne Diablotins. It is possible that the first was John Imray (on Dominica from 1837 until his death in 1880), who collected *Relbunium guadalupense* (as *Galium hypocarpium*). No locality was given by Grisebach (1861:361) but the summit of Morne Diablotins is the only confirmed locality on Dominica.

In the following list, collecting dates are approximate and an asterisk (*) denotes a resident of Dominica.

Gregg, John	1777	K (*Eugenia gregii*)
Finlay	May 1792	K (*Polygonum punctatum*)
Dudley, William Russell	Mar 1890	US (few specimens)
Elliott, W.R.	1891–1892	BM, TUR (lichens)
Elliott, W.R.	1896	BM, TUR (lichens)
Evans, Alexander	1926	US (lichens)
Stehlé, Henri & M.	mid Apr 1946	few at US (Carib plants)
*Narodny, Leo	ca. 1949	few at US
Vélez, Ismail	mid Nov 1949	very few at US
*Dupigny, Peter	Jan 1950	some at US (from A)
Smith, Albert C.	late Mar 1956	US
Proctor, George R.	early Apr 1958	some at US
Solheim, W.G.	15 Jun 1958	US (*Wedelia trilobata*)
Cowan, Richard S.	mid Apr 1959	US
Cowan, Richard S.	1 week 1962	US, if collections made
Imschaug, Henry	1 month 1963	MSC (lichens)
Kimber, Clarissa	1964 or? 1963	A
*Shillingford, Clayton A.	1963–1966	UCWI (*Connarus grandiflorus*)
Robinson, Harold E.	20 Jan–20 Apr 1964	US (bryophytes)
Ernst, Wallace R.	02 Apr–19 Jun 1964	US (dupl.)
Wilbur, Robert L.	11 Jul–14 Aug 1964	A, DUKE, US (dupl.)
Dunn, E. Lloyd	11 Jul–14 Aug 1964	Asst. to RLWilbur
Hespenheide, Henry A.	11 Jul–14 Aug 1964	Asst. to RLWilbur
Wiseman, D. Reid	11 Jul–15 Aug 1964	Asst. to RLWilbur
Nicolson, Dan H.	21 Oct–14 Dec 1964	US (dupl.)
Webster, Grady L.	28 May–28 Jun 1965	US (dupl.)
Ernst, Wallace R.	22 Jun–30 Aug 1965	US (dupl.)
Fisher, Jack B.	22 Jun–27 Jul 1965	Asst. to WREmst
Ornduff, Robert	05 Jul–28 Jul 1965	CA
Lellinger, David B.	09 Sep–29 Dec 1965	US (esp. ferns)
Chambers, Kenton L.	03 Jan–05 Mar 1966	US (dupl.)
Farr, Marie L.	03 Jan–01 Apr 1966	Fungi
Schuster, Rudolph M.	07 Jan–01 Feb 1966	Liverworts
Stern, William L.	02 Jul–05 Aug 1966	US (dupl.)
Wasshausen, Dieter C.	02 Jul–05 Aug 1966	with WLStern
Rhyne, Charles F.	13 Feb–16 Mar 1967	Algae, with WRTaylor
Taylor, William R.	15 Feb–03 Mar 1967	Algae
Fosberg, F. Raymond	ca. 11 Mar 1967	US
Wasshausen, Dieter C.	19 May–24 Jun 1967	US
Ayensu, Edward S.	22 May–19 Jun 1967	with DCWasshausen
Krauss, N.L.H.	early Nov 1967	few at US
King, Robert M.	15 Dec–29 Dec 1967	US
Ernst, Wallace R.	10 May–20 May 1968	with RWRead
Read, Robert W.	10 May–20 May 1968	US
DeFilipps, Robert A.	16 Jan–05 Feb 1969	US (Morden Exped.)
Hale, Mason E., Jr.	16 Jan–05 Feb 1969	US (lichens) Morden Exped.
Nicolson, Dan H.	16 Jan–05 Feb 1969	US (Morden Exped.)
Burch, Derek	late May–Jun 1969	few at US
Gillis, William	late May–Jun 1969	few at US
Skog, Laurence E.	late Jun 1970	US
Long, R.W.	late Sep 1971	with KJNorstog
Norstog, K.J.	late Sep 1971	few at US
Read, Robert W.	11 Jun–15 Jun 1974	US
Nicolson, Dan H.	15 May–14 Jun 1977	US (Earthwatch)
Krauss, N.L.H.	late Jul 1979	few at US
Whitefoord, Caroline	28 Aug–19 Oct 1983	BM (some at A, MO, US)
Whitefoord, Caroline	17 Sep–07 Nov 1984	BM (some at A, MO, US)
Whitefoord, Caroline	11 Jan–16 Feb 1986	BM (some at A, MO, US)
Whitefoord, Caroline	18 Mar–18 Apr 1987	BM (some at A, MO, US)
Whitefoord, Caroline	25 Mar–23 Apr 1988	BM (some at US)
Hill, Steven R.	20 Mar–27 Mar 1990	CLEMS

Old Locality Names

La Soie: An early name for a town on northeast coast of Dominica, now known as Wesley. Eggers' handwritten labels can be read as "La Joie" and I spent some time vainly looking for this. In one case, *Ruyschia*, I suspect that Wesley is not involved since the label says "ad 2000'." Wesley is coastal and you'd have to walk halfway across the island to get to 2000 ft (607 m). The collection has no number and Eggers collected *Ruyschia* from Laudat (no. 787) and Boiling Lake (no. 1098). Perhaps the numberless collection was mislabeled as being from La Soie. Other La Soie collections are no. 729 (*Gymnanathes hypoleuca*), 749 (*Miconia tetrandra*), and 1079 (*Miconia striata*).

Sugar Loaf Estate: An estate just across the Indian River from Portsmouth. Eggers also collected here, e.g., no. 723 (*Blepharocalyx eggersii*). Other collections are 717 (*Connarus grandiflorus*), 753 (*Licania leucosepala*), and 1084 (*Byrsonima lucida*).

Endemism in Dominica

The flora of Dominica is most similar to that of the nearby French islands, Guadeloupe and Martinique. Several factors affect supposed endemics of Dominica and/or the French islands, new records, changes in taxonomic concepts, and errors of identification or locality.

New records of species thought endemic to Dominica have recently been found on the French islands, and species thought endemic to the French islands have been found on Dominica. The recent publication of Fournet (1978) enables one to check whether or not a given species, supposedly endemic to Dominica, actually is now known on the French islands. Examples: *Gonocalyx smilacifolius* (Ericaceae), thought to be endemic to Dominica, has been collected on Guadeloupe. *Oreopanax dussii* (Araliaceae), previously thought to be only on the peaks of the French islands, has now been collected on Dominica.

Changing species concepts also affect endemism. As more specimens become available it becomes possible to recognize that something that seemed quite distinct, perhaps only known from one collection in a rather extreme aspect, is only part of a continuous range of variation observable when many collections are studied. *Piper dominicanum* cannot be maintained as distinct from the variable and wide-ranging species, *Piper aequale*.

An example of an error in identification is provided by the supposed endemic of Dominica *Morisonia imrayi* (Capparaceae). Its type is a misidentified specimen of *Styrax glaber* (Styracaceae).

Errors in locality information arise from three sources: (1) confusing Dominica with the Dominican Republic, (2) assumption of occurrence in Dominica from published generalized distribution statements, and (3) mislabeling of collections from the French Islands as from Trinidad.

Confusion between Dominica and the Dominican Republic (on Hispaniola) is occasionally found in monographs and revisions, i.e., citing an Imray specimen from the Dominican Republic, when it actually was from Dominica. The reverse rarely occurs, citing Dominican Republic material as if it were from Dominica.

Some questionable records for species on Dominica have been traced to Vélez' compilation (1957), "Herbaceous Angiosperms of the Lesser Antilles." Most of these questionable records proved to be based on generalized distribution statements in works like Britton and Wilson's "Flora of Porto Rico" (1923–1925) such as "Anguilla to Barbados." In such cases, Vélez inserted a B (for Britton) in the column for Dominica. If a confirming specimen was not located, an arbitrary decision was made for handling the species involved. It was included if its occurrence on Dominica seemed reasonably probable or it was listed as excluded if its occurrence seemed improbable.

According to C. Denis Adams (in litt.), there are some sixty records of Trinidad plants that are known only from Sieber "Fl. Trinitatis" specimens and have not been recollected on that island. Franz Wilhelm Sieber financed collecting trips of Franz Kohaut to Martinique (1819–1821) and Franz Wrbna to Trinidad (1822) and distributed the specimens, labeling the former as Fl. Martinicensis and the latter as Fl. Trinitensis under his own name and numbers. It is supposed that the sixty anomalous records were actually collected by Kohaut and were inadvertently mislabeled as "Fl. Trinitatis," possibly at least partially involving a confusion with the town of La Trinité on Martinique. Three of these are listed in the following list as restricted to Dominica and the French Islands, *Rauvolfia biauriculata*, *Critonia macropoda*, and *Marcgravia trinitatis*.

The following list was prepared from information available to me for those interested in endemism involving Dominica and the French Islands. An asterisk (*) denotes a species possibly rare and endangered; species names in upper case are believed to be endemics of Dominica; species known to occur beyond Dominica and the French Islands are not normally included, unless they seem to be rare. There are a dozen or two species that also reach Montserrat, St. Lucia, and/or St. Vincent.

Amanoa caribaea (Euphorbiaceae): carapite, Dominica and Guadeloupe.
Aniba ramageana (Lauraceae): Dominica and Martinique.
Begonia obliqua (Begoniaceae): common on Guadeloupe to Martinique.
BESLERIA PETIOLARIS (Gesneriaceae): only on Dominica, common.
Charianthus corymbosus (Melastomataceae): Guadeloupe to Martinique, possibly St. Lucia.
CHARIANTHUS PURPUREUS var. *RUGOSUS* (Melastomataceae): only on Dominica.
**Chionanthus dussii* (Oleaceae): supposedly endemic to Martinique but known from at least one collection from Dominica.
CHROMOLAENA IMPETIOLARIS (Asteraceae): only on Dominica, at higher elevations.
CHROMOLAENA MACRODON (Asteraceae): only on Dominica but possibly also on St. Kitts.
Chromoloena trigonocarpa (Asteraceae): Guadeloupe to Martinique but possibly elsewhere in the Lesser Antilles.
Clidemia guadalupensis (Melastomataceae): Guadeloupe and Dominica.
Clusia mangle (Clusiaceae): kaklin, a dominant in peak forests from Guadeloupe to Martinique.
**Critonia macropoda* (Asteraceae): once recently collected on Dominica, possibly earlier (by Eggers). Also known from NE Martinique. The attribution of the type to Trinidad is believed to be an error.
Duranta stenostachya (Verbenaceae): Martinique and Dominica. Fournet said it was originally from Brazil.
EUGENIA HODGEI (Myrtaceae): only on Dominica but a dominant in the Morne Gay area.
Eugenia octopleura (Myrtaceae): Guadeloupe to Martinique, possibly also in Central America.
Exostema sanctae-luciae (Rubiaceae): Dominica to St. Vincent.
**Freziera cordata* (Theaceae): mountain tops from Guadeloupe to Martinique.
Freziera undulata var. *elegans* (Theaceae): Guadeloupe to Martinique.

Gonocalyx smilacifolius (Ericaceae): supposedly endemic to Dominica but now known from Guadeloupe.

**Gyrotaenia crassifolia* (Urticaceae): Guadeloupe to Martinique but rare.

Heisteria coccinea (Olacaceae): often collected from Guadeloupe to Martinique.

**Helosia cayennensis* (Balanophoraceae): distributed from Cuba through northern South America but everywhere rare; a colorless root parasite collected only twice from Dominica.

**INGA DOMINICENSIS* (Fabaceae): only on wet uplands of Dominica, apparently rare.

**Irlbachia frigida* (Gentianaceae): showy herb with large yellow flowers in Dominica on montane cliffs but rare. Also known from Guadeloupe and St. Vincent.

Lobelia kraussii (Lobeliaceae): a common species on Dominica, believed to occur on Martinique but not mentioned by Fournet.

Marcgravia trinitatis (Marcgraviaceae): reported by Fournet from Guadeloupe and Martinique and collected twice on Dominica. The attribution of the type to Trinidad is believed an error.

**Marsdenia dussii* (Asclepiadaceae): known only from the original collection from Martinique and, now, from one Dominican collection.

Miconia coriacea (Melastomataceae): also on Guadeloupe.

MICONIA MORNICOLA (Melastomataceae): a small-leaved species on peaks of Dominica.

MICONIA ERNSTII (Melastomataceae): a cré-cré only on Dominica.

Mikania ovalis (Asteraceae): Guadeloupe to Martinique on summits.

Myrcia ramageana (Myrtaceae): Dominica and St. Lucia.

**Ocotea imrayana* (Lauraceae): Dominica and Martinique.

**Oreopanax dussii* (Araliaceae): known only from high peaks of the French islands and, now, Dominica.

Ouratea longifolia (Ochnaceae): endemic of Guadeloupe and Dominica, once found on Martinique but recollection efforts unsuccessful.

Passiflora stenosepala (Passifloraceae): known only from Dominica and St. Lucia but perhaps not different from *P. andersonii*.

**PHYLLANTHUS MEGAPODUS* (Euphorbiaceae): apparently rare on Dominica. Reported from Martinique but Webster (1958:171) felt this needed confirmation.

Pilea forsythiana (Urticaceae): Guadeloupe to Martinique but perhaps not distinct from *P. parietaria*.

Piper dussii (Piperaceae): Guadeloupe to Martinique but perhaps not different from *Piper hispidum* Swartz.

Pisonia suborbiculata (Nyctaginaceae): supposedly endemic to the French islands but recently collected on the Grand Savanne of Dominica.

**Prunus pleuradenia* (Rosaceae): Lesser Antilles, only once collected on Dominica.

Psittacanthus martinicensis (Loranthaceae): according to my notes, Guadeloupe to Martinique. Fournet credited it to the Lesser Antilles.

Rauvolfia biauriculata (Apocynaceae): frequent in Dominica but otherwise only known from Guadeloupe. Attribution of the type to Trinidad is believed an error.

Ruyschia clusiifolia (Marcgraviaceae): Guadeloupe to Martinique. It is common but, being a high climber in tree tops, it is rarely collected.

**SABINEA CARINALIS* (Fabaceae): a showy species of the dry west coast, endemic to Dominica and worth cultivating for its scarlet flowers.

**Schlegelia axillaris* (Bignoniaceae): collected twice on Dominica but known from Guadeloupe and Jamaica where it is also rare.

Senecio lucidus (Asteraceae): higher elevations from Guadeloupe to Martinique, common around Freshwater Lake.

Symplocos guadaloupensis (Symplocaceae): previously known only from Guadeloupe but collected several times on the top of Morne Diablotins in Dominica.

Tournefortia caribaea (Boraginaceae): Guadeloupe to Martinique but sometimes included in variable *T. volubilis*.

Verbesina gigantea (Asteraceae): Guadeloupe to Martinique.

Verbesina howardiana (Asteraceae): high elevations of Dominica.

**Voyria aphylla* (Gentianaceae): a small, straw-colored saprophyte, widespread in neotropics but everywhere rare.

Information on endemic monocots and ferns of Dominica can be gleaned from the first three volumes of Howard's *Flora of the Lesser Antilles* (1974–1989; vol. 1 on orchids, vol. 2 on ferns and fern allies, vol. 3 on monocots).

Information about endemics of Dominica in lower plants (algae, fungi, mosses, lichens, liverworts, hornworts) is not easy to establish. Bruce E. Webber's 1973 thesis "Dominica National Park" has a list of "Plants Endemic to Dominica" (p. 57, table 3). The bulk of the lower plants listed are new species of lichens published by Hale (1974) and Wirth and Hale (1978).

Comments on the Treatment

The basic format for handling taxa approximates that used by Hodge (1954) but differs in certain points; e.g., families, genera, and species are not assigned a numerical sequence but are in alphabetic sequence and short descriptions of species are added.

Introduced genera are not keyed out but appear in an alphabetic discussion at the beginning of each family (introduced species at the beginning of the genus) unless it appears that they are naturalizing and can be treated as if they are native. Some commonly cultivated plants may have been overlooked, simply because I have seen no herbarium specimens.

Citation of places of publication in synonymies is given in "short-form" (author, date, page), referring to Literature Cited. This replaces the usual format used in botanical synonymies, a "long-form" citation (author, abbreviated citation of place of publication, and date), often unsupported by Literature Cited. In cases that the same author published multivolume works with overlapping years, such as done by both Jacquin and Vahl, an abbreviated title is added. Vahl's *Eclogae* appeared from 1797 to 1807, his *Icones* from 1798 to 1799, and his *Enumeratio* from 1804 to 1805. Any Vahl reference cited here between 1797 and 1807 could be in either two or three of these works and for them an abbreviation is added. This makes them look like a "long-form" reference.

Synonyms cited are those that have been applied to Dominican specimens or bear on the nomenclature of accepted names and those that previously have been applied to Dominican specimens. In short, the synonymies are not complete but bear on names applied to material from Dominica.

Most citations in synonymy are only to the place of original publication but in some cases an additional reference is given. An additional citation usually involves a significant discussion of the taxon involved or a publication citing Dominican material.

Notes following a species discussion are frequently given. Most involve taxonomic or nomenclatural problems, with or without reaching a conclusion.

Acknowledgments

Dr. Walter H. Hodge published Part I of the *Flora of Dominica, B.WI.* (1954), covering the Pteridophyta (ferns and

fern allies), Gymnospermae, and Monocotyledoneae. I have taken the liberty of summarizing his extensive (50 pages) prefatory comments in the preceding sections of the Introduction.

Particular thanks are due to Bruce Bredin and John Archbold who, in 1964, established the Bredin-Archbold-Smithsonian Biological Survey of Dominica that financed about 60 scientists (including assistants) to spend up to three months each working on their specialties. George Steyskal (USDA at the Smithsonian) is preparing a summary of results.

I am grateful to the Bredin-Archbold-Smithsonian Biological Survey of Dominica for permitting me to spend three months on Dominica at the end of 1964. In early 1969 Mrs. Irene Morden, through the Morden-Smithsonian Expedition to Dominica, enabled Robert DeFilipps, Mason Hale (lichens), and me to spend a month on Dominica. I am also grateful to the Earthwatch program that gave me another month, particularly in the Syndicate-Morne Diablotins area, on Dominica in connection with study of parrots by Holly and Thomas Nichols.

I would like to thank Mr. Christopher Maximea, Chief Forester of Dominica. He took a personal interest and, on repeated occasions, arranged for guides. In appreciation for the unfailing courtesy and hospitality I dedicate this work to the people of Dominica.

One of the goals of the Bredin-Archbold-Smithsonian Biological Survey of Dominica was to complete Part 2 of the Flora of Dominica, covering the rest of the higher plants, the Dicotyledoneae or Magnoliopsida. This task fell to me. In 1964 Richard Howard, former Director of the Arnold Arboretum of Harvard University, who was initiating the *Flora of the Lesser Antilles*, contributed a checklist of all dicots then known from Dominica. I want to thank Dr. Howard for this and also for continuing cooperation, such as sharing drafts of families and proof of his last two volumes.

I also am deeply indebted to the reviewers of the first draft, Dr. C.D. Adams and F. Raymond Fosberg. Both took much time to provide many constructive suggestions.

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Other specialists reviewed particular families, such as Alwyn Gentry of the Missouri Botanical Garden in St. Louis (Bignoniaceae) and John Wurdack of the Smithsonian Institution in Washington, D.C. (Melastomataceae). All such contributions are recognized in the appropriate family treatment. Treatments not ascribed to a contributor fell to me.

This is Contribution 1 of the Archbold Tropical Research Center, Dominica.

Keys to Groups and Dicotyledonous Families

This key is intended to assist in identifications of unknown vascular plants from Dominica. In short, the key aims to define native taxa as they occur only on Dominica. Cultivated and introduced plants may not key out correctly.

1. Plants reproducing by spores, not seeds . . . . . Group 1
1. Plants reproducing by seeds, not spores.
   2. Stigma none; the single ovule and drupe-like seed not enclosed in an ovary, borne on the face of a fleshy scale or bract . . . . . Group 2
   2. Stigma(s) present; ovules and seeds enclosed in an ovary.
      3. Stem solid central pith with scattered vascular strands; flowers usually 3-merous; leaf-venation usually striate; cotyledon 1 . . . . . Group 3
      3. Stem hollow or with a central strandless pith; flowers usually 4–5-merous; leaf-venation usually reticulate; cotyledons usually 2.
         4. Perianth absent (achlamydeous) or uniseriate (monochlamydeous) . . . . . Group 4
         4. Perianth biseriate or multiseriate.
            5. Petals all united, at least at base . . . . Group 5
            5. Petals free or only some united.
               6. Ovary inferior or only half-inferior . . . . . Group 6
               6. Ovary superior.
                  7. Stamens more than twice as many as petals . . . . . Group 7
                  7. Stamens twice as many as petals or fewer . . . . . Group 8

Group 1. Ferns and Fern Allies

For Dominica, this group is covered by Hodge (1954) with 195 species in 51 genera and 10 families. For a more recent and

broader treatment see Pteridophyta by Proctor (in Howard, 1977, 2:1-414).

Group 2. Gymnosperms

For Dominica, this group is covered by Hodge (1954) with one species, *Podocarpus coriaceus* (L'Héritier) Persoon, the raisinier montagne, a common evergreen of mountain ridges. It is the national tree of Dominica and has been planted in the Roseau Botanic Garden. Other gymnosperms may be cultivated.

Group 3. Monocots

For Dominica, this group is covered by Hodge (1954) with 186 species in 138 genera and 21 families. For more recent treatments see Orchidaceae by Garay and Sweet (in Howard, 1974, 1:1-235) and other Monocotyledoneae by Howard (1979, 3:1-586).

Group 4. Achlamydeous and Monochlamydeous Dicots

1. Leaves 0; root-parasites without chlorophyll . . . . . **Balanophoraceae**
1. Leaves present, sometimes reduced; plants not root-parasites, with chlorophyll.
   2. Leaves opposite or whorled.
      3. Branchlets jointed and green; leaves reduced to whorled scales (cult.) . . . . . **Casuarinaceae**
      3. Branchlets not jointed; leaves usually normal.
         4. Plants parasitic on tree branches . . . . . **Loranthaceae**
         4. Plants not parasitic on tree branches.
            5. Leaves trifoliolate; climbing with twisting petioles . . . . . **Ranunculaceae**
            5. Leaves simple; not climbing.
               6. Stipules present (sometimes minute in *Chamaesyce*).
                  7. Ovary 3-locular; stipules usually free . . . . . **Euphorbiaceae** (***Chamaesyce***)
                  7. Ovary 1-2-locular; stipules connate, at least at base.
                     8. Stipules connate at base; ovary 2-locular; woody . . . . . **Rhamnaceae** (***Krugiodendron***)
                     8. Stipules connate; ovary 1-locular; herbaceous.
                        9. Ovary inferior; calyx absent . . . . . **Chloranthaceae**
                        9. Ovary superior; calyx present . . . . . **Urticaceae** (***Pilea***)
               6. Stipules absent.
                  10. Flowers in fleshy spikes; calyx absent . . . . . **Piperaceae** (***Peperomia***)
                  10. Flowers not in spikes or, if so, not fleshy; calyx present.
                     11. Ovary inferior . . . . . **Myrtaceae** (***Calyptranthes***)
                     11. Ovary superior.
                        12. Carpels several, free . . . . . **Monimiaceae**
                        12. Carpel(s) solitary or united.
                           13. Fruit a circumscissile capsule; plants fleshy . . **Aizoaceae**
                           13. Fruit not capsular; plants herbaceous or woody.
                              14. Floral bracts scarious; fruit an utricle . . . . . **Amaranthaceae**
                              14. Floral bracts not scarious; fruit an anthocarp . . . . . **Nyctaginaceae**
   2. Leaves alternate.
      15. Inflorescence a fleshy spike . . . . . **Piperaceae**
      15. Inflorescence not a spike or, if so, not fleshy.
         16. Base of petiole sheathing stem (ochreate) . . . . . **Polygonaceae**
         16. Base of petiole not ochreate.
            17. Stamens opening with 2-4 trapdoor-like valves . . . . . **Lauraceae**
            17. Stamens opening by 1-2 longitudinal slits.

18. Flowers unisexual (polygamous in Ulmaceae).
  19. Ovary 3-locular, rarely 2-locular . . . . . EUPHORBIACEAE
  19. Ovary 1-locular.
    20. Stipules or stipular scars present.
      21. Fruit aggregated; sap milky . . . . . MORACEAE
      21. Fruits independent; sap clear.
        22. Fruit a drupe . . . . . ULMACEAE
        22. Fruit an achene . . . . . URTICACEAE
    20. Stipules or stipular scars absent.
      23. Filaments of stamens free . . . . . THYMELAEACEAE
      23. Filaments of stamens united, at least at base.
        24. Tree (cult.) . . . . . MYRISTICACEAE
        24. Herbs or shrubby herbs . . . . . AMARANTHACEAE
18. Flowers bisexual.
  25. Locules 3 or more.
    26. Locules 5 or more; herbs or vines.
      27. Ovary inferior; vines . . . . . ARISTOLOCHIACEAE
      27. Ovary superior; herbs.
        28. Fruit a prickly capsule; stipules deciduous . . . . . TILIACEAE (*Triumfetta*)
        28. Fruit a berry; stipules absent . . . . . PHYTOLACCACEAE (*Phytolacca*)
    26. Locules 3–6; trees.
      29. Fruit a drupe . . . . . RHAMNACEAE (*Krugiodendron*)
      29. Fruit capsular or follicular.
        30. Leaves compound or palmately veined; fruit with free follicles . . . . . STERCULIACEAE (*Sterculia*)
        30. Leaves pinnately veined; fruit capsular . . . . . ELAEOCARPACEAE
  25. Locule solitary.
    31. Stipules present and persistent . . . . . CHRYSOBALANACEAE (*Licania*)
    31. Stipules absent.
      32. Ovary inferior . . . . . COMBRETACEAE
      32. Ovary superior.
        33. Leaf pinnately compound . . . . . FABACEAE (*Swartzia*)
        33. Leaf simple.
          34. Ovules several to many . . . . . FLACOURTIACEAE
          34. Ovule 1.
            35. Sap reddish, milky; leaves lobed . . . . . PAPAVERACEAE (*Bocconia*)
            35. Sap clear; leaves unlobed.
              36. Flowers with scarious bracts . . . . . AMARANTHACEAE
              36. Flowers bractless.
                37. Fruit a berry . . . . . PHYTOLACCAEAE
                37. Fruit a utricle . . . . . CHENOPODIACEAE

GROUP 5. SYMPETALOUS DICOTS

1. Stamens (fertile) more than corolla lobes.
  2. Leaves opposite; ovary of 4 free carpels . . . . . CRASSULACEAE
  2. Leaves alternate; ovary of united carpels.
    3. Leaves palmately veined and lobed; ovary 1-locular . . . . . CARICACEAE

3. Leaves pinnately veined and unlobed; ovary several-locular.
4. Ovary superior.
5. Flowers unisexual . . . . . EBENACEAE
5. Flowers bisexual . . . . . THEACEAE
4. Ovary inferior or partly inferior.
6. Ovary inferior; stamens free from corolla . . . . . ERICACEAE
6. Ovary partly inferior; stamens borne on the corolla.
7. Leaves lepidote; style branched . . . . . STYRACACEAE
7. Leaves glabrous; style unbranched . . . . . SYMPLOCACEAE

1. Stamens (fertile) as many as corolla lobes or fewer.
8. Ovary inferior or partly inferior.
9. Tendril-bearing vines . . . . . CUCURBITACEAE
9. Plants not tendriliferous.
10. Anthers united around the style (syngenesious).
11. Flowers (florets) in involucrate heads; ovary 1-locular . . ASTERACEAE
11. Flowers not in heads; ovary 2-more-locular . . . . . LOBELIACEAE
10. Anthers free from each other.
12. Leaves alternate . . . . . GESNERIACEAE (*Gesneria*)
12. Leaves opposite or whorled.
13. Leaves compound; stipules absent . . . . . CAPRIFOLIACEAE
13. Leaves simple; stipules present . . . . . RUBIACEAE
8. Ovary superior.
14. Stamens opposite the corolla lobes.
15. Ovary several-locular; placentation axile.
16. Staminodia absent . . . . . OLACACEAE (*Schoepfia*)
16. Staminodia present (alternate with stamens) . . . . . SAPOTACEAE
15. Ovary 1-locular; placentation free-central (basal).
17. Staminodia present (alternate with stamens) . . . . THEOPHRASTACEAE
17. Staminodia absent.
18. Styles 5; calyx with stalked glands . . . . . PLUMBAGINACEAE
18. Style 1; calyx with imbedded glands . . . . . MYRSINACEAE
14. Stamens alternate with corolla lobes.
19. Leaves borne on stems, alternate (*Cuscuta*, in Convolvulaceae, is a leafless parasite).
20. Flowers irregular; stamens 4.
21. Leaves broad; berry large . . . . . BIGNONIACEAE (*Enallagma*)
21. Leaves lanceolate; berry small . . . . . MYOPORACEAE
20. Flowers regular; stamens 5.
22. Ovules numerous.
23. Sap milky; carpels 2, free . . . . . APOCYNACEAE (*Plumeria*)
23. Sap clear; carpels united.
24. Flowers inconspicuous; fruit a dry capsule . . . . . SCROPHULARIACEAE (*Capraria*)
24. Flowers conspicuous or, if not, then fruit a berry . . . . . SOLANACEAE
22. Ovules 1–2 per locule.
25. Flowers borne on leaf-base . . . . . DICHAPETALACEAE
25. Flowers not attached to leaves.
26. Fruit a capsule, usually dehiscent.
27. Unarmed . . . . . CONVOLVULACEAE
27. Armed with axillary spines . . . . . HYDROPHYLLACEAE
26. Fruits various but not a capsule.
28. Stigma sessile, 4–5-lobed; flowers fascicled . . . . . AQUIFOLIACEAE

28. Stigmas on style; inflorescence scorpioid or corymbose . . . . . BORAGINACEAE
19. Leaves opposite, whorled, or basal.
29. Flowers regular; stamens usually 5.
30. Plants acaulescent; corolla scarious . . . . . PLANTAGINACEAE
30. Plants caulescent; corolla herbaceous.
31. Ovules 1–2 per locule.
32. Stamens 2 . . . . . OLEACEAE
32. Stamens 4–5 or, if 2 then with 2 staminodia . . VERBENACEAE
31. Ovules many per locule.
33. Sap milky; carpels 2, free at least to style.
34. Carpels united at least by styles; stamens free; pollen granular . . . . . APOCYNACEAE
34. Carpels united only at stigmatic disk; stamens united; pollen aggregated in waxy masses (pollinia) . . ASCLEPIADACEAE
33. Sap clear; carpels united.
35. Inflorescence spicate; stipules present . . . . . LOGANIACEAE
35. Inflorescence various but not spicate; stipules absent.
36. Leaves entire; ovary 1-locular . . . . . GENTIANACEAE
36. Leaves serrate; ovary 2-locular . . . . . SCROPHULARIACEAE (*Scoparia*)
29. Flowers irregular; stamens 2 or 4.
37. Ovary 4-lobed; style arising from between ovary lobes . . . . . LAMIACEAE
37. Ovary entire; style apical.
38. Plants acaulescent; anthers 1-celled . . . . . LENTIBULARIACEAE
38. Plants caulescent; anthers 2-celled.
39. Ovary 1-locular . . . . . GESNERIACEAE
39. Ovary 2–4-locular.
40. Ovules 1–several per locule.
41. Ovules 2–several per locule; fruit a capsule . . . . . ACANTHACEAE
41. Ovule 1 per locule; fruit drupaceous or of nutlets . . . . . VERBENACEAE
40. Ovules many per locule.
42. Placentation parietal; vines, trees or shrubs . . . . . BIGNONIACEAE
42. Placentation axile; herbs or shrubby herbs . . . . . SCROPHULARIACEAE

GROUP 6. POLYPETALOUS DICOTS; OVARY INFERIOR

1. Stamens many, more than twice as many as the petals.
2. Aquatic plants . . . . . NYMPHAEACEAE
2. Terrestrial plants.
3. Styles more than 1; flowers unisexual . . . . . BEGONIACEAE
3. Style solitary; flowers bisexual.
4. Plants fleshy and spiny . . . . . CACTACEAE
4. Plants not fleshy nor spiny.
5. Leaves opposite.
6. Leaves gland-dotted; stipules or stipular scars absent . . . . . MYRTACEAE
6. Leaves eglandular; stipules (large) or stipular scars present . . . . . RHIZOPHORACEAE
5. Leaves alternate.

7. Fruit woody; stamens and petals over 4 cm long . . . . . LECYTHIDACEAE
7. Fruit fleshy; stamens and petals less than 2 cm long . . . . . SYMPLOCACEAE

1. Stamens few, twice as many as petals or fewer.
8. Submersed aquatics; leaves whorled, pectinate . . . . . HALORAGACEAE
8. Terrestrial plants; leaves opposite or alternate.
9. Inflorescence a simple or compound umbel (head in *Eryngium*).
10. Herbs; fruit dry, breaking into 2 mericarps . . . . . APIACEAE
10. Small trees; fruit drupaceous . . . . . ARALIACEAE
9. Inflorescence not umbellate
11. Leaves opposite and palmately veined . . . . . MELASTOMATACEAE
11. Leaves alternate.
12. Herbs; flowers solitary . . . . . ONAGRACEAE
12. Woody; flowers multiple.
13. Trees or shrubs; venation palmate . . . . . HERNANDIACEAE
13. Vines with tendrils; venation pinnate . . . RHAMNACEAE (*Gouania*)

GROUP 7. POLYPETALOUS DICOTS; OVARY SUPERIOR; STAMENS MANY (>2× PETALS)

1. Carpels several and free.
2. Sepals free, hypogynous.
3. Perianth 3-merous, valvate . . . . . ANNONACEAE
3. Perianth 2- or multimerous, imbricate.
4. Fruit fleshy, pendulous . . . . . DILLENIACEAE
4. Fruit dry, erect . . . . . MAGNOLIACEAE
2. Sepals united, at least at base.
5. Leaves simple; stamens united by filaments (monadelphous) . . . . . MALVACEAE
5. Leaves compound; stamens free . . . . . ROSACEAE
1. Carpels united or solitary.
6. Leaves opposite . . . . . CLUSIACEAE
6. Leaves alternate.
7. Stamens with filaments united (monadelphous).
8. Carpel solitary . . . . . CHRYSOBALANACEAE (*Chrysobalanus*)
8. Carpels united.
9. Calyx truncate or shallowly and irregularly lobed, never subtended by an epicalyx . . . . . BOMBACACEAE
9. Calyx deeply and regularly 5-lobed or -toothed, often subtended by an epicalyx (deciduous when calyx truncate) . . . . . MALVACEAE
7. Stamens free.
10. Ovary stipitate . . . . . CAPPARACEAE
10. Ovary sessile.
11. Plants epiphytic climbers . . . . . MARCGRAVIACEAE
11. Plants not climbing.
12. Venation palmate.
13. Inflorescences (flowers) axillary; placentation axile . . TILIACEAE
13. Inflorescences terminal; placentation parietal.
14. Leaf margins entire; fruits softly spinose . . . . . BIXACEAE
14. Leaf margins serrate; fruits smooth.
15. Leaves deeply lobed; flowers and fruits large . . . . . COCHLOSPERMACEAE
15. Leaves unlobed; flowers and fruits small . . . . . FLACOURTIACEAE (*Prockia*)

12. Venation pinnate.
16. Leaves serrate.
17. Hirsute herbs; leaves narrow . . . . . TURNERACEAE
17. Glabrous woody plants; leaves broad.
18. Placentation parietal . . . . . FLACOURTIACEAE
18. Placentation axile . . . . . THEACEAE (*Freziera*)
16. Leaves entire.
19. Capsule woody; petals 4 . . . . . ELAEOCARPACEAE
19. Capsule fleshy; petals 5.
20. Stamens united by filaments . . . . . CANELLACEAE
20. Stamens free . . . . . THEACEAE (*Ternstroemia*)

GROUP 8. POLYPETALOUS DICOTS; OVARY SUPERIOR; STAMENS FEW (≤ 2 × PETALS)

1. Stamens opposite petals and equaling petal number.
2. Plants trees; petals and stamens unequal . . . . . SABIACEAE
2. Plants vines; petals and stamens equal.
3. Vines without tendrils . . . . . BASELLACEAE
3. Vines with tendrils . . . . . VITACEAE
1. Stamens alternate with petals or not equaling the petal number.
4. Leaves opposite.
5. Leaves compound.
6. Styles 2–3.
7. Styles 2; stamens 8–10 . . . . . CUNONIACEAE
7. Styles 3; stamens 5 . . . . . STAPHYLEACEAE
6. Style 1.
8. Leaves glandular-punctate; odd-pinnate . . . . . RUTACEAE (*Amyris*)
8. Leaves not glandular punctate; even-pinnate . . . . ZYGOPHYLLACEAE
5. Leaves simple.
9. Sepals each with a pair of glands . . . . . MALPIGHIACEAE
9. Sepals without paired glands.
10. Plants woody climbers; stamens 3 . . . . . HIPPOCRATEACEAE
10. Plants not climbers; stamens 5 or more.
11. Calyx tubular, elongate . . . . . LYTHRACEAE
11. Calyx ovate.
12. Leaves palmately veined . . . . . MELASTOMATACEAE
12. Leaves pinnately veined.
13. Leaves broad; plants weak herbs . . . . . CARYOPHYLLACEAE
13. Leaves narrow; plants weakly woody . . . . . MELASTOMATACEAE (*Tibouchina*)
4. Leaves alternate.
14. Leaves with pellucid glandular dots . . . . . RUTACEAE
14. Leaves without pellucid dots.
15. Carpels 5, free; vine with compound leaves . . . . . CONNARACEAE
15. Carpels 1 or, if more, united.
16. Ovary 1-locular.
17. Style gynobasic . . . . . CHRYSOBALANACEAE
17. Style terminal.
18. Staminal filaments united; climbers with tendrils . . . . . PASSIFLORACEAE
18. Staminal filaments free or at least one free; not climbing or, if so then rarely with tendrils (some legumes).
19. Flowers unisexual . . . . . ANACARDIACEAE
19. Flowers bisexual.

20. Leaves simple.
21. Flowers irregular; stipules conspicuous, fimbriate . . . . . VIOLACEAE
21. Flowers regular; stipules inconspicuous, if any.
22. Sepals 2, caducous; leaves spiny . . . . . PAPAVERACEAE (*Argemone*)
22. Sepals 4–5, persistent; leaves unarmed.
23. Fruits leathery or, if capsular, elongate. . . . . CAPPARACEAE
23. Fruits capsular, ovoid . . . . . PORTULACACEAE
20. Leaves compound.
24. Carpels 2-more; ovules parietal; petals 4 . . . . . CAPPARACEAE (*Cleome*)
24. Carpel 1; ovules on a suture; petals usually 5 . . . . . FABACEAE
16. Ovary 2-more-locular.
25. Flower irregular.
26. One sepal spurred; stamens distinct . . . . . BALSAMINACEAE
26. Sepals not spurred; stamens with filaments united . . . . . POLYGALACEAE
25. Flower regular.
27. Stamens with filaments united.
28. Leaves compound.
29. Trees or shrubs; leaves more than 3-foliolate . . MELIACEAE
29. Herbs; leaves 3-foliolate . . . . . OXALIDACEAE
28. Leaves simple.
30. Petals short-clawed; ovary 3-locular . . ERYTHROXYLACEAE
30. Petals tapering; ovary 5-locular . . . . . STERCULIACEAE
27. Stamens free.
31. Leaves simple.
32. Anthers opening by terminal pores . . . . . OCHNACEAE
32. Anthers opening by longitudinal slits.
33. Fruit leathery.
34. Stamens equaling petal numbers . . . . AQUIFOLIACEAE
34. Stamens twice the petal number . . . . . OLACACEAE (*Heisteria*)
33. Fruit a dry capsule.
35. Leaves petioled; flowers not racemose . . . . . CELASTRACEAE
35. Leaves sessile; flowers in a raceme . . . CYRILLACEAE
31. Leaves compound.
36. Petals 4, clawed; stamens 6 . . . . . BRASSICACEAE
36. Petals tapered; stamens not 6.
37. Style or stigmas branched.
38. Drupe 2.5–5.0 cm long . . ANACARDIACEAE (*Spondias*)
38. Drupes smaller or fruits not drupaceous . . . . . SAPINDACEAE
37. Style or stigmas unbranched.
39. Ovules 8–10 per locule; seed samaroid . . . . . MELIACEAE (*Cedrella*)
39. Ovules 1–2 per locule; fruit drupaceous.
40. Plants aromatic; ovules usually 2 per locule . . . . . BURSERACEAE
40. Plants not aromatic; ovules usually 1 per locule . . . . . SIMAROUBACEAE

Family Treatments

ACANTHACEAE

(by D. Wasshausen)

Asystasia gangetica (Linnaeus) T. Anderson, which would here key to *Ruellia tuberosa* but has rounded leaf-bases, is cultivated at Baiac (*Whitefoord 4218, 4219*).

Crossandra infundibuliformis (Linnaeus) Nees from India, with leaves 4 in whorl, salmon flowers with only one (lower) lip, and four 1-celled anthers, is commonly cultivated in the tropics, including Dominica: Roseau Botanic Garden (*Hodge 966, 982, 3931*).

Graptophyllum pictum (Linnaeus) Griffith from New Guinea, with leaves yellow-mottled along midrib, large (8 cm long) reddish purple flowers, 2 fertile stamens and 2 staminodia, is widely cultivated in tropical Americas, including Dominica: Roseau Botanic Gardens (*Hodge 3953*).

Hemigraphis alternata (N. Burman) T. Anderson of Malesia was reported as subspontaneous from garden borders by Adjanohoun et al. (1985, pl. 1) as *Hemigraphis colorata* (Blume) Hallier.

Pseuderantherum carruthersii (Seemann) Guillaumin var. *atropurpureum* (Bull) Fosberg of the Pacific, with leaves dark purple above, was collected on Dominica by Hodge (non vidi), probably at the Roseau Botanical Gardens.

Many other genera of Acanthaceae are in cultivation but, as yet, have not been collected on Dominica.

Excluded Acanthaceae

Barleria lupulina Lindley, *Dicliptera sexangularis* (Linnaeus) Jussieu (as *Dicliptera assurgens* (Linnaeus) Jussieu), and *Dicliptera martinicensis* (Jacquin) Jussieu were attributed to Dominica by Vélez (1957:72) based on his own collections (now mostly lost). *Dicliptera martinicensis* was attributed to Dominica with an exclamation mark by Howard (1989, 6:366) but I have not seen material.

1. Plants vines; capsule abruptly beaked; retinacula none . . . . . ***Thunbergia***
1. Plants herbaceous or shrubby; capsule oblong or clavate; seeds borne on hook-like retinacula.
   2. Perfect (fertile) stamens 4.
      3. Calyx segments dissimilar, the posterior and anterior much larger than laterals; corolla 2-lipped . . . . . ***Teliostachya***
      3. Calyx segments similar; corolla ± equally 5-lobed.
         4. Flowers in dense terminal spikes; bracts large, imbricate . . . . . ***Blechum***
         4. Flowers in loose axillary or terminal cymes; bracts small, not imbricate . . . . . ***Ruellia***
   2. Perfect stamens 2.
      5. Staminodes absent.
         6. Flowers in axillary and terminal racemes; anther cells ± equal, awnless, bearded at base . . . . . ***Andrographis***
         6. Flowers in terminal dense spikes or loose panicles; anther cells ± superposed, one or both apiculate or tailed . . . . . ***Justicia***
      5. Staminodes present.
         7. Bracts small (2–4 mm long), inconspicuous, not imbricate nor reticulate; corolla magenta or reddish purple . . . . . ***Odontonema***
         7. Bracts large (15–25 mm long), conspicuous, imbricate and reticulate; corolla scarlet to reddish orange . . . . . ***Pachystachys***

Andrographis Wallich ex Nees

Andrographis paniculata

Andrographis paniculata (N. Burman) Wallich ex Nees in Wallich, 1832, 3:116.—Lindau in Urban, 1900, 2:211.
Justicia paniculata N. Burman, 1768:9.

Erect herb to 1 m with tap root; leaves lanceolate, to 9 cm × 2.5 cm, glabrous; flowers in axillary and terminal racemes, these collected into panicles; bracts and bractlets small; corolla white below with dark purple markings above, ~1 cm long, stamens 2, anthers bilocular, dark purple, anther cells ± equal, awnless, bearded at base.

Indian subcontinent but widely cultivated and escaping; in Dominica expected in disturbed areas but only collected by Eggers: Wallhouse (*Eggers 505*), same? (*Eggers 753*, teste Lindau).

Blechum Browne

Blechum pyramidatum

Blechum pyramidatum (Lamarck) Urban, 1918b:323; 1921, 8:650.
Ruellia blechum Linnaeus, 1759a:1120, *"blechnum."*
Barleria pyramidata Lamarck, 1783, 1:380.
Blechum brownei Jussieu, 1807:270.—Lindau in Urban, 1900, 2:186.
Blechum brownei f. *puberulum* Leonard, 1942:184.

Sprawling or erect perennial herbs with ovate leaves; flowers in dense terminal spikes; bracts imbricate, ovate, 1.0–2.5 cm long, puberulent; corolla white or purplish, slightly exceeding subtending bracts, limb ± equally 5-lobed; stamens 4, fused in pairs at base of filaments; capsule 16-seeded.

Neotropical weed of dry or moist habitats; common weed in Dominica to 530 m: between Capucin and Bellevue (*Wasshausen & Ayensu 382*), Carib Reserve (*Hodge 3378*), Clarke Hall

(*Ernst 1300*), La Chaudière (*Hodge 3691*), Layou River Valley (*Ernst 1521*), Milton (*Hodge 2561*), Ridgefield Estate (*Hodge 2163*), South Chiltern (*Hodge 1463*), Sylvania (*Hodge 1343*).

Justicia Linnaeus

Justicia betonica Linnaeus of tropical Asia and Africa, with showy white and green-veined bracts, was collected in cultivation at Baiac (*Whitefoord 4225* at BM).

1. Calyx segments 4 . . . . . ***J. androsaemifolia***
1. Calyx segments 5.
   2. Flowers in loose terminal panicles; corolla <1 cm long . . . . . ***J. pectoralis***
   2. Flowers in dense spikes or panicles; corolla 3.0–4.5 cm long.
      3. Bracts large (15 mm long), spatulate; corolla reddish purple to violet . . . . . ***J. carthaginensis***
      3. Bracts small (2 mm long), subulate; corolla dull crimson . . . . . ***J. secunda***

Justicia androsaemifolia

Justicia androsaemifolia (Nees) Lindau in Engler & Prantl, 1895, IV(3b):350; in Urban, 1900, 2:244.
Rhytiglossa androsaemifolia Nees in A.P. Candolle, 1847, 11:352.
Dianthera androsaemifolia (Nees) Grisebach, 1857:98; 1862:455.

Suffrutescent herb to 50 cm; leaves ovate-lanceolate, 3–9 cm × 1–4 cm, bluntish; flowers in distant, simple, terminal and axillary spikes 5–15 cm long; calyx segments 4; corolla magenta with white spots on lower lip, 2-lipped almost to middle, upper lip entire, slightly exceeding stamens, lower lip 3-lobed; anther cells 2, obliquely affixed.

Guadeloupe and Martinique; occasional in Dominica on dry, wooded slopes: Cabrits (*Nicolson 1904, Smith 10320, Webster 13307*), Chateau (*Eggers 624*), Colihaut (*Ernst 2114*), Grand Savanne (*Ernst 1652*), Hampstead (*Lloyd 618*), Layou River Valley (*Ernst 1543, Wasshausen & Ayensu 303*), Portsmouth (*Hodge 852*), Rivière Douce (*Eggers s.n.*), sine loc. (*Imray 47*).

Justicia carthaginensis

Justicia carthaginensis Jacquin, 1760:11.—Grisebach, 1862:456.

Suffrutescent herb to 1.5 m; leaves elliptic-ovate, decurrent on petiole; flowers in dense terminal spikes; bracts large, spatulate; calyx segments 5, linear-lanceolate; corolla reddish purple to violet, 3–4 cm long, upper lip erect, shallowly bifid, lower lip deeply 3-lobate, often with transverse white bands; stamens ± equaling upper lip.

Circumcaribbean; not recently collected in Dominica: sine loc. (*Eggers 558* at GH), reported by Grisebach as collected by Imray.

Justicia pectoralis

Justicia pectoralis Jacquin, 1760:11.—Lindau in Urban, 1900, 2:241.
Dianthera pectoralis (Jacquin) Murray, 1784:64.—Grisebach, 1862:455.

Stems trailing and sparingly rooting at nodes, to 1 m; leaves linear to ovate-lanceolate, 3–5 cm × 0.5–2.0 cm; flowers ± unilateral on rather loose 13–20 cm × 4–12 cm panicles; calyx deeply 5-parted; corolla purple, 7–8 mm long, throat transversely plicate, sometimes spotted with dark purple; anther lobes equally attached or slightly superposed.

Neotropical weed, sometimes cultivated; occasional in lowlands of Dominica: Layou River Valley (*Chambers 2709*), Madjini (*DeFilipps 193*).

Infusions are used medicinally (Adjanohoun et al., 1985:35, pl. 2).

Justicia secunda

Justicia secunda Vahl, 1791, 2:7.—Lindau in Urban, 1900, 2:238.
Dianthera secunda (Vahl) Grisebach, 1857:98; 1862:455 [excl. var. β et γ].

Suffrutescent herb to 1.25 m; leaves ovate-oblong, 8–15 cm × 3–6 cm; flowers secund and crowded on branches of terminal 10–15 cm × 3–6 cm panicles; calyx segments 5; corolla dull crimson, 3.5–4.5 cm long, lips ± equal, upper erect, narrowly ovate, lower spreading, oblong, 3-lobed; stamens lying in upper lip and barely equaling it, anther lobes ± parallel, ± equally attached.

Northern South America and Lesser Antilles; occasional in Dominica in northwest: Dublanc (*Hodge 2555*), Milton (*Hodge 2584*), Montpellier (*Lloyd 927bis*), Syndicate (*Wasshausen & Ayensu 342, Whitefoord 3499*).

Odontonema Nees, nom. cons.

Odontonema cuspidatum (Nees) Kuntze (misidentified as *Odontonema tubiforme* (Bertoloni) Kuntze) was reported as cultivated on Dominica by Howard (1989, 6:374).

Odontonema nitidum

Odontonema nitidum (Jacquin) Kuntze, 1891, 2:494.—Lindau in Urban, 1900, 2:220.
Justicia nitida Jacquin, 1760:11.
Thyrsacanthus nitidus (Jacquin) Nees in A.P. Candolle, 1847, 11:327.—Grisebach, 1862:454.

Bois crapaud.

Suffrutescent herb to 3 m; leaves anthocyanous, oblong-elliptic, 10–25 cm × 3–7 cm; inflorescence pedunculate, simple or racemiform, flowers pedicellate, usually 2-more in a sessile fascicle but sometimes in pedunculate cymules; corolla magenta, tube 1.6 cm long, upper lip erect, 7–8 mm long, lower lip spreading, 6–7 mm long; stamens 2, included, anther lobes parallel; staminodes 2, tipped by rudimentary anthers.

Antilles; common in Dominica in moist, disturbed areas:

Antrim Valley (*Nicolson 1873*), Bataka (*Stehlé 6401*), Cabrits (*Smith 10307, Webster 13298*), Carib Reserve (*Taylor 154*), Deux Branches (*Ernst 1970*), Hampstead (*Lloyd 656*), La Chaudière (*Hodge 3656*), Layou River Valley (*Ernst 1435, 1547, Stern & Wasshausen 2387, Webster 13162*), Lisdara (*Cooper 45, 151, Hodge 851, 2388*), Magua (*Stehlé 6340*), Melville Hall (*Hodge 848, 849*), Mero (*Ernst 1764*), Milton (*Hodge 2580*), Morne Cola Anglais (*Webster 13421*), Mt. Joy (*Hodge 1288*), Pagua Bay (*Chambers 2628*), Petit Coulibri (*Whitefoord 4667*), Petite Soufrière Bay (*Stern & Wasshausen 2747*), Pointe Ronde (*Hodge 2661*), Ridgefield (*Hodge 2146*), Roseau Valley (*Howard 11747*), Salybia (*Hodge 3184*), Soufrière (*Lloyd 462*), South Chiltern (*Hodge 1453*), Sylvania (*Beard 637, Hodge 850, 1250*), Syndicate (*Whitefoord 3525*), Vieille Case (*Beard 1472*), Wallhouse (*Eggers s.n.* at GH), Wooten Waven (*Eggers 595*), sine loc. (*Cooley 8766*).

Pachystachys Nees

Pachystachys spicata

Pachystachys spicata (Ruiz & Pavón) Wasshausen, 1986:175.
Justicia spicata Ruiz & Pavón, 1798b, 1:8.
Pachystachys riedeliana Nees in Martius, 1847 [Jun], 9:99; in A.P. Candolle, 1847 [Nov], 11:319.
Pachystachys coccinea sensu auctt., non (Aublet) Nees.—Lindau in Urban, 1900, 2:213.—Hodge & Taylor, 1957:609.

Chandelière.

Suffrutescent herb to 3 m; leaves broadly elliptic to obovate, 11–20 cm × 5–12 cm; spikes solitary, 6–15 cm; bracts green, loosely imbricate, 1.5–2.5 cm × 0.7–1.1 cm; calyx campanulate, segments narrowly triangular; corolla scarlet to reddish orange, ringent, slenderly obconic, 5–6 cm long; stamens 2, anthers deeply sagittate; staminodes rudimentary; capsules 2-seeded.

Amazonian South America and cultivated elsewhere; naturalized in Dominica and locally common in shade: Carib Reserve (*Hodge 3307*), Grand Bay road (*Eggers 641, Ernst 1591, Nicolson 2172, Wilbur 8027*), Lisdara (*Hodge 2326*), Morne Plat Pays road (*Gillis 8118*), Portsmouth (*Hodge 847*), Salybia (*Hodge 846*).

Tea used by Caribs to treat headaches (Hodge and Taylor, 1957:609).

True *Pachystachys coccinea* (Aublet) Nees, a name often misapplied to this species, has a very different calyx.

Ruellia Plumier ex Linnaeus

Ruellia coccinea (Linnaeus) Vahl was reported for Dominica (based on an Imray collection) by Lindau (in Urban, 1900, 2:197), confirming the same collection reported by Grisebach (1862:452, as *Stemonacanthus coccineus* (Linnaeus) Grisebach). The species is regularly found in Hispaniola, Puerto Rico, and the Virgin Islands but the records from farther south (Guadeloupe and Dominica) may not be from the wild.

Ruellia tuberosa

Ruellia tuberosa Linnaeus, 1753:635.—Grisebach, 1862:452.—Lindau in Urban, 1900, 2:191.
Ruellia picta Loddiges, 1829.

Roots thick-fibrous or fusiform; erect herb, usually branched; leaves ovate-oblong, obtuse, abruptly narrowed at base into short petiole; flowers 1-several in ± erect dichotomous cymes; corolla showy, mauve, 3–6 cm long, limb 2–4 cm broad, lobes ± orbicular, 12–15 mm wide; stamens 4, didynamous; capsules cylindric, with 20-more seeds per locule.

Neotropics; occasional in Dominica in open places: Grand Bay (*Wilbur 7906*), Marigot Bay (*Ernst 1678*).

Adjanohoun et al. (1985:37, pl. 3) reported medicinal usages of infusions.

Teliostachya Nees

Teliostachya alopecuroidea

Teliostachya alopecuroidea (Vahl) Nees in Martius, 1847, 9:72.
Ruellia alopecuroidea Vahl, 1798, Eclog. 2:49.
Lepidagathis alopecuroidea (Vahl) R. Brown ex Grisebach, 1862:453.—Lindau in Urban, 1900, 2:200.

Much-branched perennial herb to 50 cm; leaves ovate-elliptic, 2–6 cm × 1.5–2.5 cm; flowers in many-flowered terminal spikes; bracts lanceolate-oblong, ~6 mm long; corolla white or lavender, 5–6 mm long; stamens 4, free at base, anther sacs parallel; capsule sessile, 4-seeded.

Northern South America, extending into Central America and Antilles; abundant in shade in Dominica: Carib Reserve (*Hodge 3229*), Clarke Hall (*Chambers 2698, Nicolson 2004*), Harris Soulton Estate (*Webster 13390*), La Chaudière (*Hodge 3611, 3689*), Laudat (*Hodge 1984, 2050, Lloyd 221*), Lisdara (*Hodge 841, 2364*), Marigot (*Hodge 840*), Milton Estate (*Hodge 2565*), Rosehill (*Eggers 891*), Salisbury (*Stern & Wasshausen 2594*), South Chiltern (*Ernst 1303, Hodge 1445, Stern & Wasshausen 2494*), Sylvania (*Hodge 842, 843*), Syndicate (*Whitefoord 3547*).

Caribs use tea to calm frightened children (Hodge and Taylor, 1957:609).

Thunbergia Retzius, nom. cons.

Thunbergia erecta (Bentham) T. Anderson, the bush clock-vine, a suberect shrub, has been collected in the Roseau Botanic Garden (*Hodge 969*).

1. Petioles winged; corolla yellow or orange, usually with a dark purple eye . . . . . ***T. alata***
1. Petioles not winged; corolla white to blue with a whitish or yellowish throat.

2. Corolla 2–3 cm long . . . . . *T. fragrans*
2. Corolla 5–8 cm long.
   3. Leaves ovate to broad-ovate, 9–18 cm × 8–15 cm, cordate or hastate at base, pubescent, coarsely toothed or lobed below middle . . . . . *T. grandiflora*
   3. Leaves lanceolate to oblong-ovate, 10–13 cm × 4–5 cm, truncate at base, glabrous, entire or sometimes obscurely repand and dentate . . . . . *T. laurifolia*

Thunbergia alata

Thunbergia alata Bojer ex Sims, 1825 [Aug].—W. Hooker, 1825 [Sep], 3, pl. 177.—Lindau in Urban, 1900, 2:181.

Pubescent twining vine; leaves ovate, cordate-hastate at base; petioles winged; corolla 2–4 cm long, yellow or orange, usually with a dark purple eye.

East Africa but now pantropically introduced and escaping; common in Dominica along roadsides: Baiac (*Whitefoord 3831*), Glasham (*Nicolson 2090*), Hatton Garden (*Hodge 2952*), Laudat (*Gillis 8189*), Lisdara (*Hodge 845*), Pichelin (*Ernst 1618, 1962*), Ridgefield (*Hodge 2131*), Roseau (*Cooper 135*), Soufrière (*Lloyd 478*), South Chiltern (*Stern & Wasshausen 2512*), Springfield (*Wasshausen & Ayensu 308*), Sylvania (*Hodge 844*), sine loc. (ad vias et in fruticetis *Eggers 594* at GH).

Ed. Note: It is evident that Sims provided the validating description and accepted the name *T. alata* Bojer that accompanied the seeds, hence the name should be attributed to Bojer ex Sims or simply to Sims, the publishing author, not to Bojer.

Thunbergia fragrans

Thunbergia fragrans Roxburgh, 1796, 1:47, pl. 67.—Lindau in Urban, 1900, 2:180.

Finely pubescent vine; leaves ovate-lanceolate, hastate or cordate at base, entire or remotely few-toothed toward base; flowers axillary; bracts ovate-lanceolate; corolla white, 2–3 cm long, lobes crenate, ± equaling the tube; capsule depressed-globose, tipped by a stout subulate beak.

Tropical Asia but now widely cultivated and escaping; occasional in Dominica: Soufrière Village (*Hodge 1626* "common on stone walls," *Lloyd 484*), loc.? (*Eggers 292b*, teste Lindau).

Thunbergia grandiflora

Thunbergia grandiflora Roxburgh [1814:45, nom. nud.; Loddiges, 1820 [Jan], nom. nud., tab. sine analysis] in Ker, 1820 [Nov].—Roxburgh, 1832, 3:34.
Flemingia grandiflora Roxburgh ex Rottler, 1803:202.

Large vine; leaves ovate to broad-ovate, cordate to hastate at base, often coarsely toothed or lobed below middle; corolla white or light blue, campanulate, to 8 cm × 5 cm.

India but widely cultivated and escaping; occasional in Dominica: Morne Cola Anglais (*Webster 13412*), Springfield (*Skog 1550*).

Ed. Note: The nomenclature is still under consideration. Recent authors attribute the combination to (Roxburgh ex Rottler) Roxburgh or (Roxburgh ex Rottler) Roxburgh ex Loddiges.

Thunbergia laurifolia

Thunbergia laurifolia Lindley, 1856.—W. Hooker, 1857.

Woody liana; leaves lanceolate to oblong-ovate, long-acuminate, truncate at base, glabrous, entire or sometimes obscurely repand and dentate; corolla pale blue or blue with whitish or yellow throat, campanulate, 5–6 cm × 4–6 cm.

Malaysia, introduced and escaping elsewhere; recently collected in Dominica: above Laudat on road to Freshwater Lake (*Ernst 1751*).

AIZOACEAE

Sesuvium portulacastrum

Sesuvium portulacastrum (Linnaeus) Linnaeus, 1759a:1058.—Howard, 1988, 4:198.
Portulaca portulacastrum Linnaeus, 1753:446.

Howard (l.c.) reported this from Dominica with an exclamation mark (!), meaning that he has seen material. I have not.

Trianthema portulacastrum Linnaeus was cited for Dominica by Vélez (1957:72) but his material has not been seen.

AMARANTHACEAE

Gomphrena keys to *Alternanthera* but has a branched stigma. Vélez (1957:73) attributed introduced *Gomphrena globosa* Linnaeus to Dominica.

Lithophila muscoides Swartz, with basal leaves and two stamens, was attributed to Dominica by Vélez (1957:74).

Philoxerus vermicularis (Linnaeus) Smith, a fleshy herb of saline soils, was attributed to Dominica by Vélez (1957:74). The current name is *Blutaparon vermiculare* (Linnaeus) Mears.

1. Leaves alternate.
   2. Flowers unisexual; ovule solitary; fruit a 1-seeded utricle . . . . . *Amaranthus*
   2. Flowers bisexual; ovules 2 or more; fruit a 3–8-seeded capsule . . . . . *Celosia*
1. Leaves opposite.
   3. Flowers in long spikes; anthers 2-celled, awned, fruits deflexed.
      4. Bracts glabrous; sepals with straight spines . . . . . *Achyranthes*
      4. Bracts pubescent; sepals with hooked spines . . . . . *Cyathula*
   3. Flowers in capitate or paniculate clusters; anthers 1-celled, awnless; fruits not deflexed.

5. Inflorescence axillary or terminal, capitate . . . . . *Alternanthera*
5. Inflorescence a terminal panicle . . . . . *Iresine*

Achyranthes Linnaeus

Achyranthes aspera

Achyranthes aspera Linnaeus, 1753:204.—Townsend in Dassanayake, 1980, 1:38.
Achyranthes aspera var. *indica* Linnaeus, 1753:204.
Achyranthes indica (Linnaeus) Miller, 1768.
Achyranthes obtusifolia Lamarck, 1785, 1:545.

Weedy herb with opposite leaves; fruits spinose, deflexed on elongate spikes.

Pantropic weed; in Dominica in dry scrub and along roads: Canefield-Roseau (*Hodge 446*), Colihaut-Coulibistri (*Ernst 1136*), West Cabrit (*Hodge 3708*).

Use of a root decoction against dysentery and an infusion against dyspepsia was reported by Adjanohoun et al. (1985:37, pl. 4).

According to Townsend, *Achyranthes aspera* Linnaeus and *A. aspera* var. *indica* Linnaeus are based on the same type. If true, the correct name for the ovate-leaved taxon on Dominica would be *A. aspera*. Fawcett and Rendle (1914, 3(1):136) treated *A. aspera* as typified on a specimen in LINN (presumably 287.1) with lanceolate leaves but it is doubtful that this constituted formal lectotypification.

Alternanthera Forsskål

A number of species names were called into question by Mears and Gillis (1977) with a promise of future publications, such as Mears (1977). Mears has annotated most of our New World holdings (US) and I generally accept his names. Several more species are expected but have not been reported.

1. Inflorescences pedunculate, terminal.
   2. Bracts 0.4 cm, equaling or surpassing the perianth . . . . . *A. brasiliana*
   2. Bracts 0.2 cm, 1/3 the perianth length . . *A. flavescens*
1. Inflorescences sessile, axillary.
   3. Bracts and perianth segments spinulose to spinescent, pubescent with retrorsely barbed hairs . . . . . *A. flavogrisea*
   3. Bracts and perianth segments acute or acuminate, glabrous . . . . . *A. sessilis*

Alternanthera brasiliana

Alternanthera brasiliana (Linnaeus) Kuntze, 1891, 2:527.—Mears & Gillis, 1977:63.—Mears, 1977:11.—Kellogg in Howard, 1988, 4:148.
Gomphrena brasiliana Linnaeus, 1756:13 (sp. no. 135).
Gomphrena dentata Moench, 1802:273, nom. superfl., "Gomphraena."
Alternanthera dentata Scheygrond in Pulle, 1932, 1:39, as to type, not as misapplied [combination often attributed to Stuchlik (1913:354) but, from his discussion, it is evident that *"A. dentata"* is an error for *A. argentata*].

Herbs to 2 m tall, with inflorescences on rather long (>5 cm) peduncles.

Neotropics; common weed of disturbed places on Dominica: Cabrits Swamp (*Whitefoord 4090*), Clarke Hall (*Chambers 2701, Ernst 1514, Nicolson 2000, Webster 13196*), Grand Bay, (*Ernst 1600*), Pointe Michel (*Eggers 566*), above Roseau (*Whitefoord 4649*), St. Paul Parish (*Cooley 8787*), Sylvania area (*Cooper 70, Hodge 1045, 1251*), sine loc. (*Imray 49*).

Minor medicinal usage was reported by Adjanohoun et al. (1985:39, pl. 5).

Mears (1977:13) stated that type illustration (Breyne) is unidentifiable to variety but does not mention how the type variety is distinguished from *A. brasiliensis* var. *villosa*.

Gomphrena dentata Moench is treated as a superfluous renaming of *G. brasiliana* because Moench cites *"Gomphraena brasiliensis* Linnaei Sp. Pl. I. p. 1312 [error for 1322]," i.e., Willdenow (1797, 1:1322). The unacceptable change from *brasiliana* to *brasiliensis* first appeared in Linnaeus (1759a:850), although later Linnaean works (1762, Amoen. 4:310; 1762:326) maintained the original spelling, *brasiliana*.

I wonder if the illustrations published as *"Gomphrena brasiliensis"* by Jacquin (1788, Icon., 2, pl. 346) and Lamarck (1792, Tab., 1(2):289, pl. 180, fig. 1) are *Alternanthera bettzickiana*, with laciniate bracts.

Mogiphanes jacquinii, at least as used by Grisebach (1859:64), is *A. brasiliana*.

Alternanthera flavescens

Alternanthera flavescens Kunth, 1818, 2:207.
Alternanthera brasiliana sensu auct., not as to type of basionym.

Decumbent herb with inflorescences on rather short (2–3 cm) peduncles.

Neotropics; only once collected in Dominica on sea cliff facing Martinique: Pointe des Fous (*Ernst 1793*).

The species name adopted follows annotations by Mears. I believe that this is the species that was called *Mogiphanes straminea* by Grisebach (1859:64) and *Alternanthera dentata* by Scheygrond (in Pulle, 1932, 1:39).

Alternanthera flavogrisea

Alternanthera flavogrisea (Urban) Urban, 1907, 5:340.
Telanthera flavogrisea Urban, 1899, 1:300.
Alternanthera tenella subsp. *flavogrisea* (Urban) Mears & Veldkamp in Veldkamp, 1978:313.

Stems pubescent all over; bracts usually 1-ribbed, densely short-pubescent; staminodia longer than filaments.

Neotropics, including southern US; a common weed in Dominica: Canefield (*Hodge 447, Nicolson 2149*), Grand Bay road (*Ernst 1599*), Hatton Garden (*Hodge 3079*), Lisdara (*Hodge 448*), Ridgefield (*Hodge 2190*).

The species name adopted follows annotations by Mears, actually as *A. flavogrisea* subsp. *diffusa*, a name apparently not

yet validly published although it was accepted by Fournet (1978:1001) without reference to Martius' basionym. Kellogg (in Howard, 1988, 4:151) treated the name accepted here as a synonym of *Alternanthera halimifolia* (Lamarck) Standley but did not attribute the taxon to Dominica. The Dominican materials seem to be cited as *Alternanthera tenella* Colla. She pointed out the need for biosystematic work.

This species is similar to *A. caracasana* (commonly called *A. repens* or *A. peploides*), a species with bracts usually 3-ribbed, loosely long-pubescent with glochidiate hairs and staminodia shorter than the filaments.

There has been a flap over *Alternanthera ficoidea*, subject of a proposal to reject (*Taxon*, 27:310, 1978), barely approved (*Taxon*, 31:540, 1982), then proposed for reconsideration (*Taxon*, 32:316, 1983) but reconsideration rejected (*Taxon*, 34:662, 1985). Ignoring the multiple issues, it seems that the result of the decisions is that the type of *Alternanthera ficoidea* (Linnaeus) Palisot de Beauvois pertains to what is widely known as *Alternanthera paronychioides* St. Hilaire. Rejection of *A. ficoidea* allows *A. paronychioides* to stand. What has been called *A. ficoidea* (or *ficoides*) is *A. tenella* Colla. The Dominican material can be called *A. tenella* subsp. *flavogrisea* (Urban) Mears & Veldkamp, but here I maintain it as a species.

Alternanthera sessilis

Alternanthera sessilis (Linnaeus) R. Brown ex A.P. Candolle, 1813:4, 77.—Melville, 1958:172.—Mears, 1977:3.
Gomphrena sessilis Linnaeus, 1753:225.

Stems with pubescence restricted to two lateral grooves; bracts 1-nerved, glabrous, to 2 mm, shorter than utricle.

Pantropic weed; in Dominica near houses, in sand and pavement: Carib Reserve (*Hodge 3365*), Lisdara (*Hodge 449*), Layou River mouth (*Fosberg 48304*), Portsmouth garden weed (DHN!), Roseau (*Ernst 2150*).

Amaranthus Linnaeus

Amaranthus polygonoides Linnaeus and *Amaranthus crassipes* Schlechter differ from the following species by having strictly axillary inflorescences rather than both terminal and axillary. The latter was said to have been collected on Dominica by Vélez (1957:73).

1. Plant with stipular spines . . . . . *A. spinosus*
1. Plant unarmed.
   2. Flowers pentamerous; utricle wrinkled, circumscissile . . . . . *A. dubius*
   2. Flowers trimerous; utricle smooth (or wrinkled), indehiscent.
      3. Leaf tips strongly emarginate, bilobed; utricles smooth, thin-walled . . . . . *A. blitum*
      3. Leaf tips tapering to a small obtuse or truncate, mucronulate apex; utricle tuberculate . . . *A. viridis*

Amaranthus blitum

Amaranthus blitum Linnaeus, 1753:990.—Kellogg in Howard, 1988, 4:157.

Flowers 3-merous.

Pantropical; reported for Dominica by Kellogg (l.c.), probably involving some material cited below as *Amaranthus viridis*.

Amaranthus dubius

Amaranthus dubius Martius ex Thellung, 1913:203.

Staminate flowers conspicuous, stramineous; flowers 5-merous.

Pantropic weed; on Dominica in dry, scrubby places: Cabrits (*Hodge 3711, 3712*), Canefield (*Nicolson 2144*), Coulibistri (*Ernst 1407*), Layou River mouth (*Fosberg 48302*), Loubière-Solomon's Slide (*Hodge 3857*), Portsmouth (*Hodge 450*), South Chiltern (*Hodge 1511*).

Adjanohoun et al. (1985:39, pl. 6) reported usage against anemia.

Amaranthus spinosus Linnaeus

Amaranthus spinosus Linnaeus, 1753:991.

Epinard.

Weedy herb with alternate leaves and stipular spines; flowers in axillary clusters and clustered on terminal spicate inflorescences.

Pantropic weed; in Dominica in dry areas: Canefield (*Nicolson 2150*), Grand Savanne (*Ernst 1645*), Portsmouth street weed (DHN!), Pringles Bay (*Whitefoord 3736*).

Used as a potherb by the Caribs (Hodge and Taylor, 1957:555). Adjanohoun et al. (1985:41, pl. 7) reported usage against anemia and as laxative.

Amaranthus viridis

Amaranthus viridis Linnaeus, 1763:1405.
Amaranthus gracilis Desfontaines, 1804:43.
Euxolus viridis (Linnaeus) Moquin in A.P. Candolle, 1849, 13(2):273.—Grisebach, 1859:68.

Epinard.

Flowers 3-merous.

Pantropic weed; in southwestern Dominica: South Chiltern (*Hodge 1613*), Sylvania (*Hodge 1244*).

Used as a potherb (Hodge and Taylor, 1957:555).

Celosia Linnaeus

Celosia argentea

Celosia argentea Linnaeus, 1753:205.—Whitefoord, 1989:149.

Annual to 1 m; leaves lanceolate; spikes to 12 cm long, crimson to silvery-white; seeds black, shiny.

Widely cultivated but escaping; only once collected on Dominica: Cabrits Swamp (*Whitefoord 4080*).

The cockscomb, likely cultivated on Dominica, belongs to the same polyploid complex, sometimes is treated as a species, *C. cristata* Linnaeus, and sometimes as a variety of *C. argentea*.

Cyathula Blume, nom. cons.

Cyathula prostrata

Cyathula prostrata (Linnaeus) Blume, 1826:549.
Achyranthes prostrata Linnaeus, 1762:296.

Weedy herb with opposite leaves; racemes terminal and elongate; flowers finally nodding and developing hooked spines that catch on clothes.

Pantropic weed; in Dominica usually in dry places: Belvedere (*Eggers 533*), Carib Reserve (*Hodge 3375*), Clarke Hall (*Chambers 2706*), Grand Bay road (*Ernst 1594*), Laudat (*Hodge 1795*), Pointe Ronde (*Hodge 2730*), South Chiltern-Scotts Head (*Hodge 1641*), St. Paul Parish (*Cooley 8767*), Wallhouse (*Eggers 66*).

Adjanohoun et al. (1985:41, pl. 8) reported use against diarrhea.

Cyathula achyranthoides (Kunth) Moquin was reported for Dominica by Fawcett and Rendle (1914, 3:135), but this is surely an error for the Dominican Republic. It is distinguished by its long-acuminate leaves and hooked spines that are twice as long as the fruiting perianth.

Iresine Browne, nom. cons.

Two perennial species are expected: *I. angustifolia* Euphrasen with glabrous bisexual flowers and *I. argentata* (Martius) D. Dietrich with tomentulose bisexual flowers. The former was attributed to Dominica by Vélez (1957:73).

Iresine herbstii Hooker, zizier poule, a cultivated shrub with colored leaves was illustrated by Honychurch (1980:4) and Adjanohoun et al. (1985:43, pl. 9) from Dominica.

Iresine diffusa

Iresine diffusa Humboldt & Bonpland ex Willdenow, 1805, 4:765.—Shinners, 1962:141.
Celosia paniculata Linnaeus, 1753:206.
Iresine celosia Linnaeus, 1759a:1291, nom. superfl.
Iresine celosioides Linnaeus, 1763:1456, nom. superfl.?
Iresine paniculata (Linnaeus) Kuntze, 1891, 2:542, non Poiret.

Weedy annual herb with opposite leaves. Differs from other Dominican Amaranthaceae in having a loosely paniculate inflorescence of small (to 1 mm long) unisexual flowers and being dioecious.

Neotropics; on Dominica in dry coastal woodlands: South Chiltern-Scotts Head (*Hodge 1640*), Roseau Valley Waterfalls (*Hodge 2003*), sine loc. (*Eggers 64*).

Mears and Gillis (1977:63) called this species *Iresine canescens* Willdenow without mentioning the equally priorable name *I. diffusa* accepted by Adams (1972:259) and other authors.

ANACARDIACEAE

Materials cited by Hodge (1954:20 and 28) as *Rhus metopium* or (gomme l'incense) are actually *Protium attenuatum* (Rose) Urban of the Burseraceae. *Metopium brownei* (Jacquin) Urban and *Metopium toxiferum* (Linnaeus) Krug & Urban, dangerous contact-poison plants, do not occur in the Lesser Antilles.

1. Leaves compound . . . . . ***Spondias***
1. Leaves simple.
   2. Leaves ovate, rounded to emarginate; fruit nut-like, curved, borne on an enlarged stalk . . . . ***Anacardium***
   2. Leaves lanceolate, acute; fruit a large drupe . . . . . ***Mangifera***

Anacardium Linnaeus

Introduced *Anacardium excelsum* (Kunth) Skeels, with a sigmoid fruit pedicel and 4 stamens, was collected April 1988 in flower and fruit from a 10 m tree in the Roseau Botanic Garden (*Whitefoord 6119*).

Anacardium occidentale

Anacardium occidentale Linnaeus, 1753:383.—Little & Wadsworth, 1964:286, pl. 130.—Mitchell & Mori, 1987:38.

Cashew, wild almond, pomme noix.

Spreading tree; leaves obovate; flowers reddish.

Neotropics, often cultivated; apparently wild in Dominica but sometimes cultivated for fruit: Calibishie (*Hodge 3135*), Castle Bruce trail (*Hodge 3344*), Dublanc (*Hodge 2519*), Grand Savanne (*Hodge 3789*), Hatton Garden (*Hodge 3060*), Mahaut (*Hodge 1307*), Portsmouth (*Hodge 660*), Ridgefield (*Hodge 2124*), Salybia (*Chambers 2633, Stehlé 6410*), between Salisbury and Mero (*Ernst 1427, Stern & Wasshausen 2461*).

The fleshy fruit pedicel is edible raw. The leathery fruit coat has a caustic oil. The nut is edible after roasting (Hodge and Taylor, 1957:577).

Mangifera Linnaeus

Mangifera indica

Mangifera indica Linnaeus, 1753:200.—Little & Wadsworth, 1964:288, pl. 131.—Adjanohoun et al., 1985:45, pl. 11.

Mango.

Tree; leaves elongate; fruit with soft and juicy flesh.

Native of tropical Asia, widely cultivated for fruit; cultivated in Dominica: Clarke Hall (*Wasshausen & Ayensu 302*), Lisdara (*Hodge 656*), Marigot (*Hodge 658*), Milton (*Hodge 2530*).

Spondias Linnaeus

Spondias mombin

Spondias mombin Linnaeus, 1753:317.—Little & Wadsworth, 1964:294, pl. 134.
Spondias lutea Linnaeus, 1762:613, nom. illeg.

Mombin, hog-plum.

Tree to 13 m; leaves odd-pinnate, ~7 pairs of leaflets; flowers fragrant, white; fruit a several-celled drupe.

Pantropical; in lowlands of Dominica at south end of island: Badineau (*Hodge 2222*), Grand Bay (*Ernst 1062*), Ridgefield (*Hodge 3899* on US specimen, probably in error), Salybia (*Hodge 3341*), South Chiltern (*Ernst 1301, Hodge 3876*).

Fruits and leaves have several medicinal uses among Caribs (Hodge and Taylor, 1957:578 and Adjanohoun et al., 1985:45, pl. 12).

ANNONACEAE

Cananga odorata (Lamarck) J. Hooker & Thomson, the source of the perfume oil ylang-ylang, with yellow, elongated (>5 cm) petals, is planted at Macoucherie Estate (*Chambers 2511*) and at the Batali River bridge (DHN!).

Monodora tenuifolia Bentham, the orchid flower tree, with showy yellow flowers marked with red (3 petals broad and spreading, 3 narrow and inflexed) is cultivated in the Roseau Botanic Gardens (*Nicolson 4215*).

1. Pedicel to 0.5 cm long . . . . . ***Oxandra***
1. Pedicel >1 cm long.
   2. Carpels free in fruit; petals 6, strap-shaped . . . . . ***Guatteria***
   2. Carpels united in fruit; petals 3 or if 6 then triangular.
      3. Fruit various but not tuberculate *and* reticulate; petals not winged . . . . . ***Annona***
      3. Fruit reticulate and tuberculate; 3 petals each with a conspicuous wing to 1 cm long . . . . . ***Rollinia***

Annona Linnaeus

1. Leaves with hairy pockets (domatia) in axils of primary lateral veins at midrib; petals 6; fruit spiny . . . . . ***A. muricata***
1. Leaves without domatia; petals 3 or 6.
   2. Petals 6; leaf thick-coriaceous, glabrous; fruit smooth . . . . . ***A. glabra***
   2. Petals 3; leaf membranous, pubescent below; fruit smooth or tuberculate.
      3. Fruit smooth, of slightly dented, completely fused carpels . . . . . ***A. reticulata***
      3. Fruit tuberculate, of rounded, loosely cohering carpels . . . . . ***A. squamosa***

Annona glabra

Annona glabra Linnaeus, 1753:537.—Little et al., 1974:172, pl. 320.
Annona palustris Linnaeus, 1762:757.

Branching shrub to 3 m tall with yellowish white flowers and a smooth green fruit.

Neotropics in wet places; in Dominica a dominant in sea-level swamp with *Dalbergia* or *Pterocarpus*: Cabrits Swamp (*Ernst 1179, Hodge 397, Whitefoord 4057*), Indian River (DHN!), Woodford Hill River (DHN!).

Annona muricata

Annona muricata Linnaeus, 1753:536.—Little & Wadsworth, 1964:100, pl. 37.

Corossol, courasotte, soursop.

Tree to 6 m; twigs pubescent; leaves light green beneath; fruit with large, curved spines.

Native of West Indies but widely cultivated; in Dominica in the lowlands: Cabrits (*Hodge 398, Nicolson 1884*), Dublanc (*Whitefoord 5203*), Eden River near airport (*Ernst 1680*), Mt. Joy Estate (*Nicolson 2124*), Roseau (*Morden 9*), Salybia (*Hodge 3092*), South Chiltern (*Stern & Wasshausen 2501*).

Fruit used for juice or to flavor ice cream; leaves used medicinally (Hodge and Taylor, 1957:557, and Adjanohoun et al., 1985:47, pl. 13).

Annona montana Macfadyen, a similar species, has short, straight fruit spines and glabrous terminal twigs, while *A. muricata* has pubescent branchlets.

Annona reticulata

Annona reticulata Linnaeus, 1753:537.—Little & Wadsworth, 1964:102, pl. 38.

Custard apple, cachima, bullock's heart, cachima langue boeuf.

Small tree 5–10 m with smooth, shiny fruit with yellowish pulp.

Native to West Indies but widely cultivated for fruit; in Dominica: Salisbury (*Nicolson 4114*), Salybia (*Hodge 3338*), South Chiltern (*Hodge 165*).

Bark and leaves used medicinally by Caribs (Hodge and Taylor, 1957:558). Medicinal usages also reported by Adjanohoun et al. (1985:46, pl. 14).

Annona squamosa

Annona squamosa Linnaeus, 1753:537.—Little & Wadsworth, 1964:104, pl. 39.

Sweetsop, sugar apple.

Small tree 5–8 m with tuberculate, glaucous fruit with sweet white pulp.

West Indian species widely cultivated for fruit; in Dominica near sea: Pointe Michelle (*Ramage s.n.*), Portsmouth (DHN!).

The leaves are used by the Caribs to brew a medicinal tea

(Hodge and Taylor, 1957:558). Adjanohoun et al. (1985:49, pl. 15) reported use as a component of medicines.

Guatteria Ruiz & Pavón, nom. cons.

Guatteria caribaea

Guatteria caribaea Urban, 1905, 4:240.—Fries, 1939:480.—Little et al., 1974:174, pl. 321.
Guatteria ouregou sensu Grisebach, 1859:7, non Dunal.
Cananga caribaea (Urban) Britton in Britton & Wilson, 1924, 5:311.

Mahaut noir, bois violin, bois anglais.

Tree to 6 m with fragrant, cream-white flowers.

Lesser Antilles to Puerto Rico; mid elevations in Dominica: Glasham (*Nicolson 2122*), Laudat (*Hodge 2035*), Pont Cassé (*Nicolson 1132, Wilbur 8147*), Salybia (*Hodge 3256*), Sylvania (*Hodge 1314*), Syndicate (*Hodge 2629, Whitefoord 5703*).

Used by Caribs for boards and rope fiber (Hodge and Taylor, 1957:558).

Oxandra A. Richard

Oxandra laurifolia

Oxandra laurifolia (Swartz) A. Richard in Sagra, 1845, 10:20.—Little et al., 1974:178, pl. 323.
Uvaria laurifolia Swartz, 1800:1001.

Bois pian.

Tree; leaves 8–19 cm long, villous when young, obscurely pellucid-dotted; berries long-stalked.

Greater Antilles to Guadeloupe; in Dominica reported from provisionally determined sterile material (*Taylor 28*) by Hodge and Taylor (1957:559).

Reputed useful for treatment of yaws (pians).

Rollinia St. Hilaire

Rollinia muscosa

Rollinia muscosa (Jacquin) Baillon, 1868:268.—Little et al., 1974:180, pl. 324.
Annona muscosa Jacquin, 1764, 1:16.

A small tree with brown pubescent twigs.

West Indies and Central America; in midlands to mossy forest in Dominica: Morne Micotrin (*Wasshausen & Ayensu 335*), Salybia-Hatton Garden Trail (*Hodge 3358*).

APIACEAE/UMBELLIFERAE

(by R. DeFilipps)

Cultivated *Anethum graveolens* Linnaeus, the dill or l'anise, has leaves pinnatifid into filiform segments. It is used for flavoring (Hodge and Taylor, 1957:594): Salybia (*Hodge 3290*). Adjanohoun et al. (1985:147, pl. 113) reported medicinal uses.

1. Plants erect; leaf-teeth spine-tipped; fruit papillate . . . . . ***Eryngium***
1. Plants creeping and rooting at nodes; leaves without spine-tipped teeth; fruit not papillate.
   2. Leaves pubescent; involucre of 2 ovate bracts . . . . . ***Centella***
   2. Leaves glabrous; involucre absent or inconspicuous . . . . . ***Hydrocotyle***

Centella Linnaeus

Centella asiatica

Centella asiatica (Linnaeus) Urban in Martius, 1879, 11(1):287.—Adams, 1972:558.
Hydrocotyle asiatica Linnaeus, 1753:234.
Hydrocotyle erecta Linnaeus f., 1782:177.
Centella erecta (Linnaeus f.) Fernald, 1940:295.—Howard, 1989, 6:20.

Leaves cordate at base, shallowly to coarsely serrate.

Pantropical; cited for Dominica (with exclamation mark, indicating voucher seen) by Howard (l.c.). To be sought in wet places.

Eryngium Linnaeus

Eryngium foetidum

Eryngium foetidum Linnaeus, 1753:232.

Chardon béni.

Glabrous rosette plants; leaves spiny-toothed; inflorescence an elongate head.

Neotropics; a weed in Dominica, 50–400 m: Fond Baron (*Ernst 1624*), Ridgefield (*Hodge 2155*).

Caribs make a cure-all tea from this foetid plant (Hodge and Taylor, 1957:594). Adjanohoun et al. (1985:147, pl. 114) reported medicinal uses.

Hydrocotyle Linnaeus

Hydrocotyle umbellata Linnaeus, with peltate leaves and simple umbels, and *Hydrocotyle verticillata* Thunberg, with peltate leaves and flowers verticillate along an interrupted axis, were cited for Dominica by Vélez (1957:74) on the authority of Stehlé.

Hydrocotyle sibthorpioides

Hydrocotyle sibthorpioides Lamarck, 1789, 3:153.—Mathias & Constance in North Amer. Fl., 1944, 28B:55.—Eichler, 1987:275.
Hydrocotyle rotundifolia Roxburgh, 1832, 2:88.—Mathias, 1936:220.

Leaves ± orbicular, crenate, lobed.

Introduced from Old World tropics; a tiny weed of damp places of Dominica: Bellevue (*Stehlé 6356*), Sylvania (*Hodge 662*).

APOCYNACEAE

(by P. Boiteau and C. Sastre)

Alstonia scholaris (Linnaeus) R. Brown, an Asiatic tree with leaves 5–10-whorled, was reported cultivated on Dominica by Monachino (1949:134).

Beaumontia grandiflora (Roxburgh) Wallich, a Himalayan woody vine with large flowers (to 12 cm long), was collected in 1956: Antrim (*Gates Clarke s.n.*).

Carissa macrocarpa (Ecklon) A.L. Candolle, an African thorny shrub with edible berry-like fruits, has been collected in the Roseau Botanic Garden (*Hodge 973, 3907*). It has corolla lobes overlapping to the left and obovate, eciliate sepals 5–6 mm long. *Carissa edulis* (Forsskål) Vahl, another thorny shrub from Africa, with corolla lobes overlapping to the right and lanceolate, ciliate sepals 3 mm long, is commonly cultivated in the Lesser Antilles and may be expected in Dominica.

Cerbera manghas Linnaeus from Malesia, with alternate leaves like *Plumeria* but differing by its acute and deciduous calyx lobes, has been collected in the Roseau Botanic Garden (*Hodge 3886*).

Ervatamia, very similar to *Tabernaemontana* but differing by technical characters such as stigma as long as the style-head, flowers long- or short-styled in the same species, and anthers included in the corolla-tube, is often cultivated in Martinique and Guadeloupe but has not been collected on Dominica. *Ervatamia coronaria* (Jacquin) Stapf, with broadly lanceolate leaves 17 cm × 6 cm, is well known, especially in its triploid double-flowered forms, such as cv. Rosebay. *Ervatamia pandacaqui* (Poiret) Pichon (or *Ervatamia cumingiana* (A.L. Candolle) Markgraf), with leaves oblong-lanceolate leaves 9 cm × 2 cm, is also often cultivated in the French Islands.

Leptopharyngia elegans (Stapf) Boiteau, sometimes treated in *Tabernaemontana* or *Conopharyngia*) from South Africa, flowered in the Roseau Botanic Garden in May 1940 (*Hodge 3926, 3944*).

Nerium oleander Linnaeus, the oleander of the Mediterranean with linear to oblanceolate, 3-whorled leaves, has been collected from cultivation at Chattanooga Estate (*Hodge 995*).

Thevetia peruviana (Persoon) K. Schumann from the neotropics, with alternate, linear leaves (<1 cm broad) and showy yellow flowers, is widely cultivated. It undoubtedly is grown in Dominica but has not yet been collected.

Excluded Apocynaceae

Rhabdadenia biflora (Jacquin) J. Mueller, widely distributed in the Caribbean area, was attributed to Dominica by Vélez (1957:75), apparently based on the report "Guadeloupe to Trinidad" by Britton and Wilson (1925, 6:93). The species is restricted to mangrove habitat that is not on Dominica. Like *Prestonia* it is a twining climber but is easily distinguished by its obovate leaves and white flowers about 6 cm long.

Apocynaceae Incertae Sedis

The following cultivated specimens from Dominica (at GH) were not identified with certainty: *Hodge 3949, Hodge 898* (collected as *Kopsia fruticosa* but with lateral inflorescences, cf. *Holarrhena antidysenterica* Wallich ex A.L. Candolle), *Hodge 3917* (dubiously *Tabernanthe iboga*).

1. Leaves alternate but congested; branches thick-succulent . . . . . ***Plumeria***
1. Leaves opposite or whorled; branches normal.
   2. Leaves whorled (opposite on occasional nodes).
      3. Flowers much >1 cm long . . . . . ***Allamanda***
      3. Flowers <1 cm long . . . . . ***Rauvolfia***
   2. Leaves strictly opposite.
      4. Plants twining climbers . . . . . ***Prestonia***
      4. Plants erect, not climbing.
         5. Inflorescences in forks of branchings; leaves of a pair often unequal; fruit fleshy but finally dehiscent; seeds arillate . . . . . ***Tabernaemontana***
         5. Inflorescences axillary; leaves of a pair equal; fruit dry (follicular).
            6. Perennial herbs or subshrubs; flowers pink or white, showy; seeds without plumose awn . . . . . ***Catharanthus***
            6. Shrub or tree; flowers creamy, inconspicuous; seeds with plumose awn . . . . . ***Funtumia***

Allamanda Linnaeus

The generic spelling is *Allamanda* on page 146 of the *Mantissa Altera* (Linnaeus, 1771), but *Allemanda* elsewhere (p. 214, 576). Linnaeus named it for Frédéric Allamand, referring to him as "Allemand." We follow usage and accept *Allamanda.*

Allamanda cathartica

Allamanda cathartica Linnaeus, 1771:214, *"Allemanda".*—Sakane & Shepherd, 1986:130.

Climbing shrub with large, bright yellow flowers; leaves usually 4 per node; calyx rather large; corolla funnel-shaped, the cylindric lower part 1.5–3.0 cm long, the spreading upper part 3 cm × 2.5 cm, the lobes rounded; fruit capsular, echinate.

Neotropical, now pantropically cultivated; frequently cultivated in Dominica and occasionally escaping: abandoned garden near Londonderry (*Chambers 2617*), Brantridge Estate near Pont Cassé (*Ernst 1809*).

Catharanthus G. Don

Catharanthus roseus

Catharanthus roseus (Linnaeus) G. Don, 1837, 4:95.—Steam 1966:196.
Vinca rosea Linnaeus, 1759a:944.
Lochnera rosea (Linnaeus) Reichenbach ex Spach, 1839, 8:526.

Caca poule, kakuti or ualukuti (Carib).

Perennial herb or subshrub to 1 m; leaves opposite, oblong to obovate, obtuse but minutely apiculate; corolla white or pink; follicles 3.0 cm × 0.2 cm.

Madagascar, now pantropically cultivated; cultivated in Dominica and escaping along dry west coast: Coulibistri (*Ernst 1405*), Portsmouth (DHN!), Scotts Head village (*Hodge 1608*).

Caribs make a medicinal tea from the leaves (Hodge and Taylor, 1957:597). Adjanohoun et al. (1985:49, pl. 16) gave more medicinal information and said that the species probably originated in the Americas (not Madagascar) before becoming pantropical.

Funtumia Stapf

Funtumia elastica

Funtumia elastica (Preuss) Stapf, 1901.—Little et al., 1974:826, pl. 664.
Kickxia elastica Preuss, 1899:353, pl. 1.

Tree to 30 m; leaves opposite, oblong, shortly acuminate, attenuate at base, 16–18 cm × 5–7 cm; axillary cymes shortly peduncled.

West Africa and cultivated there as a source of rubber; introduced into Dominica and apparently escaping: Red Gully (*Hodge 2511*), Sylvania (*Hodge 3826*), roadside between Sylvania and Springfield (*Wasshausen & Ayensu 395*).

Plumeria Linnaeus

Cultivated *Plumeria rubra* Linnaeus, the frangipani, native to Central and South America, with flat leaves >4 cm broad and many cultivars, is cultivated but apparently does not escape: Lisdara Estate (*Hodge 672*), Roseau Botanic Garden (*Hodge 3954*), between Sylvania and Springfield Estates in orange grove (*Wasshausen & Ayensu 396*).

Plumeria alba

Plumeria alba Linnaeus, 1753:210.—Woodson, 1938:216.—Little & Wadsworth, 1964:460, pl. 217.

Tree to 8 m with succulent, ± dichotomously branched stems; leaves alternate, terminal on branches, with strongly revolute margins, linear- lanceolate (25–30 cm × 3–4 cm); flowers fragrant, white with yellow eye, lobes ~1 cm broad.

Puerto Rico through Grenada; occasional in Dominica on dry west coast to 50 m: Grand Savanne to St. Joseph (*Ernst 1380, Nicolson 1940, Read 2007, Stern & Wasshausen 2434, Wilbur 8281*).

Prestonia R. Brown

Prestonia quinquangularis

Prestonia quinquangularis (Jacquin) Sprengel, 1825, 1:637.—Woodson in North Amer. Fl., 1938, 29:181.
Echites quinquangularis Jacquin, 1760:13.
Haemadictyon venosum Lindley, 1826a:70, nom. illeg.—Grisebach, 1862:413.

Liana with lanceolate leaves 6–14 cm × 2–6 cm, acute to shortly acuminate, obtuse to rounded at base; inflorescence racemose; flowers yellow, ~2 cm long; calyx with scales opposite the lobes, the lobes to 2 mm long, usually ± reflexed.

West Indies and northern South America; only once collected in Dominica, perhaps from cultivation: sine loc. (*Imray 70* at K, confirmed by Dr. Boiteau in letter to editor dated 23 Apr 1976).

Rauvolfia Linnaeus

1. Leaves 3-whorled, glabrous; lateral venation inconspicuous; wet midlands . . . . . ***R. biauriculata***
1. Leaves 4-whorled; lateral venation conspicuous; dry lowlands . . . . . ***R. viridis***

Rauvolfia biauriculata

Rauvolfia biauriculata J. Mueller, 1860:396, *"Rauwolfia"*.—Rao, 1956:338.

Bois lait de montagne.

Shrub or small tree to 9 m; leaves 3-whorled, glabrous, oblanceolate to obovate, lateral venation inconspicuous on both surfaces; corolla salverform, tube 4–6 mm, much longer than 1.5 mm lobes.

Native only in Guadeloupe and Dominica; frequent in Dominica in interior 400-850 m: En Haut Jean (*Webster 13510*), Laudat-Freshwater Lake area (*Chambers 2669, Eggers 674, Ernst 1785, Webster 13236*), Lisdara (*Hodge 2360*), Morne Couronne (*Ernst 1170*), Pleasant Valley (*Howard ?*), Roche d'Or Estate (*Wasshausen & Ayensu 404*), Sylvania (*Hodge 1112*), Syndicate (DHN!). Flowering January-June.

The original publication gave two erroneous localities: Dominican Republic or Santo Domingo (based on *Ritter s.n.* at W) and Trinidad (based on *Sieber s.n.* at W). The identifications are correct but the first must have come from Dominica and the second also surely involves mislabeling. La Trinité of Martinique could be involved (cf. notes under *Marcgravia trinitensis*) but the xerophilous forest there is not a likely habitat.

Rauvolfia viridis

Rauvolfia viridis Roemer & Schultes, 1819, 4:805, *"Rauwolfia"*.—Rao, 1956:291, fig. 4.
Rauvolfia lamarckii A.L. Candolle in A.P. Candolle, 1844, 8:337, *"Rauwolfia."*

Bois lait, milky bush.

Shrub to 2 m; leaves quaternate, slightly anisophyllous, broadly ovate-elliptic, acute to acuminate, tapering at base, 5–15 cm × 3–5 cm; corolla tubular or narrowly urceolate, tube 2.0–2.5 mm long, equaling lobes.

Puerto Rico through northern South America; frequent in Dominica along dry west coast from St. Joseph to the Cabrits:

Cabrits (*Hodge 673, 674, 3719, Webster 13299, Whitefoord 3987*), Canefield (*Whitefoord 6096*), Colihaut (*Wilbur 8230*), Grand Savanne (*Ernst 1039, Hodge 3776, Stern & Wasshausen 2463, Wilbur 7652*), Salisbury (*Ernst 1434*).

Tabernaemontana Linnaeus

Tabernaemontana citrifolia

Tabernaemontana citrifolia Linnaeus, 1753:210.—Little et al., 1974:832, pl. 667.

Bois lait, milkwood.

Shrub or small tree to 6 m; leaves opposite, ovate-obovate, acuminate, cuneate, 9-20 cm × 4-8 cm, glabrous; flowers white and fragrant; fruit green, fleshy, bursting open to show orange seeds with red, fleshy aril.

Central America and Antilles (originally Lesser Antilles); common in Dominica below 200 m from windswept eastern coast to mesophytic areas of west coast, often in disturbed areas: Cabrit swamp (*Hodge 675, Whitefoord 4001*), Calibishie (*Hodge 3160*), Clarke Hall (*Ernst 1440, Nicolson 1822, Stern & Wasshausen 305, 2410*), La Plaine (*Wilbur 8162*), Lisdara (*Cooper 186*), Melville Hall (*Ernst 1032*), Ridgefield Estate (*Hodge 2191*), Salybia (*Chambers 2629*), sine loc. (*Fishlock 34*).

Milky sap of twigs used by Caribs to allay pain in toothache (Hodge and Taylor, 1957:597).

AQUIFOLIACEAE

Dr. T.R. Dudley (U.S. National Arboretum), long a student of *Ilex*, reviewed this and several of his comments were incorporated.

Ilex Linnaeus

This is a difficult genus. Loesener's works, although monographic, are somewhat flawed by an overemphasis on extremes and ignoring of intermediates. The following treatment probably goes too far in emphasizing intermediates and ignoring extremes. I am particularly concerned that species treated here as excluded or dubious or not discussed may have been misidentified under *I. sideroxyloides*. As Dr. Dudley commented, "The genus desperately awaits the attention of a [new] monographer."

Excluded Species or Dubious Records

Ilex nitida (Vahl) Maximowicz was cited for Dominica by Hodge (1954:40), along with *I. sideroxyloides*, as a characteristic tree of the elfin woodland. It is possible that Dr. Hodge meant to cite *I. macfadyenii*, which is a characteristic tree of the summits. This species is similar to *I. sideroxyloides* but has larger, often subserrate leaves, is 4(-5)-merous rather than (4-)5-7-merous, usually has shorter pedicels and a flatter stigma. Dr. Dudley agrees that there is no evidence that *I. nitida* occurs on Dominica.

Ilex guianensis (Aublet) Kuntze was attributed to Dominica by Grisebach (1860:147) under the synonym *Ilex macoucoua* Persoon, based on an Imray collection (non vidi). Dr. Dudley advises me that *Eggers 643* (non vidi) is mixed, one specimen (G) being *I. sideroxyloides* and one (W) being *I. guianensis*. I have so much difficulty understanding this and similar species that I prefer to regard these, the only records of this species in the Lesser Antilles, as dubious and hope that a monographer or reviser will clarify this and other problems.

1. Leaves serrate (teeth to 2.5 mm), long-acuminate, membranous; inflorescence (or flower) solitary in leaf axils . . . . . ***I. macfadyenii***
1. Leaves entire; obtuse to short-acuminate, coriaceous; inflorescences (or flowers) several in leaf axils . . . . . ***I. sideroxyloides***

Ilex macfadyenii

Ilex macfadyenii (Walpers) Rehder, 1922:215.—Little et al., 1974:448, pl. 461.
Prinos montanus Swartz, 1788:58.
Prinos lanceolatus Macfadyen, 1837:206, non J. Hill.
Prinos macfadyenii Walpers, 1842, 1:541.
Ilex montana (Swartz) Grisebach, 1860:147, non Torrey & Gray ex Gray.
Ilex montana var. *lanceolata* Grisebach, 1860:147.
Ilex montana var. *occidentalis* Loesener in Urban, 1892:313.
Ilex macfadyenii var. *occidentalis* (Loesener) Moscoso, 1943:331.

The typical element of the species appears to be restricted to the Greater Antilles and Mexico and does not occur in the Lesser Antilles. It has thicker leaves on shorter petioles, fewer and smaller teeth, the leaf apices are not so strikingly acuminate, and the floral pedicels are much branched. Bornstein (in Howard, 1989, 5:110) discussed but didn't recognize infraspecific taxa, including this.

Ilex macfadyenii subsp. *ovata* (Grisebach) Nicolson, comb. nov.

Ilex montana var. *ovata* Grisebach, 1860:147.
Ilex montana var. *orientalis* Loesener in Urban, 1892:313.
Ilex macfadyenii var. *caribaea* Stehlé & Quentin in Stehlé et al., 1937, 1:175.

Ti citron.

Glabrous shrub or tree to 2.5 m; twigs reddish purple; petiole to 2.8 cm long; leaves membranous, elliptic-lanceolate or ovate, serrate with teeth to 2.5 mm long, long-acuminate; inflorescences or flowers solitary in axils; fruit black.

St. Kitts, Nevis, Guadeloupe, Martinique; on summits or in exposed montane or elfin woodlands of Dominica, 900-1425 m: Boiling Lake (*Hodge 1942, Whitefoord 5470*), Morne Anglais (*Wilbur 7949*), Morne Diablotins (*Chambers 2646, Wasshausen & Ayensu 417, Webster 13357*), Morne Nicholls (*Nicolson 1951*), Morne Trois Pitons (*Ernst 1217, 1223*), sine loc. (*Eggers 855, Fishlock 6*).

Ilex sideroxyloides

Ilex sideroxyloides (Swartz) Grisebach, 1857:224.—Little et al., 1974:454, pl. 464.
Prinos sideroxyloides Swartz, 1788:58.
Ilex occidentalis sensu Macfadyen, 1837:204 [not as to type: nom. illeg., renaming of *I. obcordata* Swartz (1788), cited in synonymy].
Ilex sideroxyloides var. *occidentalis* Loesener in Urban, 1899, 1:345.

Ti citron, ti citron montaigne, bois fourni, coco poule.

Glabrous shrub to canopy tree to 3 m dbh; leaves coriaceous, entire, of variable shape, obtuse, retuse, acute or short-acuminate at apex; inflorescences or flowers several per axil; fruits turning red.

Jamaica, Puerto Rico, and most of volcanic Lesser Antilles; widely distributed in Dominica from dry coastal woodlands (30 m) to summits (1400 m): north and east coast (to 200 m) from Vieille Case to Delices—(*Beard 239, 1417, Ernst 1367, 1371, 1559, 1834, Hodge 3023, 3215, Stehlé 6097, 6392, Whitefoord 5390*); interior peaks and westerly slopes from Syndicate Estate to Soufrière—(*Chambers 2647, 2650, Cooper 191, Eggers 20, Ernst 1108, 1166, 1218, Hodge 647, 1065, 1407, 1494, 2049, 2090, 2277, 2718, 2850, Lloyd 482, 768, Nicolson 2093, Smith 10253, Stern & Wasshausen 2506, 2571, Webster 13261, 13371, 13371, Whitefoord 3777, 4414, Wilbur 7388, 8302*).

This is an extremely variable species with many varieties and forms recognized, mainly based on leaf shape and size. The characters overlap in a large series of collections like this. Only one seems almost worthy of comment, *I. sideroxyloides* f. *eggersii* Loesener (1901:354), which has suborbiculate leaves only to 3.5 cm long and is restricted to summits (*Chambers 2647, Ernst 1218, Hodge 1407, 1065, Webster 13371, Wilbur 8203*), but even here gradations and other collections from the same localities suggest the taxon does not warrant recognition. The larger-leaved and taller forms occur at lower elevations, extending to the littoral at Vieille Case (teste *Beard 1417*).

Dr. T.R. Dudley advised me that he recognized two varieties from Dominica as differentiated by the following key:

1. Flowers all or mostly solitary and axillary or borne singly in leafless axils near base of present year's branchlets . . . . . var. ***occidentalis***
1. Flowers all or mostly fasciculate and axillary . . . . . var. ***sideroxyloides***

Dr. Dudley also recognizes only two specimens as *I. sideroxyloides* var. *occidentalis* Loesener, the rest being *I. sideroxyloides* var. *sideroxyloides*. These are *Lloyd 757* (NY, non vidi) from Imperial Road near Trois Pitons and *Stehlé 6398* (US) from the Carib Reserve.

The Stehlé specimen and other Dominica specimens appear to exhibit two aspects of flowering, at least so far as the pistillate materials are concerned. Flowers are borne on new shoots arising in leaf (persistent) axils of the previous years' wood (two, even three years old). In some cases an axillary new shoot remains short (<0.5 cm long), leafless, and bears several flowers, giving rise to the condition called "flowers fasciculate and axillary." In other cases, even on the same specimen (as *Stehlé 6398*), an axillary new shoot elongates (to 10 cm), bearing leaves without flowers at the upper end and a few, solitary flowers, not subtended by leaves, near the base, giving rise to the condition called "flowers borne singly in leafless axils near base of present year's branchlets."

In short, I believe the situation involving solitary, leafless flowers borne at the base of this year's shoots is an aspect of var. *sideroxyloides* rather than var. *occidentalis*. This does not mean I reject var. *occidentalis*, defined as having solitary, axillary flowers, only that I do not find that this variety occurs on Dominica.

ARALIACEAE

(by R. DeFilipps)

Cultivated *Polyscias cumingiana* (Presl) Fernandez-Villar, including *Polyscias filicifolia* (E. Fournier) L.H. Bailey, teste Lowry et al. (1989:7), an ornamental shrub with pinnately compound leaves often used in hedges, was reported as used to ease childbirth as an infusion by Adjanohoun et al. (1985:51, pl. 18).

Ed. Note: Panax and its compounds (*Didymopanax, Oreopanax*, etc.) have been treated in all genders. Article 76.2(a) of the *ICBN* states that "modern compounds ending in ... *-panax*, ... and other masculine words are masculine irrespective of the fact that ... [they] were originally treated as neuter by their authors."

1. Leaves simple; flowers and fruits sessile . . . ***Oreopanax***
1. Leaves palmately compound; flowers and fruits pedicellate . . . . . ***Schefflera***

Oreopanax Decaisne & Planchon

1. Leaves entire, glabrous . . . . . ***O. capitatus***
1. Leaves palmately lobed, stellate-pubescent below . . . . . ***O. dussii***

Oreopanax capitatus

Oreopanax capitatus (Jacquin) Decaisne & Planchon, 1854:108.—A.C. Smith in North Am. Fl., 1944, 28B:36.
Aralia capitata Jacquin, 1760:18.
Sciadophyllum capitatum (Jacquin) Grisebach, 1860:306.

Shrub or tree to 15 m (epiphytic?); leaves ovate; inflorescences stellate-pubescent.

Neotropics; occasional in Dominica in midland rainforest, 450–800 m: Bells road (*Whitefoord 6156*), Lisdara (*Hodge 2374*), Morne Cola Anglais (*Webster 13422*), Morne Micotrin (*Ernst 1734*), Syndicate (DHN!). Young flowers in March, fruits in late June.

Oreopanax dussii

Oreopanax dussii Krug & Urban ex Duss, 1897:322.

Tree to 6 m; leaves 5-7-lobed.

Guadeloupe, Martinique; summits of Dominica above 1000 m: Morne Diablotins (*Nicolson 4173*), Morne Micotrin (*Nicolson 1977*). New record for Dominica. Very young flowers in November, fruits in late May.

Schefflera J.R. & J.G. Forster

Schefflera attenuata

Schefflera attenuata (Swartz) Frodin, 1989 [Nov]:315.—Howard, 1989 [Dec], 6:14.

Panax attenuatus Swartz, 1788:54, *"attentuata."*

Didymopanax attenuatus (Swartz) Marchal in Martius, 1878, 11(1):234.—A.C. Smith in North Amer. Fl., 1944, 28B:13.

Aralie montagne.

Glabrous shrub or tree to 12 m; leaflets 3-6, ovate, acuminate.

Lesser Antilles; co-dominant with kaklin (*Clusia mangle*) near summits of Dominica, 750-1350 m: Boiling Lake (*Beard 247*), Morne Anglais (*Wilbur 7934*), Morne Diablotins (*Hodge 2817, Wasshausen & Ayensu 414*), Morne Micotrin vicinity (*Chambers 2573, Ernst 1093, 1714, Eggers 625, Fosberg 48282, Smith 10251, Stern & Wasshausen 2573, Webster 13243, Whitefoord 5150, Wilbur 8199, 8252*), Morne Trois Pitons (*Chambers 2590, Hodge 661, 1422, Nicolson 1816, Wilbur 8083*), Mosquito Mountain (*Webster 13532*).

Eggers 625 was distributed under a misidentification, *Didymopanax glabratus*.

ARISTOLOCHIACEAE

(by R. DeFilipps)

Aristolochia Linnaeus

Aristolochia anguicida Jacquin has cordate leaves and flowers to 2.5 cm long. It occurs in neotropics and was questionably referred to Dominica by Hodge and Taylor (1957:598).

Aristolochia trilobata

Aristolochia trilobata Linnaeus, 1753:960.

Liana; leaves trilobate, glabrous above, puberulent below, to 15 cm wide; the petaloid calyx brown with purple stripes, bilobate, the lower lobe ending in a filiform extension 8-20 cm long; fruit a capsule.

New World tropics; in Dominica near east coast at 300 m: La Plaine (Morne Jaune) (*Narodny s.n.*), Salybia (*Hodge 3198*).

It is possible that this spectacular species is introduced. Medicinal usages were reported by Adjanohoun et al. (1985:53, pl. 19).

ASCLEPIADACEAE

1. Plants erect.
   2. Leaves petiolate; corolla lobes deflexed, red/yellow or cream . . . . . ***Asclepias***
   2. Leaves sessile and clasping; corolla lobes spreading, violet . . . . . ***Calotropis***
1. Plants twining.
   3. Venation pinnate; leaves acute to rounded at base.
      4. Leaf-blade >4 cm long; inflorescence stalked, cymose . . . . . ***Marsdenia***
      4. Leaf-blade <3 cm long; inflorescence ± sessile, ± umbellate . . . . . ***Metastelma***
   3. Venation palmate at base; leaves truncate to cordate at base.
      5. Plants glabrous; leaves truncate; inflorescence stalked . . . . . ***Gonolobus***
      5. Plants pubescent; leaves cordate; inflorescence ± sessile . . . . . ***Matelea***

Asclepias Linnaeus

Asclepias physocarpa (E. Meyer) Schlechter, with white flowers and inflated, softly bristly fruits, is cultivated at Baiac (*Whitefoord 4224*).

Asclepias curassavica

Asclepias curassavica Linnaeus, 1753:215.—Woodson, 1954:60.

Asclepias nivea var. *curassavica* (Linnaeus) Kuntze, 1891, 2:418.—Schlechter in Urban, 1899, 1:243.

Erect herb with elliptic-lanceolate leaves; flowers showy, umbellate, with crimson, deflexed corolla and yellow, erect hoods, each hood with an inner, basal horn that arches over the gynostegium; fruit smooth, fusiform.

Ubiquitous in neotropics; a weed in Dominica from 100-600 m: Calibishie (*Wilbur 8307*), Delices (*Whitefoord 3775*), Fond Baron (*Ernst 1603*), Hatton Garden (*Hodge 3053*), Mt. Joy (*Hodge 1265*), South Chiltern (*Hodge 1476*), Sylvania (*Cooper 64, Hodge 1145*).

The root used for a febrifuge by Caribs (Hodge and Taylor, 1957:597).

Calotropis R. Brown

Calotropis procera

Calotropis procera (Aiton) W.T. Aiton, 1811, 2:78.

Asclepias procera Aiton, 1789, 1:305.—Willdenow, 1797, 1:1263.

Tall herb with sessile, obovate, glaucous leaves <2× longer than broad; bud globular; flowers umbellate, violet; coronal spurs not recurved.

Dry areas of West Africa and South Asia, introduced and naturalizing; reported for Dominica by Vélez (1957:75) on the authority of Britton.

This questionable record is included because I remember seeing it growing as a weed along the highway north of Roseau. It is possible that the other species, *C. gigantea*, occurs, although I have seen only one specimen from the West Indies (Barbados). It has ovoid buds, reflexed coronal basal spurs, and the leaves are usually >2× longer than broad.

Gonolobus R. Brown

Gonolobus martinicensis

Gonolobus martinicensis Decaisne in A.P. Candolle, 1844, 8:595.—Schlechter in Urban, 1899, 1:285.
Gonolobus scandens Urban, 1919c:151, nom. illeg.

Vine with palmately veined leaves, blade to 10 cm × 4 cm, ± cordate; flowers ± racemose, peduncle longer than petioles; corolla lobes glabrous, green.

St. Vincent, Guadeloupe and Martinique; common in Dominica in disturbed areas at middle elevations: En Haut Jean (*Webster 13505*), Grande Baie (*Eggers s.n.*), Laudat (*Eggers 1100*), sine loc. (*Ramage s.n.*, Mar. 1882).

Urban (1919c:151) considered he was making a new combination based on *"Periploca scandens"* Aublet (1775, 2(Tabl. Nom. Lat.):23). Study of this and its reference to page 273 satisfies me that this is not a validly published binomial with an epithet (what Linnaeus and Aublet called a "nomen triviale") but a one-word abbreviation of the "nomen specificum legitimum" (what we loosely call a polynomial) of cited *Periploca [Americana] scandens, foliis convolvuli; fructu alato* Plumier ex Tournefort (1700:93; Plumier, 1703, Cat. 2). *Gonolobus scandens* Urban is a superfluous renaming of *G. martinicensis* Decaisne, cited in Urban's synonymy.

Marsdenia R. Brown

Marsdenia dussii

Marsdenia dussii Schlechter in Urban, 1899, 1:275.—Rothe, 1915:425.

Vine with pinnately veined leaves; blades to 13 cm × 6 cm; inflorescence cymose with small, white flowers; corolla 0.4 cm long; staminal scales only equaling the anthers, not divided.

Rare; previously known only from a single Martinique collection; in rainforest of Dominica ~570 m: near Pont Cassé (*Ernst 1810*).

Matelea Aublet

Matelea maritima

Matelea maritima (Jacquin) Woodson, 1941:222.
Asclepias maritima Jacquin, 1760:17.
Cynanchum maritimum (Jacquin) Jacquin, 1763:83, pl. 56.
Ibatia maritima (Jacquin) Decaisne in A.P. Candolle, 1844, 8:599.
Ibatia muricata Grisebach, 1862:421.

Pubescent climber with deeply cordate, palmately veined leaves; inflorescence ± sessile, flowers greenish, small; fruit muricate.

Hispaniola through northern South America; in dry areas of Dominica: Grand Savanne (*Ernst 1889, 2126*).

Metastelma R. Brown

Metastelma parviflorum

Metastelma parviflorum (Swartz) R. Brown ex Schultes in Roemer & Schultes, 1820, 6:120.—Schlechter in Urban, 1899, 1:246.
Cynanchum parviflorum Swartz, 1788:53.—Liogier, 1963:191.—Whitefoord, 1989:147.
Metastelma suberosum Grisebach, 1862:417.

Small climber with apiculate, opposite or whorled, pinnately veined leaves; flowers umbellate, very small, whitish; gynostegium long-stipitate.

Puerto Rico through northern South America; in drier places of Dominica: Portsmouth (*Whitefoord 5298*), sine loc. (*Imray 17* at K).

ASTERACEAE/COMPOSITAE

It is vital to understand the composite nature of what appears to be a "flower" in Asteraceae. In a typical radiate head ("flower") what looks like a calyx (sepals) is an involucre (bracts), what looks like petals (corolla) are ligulate ray-florets, and what looks like the center of the "flower" is composed of tubular disk-florets. Each of the supposed petals or central organs is a floret.

Herbs or shrubs; leaves opposite or alternate, sometimes radical, simple to compound; venation pinnate or 3-veined (with at least 3 major veins arising at or near leaf blade base); stipules absent; typical inflorescence a head (capitulum) enclosed in 1-more series of involucral bracts (phyllaries) with flowers (florets) on a common receptacle, floral bracts on receptacle reduced to bristles or scales (pales) or absent; florets gamopetalous with three corolla types: (1) tubular (disk-floret), with elongate tube and spreading teeth, (2) ligulate (ray-floret), with short tube and elongate, strap-shaped limb with 0–5 teeth or, rarely, (3) bilabiate, with elongate tube, a 3-lobed upper and 2-lobed lower lip; heads of three basic types: (1) discoid, with all florets tubular, (2) radiate, with outer florets ligulate and inner florets tubular, or (3) ligulate, with all florets ligulate; heads also characterized by floret sex, e.g., homogamous, with all florets same sex (bisexual, pistillate, or staminate) or heterogamous, with some florets sexually different from others; calyx (pappus) none or superior, of capillary bristles (hairs) or scales (pales); corolla superior, of types described above as florets; stamens 5, epipetalous, alternate with petals, with anthers basifixed and connate (syngenesious), simple or tailed at base; pistil 1, inferior, unilocular with 1 basal ovule; style 2-branched (unbranched in neuter florets); fruit an achene, crowned by pappus (capillary bristles or pales), if any.

I am grateful to Dr. H.E. Robinson who helped with the key and in other ways.

Cultivated Genera of Asteraceae

Artemisia absinthium Linnaeus and *Artemisia vulgaris* Linnaeus were cited as cultivated in the Antilles by Adjanohoun et al. (1985:71, pl. 37-38), suggesting both are on Dominica (new records, if true).

Ayapana triplinervis (Vahl) King & Robinson was attributed to Dominica as *Eupatorium triplinerve* Vahl by Vélez (1957:81), extrapolated from Britton and Wilson's citation (1925, 6:289), "Martinique; Guadeloupe." It has been cultivated on the French Islands and escaped but no material from Dominica has been seen. It has opposite, entire, lanceolate leaves tapering to a subsessile base. However, Adjanohoun et al. (1985:81, pl. 48) reported it as widely cultivated for its medicinal usages, another new record for Dominica if there.

Cosmos caudatus Kunth, with pink ligules, was reported by Domin (1930d:79) as collected by Imray.

Cosmos sulphureus Cavanilles, with yellow or orange ligules, was reported by Adjanohoun et al. (1985:75, pl. 42). These have opposite, pinnatisect leaves and beaked achenes with barbed awns.

Helianthus annuus Linnaeus, the sunflower, may be cultivated on Dominica but no specimens have been seen. It has alternate, dentate and rough leaves and a large head 30 or more cm across.

Launaea intybacea (Jacquin) Beauverd is reported as "occasionally met in the Lesser Antilles" by Adjanohoun et al. (1985:85, pl. 51). This, if true for Dominica, would be a new record for the island.

Tagetes erecta Linnaeus (African marigold) was reported as collected by Domin (1930d:79). *Tagetes patula* Linnaeus (French marigold) was illustrated by Adjanohoun et al. (1985:91, pl. 58). These species have opposite or alternate, pinnatisect leaves and connate involucral bracts. Howard (1989, 6:601) treated these as synonyms.

Zinnia elegans Jacquin was collected in cultivation by Domin (1930d:73). This and other cultivated zinnias have opposite, sessile, and entire leaves.

Excluded Genera of Asteraceae

Borrichia arborescens (Linnaeus) A.P. Candolle was attributed to Dominica by Vélez (1957:80). No collections have been seen and it is unlikely that this shrubby coastal calciphile (with opposite, entire, oblanceolate leaves) survives on Dominica.

Helenium quadridentatum Labillardière was credited to Dominica by Adjanohoun et al. (1985:83, pl. 49) but no material has been seen.

Lagascea mollis Cavanilles was attributed to Dominica as *Nocca mollis* (Cavanilles) Jacquin by Vélez (1957:80), extrapolated from Britton and Wilson's citation (1925, 6:300), "Anguilla to Barbados." Although it is weedy, the few collections made on the French islands indicate that it is introduced and rare there. No collections from Dominica have been seen. Its leaves are generally opposite. Like *Rolandra* it has 1-flowered heads gathered in head-like glomerules but, unlike *Rolandra*, with a pseudo-involucre. The true involucral bracts are partly united.

1. Leaves opposite.
   2. Pappus bristles with prominent retrorse barbs . . . . . ***Bidens***
   2. Pappus without retrorse barbs.
      3. Leaves compound or deeply pinnatifid . . . . . ***Ambrosia***
      3. Leaves simple.
         4. Fruits spiny, at least one large terminal spine hooked . . . . . ***Acanthospermum***
         4. Fruits not spiny.
            5. Leaf margins, near base, pectinate (with elongate bristles); lower leaf surface with large, dark glandular "dots" . . . . . ***Pectis***
            5. Leaf margins not pectinate; lower surface without glandular "dots" or, if any, then inconspicuous.
               6. Heads with receptacular bracts (pales, sometimes bristles); heads heterogamous (outer florets female or neuter), corollas often yellow.
                  7. Heads conspicuously radiate (ray-florets longer than involucre).
                     8. Pappus of many plumose, capillary bristles . . . . . ***Tridax***
                     8. Pappus lacking or a cup of united scales.
                        9. Involucral bracts erect, longer than achenes and receptacular pales . . . . . ***Wedelia***
                        9. Involucral bracts deflexing, shorter than achenes and receptacular pales . . . . . ***Wulffia***
                  7. Heads inconspicuously radiate (ray-florets shorter than involucre).

10. Heads sessile in leaf axils; ray-achenes with prominent, dentate lateral wings . . . . . ***Synedrella***
10. Heads stalked; ray-achenes without dentate lateral wings.
11. Heads many, in corymbose panicles . . . . . ***Clibadium***
11. Heads few (1–3), often on long peduncles.
12. Petioles >1 cm long; involucre multiseriate; achenes with many capillary setae . . . . . ***Melanthera***
12. Petioles <1 cm long; involucre 1–2-seriate; achenes with few or no awns.
13. Receptacle with bristle-like pales . . . . . ***Eclipta***
13. Receptacle with broad pales.
14. Leaves glabrous; receptacle columnar in fruit . . . . . ***Acmella***
14. Leaves pubescent; receptacle nearly flat . . ***Galinsoga***
6. Heads without receptacular bracts (receptacle sometimes with short hairs); heads homogamous (only bisexual, disciform florets); corollas never yellow.
15. Leaves pinnately veined; lamina with internal resinous "dots," seen as pale against light . . . . . ***Critonia***
15. Leaves 3-veined from near base, without resinous "dots."
16. Pappus of 5 scales (awned in ours) . . . . . ***Ageratum***
16. Pappus of many capillary bristles.
17. Climbers; heads with 4 major bracts enclosing 4 florets . . . . . ***Mikania***
17. Erect or lax herbs; heads with >4 bracts and 4 florets.
18. Involucral bracts dark-tipped, none spreading with age or drying, all finally deciduous . . . . . ***Chromolaena***
18. Involucral bracts concolored, at least outer bracts spreading with age or drying, persistent.
19. Plants pubescent, particularly on stems; achene bases asymmetric.
20. Leaves much longer than wide; involucre with 15 bracts in 3 ranks; receptacles flat, naked; corolla limbs abruptly expanded . . . . . ***Condylidium***
20. Leaves about as wide as long; involucre with >15 bracts, not ranked; receptacles strongly convex, hirsute . . . . . ***Hebeclinum***
19. Plants glabrous; achene bases symmetric.
21. Lax herbs; corolla lobes papillose inside; apical anther appendages longer than wide . . . . ***Fleischmannia***
21. Erect herbs; corolla lobes not papillose inside; apical anther appendages broader than long . . . . . ***Koanophyllon***

1. Leaves alternate or basal.
22. Florets all ligulate with 5 lobes; sap usually milky.
23. Heads small (~5 mm long); inflorescence much longer than leafy part of plant; achenes ± terete . . . . . ***Youngia***
23. Heads longer; inflorescence much shorter than leafy part of plant; achenes flattened.
24. Achenes narrowed or beaked at apex; leaves unlobed . . . . . ***Lactuca***
24. Achenes truncate at apex; leaves lyrate . . . . . ***Sonchus***
22. Florets not ligulate with 5 lobes; sap usually clear.
25. Female heads armed with hooked spines in fruit . . . . . ***Xanthium***
25. Heads not armed with hooked spines in fruit.

26. Inflorescence compounded of multiple involucrate heads (with secondary heads).
  27. Compounded heads spheroidal; leaves petiolate, whitish beneath; pappus short, without awns . . . . . ***Rolandra***
  27. Compounded heads not spheroidal; leaves tapered to ± sessile base, not white beneath; pappus of 5 long bristles.
    28. Pappus awns straight; secondary heads subtended by broad bracts . . . . . ***Elephantopus***
    28. Pappus awns contorted; secondary heads not subtended by extremely broad bracts . . . . . ***Pseudelephantopus***
26. Heads not compounded.
  29. Heads with receptacular bracts (pales) among the florets.
    30. Pappus of many capillary bristles . . . . . ***Neurolaena***
    30. Pappus of scales, awns, or lacking.
      31. Heads solitary; peduncles swollen below heads . . . . . ***Tithonia***
      31. Heads in branching panicles; peduncles not swollen below heads.
        32. Marginal florets only fertile (setting achenes); achenes attached to a pair of male florets and their pales, without lateral wings or apical awns . . . . . ***Parthenium***
        32. Florets all fertile (setting achenes); achenes not forming complexes with adjacent florets, with marginal wings and apical awns . . . . . ***Verbesina***
  29. Heads without receptacular bracts (pales) among the florets.
    33. Pappus without capillary bristles.
      34. Heads axillary; leaves finely serrate; pappus a smooth collar . . . . . ***Struchium***
      34. Heads terminal, subtended by several leaves; leaves coarsely dentate or lobed; pappus deciduous, lacking, or a serrulate fringe.
        35. Heads closely subtended by leafy bracts; achenes prismatic; pappus deciduous or lacking . . . . . ***Centratherum***
        35. Heads not closely subtended by leafy bracts; achenes biconvex; pappus a short, serrulate collar . . . . . ***Egletes***
    33. Pappus of many capillary bristles.
      36. Involucre 1-seriate.
        37. Heads solitary, >1 cm long; leaves entire . . . . . ***Porophyllum***
        37. Heads in branching cymes or corymbs, much shorter; leaves lyrate to dentate.
          38. Heads conspicuously radiate . . . . . ***Senecio***
          38. Heads without ray-florets (all florets disciform).
            39. Involucre without bracteoles; all florets bisexual . . ***Emilia***
            39. Involucre subtended by linear bracteoles; outer florets pistillate . . . . . ***Erechtites***
      36. Involucre 2–5-seriate.
        40. Heads few or solitary; leaves in a basal rosette; female florets with ligulate limbs.
          41. Leaves lobed or dentate; achenes prismatic and beaked; disk florets slightly bilabiate . . . . . ***Chaptalia***
          41. Leaves entire; achenes biconvex, not beaked; disk florets not bilabiate . . . . . ***Erigeron***
        40. Heads numerous in complex inflorescences; none of florets with ligulate limbs.
          42. Heads heterogamous (2 types of florets in each head).
            43. Heads small (to 0.5 mm long); achenes biconvex . . . . . ***Conyza***

43. Heads larger (to 1 cm long); achenes prismatic . . ***Pluchea***
42. Heads homogamous (only 1 type of floret in each head).
44. Leaves 3-veined; plants dioecious . . . . . ***Baccharis***
44. Leaves pinnately veined; plants monoecious . . . ***Vernonia***

Acanthospermum Schrank

Acanthospermum hispidum

Acanthospermum hispidum A.P. Candolle, 1836, 5:522.—Blake, 1921:386.

Annual pubescent herbs; leaves to 3 cm long, opposite, obscurely serrate, gradually tapered to base; heads axillary, sessile; involucre double, outer 5 bracts herbaceous and inner bracts becoming burr-like, each enclosing an achene; receptacle with pales; ray-florets yellowish, few and inconspicuous; disk-florets appearing bisexual but sterile; pappus 0; fruits (achene enclosed in involucral bract) armed with 2 elongated terminal spines and marginal hooks.

Widely spread neotropical weed from U.S.A. to Argentina, now Africa and Hawaii; collected as "uncommon" in Dominica: Roseau city limits (*King 6290*).

Acmella L. Richard

Acmella uliginosa

Acmella uliginosa (Swartz) Cassini in Cuvier, 1822, 24:331.—Jansen, 1985:55.
Spilanthes uliginosa Swartz, 1788:110.—A. Moore, 1907:537.—Domin, 1930d:77.

Small annual herbs; leaves opposite, lanceolate to narrowly ovate, serrulate; heads long-peduncled, terminal or in upper axils; involucral bracts 5-6, 1-seriate; receptacle elongated, pales stramineous, enclosing and longer than achenes but finally deciduous; ray-florets female, yellow, ± equaling involucre; disk-florets yellow, 4-merous, bisexual; achenes black, compressed, ciliate on both margins, pappus 2-awned.

Widespread in tropics; in disturbed areas of Dominica in wet places: Goodwill (*Eggers 74*), Grand Fond (*King 6375*), Pont Cassé (*Chambers 2716*), Portsmouth (*Hodge 722*), Rosalie Bay (*Wilbur 8331*), Soufrière (*Lloyd 473*), Sylvania (*Hodge 721*).

Adjanohoun et al. (1985:91, pl. 57) reported medicinal usage (as *Spilanthes uliginosa*).

Ageratum Linnaeus

Ageratum conyzoides

Ageratum conyzoides Linnaeus, 1753:839.—Domin, 1930d:63.—M.F. Johnson, 1971:26.

Bouton.

Herb; leaves opposite; florets mauve or white, all tubular (disk); involucre multiseriate; receptacle naked; achenes 5-ribbed, black with 5 (awned in ours) scales.

Pantropical weed; common in Dominica in low to middle elevations: Bellevue (*King 1603*), Cabrit Swamp (*Hodge 751*), Carib Reserve (*Hodge 3394*), Fond Baron Estate (*King 6299*), Freshwater Lake road (*Chambers 2674, 2675*), Laudat (*Hodge 1805, 1806, King 6386*), Lisdara (*Hodge 755, 2337*), Marigot (*Hodge 752*), Mount Joy (*Hodge 1270, 1274*), Pointe Ronde (*Hodge 2681*), Pont Cassé (*Ernst 1236, Hodge 1200, King 6350*), Portsmouth (*Hodge 754*), Ridgefield (*Hodge 2185*), Roseau (*Hodge 753, King 6289, Lloyd 556*), South Chiltern (*Ernst 1321, Hodge 750, 1452*), Springfield (*King 6340*), Sylvania (*Cooper 2, 77, Hodge 750*), Syndicate (*Chambers 2655, Whitefoord 3606*), Tête Morne (*King 6323*).

Adjanohoun et al. (1985:67, pl. 33) reported medicinal use of infusions and decoctions.

Several collectors comment that white- and blue-flowered phases occur in the same populations without intermediates. The species is sometimes confused with *Fleischmannia microstemon* but in that the achenes are topped by a capillary pappus, not scales.

Ambrosia Linnaeus

1. Plants creeping; lower leaves tripinnatifid . . . ***A. hispida***
1. Plants erect; lower leaves bipinnatifid . . . ***A. peruviana***

Ambrosia hispida

Ambrosia hispida Pursh, 1814:743.—Domin, 1930d:59.

Hispid, monoecious herbs; leaves alternate, finely lobed; pistillate heads clustered, 1-flowered, usually armed with 4-8 tubercles or spines, corolla 0, stamens 0, pappus 0; staminate heads many-flowered, dense on undivided racemes, corolla tubular; achenes black.

Weed of Caribbean strands, sometimes cultivated; on Dominica: sine loc. (*Nicholls 11* cited by Domin, l.c., not seen).

An infusion is used by Caribs as a vermifuge and febrifuge (Hodge and Taylor, 1957:614). Adjanohoun et al. (1985:69, pl. 35) confirmed this.

Ambrosia peruviana

Ambrosia peruviana Willdenow, 1805, 4:377.
Ambrosia paniculata sensu auctt., non Michaux, nom. superfl. pro *Iva monophylla* Walter [= *A. artemisiifolia* Linnaeus].—Stehlé, 1954b:77.
Ambrosia paniculata var. *peruviana* (Willdenow) O. Schulz in Urban, 1911, 7:87.
Ambrosia cumanensis Kunth, 1820, 4:216.—Domin, 1930d:59.
Ambrosia paniculata var. *cumanensis* (Kunth) O. Schulz in Urban, 1911, 7:86.

Pubescent, erect plant; leaves less finely divided; male heads

lax on usually branched inflorescences.

Caribbean into northern South America; apparently rarely collected on Dominica: Bataka (*Hodge 3190, Stehlé 6388*), Rosehill (*Eggers 503*).

Caribs cultivate this for a febrifuge tea (Hodge and Taylor, 1957:614). Adjanohoun et al. (1985:69, pl. 36) mentioned use in bath against evil magic.

Plants with long hairs and more divided upper leaves are sometimes referred to *A. cumanensis*.

Baccharis Linnaeus

Baccharis pedunculata

Baccharis pedunculata (Miller) Cabrera, 1959:240.—Cuatrecasas, 1968:48.
Conyza pedunculata Miller, 1768.
Eupatorium cotinifolium Willdenow, 1794:11; 1803, 3:1769.
Baccharis speciosa A.P. Candolle, 1836, 5:399.—Grisebach, 1861:366.
Baccharis cotinifolia (Willdenow) Urban, 1903, 3:406.—Domin, 1930d:69; Stehlé, 1954b:74.

Branching dioecious shrub to 2 m; leaves alternate, coriaceous, 3-veined, 8-14 cm × 3-6 cm, apex shortly acuminate to mucronate, base cuneate; inflorescence corymbose, terminal; involucral bracts in 4-5 series; heads with whitish pistillate or functionally staminate flowers; pappus copious, longer on fertile than sterile flowers.

Widespread in South America, north into Central America and Lesser Antilles; occasional at higher elevations (650 m to summits) in Dominica: road from Baiac (*Whitefoord 4600*), Freshwater Lake (*Chambers 2736, Eggers 611, Ernst 1851*), Morne Anglais (*Hodge 746, Wilbur 7961*), Morne Trois Pitons (*Ernst 2037*), Pont Cassé (*King 6351, 6358, Webster 13458, Wilbur 7750*), Syndicate (*Whitefoord 3524*).

Bidens Linnaeus

Bidens reptans (Linnaeus) G. Don was attributed to Dominica by Vélez (1957:80) but no collections have been seen. It differs from the following species as a scrambling subshrub with terete stems, yellow ligulate flowers and long-ciliate achenes.

1. Leaves bipinnate; achenes (3-)4-awned . . . . . ***B. cynapiifolia***
1. Leaves 1-pinnate; achenes 2(-3)-awned.
   2. Ray-florets sterile, conspicuous; achenes 2-awned; inner involucral bracts green (ours) . . . . . ***B. alba***
   2. Ray florets absent or fertile and inconspicuous; achenes 2(-3)-awned; inner involucral bracts brown . . . . . ***B. pilosa***

Bidens alba

Bidens alba (Linnaeus) A.P. Candolle, 1836, 5:605.—Ballard, 1986:1463.
Coreopsis alba Linnaeus, 1753:908.

Bidens alba var. *radiata*

Bidens alba var. *radiata* (C. Schultz) Ballard in Melchert, 1975:295.—Ballard, 1986:1463.
Bidens pilosa var. *radiata* C. Schultz in Webb & Bertholet, 1844, 3(2,2):242.

White daisy, baksa (Carib).

Erect herb; leaves opposite (or upper alternate) usually with 3 leaflets; involucre 2-seriate; receptacle chaffy; ray-florets white, showy, sterile; disk-florets bisexual; achenes tipped by 2-6 teeth or awns, variously barbed or hispid.

Originally neotropical but now widely distributed; in disturbed places of Dominica: Pont Cassé (*Chambers 2714, Webster 13460*), Salybia (*Hodge 3285*), St. Paul Parish (*Cooley 8750*), Springfield (*King 6334, 6337*), Sylvania (*Hodge 763, 1141, King 6348, Nicolson 1869, Wilbur 7719*).

Leaf juice is used to treat eye problems (Hodge and Taylor, 1957:614).

I tried to follow Ballard (1986) in dealing with *B. alba* and *B. pilosa*, although our materials do not match his descriptions of Central American taxa exactly.

Bidens cynapiifolia

Bidens cynapiifolia Kunth, 1820, 4:185.—Domin, 1930d:78.

Erect herb; leaves bipinnate to tripinnatifid; ray florets inconspicuous, orange-yellow.

Caribbean to northern South America; occasional in dry scrub thickets of Dominica: rocky hillsides near mouth of Batali River (*Chambers 2794* at US), Fonde Hunte Estate (*Whitefoord 4454*).

Bidens pilosa

Bidens pilosa Linnaeus, 1753:832.—Domin, 1930d:79.—Ballard, 1986:1464.

Erect herb; leaflets 3(-5); ray-florets absent or white and inconspicuous.

Widely distributed weed; sometimes associated with *B. alba* on Dominica: Grand Bay road (*Ernst 1620, King 6319*), Laudat (*Lloyd 177*), Morne Micotrin (*Hodge 2086?*), Pont Cassé (*Chambers 2715*), Portsmouth (*Hodge 764*), Ridgefield (*Hodge 2187?*), South Chiltern (*Hodge 1518?*).

Adjanohoun et al. (1985:73, pl. 39) reported medicinal usages.

Specimens (at Harvard) cited with ? may belong to *B. alba* var. *radiata*.

Centratherum Cassini

Centratherum punctatum

Centratherum punctatum Cassini in Cuvier, 1817, 7:384.—Kirkman, 1981:15.
Amperephis mutica Kunth, 1820, 4:31.
Amphebecis violacea Schrank in Hornschuch, 1824, 1:86.
Centratherum muticum (Kunth) Lessing, 1829:320.
Centratherum violaceum (Schrank) Gleason in North Amer. Fl., 1922, 33:49.

Erect, pubescent herb with alternate, obovate, serrate leaves; inflorescence terminal, subtended by many bracts, including a few basal, foliose bracts; flowers all discoid, purple.

South America into Panama, sometimes cultivated and escaping; new record for Dominica: Delices at base of stony bank, 300 m (*Whitefoord 3679*), Roseau in Mrs. Irma Didier's garden (*Nicolson 4209*), sine loc. (*Eggers s.n.* Apr 1882).

Adjanohoun et al. (1985:73, pl. 40) reported usage of an infusion against fever.

Chaptalia Ventenat, nom. cons.

Chaptalia nutans

Chaptalia nutans (Linnaeus) Polakowsky, 1878:582.—Domin, 1930d:83.—Simpson in North Amer. Fl. ser. 2, 1978, 10:6.
Tussilago nutans Linnaeus, 1759a:1214.

Acaulescent herbs; leaves white-floccose beneath, ± crenate; heads radiate, solitary on long peduncle, nodding in bud and fruit but erect at anthesis; involucre multiseriate, bracts lanceolate, rather long; ray-florets white but turning purplish, pistillate; disk-florets bilabiate, bisexual; achenes shorter than whitish pappus.

Florida to Argentina; occasional in Dominica: Baiac road (*Whitefoord 4607*), Grand Bay road (*Ernst 1613*), Morne aux Diables (*Wilbur 8049*), Lisdara (*Hodge 732*), Ridgefield (*Hodge 2127*), Roseau along Jacks Walk (*Hodge 731*), Soufrière (*Lloyd 419*), sine loc. (*Eggers s.n.* Mar. 1882).

Adjanohoun et al. (1985:75, pl. 42) reported several medicinal usages.

Chromolaena A.P. Candolle

1. Leaves entire . . . . . ***C. integrifolia***
1. Leaves serrate or dentate.
   2. Leaves conspicuously pubescent, coarsely dentate with few (<10) broad teeth; plants of lowlands . . . . . ***C. odorata***
   2. Leaves glabrous or ± glabrous, finely serrate to dentate with many (>20) teeth; plants of midlands to mountain tops.
      3. Leaves sessile, rounded to obtuse at base . . . . . ***C. impetiolaris***
      3. Leaves petioled, rarely ± sessile, tapered at base.
         4. Leaves not gland-dotted beneath . . . . . ***C. macrodon***
         4. Leaves dark (to red) gland-dotted beneath . . . . . ***C. trigonocarpa***

Chromolaena impetiolaris

Chromolaena impetiolaris (Grisebach) Nicolson, 1987.
Eupatorium impetiolare Grisebach, 1861:357.—Domin, 1930d:65.

Glabrous subshrubs; leaves opposite, sessile, elliptical-oblong to lanceolate, 3-veined, coriaceous, densely gland-dotted beneath, margins cartilaginous, serrated with narrow, "horn-like" but blunt teeth; inflorescence corymbose, heads pedicellate; receptacle naked, produced into a short cylinder; involucre cylindric, with conspicuous "spots"; involucral bracts many, appressed, unequal in 4–6 series, each 3–5-veined and with a "spot" near tip, ultimately all deciduous; corollas tubular, white; anther appendage large; style without basal node; achene ribbed; carpopodium short; pappus of about 40 capillary bristles.

Endemic to Dominica in opened places at higher elevations: Freshwater Lake vicinity (*Chambers 2572, King 6384, Nicolson 2109*), Morne Diablotins (*Whitefoord 5321*), Rosehill (*Eggers 628*), near summit of Trois Pitons (*Chambers 2754, Hodge 1381, Kimber 983*). Flowering November-January, fruiting in February.

Domin (1930d:65) cited the type as *Imray 241* from Couliaboun Mountains (i.e., Morne Anglais).

Chromolaena integrifolia

Chromolaena integrifolia (Sprengel) King & Robinson, 1970b:202.
Eupatorium integrifolium Bertero ex Sprengel, 1826, 3:410.—Stehlé, 1962d:348.

Densely puberulent subshrubs; leaves succulent, entire, gland-dotted; corollas bluish.

Northern Lesser Antilles along coasts; new for Dominica on north coast: Calibishie (*Hodge 3149*), Capucin (*Whitefoord 5816*).

A number of specimens of this species from Guadeloupe and Martinique were found (US) misidentified as *Eupatorium atriplicifolium* Lamarck, a synonym of *Chromolaena corymbosa* (Aublet) King & Robinson.

Chromolaena macrodon

Chromolaena macrodon (A.P. Candolle) Nicolson, 1987.
Eupatorium macrodon A.P. Candolle, 1836, 5:145.—Domin, 1930d:65.

Glabrous subshrubs; leaves petioled, ovate-elliptic, tapered to base, 3-veined, not gland-dotted beneath, coriaceous, margins cartilaginous, serrated with narrow, "horn-like" but blunt teeth; heads pedicelled but ultimate, heads sometimes ± sessile (ternate).

Endemic (? St. Kitts) to Dominica near summits or on ridges: Morne Anglais (*Hodge 2312*), Morne Diablotins (*Fishlock 3, Hodge 2828, Webster 13341, Whitefoord 5729*), Morne Plat Pays (*Hodge 1717*), Morne Trois Pitons (*Chambers 2753*). Flowering in March on ridges, June on summits.

The type (G) reads "Habitat vertices montium in locis humidis Dominicae" (summits of mountains in humid places of Dominica). It is suspected that the collection (from L'Héritier) was made by de Ponthieu.

Chromolaena odorata

Chromolaena odorata (Linnaeus) King & Robinson, 1970b:204.
Eupatorium odoratum Linnaeus, 1759a:1205.—Domin, 1930d:64.
Osmia odorata (Linnaeus) C. Schultz, 1866:251.

Pubescent subshrub; leaves deltoid to rhombic, membranous, upper margin with a few (<10) large teeth, red gland-dotted beneath, often obscured to the naked eye by dense pubescence.

Southeastern U.S. to Argentina, adventive in Old World; occasional in disturbed places on dry scrublands along west coast of Dominica, sometimes in interior: Carib Point (*King 6327*), Dublanc (*Whitefoord 5345*), Grand Bay, Berekua (*King 6320*), La Plaine (*King 6372*), La Ronde (*King 6364*), Macoucheri (*Chambers 2733*), Mero (*Chambers 2784*), Mt. Joy (*Cooper 59, Hodge 1085*), Pointe Michel (*King 6308*). Flowering December–February.

Adjanohoun et al. (1985:81, pl. 47) reported the same medicinal usage as for *Hebeclinum macrophyllum*.

Chromolaena trigonocarpa

Chromolaena trigonocarpa (Grisebach) King & Robinson, 1970b:207.
Eupatorium trigonocarpum Grisebach, 1861:359.—Domin, 1930d:65.
Eupatorium mononeurum Urban, 1903, 3:392.—Domin, 1930d:65.
Chromolaena mononeura (Urban) King & Robinson, 1970b:203.

Pubescent to glabrescent subshrubs; leaves serrate, gland-dotted beneath, smooth to bullate, acute at base, usually acuminate at apex; heads pedicelled; involucral bracts 3-veined, only one vein colored in pale-bracted aspects; achenes 3–5-ribbed.

Guadeloupe, Martinique (possibly elsewhere in Lesser Antilles, such as St. Kitts); common in Dominica at mid- to highest elevations in disturbed places: Belle Fille (*King 6355**), Bellevue (*King 6313**), Deux Branches (*Chambers 2766**), Fond Baron Estate (*King 6298**), Freshwater Lake vicinity (*Burch 1377, Chambers 2735, Eggers 1016, 1451*, Ernst 1090, 1852, Gillis 8198, Lloyd 203*, Smith 10300, Stern & Wasshausen 2565*, Webster 13245, 13262, Whitefoord 4199, Wilbur 7431*), Glasham (*King 6395**), Grand Bay Road (*Ernst 1066*, 1622**), Grand Fond (*King 6376**), La Chaudière (*Hodge 3536**), Lisdara (*Hodge 741*), Milton (*Hodge 2578**), Morne Anglais (*Nicolson 4102, Wilbur 7945*), Morne Trois Pitons (*Chambers 2751*), Mt. Joy (*Webster 13381**), Pont Cassé (*DeFilipps 165*, Ernst 1013*), *Wilbur 7775**), Riversdale (*Proctor 25799**), Salybia (*Stehlé 6409*), South Chiltern (*Hodge 1448*, Nicolson 2168**), Springfield (*Chambers 2547*, King 6345**), Salybia (*Hodge 3310?*), Sylvania (*Cooper 4*, Hodge 1041*, 1033**), Syndicate (*Chambers 2653*, Hodge 2614*, 2887*), Trafalgar Falls (*Hodge 2025**).

It is understandable that two species have been named from Dominican material in this complex. In their extreme aspects they seem quite different. Study of Dominican specimens convinces me that the variability is continuous and has more to do with environment, such as altitude but more likely shade (*mononeura*, asterisked) vs. open sun (*trigonocarpa*), rather than genetics.

In a well-developed *mononeura* aspect one finds (1) whitish involucral bracts resulting in only 1 of the 3 bract-veins being colored, (2) plants more glabrous, (3) internodes rather longer, and (4) leaves rather larger and smoother. These tend to be from lower elevations, possibly better correlated with growing in shade.

In a well-developed *trigonocarpa* aspect one finds (1) brownish involucral bracts, resulting in all 3 bract-veins being colored, (2) plants more pubescent, (3) internodes rather shorter, and (4) leaves rather smaller and strikingly bullate. These tend to be from higher elevations, possibly correlated with growing in exposed and sunny situations.

The type of *Eupatorium trigonocarpum* is an Imray (no. 51 teste Domin, 1930d:65) collection from Dominica, at Kew, without locality. The type material of *E. mononeurum* is cited as *Eggers 71* and *1451*, from Morne Gombo, a locality unknown to me. However, *Eggers 1451* was collected Dec 1883 at Laudat (3000′), on the way to Freshwater Lake.

Clibadium Linnaeus

1. Leaves conspicuously and irregularly incised-serrate (erose); central (male) florets subtended by pales, with short hairs at top . . . . . ***C. erosum***
1. Leaves inconspicuously serrate; central (male) florets not subtended by pales, with long, multicellular hairs at top . . . . . ***C. sylvestre***

Clibadium erosum

Clibadium erosum (Swartz) A.P. Candolle, 1836, 5:506.—O. Schulz in Urban, 1911, 7:81.—Domin, 1930d:71.—Stehlé, 1954b:75.
Trixis erosa Swartz, 1788:115.

Subshrub to 3 m; leaves opposite, 3-veined at or above base, irregularly incised-serrate; heads with only tubular florets, marginal florets female, inner ones male; receptacle pales intergrading with the involucral bracts; achenes obovate, becoming dark, true pappus absent but with short hairs at top of fertile outer and abortive inner achenes.

Puerto Rico into Lesser Antilles; lower to highest regions of Dominica: Bellevue (*King 6305*), Deux Branches (*Chambers 2770*), Freshwater Lake (*Chambers 2738, Ernst 1088, Whitefoord 5143*), Glasham (*King 6396*), Layou Valley road (*Nicolson 4098*), Morne Anglais (*Hodge 2241*), Morne Diablotins summit (*Wasshausen & Ayensu 416, Webster 13352*), Morne Trois Pitons upper slopes and summit (*Chambers 2756, Ernst 2035, Wilbur 8075*), South Chiltern (*Hodge 1462*).

Clibadium sylvestre

Clibadium sylvestre (Aublet) Baillon, 1882, 8:307.—Blake, 1917:4.—Stehlé, 1954b:75.

Baillieria sylvestris Aublet, 1775:807.
Clibadium vargasii A.P. Candolle, 1836, 5:506.—O. Schulz in Urban, 1911, 7:80.—Domin, 1930d:71.
Clibadium terebinthinaceum var. *badieri* A.P. Candolle, 1836, 5:506.
Clibadium badieri (A.P. Candolle) Grisebach, 1861:368.

Enivre, nivrage, kunami (Carib).

Similar to the above but leaf margins shallowly serrate to ± entire and aborted ovaries of central flowers with tuft of long hairs.

Northern South America into Lesser Antilles; lower elevations of Dominica: Bells (*Whitefoord 6145*), Carib Reserve? (*Hodge 3195*), cult. Clarke Hall (*Nicolson 2025*), La Ronde (*King 6362*), La Plaine (*Ernst 1584, King 6373*), Salybia (*Stehlé 6113*).

Hodge and Taylor (1957:615) explained how Dominican Caribs pound bundles of leaves and throw them into pools to poison fish. At least one author is cited that believed this species was brought from South America by Caribs. *Nicolson 2025* reported that leaves are dried to make fish, insect, and rat poison.

Condylidium King & Robinson

Condylidium iresinoides

Condylidium iresinoides (Kunth) King & Robinson, 1972b:881.
Eupatorium iresinoides Kunth, 1820, 4:83.
Eupatorium iresinoides f. *integrum* Domin, 1930d:65, "*integra.*"

Pubescent, sprawling herbaceous subshrubs; leaves opposite, ovate, 3-veined, abruptly attenuated near base, dark-glandular dots beneath, margins ± entire to serrulate; inflorescence lax, often strongly divaricate; involucre of 15 unequal bracts in 3 series of 5 bracts, inner ones not quickly deciduous; receptacle flat, naked; florets tubular, few, 5-6; corolla narrowly campanulate above; anther appendages slightly longer than broad; style base with distinct enlargement above nectary, style appendages linear, densely papillose; achenes 5-ribbed, base (carpopodium) strongly contorted.

Northern South American into Central America and West Indies; occasional in Dominica on dry west coast: Gabriel (*Wilbur 8232*), Mero (*Ernst 1934*).

Although I have not seen the type (a Domin collection from Macoucherie), the forma with entire leaves does not seem different.

Conyza Lessing, nom. cons.

This genus is difficult. I have little faith in my key or identifications.

1. Leaves very thinly pubescent and often with remote marginal and midrib hairs only, entire (to ± entire); achenes glabrous . . . . . ***C. canadensis***
1. Leaves conspicuously pubescent, (± entire to) serrate; achenes villous.
2. Leaves obovate or spatulate, rather abruptly narrowed to a winged petiole . . . . . ***C. apurensis***
2. Leaves oblanceolate, gradually attenuate to a sessile base . . . . . ***C. bonariensis***

Conyza apurensis

Conyza apurensis Kunth, 1820, 4:73.—Cuatrecasas, 1969:221.
Erigeron spathulatus Vahl in West, 1793:303, "*spathulatum,*" non *Conyza spathulata* Hornemann.
Erigeron chinensis Jacquin, 1798, 3:30, non *Conyza chinensis* Linnaeus.
Conyza subspathulata Cronquist, 1943:632.

Annual herbs; leaves alternate, pubescent, central and lower ones obovate, usually strongly serrate; inflorescences tending to be flat-topped (corymbose); involucral bracts in 2-3 series; receptacle naked; ray-florets pistillate, lower tube 1 mm long, tipped by an 2-toothed ligule (teste Cuatrecasas, 1969:205), which is surpassed by the 2 stigmas; achenes villous, ± flattened, tipped by a bristly 2-seriate pappus, outer series minute.

Said by Cuatrecasas (1969:222) to have originated in Asia, now a pantropical weed; in disturbed places of Dominica at lower elevations: Clarke Hall (*Chambers 2748*), Grand Bay road (*Ernst 1588*), La Chaudière (*Hodge 3548*), Pont Cassé (*King 6357*), Roseau (*Hodge 771*).

Conyza bonariensis

Conyza bonariensis (Linnaeus) Cronquist, 1943:632.—Cuatrecasas, 1969:222.
Erigeron bonariensis Linnaeus, 1753:863, "*bonariense*".—Domin, 1930d:69.

Leaves oblanceolate, pubescent, central and lower ones often serrate, gradually tapering to base; inflorescences tending to be thyrsoid (vertically spread); achene villous, pappus 1-seriate.

Said by Cuatrecasas to have probably originated in Argentina, now a widespread weed; tending to occur at higher elevations in Dominica: Freshwater Lake (*Hodge 1833, King 6382*), Pointe Michel (*King 6310*).

Cuatrecasas (1968) annotated *King 6382* as *Conyza bonariensis* var. *leiotheca* (Blake) Cuatrecasas.

Conyza canadensis

Conyza canadensis (Linnaeus) Cronquist, 1943:632.—Cuatrecasas, 1969:222.
Erigeron canadensis Linnaeus, 1753:863, "*canadense*".—Grisebach, 1861:365.
Erigeron pusillus Nuttall, 1818, 2:148.—Domin, 1930d:68.

Leaves linear-oblanceolate, sparsely pubescent, entire or essentially so; inflorescences tending to be thyrsoid (vertically spread); achenes glabrous, pappus 1-seriate.

Said to have originated in North America, now widespread; in disturbed places of Dominica: Belle Fille (*King 6352*), Delices (*Whitefoord 3685*), Grand Savanne (*Ernst 1644*), La Ronde (*King 6361*), above Laudat (*Chambers 2742A, Chambers 2742B*), Lisdara (*Hodge 770*), above Salisbury (*Whitefoord 4519*).

Smaller, linear-leaved plants with purple-tipped involucral bracts can be identified as *Conyza canadensis* var. *pusilla* (Nuttall) Cronquist. One Dominican specimen has rather broadly lanceolate leaves without purple-tipped bracts, *Chambers 2742B*. It was collected at the same time (same population?) as *Chambers 2742A*.

Critonia Browne

Critonia macropoda

Critonia macropoda A.P. Candolle, 1836, 5:140.
Eupatorium macropus Urban, 1899, 1:460, non *Eupatorium macropodum* Baker.
Eupatorium magdalenae Stehlé, 1962d:349.
Critonia dominicensis King & Robinson, 1972a:405.

Glabrous shrubs to 2 m; leaves opposite on 1.5–2.0 cm petioles, pellucid-punctate, long-attenuate at apex, narrowly cuneate at base, margin remotely serrulate, pinnately veined; inflorescence corymbose, heads with 5 tubular florets in 3–6 fascicles; involucral bracts in 4–5-series, highly unequal, interior ones quickly deciduous; anther appendages about as long as broad; style base not enlarged, style appendages linear; achenes broadly ribbed, narrowed at base, crowned by a pappus of ~35 capillary bristles.

Martinique and Dominica: Fond Baron Estate along Grand Bay Road (*King 6301*). Past anthesis in December.

The type material of *Critonia macropoda* A.P. Candolle, *Sieber 184*, was supposedly collected in 1826 from Trinidad. Sieber's collectors (Kohaut in Martinique 1818–1821 and Wrbna in Trinidad 1822) were not in the West Indies in 1826 (cf. Urban, 1902, 3:14–158). Urban (1899, 1:460) suspected it (from the year) was from Martinique. Cheesman (in R.O. Williams, 1940, 2(2):70) treated it as a doubtful record for Trinidad.

De Candolle's species was renamed as *Eupatorium macropus* Urban (l.c.), indicating possible affinity of a defective Eggers specimen from Dominica. Urban was clear that he was providing a new epithet (*macropus*) in *Eupatorium* to avoid homonymy with earlier *E. macropodum* Baker but, under Art. 64.3, Ex. 8 (*ICBN*) "*heteropus* and *heteropodus*," the epithets are treated as homonyms. Stehlé (l.c.) created yet another name, *E. magdalenae* Stehlé (with its own designated type), including the type of De Candolle's name.

Eclipta Linnaeus, nom. cons.

Eclipta prostrata

Eclipta prostrata (Linnaeus) Linnaeus, 1771:286.—Koyama & Boufford, 1981:505.
Verbesina prostrata Linnaeus, 1753:902.
Verbesina alba Linnaeus, 1753:902.
Bellis ramosa Jacquin, 1760:28.
Eclipta erecta Linnaeus, 1771:286, nom. illeg. [incl. type of *Verbesina alba* Linnaeus, 1753].
Eclipta punctata Linnaeus, 1771:286, nom. illeg. [incl. type of *Bellis ramosa* Jacquin, 1760].
Eclipta alba (Linnaeus) Hasskarl, 1848:528.—Domin, 1930d:73.—Cronquist, 1945b:398.

Herbs, erect or prostrate; leaves opposite, lanceolate, serrulate to ± entire and ± sessile; inflorescences peduncled, 1–3 per axil; involucral bracts ovate, in 2 series; receptacle flat to convex, with linear pales equaling achenes; ray-florets linear, 2 mm long; achenes rugose, brown below, the broad tip black, sometimes with 2 scales.

Widespread weed; disturbed, open places of Dominica: Anse du Me (*Wilbur 8297*), Cabrit Swamp (*Whitefoord 4062*), Hatton Garden (*Hodge 3080*), Melville Hall (*Ernst 1574*), Pont Cassé (*Webster 13468*), Soufrière (*Lloyd 400*).

The correct name for this variable taxon hinges on determining who was the first to treat the two 1753 Linnaean species in a single species. Article 57 (*ICBN*) now lists Roxburgh as having first united them as *E. prostrata* in 1832, following Koyama and Boufford (1981:505).

Egletes Cassini

Egletes prostrata

Egletes prostrata (Swartz) Kuntze, 1891, 1:334.—Shinners, 1950:242.
Matricaria prostrata Swartz, 1788:114.

Bouton blanc.

Low herbs with cottony pubescence at least on young growth; leaves alternate, obovate, rounded tip serrate-dentate; inflorescences usually solitary, long-peduncled; involucral bracts in 2–3 series, outer shorter than inner; receptacle naked, ovoid-conic; ray-florets bisexual, white, ligules narrow; disk florets numerous, yellow; achenes obovoid, tipped by a dentate ring.

West Indies to northern South America, a calciphile usually near coast; apparently only once collected in Dominica: Portsmouth gravelly roads (*Hodge 773*).

Reported as an ingredient of a ritual bath given a mother about a week after childbirth (Hodge and Taylor, 1957:615).

Elephantopus Linnaeus

Elephantopus mollis

Elephantopus mollis Kunth, 1820, 4:26.—Domin, 1930d:61.—Clonts & McDaniels in North Amer. Fl. ser. 2, 1978, 10:199.
Elephantopus mollis var. *capitulatis* Domin, 1930d:62.
Elephantopus mollis var. *bracteosus* Domin, 1930d:62.

Erect herb usually >1 m; leaves alternate, crenate-serrate, elliptic to obovate, narrowed to a winged petiole; glomerules subtended by about 3 basally overlapping bracts; pappus of 5 bristles.

Neotropics but now pantropically distributed; weed of disturbed places on Dominica: Clarke Hall (*Chambers 2710*),

Côte d'Or (*Nicolson 2062*), Hatton Garden (*Hodge 3288*), La Chaudière (*Hodge 3694*), Lisdara (*Hodge 2423*), Mt. Joy (*Hodge 1279*), Petit Coulibri (*Whitefoord 4676*), Ridgefield (*Hodge 2149*), South Chiltern (*Hodge 1495*), Sylvania (*Cooper 11, Hodge 1031*).

Adjanohoun et al. (1985:77, pl. 43) reported use against diarrhea.

Although I have not seen the types of Domin's varieties, I doubt that the differences (bracts surpassing or equaling the capitula vs. bracts shorter than the capitula) is significant.

Emilia Cassini

1. Lower leaves entire to dentate; involucre broadly cylindric (2× longer than broad), about 3/4 corolla length; flowers brick red . . . . . ***E. fosbergii***
1. Lower leaves lyrate; involucre narrowly cylindric (3× longer than broad), ± equaling corolla length; flowers pale purple . . . . . ***E. sonchifolia***

Emilia fosbergii

Emilia fosbergii Nicolson, 1975:34; 1981b:395.

Herb to 1 m; leaves alternate and basal, strongly dentate; peduncles 15–30 cm long; involucre 1-seriate; receptacle naked; florets tubular, brick red, distinctly longer than involucre; corolla lobes 1.1–1.5 mm long; pappus of many soft, white bristles.

A widespread weed probably of African origin (allopolyploid), widely collected in neotropics since 1880; in disturbed areas (often in ditches) of Dominica, usually about 500 m but sometimes near sea level: Baiac (*Whitefoord 3835*), La Ronde (*King 6366*), Lisdara (*Hodge 728, 2437*), Mero (*Chambers 2785*), Milton (*Hodge 2928*), Morne Jack (*Nicolson 2097*), Pont Cassé (*Chambers 2717, Ernst 1239*), Ridgefield (*Hodge 2162*), Roseau (*Hodge 725*), South Chiltern (*Ernst 1863, Hodge 1474*), Springfield (*King 6346, Wilbur 7681*), Sylvania (*Cooper 23* (mixed with *sonchifolia*), *Hodge 1135*), Tête Morne (*King 6324*), Trafalgar Falls Road (*Whitefoord 4698*).

This taxon was often called *Emilia coccinea*, a different, sometimes cultivated species with broad heads and orange florets almost 2× the bracts. Adjanohoun et al. (1985:77, pl. 44) misnamed this species as *E. coccinea*, infused for a refreshing drink.

Emilia sonchifolia

Emilia sonchifolia (Linnaeus) A.P. Candolle in Wight, 1834:24.—Domin, 1930d:82.—Nicolson, 1981b:398.
Cacalia sonchifolia Linnaeus, 1753:835.

Herb to 5 dm; lower leaves lyrate; peduncles to 15 cm long; florets pale purple (mauve or violet), equaling involucre; corolla lobes 0.5–0.7 mm long.

Probably originally South Asian and now pantropically distributed; weed in Dominica usually of lower elevations but sometimes to 500 m: Clarke Hall (*Chambers 2749*), Grand Bay road (*Ernst 1601*), Layou (*Hodge 727*), Marigot (*Hodge 726*), Morne Plaisance (*Whitefoord 6171*), Salybia (*Hodge 3387*), Sylvania (*Cooper 23* (mixed with *fosbergii*), *Hodge 1134*).

Adjanohoun et al. (1985:79, pl. 45) reported use of an infusion "for its refreshing properties."

Erechtites Rafinesque

1. Pappus white, florets yellowish; leaves sessile or, if shortly petiolate, petiole conspicuously alate . . ***E. hieraciifolia***
1. Pappus and florets pinkish; leaves petioled or only inconspicuously alate . . . . . ***E. valerianifolia***

Erechtites hieraciifolia

Erechtites hieraciifolia (Linnaeus) Rafinesque ex A.P. Candolle, 1838, 6:294, "*hieracifolia*".—Domin, 1930d:82.—Belcher, 1956:12.
Senecio hieraciifolius Linnaeus, 1753:866, "*hieracifolius*."

Erechtites hieraciifolia var. *cacalioides*

Erechtites hieraciifolia var. *cacalioides* (Sprengel) Lessing ex Grisebach, 1861:381.
Sonchus agrestis Swartz, 1788:110.
Senecio cacalioides Fischer ex Sprengel, 1818:37.
Erechtites cacalioides (Sprengel) Lessing, 1832:395.
Erechtites agrestis (Swartz) Standley & Steyermark, 1947:265.

Medium annual herbs; leaves alternate, lanceolate, serrate to irregularly dentate or lobed; involucre with principle bracts in 1 series, subtended by scattered bracteoles; receptacle naked; marginal florets pistillate; disk florets bisexual; achenes with a copious, white, capillary pappus.

Neotropical, a weed in the Old World, often confused with African *Crassocephalum crepidioides* (Bentham) S. Moore; occasional in disturbed habitats of Dominica at low to mid-elevations: Carib Reserve (*Hodge 3393*), above Deux Branches (*Ernst 1667*), Layou (*Hodge 775*), Lisdara (*Hodge 2475*), Sylvania (*Hodge 781, 782*).

Erechtites valerianifolia

Erechtites valerianifolia (Sprengel) A.P. Candolle, 1838, 6:294, "*valerianaefolia*".—Belcher, 1956:25.
Senecio valerianifolius Link ex Sprengel, 1826, 3:565, "*valerianaefolius*."

Leaves usually ovate in outline, lower leaves coarsely irregularly dentate, medial and upper leaves deeply pinnatifid; florets and pappus with distinct pink or mauve tinge.

Widespread, sometimes aggressive weed; common in Dominica: Carib Reserve (*Hodge 3379*), Fond Baron (*king 6302*), Freshwater Lake (*Wilbur 7465*), Grand Bay road (*Ernst 1592*), La Chaudière (*Hodge 3697*), Laudat (*Hodge 1840, Lloyd 44, 49*), Lisdara (*Hodge 776*), Morne Anglais base (*Hodge 780*),

Providence Valley (*Hodge 2057*), Roche d'Or Estate (*Stern & Wasshausen 2579*), Springfield (*King 6332*), Sylvania (*Hodge 777, 778, 779*), Syndicate (*Chambers 2654, Whitefoord 3581*).

Our material falls in forma *valerianifolia*.

As discussed by Belcher (1956:28), the basionym (*Senecio valerianifolius*) was attributed to Wolf in an 1825 Berlin seedlist by Reichenbach (Halle) and Lessing (Berlin). Because no one has seen this publication, neither the validity (with description or nomen nudum?) nor the authorship of the name can be established. Sprengel's publication, accepted here as the first known publication with a validating description, appeared between January and March of 1826, attributing the name to Link. At that time Link was in charge of the Berlin Herbarium. I find no trace of a Wolf, Wolff, Wulf, or Wulff associated with the Berlin Garden at that or any other time.

Erigeron Linnaeus

Erigeron karwinskianus A.P. Candolle, a sprawling plant with elongate stems, was cited for Dominica (with exclamation mark) by Howard (1989, 6:553).

Erigeron polycladus

Erigeron polycladus Urban, 1903, 3:403.—Stehlé, 1954b:73.

Leaves to 10 mm × 3 mm, narrowly spatulate, entire but with marginal hairs. Inflorescence shoots decumbent, appearing to be capable of rooting, then upturned with a single head. Involucral bracts in 2–3 series, deflexing from naked receptacle. One achene found, with bristly pappus in a single series.

Lesser Antilles; a new record for Dominica on north coast "Small colony on bluffs above sea": L'Anse Noire near Pointe Baptiste, alt. ~50 ft [15 m] (*Ernst 2079*).

Our material is referred here with doubt because of its incompleteness, "Cespitose and succulent composite about 2 inches tall."

Fleischmannia C. Schultz

Fleischmannia microstemon

Fleischmannia microstemon (Cassini) King & Robinson, 1970a:204.
Eupatorium microstemon Cassini in Cuvier, 1822, 25:432.—Domin, 1930d:66.—H.G. Baker, 1967.

Branched annual herbs to 1 m; leaves opposite (upper often ± opposite), 3-veined, rhombic-ovate and small (to 4 cm × 5 cm), upper margin crenate, lower surface inconspicuously gland-dotted; heads 20–35-flowered; involucral bracts in 3 series; receptacle naked; corolla lobes puberulent outside, papillose inside (giving a granular aspect); anther appendages large, usually truncate; achene blackish with yellowish, setaceous ribs, crowned with pappus of 25–30 capillary bristles.

Northern South America into West Indies and Central America to Yucatan; occasional weed, often on damp sites of Dominica: Carholm (*King 6391*), Clarke Hall (*Chambers 2700*), Lisdara (*Hodge 738*), Montpelier (*Lloyd 581*), Portsmouth (*Hodge 739*), Ridgefield (*Hodge 2199*), Springfield (*King 6341*), Sylvania (*Hodge 740, 1347*), Syndicate (*Whitefoord 3650*).

Galinsoga Ruiz & Pavón

Galinsoga quadriradiata

Galinsoga quadriradiata Ruiz & Pavón, 1798a:198.—Canne, 1977:355.
Vargasia caracasana A.P. Candolle, 1836, 5:676.
Adventina ciliata Rafinesque, 1836, New Fl., 1:67.
Galinsoga caracasana (A.P. Candolle) C. Schultz, 1865:80.
Galinsoga ciliata (Rafinesque) Blake, 1922:35.—Stehlé, 1963:195.

Erect, pilose herb with glandular hairs on young growth; leaves opposite, 3-veined, shallowly serrate; peduncles to 2 cm long; heads 3–5 mm wide; ray-florets white (ours), inconspicuous, ligules ± equally 3-lobed.

Avariable species apparently native to Mexico but now widely dispersed from Canada to southern South America, Europe, Africa, Asia, and Pacific: in midlands of Dominica ~500 m: Baiac (*Whitefoord 3838*), Lisdara (*Hodge 2336*), Magua (*Stehlé 6351*).

Hebeclinium A.P. Candolle

Hebeclinium macrophyllum

Hebeclinium macrophyllum (Linnaeus) A.P. Candolle, 1836, 5:136.—Domin, 1930d:64.—King & Robinson, 1971a:300.
Eupatorium macrophyllum Linnaeus, 1763:1175.

Tomentellous erect subshrubs; leaves opposite, 3-veined, broadly ovate to deltoid, margins crenate to dentate; heads 50–80-flowered; involucral bracts ~30 in 4–5 series; receptacle hemispheric, densely hirsute; anther appendages large; style base without enlarged node, stylar appendages very narrow; achenes 4–5-ribbed, with pappus of 30–35 capillary bristles.

Widespread in neotropics; occasional in Dominica as a weed: Milton Estate (*Hodge 2873*), La Chaudière (*Hodge 3575*), Rosalie Valley (*Lloyd 706*), South Chiltern (*Hodge 1557*).

Adjanohoun et al. (1985:79, pl. 46) reported medicinal usages.

Koanophyllon Arruda da Camara

The etymology of this generic name is obscure. It may be a lapsus for *Kyanophyllon*, indicating the leaves (phyllon) as a source of a blue dye (cyanin or anil), as discussed by the author.

Koanophyllon celtidifolium

Koanophyllon celtidifolium (Lamarck) King & Robinson, 1971b:149, "*celtidifolia*".—King & Robinson, 1975:255.

Eupatorium celtidifolium Lamarck, 1788, 2:406.—Domin, 1930d:66.
Eupatorium plicatum Urban, 1907, 5:523.

Sprawling glabrescent subshrubs; leaves opposite, shortly petiolate, 3-veined but often with a pair of veins below, conspicuously (with magnification) dark gland-dotted beneath, margins distantly serrulate, apex long-tapered, base obtuse to rounded; inflorescence loose; heads small, 7-20-flowered; involucral bracts 7-16, in 1-2 series; receptacle slightly convex, naked; anther appendages wider than long, very short; style base unenlarged, stylar appendages distinctly enlarged apically, smooth; achenes 5-ribbed, ribs setiferous, carpopodium short and narrowed below; pappus of many capillary bristles, 2-3 mm long.

Northern South America into Antilles; occasional weed in Dominica, apparently in ± drier sites: Clarke Hall (*Ernst 1262, Stern & Wasshausen 2398*), Petit Coulibri (*Whitefoord 4665, 6002*), Rivière Douce (*Eggers 68*), Rosehill (*Eggers 541*), South Chiltern (*Ernst 1876*), Soufrière (*Lloyd 737*).

Lactuca Linnaeus

(by K. Chambers)

Lactuca sativa

Lactuca sativa Linnaeus, 1753:795.—Adjanohoun et al., 1985:83, pl. 50.

Lettuce.

Glabrous annual herb with milky sap; leaves alternate, upper ovate to orbicular, lower variable, apiculate-serrulate, auriculate-clasping; inflorescence a large panicle, branchlets with numerous clasping bracts; involucre of several series; receptacle flat, naked; florets yellow, all ligulate and 5-toothed; achenes oblanceolate, flattened, with a slender beak to apex, pappus of silky bristles.

Widely cultivated plant; new record for Dominica (perhaps escaping): Clarke Hall (*Chambers s.n.*).

Melanthera Rohr

Views on typification of the generic name were summarized by Nicolson (1981a:491), arguing that the generic name should rest on a Rohr collection (at C) from Martinique that has been variously identified as *M. nivea* (Linnaeus) Small, *M. paduriformis* Cassini and *M. aspera* var. *glabriuscula* (Kuntze) Parks, not on the type of a species name. This is contrary to Art. 10 (*ICBN*), which says a generic name is typified on the type of a species name.

Melanthera aspera

Melanthera aspera (Jacquin) Steudel ex Small, 1909:164.—Fawcett in Fawcett & Rendle, 1936, 7(5):232.—Parks, 1973:190.
Calea aspera Jacquin, 1788, Coll., 2:290; 1789, Icon., 3:13, pl. 583.
Melanthera deltoidea Michaux, 1803, 2:107, "*Melananthera,*" nom. illeg. [incl. type of *Calea aspera* Jacquin].—Grisebach, 1861:372.

Herb; leaves opposite, dentate; capitula mostly solitary on peduncles to 10 cm long; involucral bracts in 2-3 series; receptacle convex, pales shortly aristate; corollas tubular; achenes 4-angled, with 2-4 caducous bristles.

Weed of Caribbean and northern South America; apparently rarely collected on Dominica: Marigot (*Hodge 774*).

The binomial is attributed to Steudel (1841, 2:113), but he didn't accept the name, treating "*M. aspera* Rich." as a synonym of *M. deltoidea* Michaux. The binomial also appears (attributed to L. Richard) in Sprengel (1821, 2:135; 1822, 3:40) apparently as a nomen nudum.

Our material presumably falls in *Melanthera aspera* Steudel ex Small var. *glabriuscula* (Kuntze) Parks. At least one recent worker, Nash (in Standley and Steyermark, 1976, 12:264), feels that *M. aspera* is conspecific with *Melanthera nivea* (Linnaeus) Small. Domin (1930d:77) reported *Imray 162* (K) from Dominica as *M. nivea*.

Mikania Willdenow, nom. cons.

A widespread species, *Mikania cordifolia* (Linnaeus f.) Willdenow, has been reported for Dominica by Vélez (1957:81) but no specimens have been seen. Medicinal usage for that species was reported by Adjanohoun et al. (1985:85, pl. 52). Specimens from Guadeloupe (*Stehlé 5466, Duss 2814*) and Martinique (*Duss 310*) have been seen, the latter misidentified and cited by Urban as *M. scandens* (= *M. micrantha* here). It usually has cordate leaves with toothed margins of *M. micrantha* but is densely pubescent and has distinctly longer involucres (6-8 mm) and achenes (3-4 mm).

1. Leaves thick-coriacous; heads small (involucre 2 mm long); plants of summits of high mountains . . . . . ***M. ovalis***
1. Leaves thin-coriaceous to membranous; heads larger (involucre 4-8 mm long); plants of middle to lower elevations.
   2. Inflorescences ending in pedicelled heads; leaves membranous, usually cordate at base with toothed margins . . . . . ***M. micrantha***
   2. Inflorescences ending in 3 sessile heads; leaves thin-coriaceous, usually rounded at base with entire margins.
      3. Heads smaller (involucre 4-5 mm); achenes shorter (2-3 mm) . . . . . ***M. hookeriana***
      3. Heads larger (involucre 6-7 mm); achenes longer (4-5 mm) . . . . . ***M. latifolia***

Mikania hookeriana

Mikania hookeriana A.P. Candolle, 1836, 5:195.
Mikania badieri A.P. Candolle, 1836, 5:194.—Urban, 1907, 5:219.—Domin, 1930d:67.—Stehlé, 1954b:71.
Mikania imrayana Grisebach, 1861:363.
Mikania hookeriana var. *badieri* (A.P. Candolle) Robinson, 1934a:51.

Herbaceous, twining vines; leaves opposite, thinly coriaceous, base rounded, margins entire; heads ± sessile; involucre

4 mm long, subtended by a longish bracteole, bracts 4; receptacle small, naked; florets 4, discoid, 5-toothed, teeth 1 mm long; achenes 2-3 mm long, crowned with capillary bristles.

Northern South America into Central America and Lesser Antilles; rare in Dominica at midelevations: Couliaboun [M. Anglais] (*Imray s.n.* [type of *M. imrayana*], *Nicolson 4100, 4105*), Grand Bay (*Eggers 655*), between Laudat & Valley of Desolation (*Whitefoord 5486*), Lisdara (*Cooper 172*).

Although the Antillean materials are isolated from the mainland, they do not seem sufficiently differentiated for infraspecific recognition. This species may intergrade with *M. latifolia*, although not on Dominica.

Mikania latifolia

Mikania latifolia J.E. Smith in Rees, 1813, 23, no. 8.—Urban, 1907, 5:222.
Mikania latifolia f. *dominicensis* Urban, 1907, 5:223.—Stehlé, 1954b:71.
Mikania latifolia var. *dominicensis* (Urban) Domin, 1930d:68.

Leaves thinly coriaceous, base rounded to ± cordate or tapered, margins entire; heads sessile, with short bracteoles; involucre 6-7 mm; corolla lobes 3 mm long; achenes 4-5 mm.

Lesser Antilles; occasional on Dominica, usually at midelevations or near east coast: Freshwater Lake (*Chambers 2568*), Laudat (*Eggers 998* type of f. *dominicensis*), Morne Negres Marrons (*Hodge 1069*), Rosalie (*Eggers 656*), Woodford Hill (*Chambers 2604*).

The question with this taxon is not whether infraspecific taxa should be recognized but whether it is truly different from some South American species.

Mikania micrantha

Mikania micrantha Kunth, 1820, 4:105.—Robinson, 1934b:57.
Mikania scandens sensu Urban, 1907, 5:229, et Domin, 1930d:66, not as to type of *Mikania scandens* (Linnaeus) Willdenow.

Glabrous; leaves thinly membranous, usually cordate at base and with margins undulately toothed; heads pedicelled; involucre 4 mm; achenes 2 mm.

Neotropical, elsewhere an introduced weed; the commonest *Mikania* of Dominica: Baiac (*Whitefoord 3829*), Belle Fille (*King 6354*), Carholm (*King 6393*), Carib Reserve (*Hodge 3235*), Clarke Hall (*Chambers 2707, Ernst 1694*), Deux Branches (*Chambers 2772, Hodge 2989*), Fond Colet (*King 6292*), Fond St. John (*King 6330*), Freshwater Lake (*Wilbur 7476*), Grand Bay road (*Ernst 1619*), La Chaudière (*Hodge 3579*), Laudat (*Gillis 8196*), L'Imprévue (*Narodny s.n.*), Lisdara (*Hodge 2340*), Marigot (*Hodge 765*), Milton (*Hodge 2564*), Pont Cassé (*Long & Norstog 3373, Wilbur 7773*), Pointe Michel (*King 6311*), Pointe Ronde (*Hodge 2697*), Rasade (*King 6317*), Roche d'Or (*Stern & Wasshausen 2580*), near Rosalie (*Chambers 2726*), Roseau (*Cooper 136*), South Chiltern (*Hodge 1538*), Sylvania (*Cooper 89, Hodge 766, Nicolson 1867*), Syndicate (*Whitefoord 3588*).

Robinson (1934b) discussed *M. scandens* and its relatives, concluding that this species name should be restricted to a taxon of eastern and southeastern United States and *M. micrantha* used for the neotropical aspect. Fosberg and Sachet (1980b:45) used *Mikania scandens* (Linnaeus) Willdenow for a broad concept, including *M. micrantha*.

Domin (1930d:65) reported the local tradition that this weed arrived in Dominica in 1902 with the eruption of Mt. Pelée and arrived in its volcanic cloud. The earliest Dominica collection known (cited by Domin) is a Bryant collection in 1905.

Mikania ovalis

Mikania ovalis Grisebach, 1861:363.—Urban, 1907, 5:217.—Domin, 1930d:67.

Leaves thick-coriaceous, ovate to rotund, base rounded, margins with a few glandular "teeth"; heads pedicelled; involucre 2 mm; achenes 2 mm.

Martinique and Guadeloupe; in Dominica on or near summits of higher mountains: Morne Anglais [Couliaboun, type locality] (*Hodge 768, 2266*), Morne Diablotins (*Fishlock s.n., Hodge 2831, Wasshausen & Ayensu 407, Webster 13367, Whitefoord 5730*), Morne Trois Pitons (*Chambers 2755, Ernst 1219, Hodge 767, 1388, Wilbur 8100*), sine loc. (*Fishlock 4*). Flowering April-June.

Neurolaena R. Brown

Neurolaena lobata

Neurolaena lobata (Linnaeus) Cassini in Cuvier, 1825, 34:502.—Domin, 1930d:81.—Stehlé, 1963:185.—Turner, 1982:134.—Khan & Jarvis, 1989:661.
Conyza lobata Linnaeus, 1753:862.
Conyza symphytifolia Miller, 1768.
Pluchea symphytifolia (Miller) Gillis, 1977:591.

Z'herbes à pique.

Coarse, erect herb to 2 m; leaves alternate, denticulate, sometimes lower ones lobed; corymbs terminal; involucral bracts 3-veined, imbricate, in 2-3 series, outer smallest; receptacle flat, with elongate, 1-veined pales; florets all tubular, bisexual, yellow; achenes narrowed at base, with pappus of many capillary bristles.

Widespread in neotropics; occasional in Dominica, usually in midlands: Bellevue (*Taylor 146*), Carib Reserve (*Hodge 3231, Stehlé 6418*), Fond Baron (*Ernst 1621, King 6296*), Freshwater Lake (*Chambers 2556*), Grand Fond (*King 6377*), La Chaudière (*Hodge 3684*), Lisdara (*Cooper 146, Hodge 2390, 2483*), Mt. Joy (*Hodge 1253*), Pont Cassé (*King 6349, Proctor 25762, Wilbur 7759*), South Chiltern (*Hodge 1454, 1569*), Syndicate (*Ernst 2004*), Trou Cochon (*Whitefoord 5615*), sine loc. (*Hodge 1087*).

Caribs reported to use as a remedy for yaws, to use pounded leaves and stems as a mild fish poison or as wash for ticks, and to apply to breasts for weaning (Hodge and Taylor, 1957:615).

The combination is usually attributed to R. Brown but he did not actually make it, as required by Art. 33.1 (*ICBN*, cf. Ex. 2).

Parthenium Linnaeus

Parthenium hysterophorus

Parthenium hysterophorus Linnaeus, 1753:988.—Grisebach, 1861:369.—Domin, 1930d:72.—Rollins, 1950:52.

Erect annual herbs; leaves alternate, 1-2-pinnately parted (to simple above); heads many, small (to 0.5 cm across); involucral bracts in 2 series, ± equal; receptacle small, convex, with pales; marginal florets white, female, ligules short, 2-toothed; central florets functionally male; achenes black, obovoid, keeled on inner face, with 2 scales.

Apparently originally native to Caribbean area but an aggressive weed; common in disturbed, lowland areas of Dominica: Bataka (*Hodge 3189*), Canefield (*Hodge 730*), Goodwill (*Ernst 1277, King 6288*), Grand Bay, Berekua (*King 6318*), Marigot (*Hodge 729*), Pringles Bay (*Whitefoord 3739*), Scotts Head village (*Hodge 1616*), Soufrière (*Lloyd 415*).

Adjanohoun et al. (1985:87, pl. 53) reported medicinal usages. Howard (1989, 6:583) noted that the plant is often a contact poison, causing itching and swelling.

Pectis Linnaeus

Pectis linifolia Linnaeus was reported for Dominica by Urban (1907, 5:286) as "Dominica et St. Lucia in litoralibus: Duss n. 201, 932." These are the basis for Stehlé (1963:182) citation. With Duss collections one can suspect a label error. The species was again attributed to Dominica by Vélez (1957:82), based on a statement by Britton and Wilson (1925, 6:319), "West Indies south to Grenada." No Dominican specimens of this long-peduncled species have been seen.

1. Plants erect; leaves linear, >1.5 cm long . . . ***P. elongata***
1. Plant prostrate; leaves oblanceolate, <1.5 cm long . . . . . ***P. humifusa***

Pectis elongata

Pectis elongata Kunth, 1820, 4:262.

Herbs erect, lemon-scented; leaves sessile, with dark gland-dots beneath (ours), linear, to 5 cm × 0.4 cm; peduncle to 0.5 cm long; involucre 1-seriate; receptacle naked; ray-florets small, pistillate, yellow; disk-florets bisexual; achenes linear, with pappus of 8 bristles ~3 mm long.

Central America, Antilles, and northern South America; new record for Dominica: East Cabrit (*Whitefoord 4039*).

Our material is short-peduncled Caribbean *Pectis elongata* var. *floribunda* (A. Richard) D.J. Kiel (1976:1229), as reported by Whitefoord (1989:147).

Pectis humifusa

Pectis humifusa Swartz, 1788:114.—Urban, 1907, 5:271.—Domin, 1930d:80.—Stehlé, 1963:178.

Plants prostrate; leaves narrowly oblanceolate, to 1.3 cm × 0.3 cm; peduncle to 0.5 cm long.

Antilles (south from Hispaniola); near sea on Dominica: Castle Bruce River mouth (*Ernst 1465*), Grand Savanne (*Ernst 2129*), Hatton Garden (*Hodge 3070*), Marigot (*Hodge 737*), Melville Hall (*Wilbur 8036*), Petite Soufrière Bay (*Nicolson 1984*), Salisbury (*Hodge 3792*), Woodford Hill (*Hodge 3502*).

Pluchea Cassini

Annual *Pluchea odorata* (Linnaeus) Cassini, medicinal usage reported by Adjanohoun et al. (1985:87, pl. 54) is a new record, if based on Dominica material. More uses were given for *P. carolinensis*, as *P. symphitifolia*, (l.c., p. 89, pl. 55).

Pluchea carolinensis

Pluchea carolinensis (Jacquin) G. Don in Sweet, 1839:350.—Khan & Jarvis, 1989:661.

Conyza carolinensis Jacquin, 1789, Coll., 2:271.

Pluchea odorata sensu auctt. as Britton & Wilson, 1925, 6:298 and Domin, 1930d:70, not as to type of (Linnaeus) Cassini [incl. *Pluchea purpurascens* (Swartz) A. P. Candolle].

Cattle tongue.

Perennial subshrub; leaves alternate, ± entire; corymbs 5-10 cm across or more; involucre several-seriate, tight; receptacle naked; florets white to lilac, outer pistillate, inner mostly sterile; achenes 4-5-angled, with pappus of a single series of scabrous bristles.

Caribbean area into northern South America; occasional in disturbed places in low- to midlands of Dominica: Coulibistri (*Wilbur 8115*), Fond Figues River (*Ernst 1014*), Hatton Garden (*Hodge 2958*), Mahaut (*Morden 4*), Milton (*Hodge 2522*), Point Michel (*Gillis 8130, King 6309*), south of Rosalie (*Chambers 2722*), South Chiltern (*Hodge 1460*), Spanish Mountain (*Hodge 2754*), bottom of Syndicate road (*Whitefoord 4325*).

The Irene Morden collection reported that "cattle tongue" can be boiled in water, sweetened with a little sugar, and drunk very cold for colds.

Porophyllum Guettard

According to Dandy (1967:13 and 74), this was first validly published by Guettard (1754:377). According to ING, it was first validly published by Adanson (1763, 2:122). There is a possibility that the latter publication constitutes an illegitimate renaming of *Cacalia* Linnaeus, cited in synonymy.

Porophyllum ruderale

Porophyllum ruderale (Jacquin) Cassini in Cuvier, 1826, 43:56.—R.R. Johnson, 1969:234.

Cacalia porophyllum Linnaeus, 1753:834.
Kleinia ruderalis Jacquin, 1760:28.
Porophyllum ellipticum Cassini in Cuvier, 1826, 43:56 [based on *Cacalia porophyllum* Linnaeus, 1753].—Domin, 1930d:80.—Stehlé, 1963:183.

Annual herbs; leaves alternate, entire, elliptic to oblong, thin, to 6 cm × 2.5 cm on thin petioles; heads solitary, on long peduncles that are swollen towards apex; involucral bracts 5, in a single series, linear, ~2 cm long; receptacle naked, small; florets green, purple-tinged at tip, all tubular, bisexual, with a thin, elongate tube and a short limb; achenes dark, linear, to 1 cm long, with conspicuous light tan pappus of capillary bristles.

Weed from southern US to Argentina; rarely collected on Dominica: Baiac (*Whitefoord 5465*) [Eggers collection reported by Urban (1899, 1:467) and Imray and Domin collections reported by Domin (1930d:80)].

Pseudelephantopus Rohr, nom. et orth. cons.

Pseudelephantopus spicatus

Pseudelephantopus spicatus (Aublet) C.F. Baker, 1902:45.—Nicolson, 1981a:492.
Elephantopus spicatus Jussieu ex Aublet, 1775:808.—Clonts & McDaniels in North Amer. Fl., ser. 2, 1978, 10:199.
Distrephus spicatus (Aublet) Cassini in Cuvier, 1819, 13:367.—Domin, 1930d:62.

Erect perennial herb to 1 m; leaves alternate, lower oblanceolate, upper smaller and linear; glomerules 1–4-headed with 2–4 florets per head; achenes 10-ribbed, pappus with longer bristly hairs double-bent.

Neotropical weed now pantropical; common on Dominica in disturbed places: Clarke Hall (*Chambers 2637*), Fort Shirley of West Cabrit (*Whitefoord 3978*), Grand Bay road (*Ernst 1597*), Mt. Joy (*Hodge 1277*), South Chiltern (*Hodge 1532*), Trafalgar Falls road (*Hodge 2014, Whitefoord 4581*).

Rolandra Rottbøll

Rolandra fruticosa

Rolandra fruticosa (Linnaeus) Kuntze, 1891, 1:360.—Domin, 1930d:62.
Echinops fruticosus Linnaeus, 1753:815.
Rolandra argentea Rottbøll, 1775:258.

Tête negresse.

Virgate, stiff perennial herb; leaves alternate, entire, elliptic-lanceolate, dark green above, white-tomentose beneath; inflorescence compounded of 1-flowered heads that are glomerate in sessile clusters subtended by a leaf; involucre of 2 bracts, outer larger than inner and aristate; florets all tubular, 3–4-toothed; achenes angled, truncate, crowned with a lacerate pappus, shed in the 2 clasping involucral bracts.

Northern South America to Honduras and Puerto Rico; occasional in Dominica in moist, disturbed areas: Carib Reserve (*Hodge 3278*), Clarke Hall (*Chambers 2750*), La Chaudière (*Hodge 3628*), Layou River Valley (*Ernst 1508*), Lisdara (*Hodge 2422*), Morne Plaisance (*Whitefoord 4508*), near Newhall [?] (*Eggers 516*), Providence Valley (*Hodge 2039*), Riversdale (*Proctor 25792*), South Chiltern (*Hodge 1483*).

Root infusion used by Caribs for medicine (Hodge and Taylor, 1957:616). Adjanohoun et al. (1985:89, pl. 56) reported use of leaf infusion.

Senecio Linnaeus

Senecio lucidus

Senecio lucidus (Swartz) A.P. Candolle, 1838, 6:411.—Domin, 1930d:83.—Stehlé, 1963:188.
Cineraria lucida Swartz, 1806:1360.

Large herbaceous shrub to 3 m, often reclining on other vegetation, stems strongly ridged; leaves alternate, fleshy, elliptic to lanceolate, denticulate; inflorescence much branched, terminal; involucre 1-seriate; receptacle flat, naked; florets yellow to orange, marginal florets ligulate, female and disk florets bisexual and tubular; achenes elongate, pappus of many silky bristles.

Guadeloupe to Martinique; at higher elevations of Dominica, reported as common around Freshwater Lake: Freshwater Lake area (*Chambers 2552, Eggers 680, Ernst 1103, Hodge 1871, King 6379, Smith 10244, Whitefoord 4179, 5152*), Morne Anglais (*Fennah 23*), Valley of Desolation (*Hodge 1943*).

A Trinidad record is probably a Sieber labeling error, as noted by Stehlé (1963:189).

Sonchus Linnaeus

(by K. Chambers)

Sonchus oleraceus

Sonchus oleraceus Linnaeus, 1753:794.—Boulos, 1973:155.

Sow-thistle.

Stout, hollow-stemmed annual herbs to 1 m, sap milky; leaves alternate, lower lyrate-pinnatifid with a broad terminal lobe, acutely dentate, upper auriculate-clasping; involucral bracts in several series, outer smallest; receptacle flat, naked; florets pale yellow, all ligulate and 5-toothed; achenes flattened, rugulose and grooved, with pappus of capillary hairs.

Cosmopolitan weed, especially in temperate regions; new record for Dominica: En Haut Jean (*Whitefoord 5423*), north of Grand Savanne (*Wilbur 8118*), Tête Morne (*King 6325*).

Struchium Browne

Struchium sparganophorum

Struchium sparganophorum (Linnaeus) Kuntze, 1891, 1:366.
Ethulia sparganophora Linnaeus, 1763:1171.

Sparganophorus vaillantii Crantz, 1766, 1:261, nom. illeg. [incl. type of *Ethulia sparganophora* Linnaeus, 1763].—Domin, 1930d:60.
Sparganophorus sparganophorus (Linnaeus) Jeffrey, 1988:272, "*sparganophora*," nom. inadmiss.

Herb; leaves alternate, elliptic-lanceolate, serrate; heads axillary, sessile, to 1 cm across; involucral bracts ovate-lanceolate, acuminate to aristate; receptacle naked; florets all bisexual and tubular, white or pink; achenes 4-angled, topped by a whitish cartilaginous cupule to 1 mm long.

Throughout neotropics, introduced elsewhere; apparently uncommon on Dominica in wet lowlands: Hatton Garden (*Hodge 3100*), Sugar Loaf (*Eggers 788*).

Jeffrey (l.c.) argued that *Struchium* Browne was not validly published, citing Art. 42 (*ICBN*) as if Browne's new generic names rested on species descriptions. As Dandy (1967:11) pointed out, Patrick Browne's generic names rest on generic descriptions that are in the usual Linnaean format for generic descriptions. These appear within the text for the first (or only) species with three exceptions, the most critical being *Phaelypea*, the only one for which there is no generic description. The other two involve the generic description appearing on the page before or under the second species.

I am not convinced that the epithet in *Ethulia sparganophora* is a noun in apposition. The original form was *Sparganophoros*, attributed to Vaillant. It appears that Linnaeus modified the original form to agree with *Ethulia*, suggesting that his usage was adjectival.

Synedrella Gaertner, nom. cons.

Synedrella nodiflora

Synedrella nodiflora (Linnaeus) Gaertner, 1791, 2:246.—Domin, 1930d:78.
Verbesina nodiflora Linnaeus, 1755:28.

Weak-stemmed and pubescent herbs; leaves opposite, 3-veined, shallowly serrulate to ± entire; heads crowded and ± sessile in axils; involucre few-bracted, outer 1–2 green, inner dry and scarious; receptacle small, with scarious, elongate pales; inconspicuous ray-florets female, yellow, with filiform tube and short, 2–3-toothed ligule; disk-florets bisexual; achenes of two types: those from ray-florets compressed, 2-winged, the wings with awns; those from disk-florets narrow, with 2–3 awns at tip.

Neotropical, now widespread; common in disturbed places of Dominica at low to mid-elevations: Cabrits (*Whitefoord 3989*), Canefield (*Hodge 758*), Carib Reserve (*Hodge 3392*), Clarke Hall (*Chambers 2638*), Delices (*Whitefoord 3673*), Fond Baron (*Ernst 1963, King 6300*), Fond St. Jean (*King 6328*), Grand Bay road (*Ernst 1589*), Layou River valley (*Ernst 1527, 2186*), Lisdara (*Hodge 757, 2461*), Morne aux Diables (*Wilbur 8066*), Pointe Ronde (*Hodge 2643*), Pont Cassé (*Chambers 2719*), Ridgefield (*Hodge 2182*), South Chiltern (*Hodge 1510*), Sylvania (*Hodge 756*).

Tithonia Desfontaines ex Jussieu

Tithonia diversifolia

Tithonia diversifolia (Hemsley) A. Gray, 1883:5.—La Duke, 1982:498.
Mirasolia diversifolia Hemsley, 1881, 2:168.

Coarse subshrub to 3 m; leaves alternate, usually 3–5-lobed, whitish beneath, base decurrent on petiole; inflorescence large, terminal, long-peduncled; involucral bracts in 2 series; receptacle convex, with 1 cm pales; outer ray-florets sterile, with large, 3-toothed, showy yellow ligules 3–6 cm long; achenes pilose, ~5 mm long, tipped by 2 unequal awns and 6–10 small scales.

Central American, introduced elsewhere but naturalizing and sometimes a pest; locally common in Dominica: Bataka (*Hodge 3185*), Carib Reserve (*Stehlé 6435*), Castleton Estate (*Webster 13411*), King's Hill (*King 6295*), Springfield (*King 6336, 6343, Whitefoord 5838*), Sylvania (*Wilbur 7718*).

Tridax Linnaeus

Tridax procumbens

Tridax procumbens Linnaeus, 1753:900.—Powell, 1965:80.

Trailing herbs; leaves opposite, serrate; heads long-peduncled; involucral bracts in few series; receptacle convex, with pales; ray-florets female, 3-lobed, white to pale yellow; disk-florets bisexual, yellow; achenes villous, overtopped by pales, pappus of many aristate bristles.

Central American but now a widespread weed; weed on Dominica, common along west coast: Batali River mouth (*Chambers 2795*), Canefield (*Hodge 733*), Goodwill (*Ernst 1296, Wilbur 7578*), Grand Savanne (*Wilbur 7666*), Loubière (*Hodge 3856*), Pointe Michel (*King 6388*), Roseau (*Hodge 734*), Salisbury (*Whitefoord 5449*).

Verbesina Linnaeus

1. Leaves deeply pinnatifid; heads 5–7 mm across; midlands . . . . . ***V. gigantea***
1. Leaves denticulate; heads 12–15 mm across; montane . . . . . ***V. howardiana***

Verbesina gigantea

Verbesina gigantea Jacquin, 1784, Icon., 1(4):17, pl. 175; 1786, Coll., 1:53.—Urban, 1907, 5:264.—Domin, 1930d:73.—Stehlé, 1962d:365.

Herb to 2 m, finely pubescent; leaves alternate, lower ones deeply 5–9-lobed, 4–16 cm × 2–8 cm; inflorescence corymbose; involucre multiseriate, light brown; receptacle convex with pales clasping achenes; florets white, ray-florets inconspicuous (absent?); achenes flattened, broad-winged, with pappus of 2 awns.

Scattered in Antilles, also Panama; low to midlands of Dominica: Bellevue (*King 6306, 6312*), Fond Baron (*King*

6297), Petit Coulibri (*Whitefoord 5996*), South Chiltern (*Nicolson 2167*), Springfield (*King 6333, 6338*), Sylvania (*Cooper 24*), Tête Morne (*King 6322*).

Verbesina howardiana

Verbesina howardiana J. Olsen, 1989:107.

Subshrub with rather succulent stems; leaves clustered near branch ends, obovate, to 10 cm × 5 cm, the small teeth glandular; involucral bracts dark brown; ray-florets yellow, conspicuous, 1.2–1.5 cm long, disk-florets glabrous.

Endemic and new for Dominica in elfin woodlands: Morne Diablotins (*Whitefoord 5309* at BM), Morne Trois Pitons summit (*Chambers 2588, Kimber 975, Nicolson 1815*). Flowering in October, fruiting December.

Guadeloupe, Martinique, and Dominica now each have endemic montane species of *Verbesina*. The original publication's attribution of Dominica's endemic to the Dominican Republic (Hispaniola) is an unfortunate error.

Vernonia Schreber, nom. cons.

1. Plants perennial subshrubs; heads sessile . . ***V. albicaulis***
1. Plants annual herbs; heads pedunculate . . . . ***V. cinerea***

Vernonia albicaulis

Vernonia albicaulis Persoon, 1807, 2:404.—Keeley, 1978:372.
Vernonia longifolia Persoon, 1807, 2:404.—Domin, 1930d:61.
Vernonia vahliana Lessing, 1829:306.

Suffruticose herbs to 2 m; leaves alternate, oblong-elliptic, 2–15 cm × 1–5 cm; inflorescences cymose, condensed and little branched; heads sessile; involucre few-seriate; receptacle flat, naked; corollas all tubular, lavender, pink to white; achenes ~3 mm long with pale brown (rarely white) pappus.

Puerto Rico through northern Lesser Antilles; in disturbed places of Dominica, usually in drier habitats: Cabrits (*Hodge 749, Nicolson 1906, Webster 13296*), Dublanc (*Hodge 2534*), Fond Hunte Estate (*Whitefoord 4446*), near Londonderry (*Chambers 2620*), Point Carib (*Wilbur 8009*), Pointe Ronde (*Ernst 1565*), Portsmouth (*Whitefoord 5188*), South Chiltern (*Ernst 1877, Hodge 1643, Stern & Wasshausen 2529*), Sylvania (*Cooper 88*), sine loc. (*Fishlock 57*), Tête Morne (*King 6321*). Our specimens apparently fall in subsp. *albicaulis*.

Vernonia cinerea

Vernonia cinerea (Linnaeus) Lessing, 1829:291.—Domin, 1930d:60.—Keeley, 1978:411.
Conyza cinerea Linnaeus, 1753:262.

Annual herb to 0.5 m; leaves ovate (below) to oblanceolate (above), 2–5 cm × 1.5–2.5 cm; inflorescence loosely branched; heads peduncled; corollas purple, blue to white; achenes rounded, ~1.5 mm long with deciduous, white pappus.

Apparently Asiatic but now a pantropic weed; common in disturbed areas of Dominica, often on coconut hull dumps: Cabrits (*Whitefoord 4079*), Calibishie (*Hodge 3144*), Canefield (*Hodge 747, Nicolson 2145*), *Kimber 1106*), Colihaut (*Kimber 1059*), Eden River mouth (*Chambers 2603*), Fond St. Jean (*DeFilipps 168, King 6329*), Mero (*Chambers 2782*), Pont Cassé (*Ernst 1236A, Wilbur 7732*), Portsmouth (*Hodge 748*).

Domin (1930d:1930) said he was the first to collect this on Dominica. *Nicolson 2145* reports use as tea to provoke menstruation.

Wedelia Jacquin, nom. cons.

1. Erect subshrubs; leaves petioled, unlobed; peduncles to 2 cm long . . . . . ***W. calycina***
1. Sprawling herbs, rooting at nodes; leaves ± sessile, often 3–5-lobed; peduncles 3–15 cm long . . . . ***W. trilobata***

Wedelia calycina

Wedelia calycina L. Richard in Persoon, 1807, 2:490.—Domin, 1930d:75.
Wedelia buphthalmoides var. *dominicensis* Grisebach, 1861:372.
Wedelia jacquinii var. *calycina* (L. Richard) O. Schulz in Urban, 1911, 7:102.
Wedelia calycina var. *dominicensis* (Grisebach) Domin, 1930d:76.
Wedelia jacquinii sensu O. Schulz in Urban, 1911, 7:100, non L. Richard in Persoon, nom. superfl. pro *Wedelia fruticosa* Jacquin.

Hirsute subshrub 1–2 m; leaves opposite, 3-veined from above base, ovate to lanceolate, serrate; heads radiate; involucre 2-seriate, outer ± foliaceous; receptacle with pales; ray-florets pistillate, bright yellow to golden orange; disk florets bisexual; achenes tipped by scales or a cupule.

Antilles into northern South America and Panama; dry areas of Dominica, common near coast: Anse du Me (*Wilbur 8046*), Carholm (*King 6394*), ridge above Clarke Hall (*Ernst 1532, Stern & Wasshausen 2400, Webster 13183*), Delices (*Whitefoord 3755*), Fonde Hunte Estate (*Whitefoord 4458*), Grand Savanne (*Hodge 3774*), King's Hill (*King 6294*), Laudat (*Lloyd 227*), Loubière (*Hodge 3868*), Mero (*Chambers 2778*), Point Carib (*Wilbur 8014*), Pointe des Fous (*Ernst 1794*), Pointe Guignard (*Wilbur 8133*), Pointe Ronde (*Hodge 2636*), Roseau (*Hodge 745, Lloyd 737*), St. Joseph (*King 6389*), Scotts Head (*Hodge 1634*), Tête Morne (*King 6326*).

Smaller leaved plants, as *Wilbur 8133*, could be treated as *Wedelia calycina* var. *parviflora* (L. Richard) Alain.

Wedelia trilobata

Wedelia trilobata (Linnaeus) Hitchcock, 1893:99.—O. Schulz in Urban, 1911, 7:95.—Domin, 1930d:74.
Silphium trilobatum Linnaeus, 1759a:1233.
Wedelia carnosa L. Richard in Persoon, 1807, 2:490, nom. illeg.—Grisebach, 1861:370.

Trailing and rooting prostrate herb; leaves obovate, often lobed and irregularly serrate, 3-nerved from above base; ray-florets orange to yellow.

Widespread weed, sometimes used as groundcover; usually in damp places of Dominica from strand to 500 m: Bellevue (*Taylor 22*), Carib Reserve (*Hodge 3339*), beach near Castle Bruce (*Wilbur 7983*), Hatton Garden beach (*Hodge 3064*), La Plaine (*King 6371*), Lisdara (*Hodge 744*), Morne Daniel (*Kimber 1081*), Pagua Bay (*Chambers 2627, Wilbur 7531*), Pont Cassé (*King 6356*), Portsmouth (*Hodge 742, Solheim 5629*), Rosalie (*Ernst 1353*), Roseau (*Hodge 743*), Soufrière (*Lloyd 403*), Sylvania (*Hodge 3829*), Syndicate (*Whitefoord 3605*).

Caribs are reported to use the leaves as a poultice (Hodge and Taylor, 1957:616). Adjanohoun et al. (1985:93, pl. 60) reported several medicinal usages.

Wulffia Necker ex Cassini

Wulffia baccata

Wulffia baccata (Linnaeus f.) Kuntze, 1891, 1:373.—O. Schulz in Urban, 1911, 7:91.—Domin, 1930d:73.
Coreopsis baccata Linnaeus f., 1782:380.
Wulffia stenoglossa A.P. Candolle, 1836, 5:363.—Grisebach, 1861:372.
Wulffia havanensis sensu Grisebach, 1861:373, non A.P. Candolle.

Large subshrub, sometimes scrambling; leaves opposite, serrate-dentate, 3-veined above base; heads 1–3, terminal, radiate, with bracts in 2–3 series; receptacle with pales below fertile (disk) florets and exceeding florets and achenes; florets yellow to orange; achene without pappus, fleshy at maturity.

Lesser Antilles into northern South America; occasional weed in Dominica: Baiac (*Whitefoord 3827*), Bellevue (*King 6314*), Freshwater Lake (*Gillis 8187*), Grand Bay (*Cooper 55, Ernst 1610, Eggers 699*), Laudat (*Lloyd 243*), Lisdara (*Hodge 760, 762*), Morne Colla Anglais (*Webster 13413*), Ridgefield (*Hodge 2180*), Sylvania (*Hodge 759, 761, 3828*).

Xanthium Linnaeus

Xanthium strumarium

Xanthium strumarium Linnaeus, 1753:987.
Xanthium chinense Miller, 1768.—Domin, 1930d:60.

Cocklebur.

Coarse herb; leaves alternate, pedately veined, 3–5-lobed; corymbs with pistillate flowers near base, upper heads staminate; pistillate receptacle with pales subtending florets; fruits enclosed by woody involucre with hooked spines.

Widespread weed; rarely collected on Dominica, the first collection claimed by Domin (1930d:60): Carib Reserve (*Hodge 3295*).

This genus is sometimes split into many species. *Xanthium chinense* Miller, *Xanthium echinatum* Murray, *Xanthium occidentale* Bertoloni, and *Xanthium orientale* Linnaeus are often used on Antillean material but a broad species concept is used here.

Youngia Cassini

(by K. Chambers)

Youngia japonica

Youngia japonica (Linnaeus) A.P. Candolle, 1838, 7:194.—Babcock & Stebbins, 1937:94.
Prenanthes japonica Linnaeus, 1767b:107.
Crepis japonica (Linnaeus) Bentham, 1861a:194.

Erect annual herbs with milky sap; leaves mostly basal, lyrate-pinnatifid with large terminal lobe; inflorescence scapose, paniculate; heads small, ligulate; involucre in 2 series, outer small and inner equaling florets; florets yellow, outer ones reddish-tinged, ligulate and 5-toothed, all fertile; achenes with pappus of white hairs.

Widespread weed of tropical and subtropical regions, native to eastern Asia; often on banks near ditches at middle elevations of Dominica: Jean (*Ernst 1816*), Pont Cassé (*Chambers 2718*), Sylvania (*Hodge 440*[?], *769, 2502*), Syndicate (*Whitefoord 3657*), Trafalgar Falls road (*Whitefoord 4639*).

BALANOPHORACEAE

Helosis cayennensis

Helosis cayennensis (Swartz) Sprengel, 1826, 3:765.—Howard, 1959b:81.—Hansen, 1980:35.
Cynomorium cayennense Swartz, 1797:13, "*cayenense*."

Rhizomatous, achlorophyllous, leafless root-parasite; erect portion of plant to 5 cm, with globoid or ellipsoid monoecious capitulum of florets, each subtended by a ring of hairs; male florets with 3-lobed tepals, females with 2 styles.

Cuba, Martinique, St. Lucia, Trinidad, northern South America; in Dominica in montane rainforest at 600–1000 m: Morne Anglais (*Fennah 24*), Laurent River near Morne Negres Marrons (*Hodge 1206*).

Hansen calls our *H. cayennensis* var. *mexicana* (Liebmann) Hansen but the varietal epithet *andicola* appears to have priority.

BALSAMINACEAE

(by R. DeFilipps)

Impatiens balsamina

Impatiens balsamina Linnaeus, 1753:938.

Garden balsam.

Succulent herb; leaves serrate, alternate; flowers showy, magenta; capsules tomentose.

Native of Southeast Asia, widely cultivated as an ornamental; escaping in Dominica on cleared land: Sylvania (*Hodge 459*), roadside at Bornes (DHN!, flowering June).

BASELLACEAE

Anredera leptostachys

Anredera leptostachys (Moquin) Steenis, 1957, 5:302.—Bogle, 1969:595.
Boussingaultia leptostachys Moquin in A.P. Candolle, 1849, 13(2):229.

Glabrous vine; racemes slender, lax; pedicels jointed; outer bracteoles shorter than perianth and not winged.

Neotropics; in Dominica, possibly escaping, at 30–60 m in coastal scrub-woodlands: Colihaut (*Ernst 1149*), Petit Coulibri (*Whitefoord 4672*), Salisbury (*Nicolson 1941*).

Adjanohoun et al. (1985:53, pl. 20) reported use to treat inflammation.

Recent annotations by Calvin R. Sperling (Harvard) indicate that he regards this as a synonym of *Anredera vesicaria* (Lamarck) C. Gaertner.

BEGONIACEAE

(by K. Burt-Utley)

Begonia Linnaeus

Begonia heracleifolia Chamisso & Schlechtendal of Central America, with pedatifid leaves and pubescent petioles, was collected in cultivation at Baiac (*Whitefoord 5459*).

Excluded *Begonia*

Begonia scandens Swartz (= *Begonia glabra* Aublet), a distinctive scandent species not known to occur in the Lesser Antilles, was reported from Dominica by Grisebach (1860:305) based on an Imray record. The type of *B. dominicalis, Imray 584* (K), has "*B. scandentis* proxime" written on it and may have been misread by Grisebach.

1. Leaf blades to 10.5 cm long, doubly serrate; inflorescences few-flowered, to 10 cm long . . . . . ***B. humilis***
1. Leaf blades 8–23 cm long, ± entire; inflorescences many-flowered, >20 cm long . . . . . ***B. obliqua***

Begonia humilis

Begonia humilis Aiton, 1789, 3:353.—Smith et al., 1986:181.

Annual herb; leaf blades 1.5–10.5 cm × 0.8–5.0 cm, short-pilose above, glabrous below, doubly serrate; inflorescences few-flowered; tepals white; staminate tepals 2, ± orbicular to ovate; largest capsule wing rounded at apex.

Grenada into northern South America; locally common in humid areas in Dominica 30–700 m: north (Syndicate-Calibishie)—(*Ernst 1554, Hodge 3539, Whitefoord 3510*); interior (Pont Cassé)—(*Cowan 1615, Hodge 1077, Nicolson 2125*); west slopes (Clarke Hall-Lisdara)—(*Cooper 66, Hodge 2501, Stehlé 6360, Stern & Wasshausen 2443A, Wasshausen & Ayensu 307, Wilbur 7687*).

Begonia obliqua

Begonia obliqua Linnaeus, 1753:1056.—Golding, 1980:245.—Smith et al., 1986:206.—Howard, 1989, 5:395.
Begonia macrophylla Lamarck, 1785, 1:394.
Begonia odorata Willdenow [1814, Enum. Suppl., 64, nom. nud.] ex Link, 1822, 2:396.—Smith et al., 1986:207.
Begonia dominicalis A.L. Candolle ex Grisebach, 1860:304.—A.L. Candolle in A.P. Candolle, 1864, 15(1):294.—Smith et al., 1986:160.
Begonia domingensis sensu Grisebach, 1860:304, non A.L. Candolle (fide O. Schulz in Urban, 1911, 7:19).
Begonia suaveolens sensu A.L. Candolle in A.P. Candolle, 1864, 15(1):294, non Loddiges.

Perennial herb; leaf blades 8–23 cm × 5–15 cm, glabrous above, sometimes weakly pilose below (especially on veins), margins entire to weakly denticulate or crenate; inflorescences many-flowered, tepals white to pink; staminate tepals 4, the 2 largest ± orbicular to ovate, the 2 smallest oblanceolate; largest capsule wing obtuse, acute or acuminate at apex.

Guadeloupe and Martinique; common in Dominica in woodlands and rainforests 30–900 m: east (Carib Reserve-Rosalie)—(*Hodge 3031, Stehlé 6368, Stern & Wasshausen 2471, 2472*); interior (Micotrin-Deux Branches)—(*Beard 1453, Chambers 2767, Cowan 1613, 1614, Fairchild 2924, Ernst 1489, Hodge 1800, 1801, Smith 10239, Webster 13244, Wilbur 7471, 7820*); west (Syndicate-Petit Coulibri)—(*Chambers 2699, Cooper 76, Eggers 612, Hodge 473, 1014, 1174, 1356, 1471, 1543, 2022, 2305, 2496, 2570, 2581, Nicolson 1826, 2156, Skog 1553, Webster 13190, 13276, 3489, Whitefoord 5894, 6023, Wilbur 7609, 7697*), sine loc. (*Imray 584* at K).

Adjanohoun et al. (1985:55, pl. 21) reported medicinal usages (as *B. odorata*).

The characters utilized by O. Schulz (l.c.) and Smith et al. (1986:121) to separate *B. macrophylla, B. dominicalis,* and *B. odorata* are, at best, superficial. The shape of the bracteoles subtending pistillate flowers is frequently a variable character, even within an inflorescence. Moreover, it is common for the two bracteoles to have different shapes. The difficulty in distinguishing these taxa by bracteole characters is compounded by Schulz's use of capsule wing characters. Wing shape varies within and among populations of *Begonia*. Even within an inflorescence there are subtle differences in wing shape, making it an unreliable character. The polymorphic species concept accepted by Howard (l.c.) is continued here.

Although Schulz included Lamarck's plate 778 in *Begonia macrophylla,* the plate is *Begonia minor* Jacquin, a species that does not occur on Dominica.

BIGNONIACEAE

(by A.C. Nicolson)

We acknowledge, with thanks, the prompt and constructive criticism by Dr. Alwyn Gentry (MO) of this text.

Cultivated genera include the following: *Amphitecna latifolia* (Miller) Gentry (includes *Enallagma latifolia* Miller), a tree

with simple, oblanceolate leaves and solitary, greenish flowers was reported by Hodge and Taylor (1957:607).

Catalpa longissima (Jacquin) Dumont de Courset, a tree with simple, ovate leaves and white flowers (Roseau Botanic Garden: *Bailey 208, Hodge C*).

Jacaranda mimosifolia D. Don, a tree with bipinnate leaves and blue flowers (Roseau Botanic Garden: *Hodge 3955*).

Parmentiera cereifera Seemann, the candle-tree, with trifoliolate leaves and elongate, white cauliflorous flowers (Roseau Botanic Garden: *Hodge 931*).

Spathodea campanulata Palisot de Beauvois, the African tulip-tree, with pinnate leaves and large, scarlet flowers (Sylvania: *Hodge 837*).

1. Trees or shrubs, not climbing.
   2. Leaves pinnately compound, margins dentate . . . . . ***Tecoma***
   2. Leaves simple or palmately compound; margins entire.
      3. Leaves fascicled, simple, oblanceolate; inflorescence on old wood, 1-few-flowered; corolla greenish, lobes apiculate . . . . . ***Crescentia***
      3. Leaves opposite, simple or palmately 3-5-foliolate, leaflets ovate-elliptic; inflorescence ± terminal, many-flowered; corolla pink, lobes broadly rounded . . . . . ***Tabebuia***
1. Climbers by tendrils or rootlets.
   4. Leaves simple, broadly ovate; flowers inconspicuous, appearing cauliflorous; fruit globose, indehiscent . . . . . ***Schlegelia***
   4. Leaves 2-3-foliolate, terminal leaflet sometimes replaced by tendril; flowers showy, not appearing cauliflorous; fruit dehiscent.
      5. Stems sharply 6-angled; leaflets broadly cordate; inflorescence an elongate terminal panicle; calyx margin double, the outer frilly and the inner thick . . . . . ***Amphilophium***
      5. Stems terete to 4-angled; leaflets ovate to elliptic; inflorescence not as above; calyx simple, without frilly outer margin.
         6. Tendrils 3-clawed; flowers yellow, solitary to few at nodes; calyx thin and membranous, margin irregular . . . . . ***Macfadyena***
         6. Tendrils not clawed; flowers lavender-pink or white, in terminal or lateral inflorescences; calyx ± coriaceous, margin regularly truncate or 5-denticulate.
            7. Corolla tubular, white, >10 cm long; fruit ellipsoidal, the seeds thick and unwinged; leaves densely tan-puberulous beneath . . ***Tanaecium***
            7. Corolla infundibuliform- to campanulate-tubular, usually lavender-pink, <8 cm long; fruit linear; seeds thin-winged, leaves glabrous or pubescent only in nerve axils beneath.
            8. Panicle many-flowered (>20); corolla <5 cm long; nectariferous disc present; seed wings hyaline, white; rare . . . . . ***Arrabidaea***
            8. Raceme few-flowered (<20); corolla >8 cm long, nectariferous disc absent; seed wings firm, brownish; common . . . . . ***Cydista***

Amphilophium Kunth

Amphilophium paniculatum

Amphilophium paniculatum (Linnaeus) Kunth, 1819, 3:149.
Bignonia paniculata Linnaeus, 1753:623.

Coarse vine; leaflets usually 2, cordate, acuminate, to 15 cm long; petioles to 5 cm long, petiolules to 4 cm; inflorescence terminal, to 15 cm long; pedicels 1 cm long; calyx double-margined, urceolate, outer 5 lobes broadly spreading; corolla 2 cm long, bilabiate, purple at maturity, fragrant; capsule oblong-elliptic, ± flattened, to 9 cm × 5 cm; seeds to 2 cm × 3 cm, puberulous.

Neotropics; occasional in Dominica from sea level to 800 m: Antrim Valley (*Nicolson 1874*), Douglas Bay (*Ernst 1930*), Rosehill (*Eggers 504*), Syndicate (*Ernst 2104*, *Whitefoord 4306*), sine loc. (*Imray 104*). Flowering July-October.

Arrabidaea A.P. Candolle

Arrabidaea chica

Arrabidaea chica (Humboldt & Bonpland) Verlot, 1868:154.
Bignonia chica Humboldt & Bonpland, 1807, 1:107.

Vine; leaflets ovate, base rounded, apex acute to acuminate, to 12 cm × 5 cm; petiole to 7 cm, petiolules to 3 cm long, the petiole and tendril persistent after the fall of the leaflets, creating the appearance of cauline tendrils; inflorescence a terminal panicle, to 15 cm long; pedicel 5 mm, slender; calyx 5 mm, teeth minute; corolla lavender-pink, 3-4 cm long, lobes to 1 cm; pods 15 cm × 1 cm, linear and flattened; seeds flattened, 4 cm × 1 cm, wings hyaline.

Continental neotropics and Greater Antilles; rare (possibly escaped?) in Dominica: rocky flat along Douglas Bay (*Ernst 1929*). Flowering and fruiting in July.

Crescentia Linnaeus

Crescentia cujete

Crescentia cujete Linnaeus, 1753:626.

Calabash, calebasse coucou, calebasse rond.

Tree to 10 m; leaves simple, sometimes clustered, apex rounded or short-apiculate, base long-tapering to 1 cm petiole; flowers solitary, lateral on old wood; pedicel to 1.5 cm; calyx 2 cm, deeply bifid; corolla campanulate, 5.6 cm long, greenish, the lobes triangular, 1.5 cm long, long-apiculate to fimbriate;

fruit gourd-like, indehiscent; seeds unwinged, embedded in pulp.

Neotropics, often semi-cultivated; occasional in Dominica at lower elevations: Bataca (*Stehlé 6369, 6372*), sine loc. (*Taylor 118, 119, 120*).

As elsewhere, the hard-shelled fruits of various shapes are used to make containers (Hodge and Taylor, 1957:607). Adjanohoun et al. (1985:55, pl. 22) reported usage to treat wounds.

Cydista Miers

Cydista aequinoctialis

Cydista aequinoctialis (Linnaeus) Miers, 1863:191.
Bignonia aequinoctialis Linnaeus, 1753:623.

Vigorous vine; leaflets obovate, base rounded, apex tapered, to 12 cm × 4 cm; petiole 3-5 cm, petiolules 1.5 cm; pedicel 1 cm; calyx 8 mm, truncate; corolla 7-9 cm, lobes 2.5 cm long, rounded, pink; fruit to 40 cm × 2.5 cm, flattened; seeds coriaceous, flattened, winged, 3.5 cm × 2 cm.

Neotropics; common in Dominica along the west coast: Batali River (*Ernst 1395, 1656*), Cabrits (*Hodge 836, Nicolson 4198, Webster 13317*), Canefield Estate (*Ernst 1839*), Douglas Bay (*Finlay s.n.* at K), Hatton Garden (*Hodge 3072*), Portsmouth (*Hodge 3755, Whitefoord 4513*), sine loc. (*Imray 26*). Flowering April-June, fruiting in July.

Macfadyena A.P. Candolle

Macfadyena unguis-cati

Macfadyena unguis-cati (Linnaeus) Gentry, 1973:236.
Bignonia unguis-cati Linnaeus, 1753:623.
Doxantha unguis-cati (Linnaeus) Miers, 1863:190.

Climber; short tendrils with 3 claw-like hooks; leaflets ovate to long-ovate, to 9 cm × 4 cm; petioles to 3.5 cm, petiolules to 2.5 cm; flowers 1-several at nodes; pedicels 2 cm, slender; calyx to 1.5 cm, shallowly and irregularly round-lobed; corolla to 7 cm long, yellow with reddish lines in throat, lobes 2.5 cm, rounded; fruit linear, to 35 cm × 1 cm; seeds to 2 cm × 6 cm, wings membranous.

Neotropics; occasional in Dominica along west coast: Batali River (*Ernst 1649*), East Cabrit (*Whitefoord 5288*), Morne Daniel cliffs (*Hodge 3896*), Rodney's Rocks (*Nicolson 1969*), Roseau (*Hodge 3896*), sine loc. (*Imray 66*). Flowering April-June, fruiting January.

Schlegelia Miquel

Schlegelia axillaris

Schlegelia axillaris Grisebach, 1862:445.

Epiphyte; leaves entire, leathery, ovate-orbicular, to 10 cm × 8 cm; petiole 1.5 cm; inflorescence lateral, few-flowered, 3(-6) cm long; pedicels 5-15 mm; calyx 4 mm, irregularly lobed; corolla whitish, 1.5 cm, the rounded lobes 0.5 cm; fruit spherical, indehiscent, to 1 cm broad.

Jamaica and Guadeloupe; in Dominican rain forests (type locality) at 500 m: Dleau Gommier (*Nicolson 4035*). Flowering in January.

This genus is sometimes put in the Scrophulariaceae (Armstrong, 1985).

Tabebuia Gomes ex A.P. Candolle

This genus is badly in need of revision. The taxa occurring in Dominica are remarkably distinct in morphology and habitat, perhaps more so than elsewhere. Because the taxonomy has long been unsettled, nomenclature is remarkably entangled, various authors using the same names for very different or broad senses or different names for the same senses. We decided to simply accept four more or less discrete taxa as species for a basic classification and work out the nomenclature (types) under that assumption.

The four species accepted are (1) *Tabebuia rosea* (Bertoloni) A.P. Candolle (1845, 9:215), a native of Central America and northern South America, which is cultivated in the Antilles, including the Roseau Botanic Garden (*Anonymous s.n.* at K); (2) *Tabebuia riparia* (Rafinesque) Sandwith (1955:44), endemic to Jamaica; (3) *Tabebuia heterophylla* (A.P. Candolle) Britton (1915:48), a (3-)5-foliolate pan-Antillean species (excluding Jamaica); and (4) *Tabebuia pallida* (Lindley) Miers (1863:199), a 1(-3)-foliolate species endemic to the volcanic Lesser Antilles, but sometimes cultivated elsewhere.

We do not give formal synonymies for the first two species since they are not known to occur naturally on Dominica. We will give formal synonymies for the last two species that are native to Dominica. However, an attempt to sort out all the different misapplications of names used by various authors for Dominican species results in such incomprehensible synonymies that we decided to minimize the citation of names "sensu auct." and "pro parte." The following narrative account of various names that have been used is an attempt to express their disposition (typification) and to suggest the difficulties of accounting for their misapplications.

The earliest legitimate name applicable to this group is *Bignonia leucoxylon* Linnaeus (1753:624). Sandwith (1953:453; 1955:44) identified the Linnaean type with the Jamaican endemic species (*T. riparia* (Rafinesque) Sandwith); the epithet is unavailable in *Tabebuia* because of the existence of the binomial *T. leucoxyla* A.P. Candolle, based on Vellozo material.

Bignonia leucoxylon Linnaeus (1763:870) is interpreted by Sandwith (1953:453) as an illegitimate later homonym of *B. leucoxylon* Linnaeus (1753:624). The type of the later homonym is identified with what is here called *T. heterophylla*.

The binomial *Tecoma leucoxylon* Martius ex A.P. Candolle (1845, 9:219) is a legitimate name under Article 72 (Note) (*ICBN*), with priority dating from 1845, not 1763. De Candolle and later authors (Grisebach, 1862:447; Urban, 1911, 4:565) also included elements of what would not only appear to be *T. heterophylla* (pan-Antillean) but also *T. rosea* (South America) and *T. riparia* (Jamaica).

Bignonia pentaphylla Linnaeus (1763:870) comes next. Sandwith (1953:453) argued that this constitutes an illegitimate renaming of *Bignonia leucoxylon* Linnaeus (1753:624) and thus falls into the synonymy of *Tabebuia riparia* (Jamaican endemic). The binomial *Tecoma pentaphylla* Jussieu ex A.P. Candolle (1845, 9:217) is a legitimate name under Article 72 (Note) (*ICBN*) with priority from 1845, not 1763. It is possible that a lectotype of *Tecoma pentaphylla* could be selected that could be identified with the pan-Antillean species (*T. heterophylla*), but de Candolle apparently also included the Lesser Antillean endemic (*T. pallida*). In any case, Grisebach (1861:447) and Urban (1911, 4:565) indiscriminately used *Tecoma pentaphylla* for elements of all four species.

Raputia (Rutaceae!) *heterophylla* A.P. Candolle (1822a:153) is based on sterile material from Puerto Rico. The type (microfiche) corresponds to our concept of the pan-Antillean species, for which we accept the name *Tabebuia heterophylla* (A.P. Candolle) Britton (1915:48).

Finally, *Bignonia pallida* Lindley (1826b) is based on unifoliolate material cultivated in St. Vincent. This is what we regard as the Lesser Antillean endemic, for which we accept the name *Tabebuia pallida* (Lindley) Miers. This name has been generally used for other taxa, particularly the pan-Antillean taxon (Britton and Wilson, 1925, 6:196, Gooding et al., 1965:389).

We re-emphasize that our acceptance of the species rank for the two Dominican taxa is provisional. On Dominica they are very distinct in aspect and habitat but material from other islands is not so easily divided. Stehlé (1945:338; 1946a:32) recognized three subspecies within a variable concept of *T. heterophylla*. Little and Wadsworth (1964:498) went further and accepted *T. heterophylla* as a variable species without subspecies. A revision of Antillean Tabebuieae, particularly accounting for the Cuban taxa, is needed.

1. Leaflets (3-)5, west (leeward) coast . . . ***T. heterophylla***
1. Leaflets 1(-3); east (windward) coast . . . . . ***T. pallida***

Tabebuia heterophylla

Tabebuia heterophylla (A.P. Candolle) Britton, 1915:18.—Little & Wadsworth, 1964:198, pl. 236.
Raputia heterophylla A.P. Candolle, 1822a:153; 1824, 1:734.
Tecoma pentaphylla Jussieu ex A.P. Candolle, 1845, 9:217.—Urban, 1911, 4:565.
Tabebuia pentaphylla (A.P. Candolle) Hemsley, 1882, 2:495.—Urban, 1921, 8:641.
Tabebuia pallida subsp. *pentaphylla* (A.P. Candolle) Stehlé, 1945:329, 338.
Tabebuia heterophylla subsp. *pallida* sensu Stehlé, 1946a:32, as to description, not as to the Lindley type.

White cedar, poirier blanc.

Tree to 6(-20) m; leaves (3-)5-foliolate, leaflets to 9(-12) cm × 5.5 cm, apex obtuse to emarginate and base rounded; petioles to 5 cm, petiolules to 3 cm; calyx 1.5 cm long, irregularly lobed; corolla to 8 cm long, pale violet with yellowish center, lobes flattened, to 2 cm long; fruits terete, to 20 cm × 1 cm, apex attenuate; seeds flattened, 0.6 cm × 1 cm, hyaline wings to 2 cm long.

Antillean (except Jamaica); common in dry scrub along west coast of Dominica: Cabrit (*Smith 10310*), Grand Savanne (*Beard 246*), Hungry Hill (*Whitefoord 4487*), Loubière (*Hodge 3864*), Mero (*Stern & Wasshausen 2437*), Morne Bruce (*Fairchild 2831*), Morne Daniel (*Webster 13291*), Pointe Ronde (*Hodge 2660, 2755*), Salisbury (*Chambers 2801*), Scotts Head (*Hodge 1603, Kimber 884, Wilbur 7589*), Tarou Cliffs (*Nicolson 1858*). Flowering January-June, fruiting in July.

Tabebuia pallida

Tabebuia pallida (Lindley) Miers, 1863:199.
Bignonia pallida Lindley, 1826b.
Tabebuia dominicensis Urban, 1924:308.
Tabebuia pallida subsp. *dominicensis* (Urban) Stehlé, 1945:330, 338.
Tabebuia heterophylla subsp. *dominicensis* (Urban) Stehlé, 1946a:33.

Poirier.

Tree to 10(-30) m; leaves usually simple with apex rounded to obtuse, to 20 cm × 9 cm, petioles to 5 cm, or when rarely 3-foliolate, leaflets to 12 cm × 5.5 cm, petioles to 9 cm and petiolules to 3 cm; pedicels 3 cm, slender; flowers and fruits as above; seeds as above but perhaps ± larger.

Guadeloupe, Martinique, St. Vincent, Barbados, Grenadines, and St. Lucia; common in Dominica in the eastern (windward) coastal forests: Au Park (*Read 20270*), Bout Sable Bay (*Nicolson 1987*), L'Anse Noire (*Wilbur 7518*), Hatton Garden (*Hodge 3055*), La Plaine (*Ramage s.n.*, type at K), Marigot (*Hodge 839*), Petit Soufrière Bay (*Stern & Wasshausen 2477*), St. Davids Bay (*Ernst 1470, Wilbur 7987*), St. Saveur (*Chambers 2549*), Salybia (*Stehlé 6091, 6387*). Flowering January-May; fruit formed in many months, apparently mostly in July.

Caribs use the wood of this (perhaps also the other species) for ship building and other purposes (Hodge and Taylor, 1957:608). Adjanohoun et al. (1985:57, pl. 23) reported medicinal usage of what probably is a composite of the two taxa recognized here.

Tanaecium Swartz

Tanaecium crucigerum

Tanaecium crucigerum B. Seemann, 1856:27.—Gentry, 1975:122.

Scrubby vine to 3 m; leaflets elliptic, apex rounded or

obtuse, 12 cm × 7 cm, petioles to 9 cm, petiolules to 3 cm; pedicel 1 cm; calyx to 1.5 cm, truncate; corolla to 16 cm long, white, lobes to 2 cm, rounded, fruit cylindric, 12 cm × 4 cm; seeds flattened, woody, 2 cm × 3 cm.

Lesser Antilles and Venezuela; locally abundant along the west coast of Dominica (type locality): Canefield Estate (*Ernst 1838*), Massacre (*Webster 13476*). Flowering June, flowers and fruits in July.

This species differs from *T. jaroba* Swartz only in its puberulous leaf undersurface and may fall into synonymy (Gentry, pers. comm.).

Tecoma Jussieu

Tecoma capensis (Thunberg) Lindley (includes *Tecomaria capensis* (Thunberg) Spach), cape honeysuckle, a rambling shrub with scarlet flowers to 2 cm long (*Hodge 1007*, sterile).

Tecoma stans

Tecoma stans (Linnaeus) Jussieu ex Kunth, 1819, 3:144.
Bignonia stans Linnaeus, 1763:871.

Shrub to 4 m; leaves 5–7-pinnate; leaflets sessile, ovate-lanceolate, margins crenate; pedicel 7 mm; calyx 5 mm, lobes acute, 1 mm; corolla campanulate, yellow, to 4.5 cm, rounded lobes to 1 cm; fruit terete, to 20 cm × 0.5 cm; seeds 0.5 cm, membranous wings 1.5 cm.

Neotropics; infrequent to common along dry west coast: Batali River (*Ernst 1412*), Colihaut (*Hodge 3777*), Loubière (*Hodge 3862*), Pointe Guignard (*Wilbur 8132*), Scotts Head (*Wilbur 7592*), South Chiltern (*Hodge 1629*), Tarou Cliffs (*Nicolson 1859*). Flowers and fruits in March, May, June, and October.

BIXACEAE

Bixa orellana

Bixa orellana Linnaeus, 1753:512.—Little & Wadsworth, 1964:358, pl. 166.

Rou-cou, annetto.

Shrub or tree to 7 m; leaves ovate, cordate, acuminate; petals white; capsule spiny, seeds red.

Neotropics, pantropically naturalizing; in Dominica cultivated and apparently spontaneous at lower and middle elevations on east coast: Côte d'Or (*Nicolson 2054*), Lisdara (*Hodge 2478*), Londonderry (*Chambers 2624*), Salybia (*Hodge 3303, 3225*).

The red seed coat is used as a dye (Hodge and Taylor, 1957:588).

BOMBACACEAE

(by R. DeFilipps)

Durio zibethinus Murray, the famous durian of Southeast Asia, was collected in the Roseau Botanical Garden (*Hodge 941*). It has a large, spiny, overwhelmingly fragrant fruit.

1. Leaves palmately 5–9-foliolate; staminal filaments 5, free above; fruits dehiscent . . . . . ***Ceiba***
1. Leaves simple; staminal filaments many, connate above; fruit indehiscent or dehiscent.
   2. Leaves shallowly lobed; petals 11–15 cm long; anthers to 5 cm long; fruit dehiscent . . . . . ***Ochroma***
   2. Leaves unlobed; petals to 5 cm long; anthers to 2 mm long; fruit indehiscent . . . . . ***Quararibea***

Ceiba Miller

Ceiba pentandra

Ceiba pentandra (Linnaeus) Gaertner, 1791, 2:244.—Little & Wadsworth, 1964:332, pl. 153.
Bombax pentandrum Linnaeus, 1753:511.
Eriodendron anfractuosum var. *caribaeum* A.P. Candolle, 1824, 1:479.
Bombax occidentale Sprengel, 1826, 3:124.
Ceiba pentandra var. *caribaea* (A.P. Candolle) Bakhuizen van den Brink, 1924:196.
Ceiba occidentalis (Sprengel) Burkill, 1935:317.

Fromager, pin tree, kumaka (Carib).

Buttressed, enormous, deciduous tree, ours with stout spines on young branches and young trunks; leaves palmately compound; petals 2.5–4 cm long; woolly hairs of the endocarp are the kapok of commerce.

Pantropical; in Dominica in dry west coast woodlands: Cabrits (*Hodge 3703*), Portsmouth (*Hodge 543*), South Chiltern (*Hodge 1649*). Leafless March–May, fruits ripe in May.

Source of light wood and kapok (Hodge and Taylor, 1957:582).

Ochroma Swartz

Ochroma pyramidale

Ochroma pyramidale (Lamarck) Urban, 1920:123.—Little & Wadsworth, 1964:334, pl. 154.—Bornstein in Howard, 1989, 5:268.
Bombax pyramidale Cavanilles ex Lamarck, 1788 [Apr], 2:552.
Ochroma lagopus Swartz, 1788 [Jun–Jul]:98.

Bois flot, balsa.

Unarmed tree to 20 m; leaves palmately lobed; endocarp with woolly hairs.

Neotropics; occasional in Dominica in lowland woods at 30–210 m: Hatton Garden (*Hodge 3058*), Rosalie (*Ernst 1360, Nicolson 4128*), Calibishie-Portsmouth-Spanish Mountain (Nicolson!). Flowers in January, fruits in April–June.

Source of light wood and kapok (Hodge and Taylor, 1957:582).

Quararibea Aublet

Quararibea turbinata

Quararibea turbinata (Swartz) Poiret in Lamarck, 1816, Encycl., Suppl., 4:636.—Little & Wadsworth, 1964:336, pl. 155.
Myrodia turbinata Swartz, 1788:102.

Lele, swizzle-stick tree.

Tree to 6 m; branches whorled; leaves to 27 cm long, sparsely minutely lepidote below and pubescent in vein axils.

West Indies and northern South America; in Dominica in low forests: Calibishie (*Hodge 2733*), Carib Reserve (*Stehlé 6384*), Deux Branches (*Hodge 3101*), sine loc. (*Imray s.n.*, 1859, *Taylor 109*).

A source of stirring sticks (Hodge and Taylor, 1957:582).

BORAGINACEAE

(by A.C. Nicolson)

Argusia gnaphalodes (Linnaeus) Heine, also known as *Mallotonia gnaphalodes* (Linnaeus) Britton, has sessile, spatulate, tomentose leaves, 3–10 cm long and was reported for Dominica by Vélez (1957:76) based on a report by Stehlé (non vidi). Howard (1989, 6:189) reported it, with exclamation mark, but I have not seen the Dominica record.

Rochefortia spinosa (Jacquin) Urban (including *Rochefortia cuneata* Swartz) has leaves clustered on short shoots and is sparingly spiny. It was first attributed to Dominica by Britton and Wilson (1925, 6:130), perhaps based on material from the Dominican Republic, although Johnston (1949b:128) cited Dominica.

Symphytum officinale Linnaeus of Europe was reported by Adjanohoun et al. (1985:59, pl. 25) as cultivated around houses in the Lesser Antilles as a medicinal plant. Its presence on Dominica is unconfirmed.

1. Style twice-branched, stigmas 4 . . . . . ***Cordia***
1. Style simple or wanting; stigma simple or 2-lobed.
   2. Inflorescence a branching corymb; flowers long-pedicellate . . . . . ***Bourreria***
   2. Inflorescence a branched or unbranched scorpioid spike; flowers sessile or ± sessile.
      3. Inflorescence unbranched (rarely once-branched) . . . . . ***Heliotropium***
      3. Inflorescence 2-more-branched . . . . ***Tournefortia***

Alternative Key

1. Inflorescences corymbose.
   2. Inflorescence glabrous . . . . . ***Bourreria***
   2. Inflorescence pubescent . . . . . ***Cordia***
1. Inflorescence spicate, racemose, or capitate.
   3. Inflorescence capitate . . . . . ***Cordia***
   3. Inflorescence spicate or racemose.
      4. Inflorescence 2-more-branched; woody climbers or trees . . . . . ***Tournefortia***
      4. Inflorescence unbranched or with 1 branch; erect shrubs or herbs.
         5. Calyx teeth shorter than calyx tube . . . ***Cordia***
         5. Calyx teeth longer than calyx tube . . . . . ***Heliotropium***

Bourreria Browne, nom. cons.

Bourreria succulenta

Bourreria succulenta Jacquin, 1760:14.—Little & Wadsworth, 1964:466, pl. 220.
Bourreria domingensis sensu Miers, 1869, 2:233, non Grisebach.
Bourreria recurva Miers, 1869, 2:234.

Cotlette, tawai (Carib).

Shrub or small tree to 8 m; leaves glabrous, elliptic-ovate, base tapering, apex ± acute, to 12 cm 5 cm; petiole to 1 cm; inflorescence loosely corymbose, to 12 cm broad; calyx campanulate, pubescent within, tube 5 mm, lobes 2 mm, deltoid; corolla white, tube 6 mm, lobes 4 mm, rounded; stamens exserted; style 8 mm; stigma capitate; fruit an orange berry, 1 cm across.

Neotropics; in Dominica common below 100 m: Cabrits (*Nicolson 1902, 4196, Webster 13316, Whitefoord 4002*), Calibishie (*Hodge 3140*), Dublanc (*Whitefoord 4297*), Grand Bay (*Wilbur 7999*), La Plaine (*Wilbur 8171*), Layou Valley (*Ernst 1525, Stern & Wasshausen 2420*), Pointe Baptiste (*Hodge 3740*), Pointe Ronde (*Hodge 2635*), Portsmouth (*Hodge 790*), Prince Ruperts Head (*Finlay* in 1792), Salisbury (*Ernst 1431, Nicolson 2039, Stern & Wasshausen 2455, Wilbur 7648, 8112*), Salybia (*Hodge 3218, 3272, Taylor 17*), Walkers Rest (*Chambers 2773*), Woodford Hill (*Ernst 1684*).

The Caribs obtain an emollient fluid from the inner bark to use on inflamed eyes (Hodge and Taylor, 1957:599).

Cordia Linnaeus

1. Inflorescence unbranched.
   2. Inflorescence capitate; sepals setaceous . . ***C. globosa***
   2. Inflorescence spicate; sepals short-triangular.
      3. Leaves small, obovate, slightly crenate, rounded at apex . . . . . ***C. divaricata***
      3. Leaves large, ovate, serrate, acuminate at apex . . . . . ***C. martinicensis***
1. Inflorescence branched.
   4. Leaf margins serrate; leaf scabrous above.
      5. Inflorescence axillary, with ball-like flower clusters . . . . . ***C. polycephala***
      5. Inflorescence terminal; flowers scattered . . . . . ***C. nesophila***
   4. Leaf margins entire; leaf scabrous or glabrous above.
      6. Calyx and corolla persistent, enveloping slender, elongate dry fruit; calyx conspicuously 10-ribbed . . . . . ***C. alliodora***
      6. Corolla withering and deciduous; calyx not conspicuously 10-ribbed; fruit fleshy, drupaceous.
         7. Leaves obovate; fruits red . . . . . ***C. collococca***
         7. Leaves ovate; fruit white.
            8. Leaves medium, glabrous; mature calyx campanulate, splitting irregularly . . . . ***C. reticulata***
            8. Leaves large, scabrous; mature calyx appearing salverform . . . . . ***C. sulcata***

Cordia alliodora

Cordia alliodora (Ruiz & Pavón) Oken, 1841, 3:1098.—Little & Wadsworth, 1964:468, pl. 221.
Cerdana alliodora Ruiz & Pavón, 1799, 2:47.
Cordia gerascanthus sensu Grisebach, 1862:478, non Linnaeus.
Gerascanthus alliodorus (Ruiz & Pavón) Borhidi et al., 1988:396.

Tree to 20 m tall; younger parts stellately ± pubescent; leaves elliptic, 10–20 cm × 2.5–9 cm; petiole to 4 cm; inflorescence a stiff panicle to 22 cm broad; calyx tube 4.5 mm long, lobes 0.5 mm, 10-veined, pubescent; corolla white, 1.1 cm, lobes 0.6 cm; fruit fusiform, included in persistent calyx and corolla.

Neotropics; rare in Dominica in dry coastal woodlands: Coulibistri (*Whitefoord 5359*), Scotts Head (*Hodge 1627*), sine loc. (*Imray s.n.*).

Cordia sebestana Linnaeus, a similar species but more pubescent and with large red flowers, was reported from Dominica by Beard (1944:64), possibly from cultivation.

Cordia collococca

Cordia collococca Linnaeus, 1760 [Jan]:14, *"callococca"*; 1760 [Sep], Amoen. 5:377.—Johnston, 1949b:123.—Little et al., 1974:842, pl. 672.
Gerascanthus collococcus (Linnaeus) Borhidi in Borhidi et al., 1988:399.

Tree to 6 m; leaves obovate, apiculate, usually tapering at base, glabrous, to 12 cm × 6 cm; petioles 1 cm; leaf scars prominent on 1 year twigs; inflorescence cymose; flowers white, fragrant; calyx splitting irregularly; corolla tube 3 mm, petals 3 mm, reflexed; stamens conspicuously exserted, fruit a fleshy red berry, 1 cm across.

Neotropics; near sea level in Dominica on west coast: Cabrits (*Nicolson 4193*), Morne Daniel (*Hodge 3890*), Pointe Ronde (*Hodge 2735*), Salisbury (*Ernst 1423*). Fruits May–June.

Cordia divaricata

Cordia divaricata Kunth, 1818, 3:74.—Johnston, 1949b:121.
Cordia curassavica sensu auctt., non Roemer & Schultes.
Cordia cinerascens A.P. Candolle, 1845, 9:492.
Cordia cylindristachya var. *cinerascens* (A.P. Candolle) Grisebach, 1862:480.
Varronia divaricata (Kunth) Borhidi in Borhidi et al., 1988:391.

Densely branching shrub to 2 m; leaves rugose, oblong-ovate, rounded at apex, tapering at base, epetiolate, to 5 cm × 1.5 cm, margins crenate; inflorescence a terminal spike, to 8 cm long; corolla tube 4 mm, lobes 1.5 mm; fruit a red berry.

Northern South America, Martinique; a fairly common shrub in Dominica in dry areas below 500 m on west side: Batali River (*Webster 13171*), Colihaut (*Ernst 1137, Wilbur 8225*), Dublanc (*Whitefoord 4278*), Grand Savanne (*Hodge 3808, Lloyd 839, Nicolson 4051, Stehlé 6317, Wilbur 7631*), South Chiltern (*Stern & Wasshausen 2534*).

Cordia curassavica Roemer & Schultes sensu stricto seems not to occur in Dominica. Reports of its occurrence are based on a wider interpretation of the species that includes *C. divaricata* (see Johnston, 1949b:99–102). *Cordia curassavica* is distinguished from *C. divaricata* in having larger (11 cm × 3 cm), elliptic, dentate, short-petiolate leaves. *Cordia curassavica* may also have been confused with *C. martinicensis* or *C. nesophila*.

Cordia globosa

Cordia globosa (Jacquin) Kunth, 1818, 3:76.
Varronia globosa Jacquin, 1760:11.
Varronia dasycephala Desvaux, 1809:274.
Cordia dasycephala (Desvaux) Kunth, 1818, 3:76.

Sprawling shrub to 2 m; leaves elliptic, base cuneate, upper 2/3 of margins coarsely serrate, 3–8 cm × 1.5–4 cm; twigs, leaves and calyx strigose; inflorescence terminal, globose, 2 cm broad; calyx lobes setaceous, 3 mm; corolla tube 4 mm, lobes 2 mm, white; berry ovate, red, 5 mm long.

Northern South America, Lesser Antilles; occasional in Dominica, roadside thickets on west coast: Cabrits (*Hodge 890, Nicolson 1195, Smith 10337*), Colihaut (*Kimber 1060*), Dublanc (*Whitefoord 4276*), Grand Savanne (*Wilbur 7656, Stehlé 6396*), Loubière (*Hodge 3861*), Pointe Ronde (*Hodge 2769*), Rosehill (*Eggers 878*), Salisbury (*Ernst 1753*), Scotts Head (*Wilbur 8135*), St. Joseph (*Nicolson 4047*), sine loc. (*Eggers 818, Imray s.n.*).

Cordia martinicensis

Cordia martinicensis (Jacquin) Roemer & Schultes, 1819, 4:461.
Varronia martinicensis Jacquin, 1760:14.

Shrub to 2 m; leaves slightly scabrous, ovate, apex acute-attenuate, base rounded to acute, 6–20 cm × 3–8 cm, margin coarsely toothed; inflorescence a stout terminal spike, densely flowered; calyx inflated, lobes with subulate tips; corolla tube 6 mm long, lobes 1 mm; fruit a drupe, included in calyx.

Lesser Antilles; occasional in Dominica on west coast below 300 m: Colihaut-Pointe Ronde-Milton Estate (*Ernst 2063, Hodge 2543, 2663, Lloyd 853, Whitefoord 4682*).

Cordia nesophila

Cordia nesophila Johnston, 1956:289.
Cordia salviifolia sensu auctt., non Jussieu ex Poiret.
Varronia nesophila (Johnston) Borhidi in Borhidi et al., 1988:392.

Slender shrub to 3 m; leaves scabrous above, pubescent beneath, ovate-lanceolate, apex acute, base rounded to acute, 6–15 cm × 1.5–6 cm, margins crenate; inflorescence a terminal corymbiform cyme to 7 cm across; flowers ± sessile; calyx with 10 veins visible; corolla tube 4 mm, lobes 2 mm, reflexed; fruits frequently parasitized, 5 mm across.

Lesser Antilles; infrequent in Dominica, dry western coastal slopes: Colihaut (*Wilbur 8238, 8279*), Dublanc (*Whitefoord 4277*).

Cordia polycephala

Cordia polycephala (Lamarck) Johnston, 1935:33.
Varronia polycephala Lamarck, 1792, Tab. 1:418.
Cordia ulmifolia Jussieu in Dumont de Courset, 1802, 2:148, pro parte.

Common scraggly shrub to 2 m; leaves slightly scabrous above, pale and slightly curly-pubescent beneath; elliptic to ovate, 8–14 cm × 3–6 cm, margins shallowly toothed; inflorescence an axial, spare, ± capitate cyme; corolla tube 4.5 mm, lobes 0.5 mm; fruit ovate, included in calyx.

Hispaniola, Lesser Antilles to northern South America; common in Dominica in forest and shrubby areas to 600 m: Clarke Hall (*Stern & Wasshausen 2418, Webster 13167*), Delices (*Whitefoord 3754*), Grand Bay (*Ernst 1064*), La Plaine (*Wilbur 8168*), Laudat (*Gillis 8197*), Lisdara (*Hodge 792, 2319, Cooper 141*), Milton (*Hodge 2915*), Morne Colla Anglais (*Hodge 793*), Morne Jaune (*Nicolson 2049*), Morne Plat Pays (*Wilbur 7857*), Ridgefield (*Hodge 2217, 3900*), Soufrière (*Howard 11786*), Soufrière Bay (*Wilbur 8217*), South Chiltern (*Ernst 1878, Hodge 1451*), Sylvania (*Cooper 22, Stehlé 6314*).

Cordia reticulata

Cordia reticulata Vahl, 1807, Eclog., 3:5.—Howard, 1989, 6:199.
Cordia elliptica sensu auctt.: Urban, 1903, 3:357.—Johnston, 1949b:125, non Swartz.
Gerascanthus reticulatus (Vahl) Borhidi in Borhidi et al., 1988:401.
Cordia laevigata sensu auctt., non Lamarck.

Coco poule, mapou.

Tree 8–10 m; leaves glabrous, broadly ovate, apiculate, base rounded, 15 cm × 7 cm, 4–5 pairs lateral veins prominent beneath; inflorescence a coarse cyme, 7 cm broad, cinereo-hispid; calyx tube 6 mm long, lobes 2 mm, broadly triangular; corolla white, tube 7 mm, lobes 4 mm, oblong, reflexed; fruit an ovate, succulent, white berry, 1.5 cm long.

Lesser Antilles; occasional in Dominican midlands to 900 m: Central Forest Reserve (*Ernst 1669*), Delices (*Whitefoord 3708*), En Haut Jean (*Webster 13515*), Freshwater Lake (*Whitefoord 3855*), Hatton Gardens (*Hodge 3012*), Lisdara (*Cooper 142*), Morne Anglais (*Hodge 2247*), Morne Micotrin (*Chambers 2679, Wasshausen & Ayensu 331, Wilbur 7413, 8248*), Mount Joy (*Cooper 58, Webster 13384*), Pont Cassé (*Nicolson 1851, Stern & Wasshausen 2552, Wilbur 7761, 8284*), Salybia (*Hodge 3359*), South Chiltern (*Stern & Wasshausen 2505*), Sylvania (*Beard 1164, Hodge 791, 1126*), Syndicate (*Hodge 2612, Whitefoord 3908*).

Leaves are believed by the Caribs to relieve headache (Hodge and Taylor, 1957:599).

Cordia sulcata

Cordia sulcata A.P. Candolle, 1845, 9:488.—Little & Wadsworth, 1964:474, pl. 224.
Gerascanthus sulcatus (A.P. Candolle) Borhidi in Borhidi et al., 1988:402.

Bois bre, coco poule.

Tree to 15 m; leaves scabrous above, (rusty) pubescent beneath and with prominent veins, oblong-ovate, acuminate, rounded at base, 30 cm × 15 cm; inflorescence corymbiform, terminal; corolla tube 4 mm, lobes 2 mm, reflexed; fruit a fleshy white berry, 8 mm across, subtended by 4 mm salverform calyx.

West Indies; occasional in Dominica in forests: Calibishie (*Hodge 3154*), Clarke Hall (*Stern & Wasshausen 2390*), Eden River (*Ernst 1681*), Laudat (*Eggers 829*), L'Imprévue (*Narodny 1*), Portsmouth (*Hodge 3745*), Syndicate (*Ernst 2107, Whitefoord 4310*), Upper Layou Valley (*Beard 661*), sine loc. (*Imray 282*).

Heliotropium Linnaeus

Heliotropium curassavicum Linnaeus, a glabrous, somewhat glaucous fleshy halophyte, was reported for Dominica by Vélez (1957:76) based on his own collection. The collection has not been located and the record is questioned.

Heliotropium procumbens Miller (incl. *Heliotropium inundatum* Swartz), an annual with obovate to spatulate leaves, was reported for Dominica by Vélez (1957:76) based on his own collection. It may be in areas subject to periodic fresh water inundation.

1. Woody perennial; leaves linear, <0.5 cm broad . . . . . ***H. ternatum***
1. Herbaceous annual; leaves >1.5 cm broad.
   2. Leaves attenuate at base, ± entire; nutlets rounded . . . . . ***H. angiospermum***
   2. Leaves ± truncate at base, ± undulate; nutlets pointed . . . . . ***H. indicum***

Heliotropium angiospermum

Heliotropium angiospermum Murray, 1770:217.—Johnston, 1949b:138.
Heliotropium parviflorum Linnaeus, 1771:201.

Annual ~1 m; leaves ovate, acuminate, base attenuate, to 8 cm × 3 cm, margin entire; inflorescence sometimes forked, to 15 cm long; fruit 2-lobed, finely scaly.

Neotropics; infrequent in Dominica, dry scrub areas on west coast: Colihaut (*Ernst 1150, Wilbur 8274*), Roseau (*Hodge 795*).

Heliotropium indicum

Heliotropium indicum Linnaeus, 1753:130.

Annual ~1 m; leaves broadly ovate, irregularly undulate-margined; inflorescence to 30 cm; fruit 2-lobed, glabrous.

Tropical weed; occasional in Dominica: Cabrit Swamp (*Whitefoord 4059*), Hillsborough Estate (*Hodge 3759*), Laudat (*Lloyd 247*), Loubière (*Hodge 3872*), sine loc. (*Nicholls 37*).

Medicinal usages were reported by Adjanohoun et al. (1985:57, pl. 24).

Heliotropium ternatum

Heliotropium ternatum Vahl, 1794, 3:21.
Heliotropium fruticosum sensu Grisebach, 1862:486, non Linnaeus.
Heliotropium humile (Linnaeus) R. Brown ex Roemer & Schultes, 1819, 4:37, non Lamarck.—Urban, 1910, 4:527.

Shrub to 0.5 m; leaves ± sessile, often ternate, white-hairy beneath, linear, to 3 cm × 0.5 cm, margins often revolute; inflorescence short, to 6 cm; fruit 4-lobed, hispid.

West Indies, Yucatan, northern South America; very common in Dominica, co-dominant in xerophytic scrub of west coast: Batali River (*Chambers 2789*), Colihaut (*Ernst 1146*), Grand Savanne (*Hodge 3790, Lloyd 827, Nicolson 1942, Stehlé 6315, Stern & Wasshausen 2538, Webster 13169, Wilbur 7630*), Mero Valley (*Kimber 932*), Wallhouse (*Eggers 934*).

True *H. fruticosum*, of the Greater Antilles and Central America, is a smaller, more compact annual with large leaf-like bracts on an attenuate inflorescence.

Tournefortia Linnaeus

1. Leaves usually >4 cm broad; corolla white; corolla lobes triangular, acute; flowers sessile; fruit an ovoid, unlobed white drupe.
   2. Sprawling shrub or climber; leaves ovate (2× longer than broad), obtuse to acute at base; corolla tube constricted near middle; style none (stigma sessile) . . . ***T. bicolor***
   2. Tree or shrub; leaves lanceolate (4× longer than broad), attenuate at base; corolla tube bulged near middle; style elongate . . . . . ***T. filiflora***
1. Leaves usually <4 cm broad; corolla greenish; corolla lobes filiform or acuminate; flowers ± sessile to pedicellate; fruit a greenish or yellowish drupe with 2–4 lobes (stones).
   3. Corolla tube 5 mm or longer; corolla lobes broad at base; leaves glabrous beneath; fruits yellowish . . . . . ***T. maculata***
   3. Corolla tube to 3 mm long; corolla lobes filiform; leaves hispid to pubescent beneath; fruits greenish-white.
      4. Plants hispid; pedicels to 2 mm; calyx lobes to 3 mm long; fruits hispid . . . . . ***T. caribaea***
      4. Plants curly-pubescent; pedicels <1 mm long; calyx lobes to 1 mm long; fruits glabrous . . . ***T. volubilis***

Tournefortia bicolor

Tournefortia bicolor Swartz, 1788:40.—Johnston, 1949b:133.
Tournefortia laevigata Lamarck, 1792, Tab., 1:416.
Tournefortia bicolor f. *laevigata* (Lamarck) Grisebach, 1862:483.

Mirette.

Sprawling shrub to tree to 4 m; leaves elliptic, to 15 cm × 7 cm, 4–6 primary veins, ± opposite, conspicuous beneath; stigma sessile, annular.

Neotropics; in Dominica in cleared areas at lower elevations: Calibishie (*Ernst 1560, Hodge 3176*), Carib Reserve (*Hodge 3263*), Lisdara (*Hodge 2347*), Melville Hall (*Ernst 1029*), Portsmouth (*Hodge 3721, 3756*), Prince Ruperts Head (*Finlay*? May 1792), Ridgefield Estate (*Hodge 2126*), Sylvania (*Cooper 196, Hodge 1327, 3165*), Syndicate (*Ernst 2106, Whitefoord 3930, 4331*), Wotten Waven (*Eggers 688*).

Leaves of this plant are pounded with oil and used as a poultice for boils by the Caribs (Hodge and Taylor, 1957:600).

Tournefortia hirsutissima Linnaeus would key to *T. bicolor*, but is conspicuously hairy. It was cited for Dominica by Vélez (1957:77) based on Britton and Wilson (1925, 6:132). It has been collected on Guadeloupe and Martinique.

Tournefortia caribaea

Tournefortia caribaea (A.P. Candolle) Grisebach, 1862:484.
Tournefortia psilostachya var. *caribaea* A.P. Candolle, 1845, 9:525.
Tournefortia volubilis sensu Johnston (1949b:131) p.p., as to Hodge collections cited below, non Linnaeus.

Hispid to strigose climber; calyx lobes 3 mm long; corolla tube and style 3–4 mm; fruit hispid.

Îles des Saintes (*Stehlé 259*), Martinique (*Stehlé 4578*); occasional in Dominica at lower elevations from northeast down the west coast: Cabrits (*Hodge 794, (Webster 13303*), Calibishie (*Hodge 3152*), Salisbury-Mero (*Ernst 1765, 1933*), Salybia area (*Hodge 3084, 3281*), South Chiltern (*Stern & Wasshausen 2537*).

Johnston (1949b:131) included this element in *T. volubilis*, a very variable species with phases appearing erratically in widely separated places and with gradations in the same locality. However, this hispid element occurs only in one contiguous area and without gradations.

Tournefortia filiflora

Tournefortia filiflora Grisebach, 1862:483.—Johnston, 1949b:132.—Little et al., 1974:852, pl. 677.—Lourteig, 1988a:388.
Tournefortia foetidissima sensu Grisebach, l.c., p.p., non Linnaeus.

Coarse shrub to tree to 8 m; leaves oblong-elliptic, 20(–40) cm × 8(–15) cm, base tapering to 2(–3) cm petiole; 8–12 pairs ± opposite lateral veins ± prominent; corolla tube slender, swelling slightly at midpoint; style 1.5 mm, with corolla often persistent.

Puerto Rico through Lesser Antilles; common in Dominican woodlands at low to mid-elevations: Clarke Hall (*Wasshausen & Ayensu 304*), Fond Baron (*Ernst 1964*), Layou Valley (*Webster 13277*), South Chiltern (*Hodge 1592*), Syndicate (*Ernst 2105*), sine loc. (*Imray 322*, TYPE).

Grisebach's citation of *T. foetidissima* for Dominica apparently rests on his tentative identification of an Imray specimen (K), "an *T. foetidissima*? L. sed lobi calyci acuti." This specimen is clearly *T. filiflora*. Lourteig (1988a:388) discussed *Tournefortia foetidissimum* Linnaeus.

Tournefortia maculata

Tournefortia maculata Jacquin, 1760:14.—Johnston, 1949b:130.—Lourteig, 1988a:384.

Woody climber; leaves mostly glabrous, ovate, to 7(-8) cm × 3(-3.5) cm; style 4.5 mm; fruit lobed, yellow.

Neotropics; rarely collected in Dominica at 500 m: Lisdara (*Hodge 2385*).

Tournefortia volubilis

Tournefortia volubilis Linnaeus, 1753:140.—Johnston, 1949b:131.

Pubescent climber; calyx lobes 1 mm long; corolla tube and style 1.5-2.5 mm; fruit glabrous.

Neotropics; occasional in Dominica below 300 m from Salybia to Grand Bay: Colihaut (*Nicolson 4171*), above Dublanc (*Hodge 2542*), Grand Bay (*Eggers 689*), Grand Savanne (*Ernst 1636, 1892*), Morne Daniel (*Webster 13293*), Portsmouth (*Whitefoord 5186*), Prince Ruperts Head (*Finlay*? Jun 1792), Salybia area (*Hodge 3083*).

BRASSICACEAE/CRUCIFERAE

Cakile, a genus of fleshy seaside herbs with indehiscent, 2-jointed fruits, occurs on beaches throughout the Caribbean.

1. Plants pubescent; fruit orbicular (silicle); seeds 1 per locule . . . . . ***Lepidium***
1. Plants glabrous; fruit elongate (silique); seeds several per locule.
   2. Petals yellow; seeds in 1 row per locule; dry land . . . . . ***Brassica***
   2. Petals white; seeds in 2 rows per locule; wet areas . . . . . ***Nasturtium***

Brassica Linnaeus

Brassica oleracea Linnaeus, the cabbage, is cultivated in Dominica and sold in markets.

Brassica juncea

Brassica juncea (Linnaeus) Czernajew, 1859:8.—Al-Shehbaz in Howard, 1988, 4:278.
Sinapis juncea Linnaeus, 1753:668.
Sinapis integrifolia Vahl in West, 1793:296.
Sinapis integrifolia Willdenow, 1804, Hort. 1:14, non Vahl.
Sinapis cuneifolia Roxburgh, 1832, 3:121.
Brassica willdenovii Boissier, 1842:88.—Adams, 1972:308.
Brassica integrifolia Ruprecht, 1860:96.—Bailey, 1922:95.
Brassica integrifolia (Vahl) Schulz in Urban, 1903, 3:509, non Ruprecht.—Schulz in Engler, 1919, IV.105 (Heft 70):57.

Wild mustard.

Leaves serrate, not amplexicaul, upper leaves oblong or wider near apex.

Presumed originally Asiatic, now widely cultivated and escaping; field weed in Dominica: South Chiltern (*Hodge 1504*). Dried leaves used as tobacco substitute.

Specimens with lower leaves not or scarcely divided are commonly treated as a distinct species, a view not accepted here. This concept is commonly called *Brassica integrifolia* or *B. willdenovii*.

There are questions about the author citation of *Brassica juncea*. Many workers cite Cosson (1859:605), who read his paper on 16 Aug 1859; publication was certainly late in 1859, at best. I follow Tutin et al. (1964, 1:337) in accepting Czernajew's publication as valid and prior to Cosson's. The romanization as Czernajew is questionable. A literal transcription would be Chernyaev. Tscherniaieff was used by Pritzel. Again I follow Tutin et al. (1964), assuming that the rather irregular romanization was used by the author.

Lepidium Linnaeus

Lepidium virginicum

Lepidium virginicum Linnaeus, 1753:645.

Pepper grass.

Small herb with white petals; stamens usually 2; beak of fruit absent.

North American, now widely distributed; a weed of flower gardens and waste places in Dominica: Cabrit Swamp (*Whitefoord 4085*), Clarke Hall (*Ernst 1272*), South Chiltern (*Hodge 1515, Nicolson 2170*).

Nasturtium R. Brown, nom. cons.

Nasturtium officinale

Nasturtium officinale R. Brown in W.T. Aiton, 1812, 4:110.—Adams, 1972:307.
Sisymbrium nasturtium-aquaticum Linnaeus, 1753:657.
Cardamine fontana Lamarck, 1778, 2:527, nom. superfl.
Nasturtium fontanum Ascherson, 1860, 1:32, nom. superfl.
Rorippa nasturtium-aquaticum (Linnaeus) Hayek, 1905:22.—Green, 1962:32.

Watercress, cresson.

Aquatic herb with succulent, edible stems and leaves; fruit beak short.

Old World, widely naturalized; in Dominica growing beside Gaulettre River in Carib Reserve: (*Hodge 3322*).

The literature is full of articles on watercress because its generic disposition is debatable. Some authors include it in *Rorippa*. Recent major publications on *Rorippa* (Jonsell, 1968, and Stuckey, 1972) separate *Nasturtium* from *Rorippa* and regard it as a separate genus with one diploid species, *N. officinale*, and a tetraploid taxon commonly recognized as a distinct species, *N. microphylla*.

The logical combination, *Nasturtium nasturtium-aquaticum*, is specifically cited in the *ICBN* (Art. 23.4) as a tautonym.

Nasturtium aquaticum Garsault (1764, 3:241, pl. 403) is not validly published under Article 23.6(c) (*ICBN*), because

Garsault did not consistently use binomial nomenclature. The generic name was not validly published there because there is no generic description and the genus was not monotypic (Art. 42).

BURSERACEAE

(by R. DeFilipps)

1. Bark papery, sheeting; deciduous; stigma 3-lobed . . . . . ***Bursera***
1. Bark thick, flaking; evergreen; stigma unlobed or 5-lobed.
   2. Petals 3; stigma unlobed; leaflets obtuse; petiolules not distinctly geniculate at both ends . . . . . ***Dacryodes***
   2. Petals 5; stigma 5-lobed; leaflets attenuate; petiolules distinctly geniculate at both ends . . . . . ***Protium***

Bursera Jacquin ex Linnaeus, nom. cons.

Bursera simaruba

Bursera simaruba (Linnaeus) Sargent, 1890.—Little & Wadsworth, 1964:236, pl. 105.
Pistacia simaruba Linnaeus, 1753:1026.
Bursera gummifera Linnaeus, 1762:471.
Elaphrium simaruba (Linnaeus) Rose in North Amer. Fl., 1911, 25(3):246.

Gumbo limbo, gommier rouge.

Deciduous tree to 10 m with reddish, sheeting bark; leaflets 5–9; ovary 3-locular.

Florida and northern neotropics; frequent in Dominica in dry areas of north and west coasts: Badineau (*Hodge 2223*), Cabrits (*Hodge 3730, Whitefoord 5289*), Calibishie (*Hodge 3146*), Grand Savanne (*Ernst 1651, 1885, Hodge 3805, Wilbur 8282*), Macoucherie (*Nicolson 2043*), Morne Raquette (*Webster 13181*), Pointe Ronde (*Hodge 2658*). Deciduous in March, leaves and flowers in May, fruits in November.

Caribs use the fragrant gum on wounds (Hodge and Taylor, 1957:568).

Dacryodes Vahl

Dacryodes excelsa

Dacryodes excelsa Vahl, 1810:117.—Cuatrecasas, 1957:57.—Little & Wadsworth, 1964:238, pl. 106.
Amyris hexandra Hamilton, 1825:34.
Dacryodes hexandra (Hamilton) Grisebach, 1860:174.

Gommier, bois gommier, gommier rouge, lady gommier (straight boles), man gommier (lumpy boles).

Large, unbuttressed, aromatic trees; leaflets 5–7, obtuse, revolute; ovary 1-locular.

Puerto Rico to Grenada; a dominant in Dominican interior rainforests 250–950 m: Breakfast River (*Hodge 1891*), Deux Branches (*Hodge 2969*), La Plaine (*Ramage s.n.*), L'Or River (*Nicolson 2029*), Pont Cassé (*Ernst 1797*), Sylvania (*Hodge 653*), Syndicate (*Whitefoord 4384, 4404*).

Whitish gum from wounds valued for starting fires. The wood is a prime source of lumber (Hodge and Taylor, 1957:568).

Protium N. Burman, nom. cons.

Protium attenuatum

Protium attenuatum (Rose) Urban, 1912, 7:240.—Swart, 1942:274.
Icica attenuata Rose in North Amer. Fl., 1911, 25(3):261.

Gommier beni, gommier jaune, gomme l'incense, bastard gommier.

Tree to 15 m; sap sticky, drying white (used as incense in church); leaflets 3–7; petiolules geniculate at both ends; ovary 5-locular.

Lesser Antilles from Guadeloupe to St. Vincent; occasional in Dominican lowlands (to 360 m): Bells (*Whitefoord 6154*), Carib Reserve (*Hodge 3276*), Governor (*Nicolson 4187*), Hatton Garden (*Hodge 3011*), La Chaudière (*Hodge 3592*), Marigot (*Hodge 659*), Mt. Joy (*Nicolson 2123*), Petite Soufrière Bay (*Stern & Wasshausen 2475*), Sylvania (*Hodge 1315*). Flowering and fruiting in July, fruiting in April.

Specimens from Dominica have been distributed as *Icica heptaphylla* Aublet and *Rhus metopium* Linnaeus (= *Metopium brownei* (Jacquin) Urban), both misidentifications of *Protium attenuatum*.

CACTACEAE

(by R. DeFilipps)

This family needs study. Most of the few specimens available are from cultivation, making the records uncertain.

Dendrocereus nudiflorus (Engelmann) Britton & Rose (1920, 2:113), endemic to Cuba, is tree-like with a woody trunk. A large clump cultivated at the Roseau Botanic Garden as "*Cereus napoleonis*" in 1922, represented by *Bailey 804* (US), was discussed by Britton and Rose (1923, 4:275–276).

Pereskia aculeata Miller was cultivated at the Roseau Botanic Garden (*Hodge 3936*). It is a climbing vine with paired and curved spines, persistent leaves and pedicellate, white flowers.

1. Plants barrel-shaped, unbranched . . . . . ***Melocactus***
1. Plants not barrel-shaped, branching.
   2. Branches flattened, not ribbed . . . . . ***Opuntia***
   2. Branches terete, ribbed or angled.
      3. Plants arching, clambering; branches 3–5-angled . . . . . ***Acanthocereus***
      3. Plants erect; branches 6–13-ribbed . . ***Pilosocereus***

Acantherocereus Britton & Rose

Acanthocereus tetragonus

Acanthocereus tetragonus (Linnaeus) Hummelinck, 1938.—Howard, 1989, 5:401.

Cactus tetragonus Linnaeus, 1753:466.
Cactus pentagonus Linnaeus, 1753:467.
Acanthocereus pentagonus sensu auctt., non (Linnaeus) Britton & Rose.

Plants arching or clambering, to 3 m tall; juvenile stems 6–8-ribbed, mature plants with stems 3–5-ribbed, 5 cm broad; spines 10–12, to 3 cm, gray; flowers white, 2.2 dm long, closed by mid-morning, style included.

Native along coasts of the Caribbean; in Dominica on cliffs of dry west coast near sea level: Tarou Cliffs (*Ernst 1707*). Flowering in mid-June.

Ernst's 1964 collection seems to be a new record for Dominica.

Howard (l.c.) neotypified *Cactus tetragonus* Linnaeus but gave no reason why he accepted Hummelinck's combination. So far as I can determine, the basionym (*Cactus pentagonus* Linnaeus) of *Acanthocereus pentagonus* is not a synonym but has been excluded as a nomen dubium of uncertain application (typification).

Melocactus Link & Otto, nom. cons.

Melocactus intortus

Melocactus intortus (Miller) Urban, 1919b:35.—Marshall & Bock, 1941:165-166.—Liogier, 1965:341.—Howard, 1989, 5:408.
Cactus intortus Miller, 1768.

Unbranched barrel cacti to 1 m tall and 4 dm wide, surmounted by a flat or cylindric cephalium to 3 dm; flowers pinkish.

Bahamas through Guadeloupe (incl. Saintes); cited for Dominica by Britton and Rose (1922, 3:231) based on a Kew-grown specimen from Dominica (*Rose 17247*, flowers only).

This genus is very distinctive and the fact that it has not been collected recently on Dominica makes one wonder if the record of the Dominican origin at Kew was correct or, if correct, was actually from cultivated material introduced to Dominica from somewhere else.

Opuntia Miller

1. Areoles spineless (ours); flowers scarlet; stamens exserted . . . . . ***O. cochinellifera***
1. Areoles with 1–10 spines; flowers yellow; stamens shorter than petals . . . . . ***O. stricta***

Opuntia cochenillifera

Opuntia cochenillifera (Linnaeus) Miller, 1768.—Howard, 1989, 5:411.
Cactus cochenillifer Linnaeus, 1753:468.
Nopalea cochenillifera (Linnaeus) Salm-Dyck, 1850:64.

Tall shrubs with flattened branches; joints oblong, 50 cm × 25 cm; spines none or minute; flower to 7 cm, scarlet; stamens exserted 1–1.5 cm.

Originally Mexican or Jamaican but now widespread in tropics; a single plant observed in Dominica in "thickets south of Salisbury" (*Hodge 3813* at GH).

Opuntia stricta

Opuntia stricta (Haworth) Haworth, 1812:191.—Howard, 1989, 5:412.
Cactus strictus Haworth, 1803:188.
Cactus dillenii Ker, 1817b.
Opuntia dillenii (Ker) Haworth, 1819:79.
Opuntia stricta var. *dillenii* (Ker) L. Benson, 1969:126.

Prickly pear, raquette, báta, páta (Carib).

Much-branched, spreading plants to 2 m tall; branches (pads) flattened, obovoid or oblongoid, spines yellow, ± banded; flowers yellow.

Neotropics, now widespread; common coastal species in Dominica on the west coast: Pointe Ronde (*Hodge 2702*), Grand Savanne (*Hodge 3814*), sine loc. (*Lloyd* [Rose?] *21850*, NY).

The Caribs use the fleshy joints to treat an enlarged spleen (Hodge and Taylor, 1957:591).

This is a widespread and serious pest in some parts of the world, such as Australia.

Adjanohoun et al. (1985:61, pl. 27) reported medicinal usage of apparently cultivated *Opuntia ficus-indica* (Linnaeus) Miller. It would key here to *O. stricta*, but it is like *O. cochenillifera* in that it is essentially spineless.

Pilosocereus Byles & Rowley

Pilosocereus royenii

Pilosocereus royenii (Linnaeus) Byles & Rowley, 1957:67 "*royeni*".—Howard, 1989, 5:419.
Cactus royenii Linnaeus, 1753:467, "*royeni.*"
Cereus nobilis Haworth, 1812:179.
Pilocereus nobilis (Haworth) K. Schumann in Engler & Prantl, 1894, III(6a):181.
Cephalocereus nobilis (Haworth) Britton & Rose, 1909:418.
Cephalocereus royenii (Linnaeus) Britton & Rose, 1909:419 "*royeni*".—Vélez, 1957:78.
Pilosocereus nobilis (Haworth) Byles & Rowley, 1957:67.

Long-branched, columnar plants to 8 m; stems 5–7 cm thick; flowers yellowish purplish; fruit purple-black at maturity.

Puerto Rico and Virgin Islands to Grenada; apparently the most common columnar cactus in Dominica on rocky outcrops of the dry west coast: above Colihaut (*Whitefoord 5966*), Grand Savanne (*Hodge 3815*), Spanish Mountain (*Hodge 2771*), cult. Kew from Dominica (*Rose 17246*). In bud in mid-May.

CANELLACEAE

Canella winterana

Canella winterana (Linnaeus) Gaertner, 1788, 1:373.—Little & Wadsworth, 1964:362, pl. 168.
Laurus winterana Linnaeus, 1753:371.

Winterana canella Linnaeus, 1759a:1045.
Canella alba Murray, 1784:443, nom. illeg. [incl. *Laurus winterana* Linnaeus, 1753].

Tree or shrub to 10 m; leaves oblanceolate to spatulate, minutely glandular-punctate; inflorescence a corymb; petals red, stamens connate into a tube surrounding pistil; berry red to purplish black.

Southeast U.S. and West Indies; cited for Dominica by Beard (1949:40).

This species has been included for Dominica with reservation. Specimens (US) indicate that this species tends to occur in coastal lowlands, particularly favoring a dry climate and a calcareous substrate. It is frequently collected in the Greater Antilles down the coralline outer chain of Lesser Antilles, including the Virgin Islands, Antigua, Barbuda, Guadeloupe (Grande Terre), Marie Galante, intermediate islands, and Barbados. Its occurrence on the volcanic inner chain of the Lesser Antilles seems remarkable: Martinique (*Duss 1501*) and Montserrat (*Shafer 493*), collections made respectively in 1883 and 1907. It is possible that the species persists and that Beard did find it, as he reported, on Dominica and St. Lucia but representing a waif or introduction rather than a native species.

CAPPARACEAE

(by H.H. Iltis)

Steriphoma ellipticum (A.P. Candolle) Sprengel was collected in a yard in Roseau (*Howard 11771*), described as a bush to 16 ft with orange, 2-lipped, 4-lobed calyx; petals yellow inside, orange outside, 4, alternating with small nectaries; stamens 6; style green; gynophore slightly developed.

1. Herb; leaves palmately compound; fruit dry, elongate capsule, dehiscing by 2 valves; seeds dry . . . . ***Cleome***
1. Woody; leaves simple; fruit woody, indehiscent or irregularly dehiscent; seeds imbedded in fleshy pulp.
   2. Sepals free, 4; inflorescences terminal; fruit usually elongate . . . . . ***Capparis***
   2. Sepals united, irregularly rupturing into 2 parts; inflorescences cauliflorous; fruit globose . . . . . ***Morisonia***

Capparis Linnaeus

Capparis cynophallophora Linnaeus, another widespread neotropical species, is cultivated in Roseau Botanic Garden (*Ernst 1349, Nicolson 4210*). It differs from *C. indica* by having sepals (~1 cm long) equaling the petals, petals lepidote outside, and glabrous gynophores.

1. Plant silvery-lepidote; leaves cuneate at base . . . . . ***C. indica***
1. Plant essentially glabrous; leaves obtuse to ± cordate at base.
   2. Sepals to 2 mm long; stamens short, slightly longer than petals; leaves often clustered, usually >10 cm long; petioles unequal . . . . . ***C. baducca***
   2. Sepals 6–10 mm long; stamens long, >5× as long as petals; leaves ± equidistant, usually <10 cm long; petioles ± equal.
      3. Leaves membranous to ± coriaceous; fruit ± spheroid, 3–5 cm thick at maturity, only slightly (to 2×) longer than broad . . . . . ***C. amplissima***
      3. Leaves coriaceous; fruit torulose, to 2 cm in diameter at maturity, much (6–10×) longer than broad.
         4. Fruits smooth, to 1 cm diameter; gynophore longer than 7 cm; leaves usually 2–4 cm wide, oblong but variable; plants glabrous, even when young . . . . . ***C. flexuosa***
         4. Fruits rugulose-papillose, to 2 cm diameter; gynophore 4–5 cm long; leaves usually 4–7 cm wide, ± rotund but variable; sepals, pedicels, fruits and undersides of leaves often minutely papillose to short-pubescent under magnification, especially when young . . . . . ***C. hastata***

Capparis amplissima

Capparis amplissima Lamarck, 1785, 1:607.—Little et al., 1974:218, pl. 313.
Capparis cynophallophora [var.] *acutifolia* Bello, 1881, 10:237.
Capparis portoricensis Urban, 1899, 1:309.—Britton & Wilson, 1924, 5:335.

Glabrous, ample tree to 20 m; leaves thin and often broken in herbarium; fruits 5–10 (–15) cm long, 3–4 (–6) cm thick. In other characters similar to *C. flexuosa*.

Antillean, possibly Central and northern South America; reported once from Dominica (*Ramage* in 1888, B).

The type locality of this species is Santo Domingo, but the Puerto Rican materials seem scarcely distinguishable. An earlier name may be applicable to this species, *Capparis eustachiana* Jacquin (1760), treated as a synonym of *C. flexuosa* by Al-Shehbaz (in Howard, 1988, 4:297). Similar materials from northern South America with more coriaceous leaves and ± larger fruits may represent a subspecies.

Capparis baducca

Capparis baducca Linnaeus, 1753:504.—Adams, 1972:305.—Al-Shehbaz in Howard, 1988, 4:295.
Capparis frondosa Jacquin, 1760:24.—Little et al., 1974:222, pl. 345.

Glabrous shrub to 8 m; leaves tending to be clustered with sessile to long (6 cm) petioles; inflorescence a terminal few-flowered corymb; stamens to 2 cm long.

Neotropics; cited for Dominica (in Howard, l.c.) without exclamation mark, possibly a locality error for Dominican Republic, although the species occurs elsewhere in the Lesser Antilles.

Ed. Note: The following is summarized from Nicolson (1978a). The lectotypification of *Capparis baducca* Linnaeus has alternated between an illustration of an Indian plant,

Badukka (Rheede, 1686, 6:105, pl. 57), as done by Jacobs (1965:435), and a specimen from the New World in Clifford's Herbarium, as cited by Fawcett and Rendle (1914, 3:233). Linnaeus (1753:504) cited Rheede's illustration and adopted Rheede's name for his species epithet. Linnaeus also cited "Capparis inermis, foliis ovato-oblongis determinate confertis perennantibus *Hort. Cliff.* 204*," the asterisk meaning that a good description is to be found at the place cited. The decisive phrase in Linnaeus (1753), "foliis... determinate confertis..." is a paraphrase of Linnaeus (1737:204), "foliis...per spatia confertis..." (both expressing leaves clustered after a space), a characteristic of the New World taxon, not the Old World taxon illustrated by Rheede. In addition Linnaeus (1737) commented that the Malabar material differs from the American by its slightly shorter petioles and discussed other characters not evident in Rheede's illustration.

It is clear that Linnaeus' concept of the taxon was based on something other than Rheede's illustration that he, by the light of present knowledge, misidentified with his taxon. There is a specimen in the Linnaean herbarium (664.7) that fits the Linnaean description, and Fawcett and Rendle (1914, 3:233) reported a specimen in the Clifford Herbarium. One of these neotropical specimens (Al-Shehbaz in Howard, l.c., designated the Hort. Cliff specimen) must be accepted as the lectotype of *Capparis baducca* Linnaeus, not Rheede's illustration. Rheede's illustration is the type of *Capparis rheedei* A.P. Candolle, the correct name for the Indian element (see Nicolson et al., 1988:77).

Capparis flexuosa

Capparis flexuosa (Linnaeus) Linnaeus, 1762:722.—Dugand, 1968:220.—Adams, 1972:305.

Morisonia flexuosa Linnaeus, 1759b:14; 1760, Amoen., 5:398.

Capparis cynophallophora sensu auctt., non Linnaeus.—Grisebach, 1859:18.—Eichler in Martius, 1865, 3(1):282.—Urban, 1910, 4:254. [See extensive synonymy in Britton & Wilson, 1924, 5:334.]

Woody, glabrous plant to 9 m; leaves cuneate (to rounded); petioles 5–10 mm long; sepals and petals greenish white; stamens white; fruit smooth, torulose, linear (to 1.5 cm wide) with red pulp and white seeds.

Neotropics, typically near coast; common in Dominica in west coast scrub to 65 m: Cabrit Swamp (*Hodge 428*), Dublanc (*Hodge 2532*), Grand Savanne (*Hodge 3811, Wilbur 7664*), lower Layou River area (*Ernst 1501, Webster 13164, Wilbur 7377*), Mero area (*Ernst 1377, 1883, Stern & Wasshausen 2430*), Pointe Ronde (*Hodge 2652, 2736*), Rodney's Rock (*Nicolson 1965*), Scotts Head (*Ernst 1324, Hodge 1630, Wilbur 7598*).

Flowers opening by 6:30 A.M. (visited by hummingbirds), petals and stamens falling by mid-morning. Chromosome count: n=14 (*Ernst 1883*).

In the field this species can easily be distinguished by its light green leaves from *Capparis hastata*, which has much darker green leaves. This species is invariably a scrambler, while *C. hastata* becomes an erect shrub.

Capparis hastata

Capparis hastata Jacquin, 1760:23.—Dugand, 1968:219.—Little et al., 1974:224, pl. 346.

Capparis coccolobifolia Martius ex Eichler in Martius, 1865, 13(1):284.—Dugand, 1968:228.

Capparis cynophallophora var. *latifolia* Grisebach, 1859:18.

Capparis flexuosa f. *hastata* (Jacquin) Dugand, 1941:51.

Glabrescent erect shrub to 7 m; leaves rigid-coriaceous, ± orbiculate to oblong-elliptic, typically cordate at base; fruit rugulose at maturity, to 2 cm thick.

Hispaniola to northern South America; fairly common in Dominica in scrub woodlands to 150 m: Batali River slopes (*Webster 13180*), Cabrits (*Nicolson 4203*), Dublanc (*Hodge 2518*), Grand Savanne (*Hodge 3761*), Layou River slopes (*Ernst 1540*), Mero (*Ernst 1378, 1379*), Pointe Ronde (*Hodge 2651*).

This species is generally larger than *C. flexuosa* and farther from the coast at slightly higher elevations.

Capparis indica

Capparis indica (Linnaeus) Druce, 1914 [Feb]:415.—Fawcett & Rendle, 1914 [Jun]:144.

Breynia indica Linnaeus, 1753:503.

Lepidote shrub or tree to 8 m; leaves dull above, with raised venation; sepals 2–3 mm long, much shorter than the petals; petals white, 1–1.4 cm long; stellate-tomentose; fruit linear, torulose; gynophore lepidote to stellate-pubescent.

Neotropics; occasional in dry scrub woodlands on west coast to 400 m: Cabrits (*Hodge 3718, Whitefoord 3997*), Coulibistri (*Wilbur 8117*), Grand Savanne (*Hodge 3773, Stern & Wasshausen 2464*), lower Layou Valley slopes (*Ernst 1266, Webster 13163*), Mero (*Ernst 1376*), Scotts Head (*Ernst 1326*), South Chiltern (*Stern & Wasshausen 2535*).

Cleome Linnaeus

1. Stamens (10-) 16–25, equaling petals; petals yellow; valves of fruit persistent . . . . . ***C. viscosa***
1. Stamens 6, longer than petals; petals white to pink or purple; valves of fruit deciduous.
   2. Stamens (or staminal scars on fruit) halfway between receptacle and gynoecium; petals white to yellowish, not covering stamens in bud (aestivation open) . . . . . ***C. gynandra***
   2. Stamens inserted at or near receptacle (androgynophore $<^1/_8$ the gynophore length); petals white, pink or purple, covering stamens in bud (aestivation closed).
      3. Flowers or fruits axillary, solitary (subtended by stalked 3-foliolate leaf that is essentially undifferentiated from foliage leaves) . . . . . ***C. rutidosperma***

3. Inflorescence racemose; individual flowers or fruits subtended by a sessile, unifoliolate bract that is much smaller than foliage leaves, or bractless.
   4. Raceme bractless . . . . . ***C. serrata***
   4. Raceme with bracts.
      5. Bracts equaling or slightly smaller than leaflets; inflorescence open, few (3–10–)-flowered; leaves 3-foliolate . . . . . ***C. aculeata***
      5. Bracts much reduced and smaller than leaflets; inflorescence dense, many-flowered; leaves typically 5–7-foliolate.
         6. Flowers typically purple, stamens attached ~5 mm above petals; plants glabrous, unarmed . . . . . ***C. speciosa***
         6. Flowers typically white; stamens attached at receptacle; plant usually glandular pubescent, typically with 2 stipular thorns at base of each petiole . . . . . ***C. spinosa***

Cleome aculeata

Cleome aculeata Linnaeus, 1768, 3:232.

Minutely glandular pubescent herb, often with pairs of stipular spines at petiole attachment; leaflets typically 3; petals white; gynophore inconspicuous (to 0.8 cm long). Resembles *Cleome rutidosperma* A.P. Candolle.

Neotropics; in Dominica a weed along dry west coast to 50 m: Cabrits (*Smith 10330*), lower Layou Valley (*Ernst 1524A*), Mero (*Stern & Wasshausen 2426*), Roseau area (*Ernst 1276, Hodge 429, 3869*).

Cleome gynandra

Cleome gynandra Linnaeus, 1753:671.—Iltis, 1960:284.
Cleome pentaphylla Linnaeus, 1763:938.
Gynandropsis pentaphylla (Linnaeus) A.P. Candolle, 1824, 1:238.
Gynandropsis gynandra (Linnaeus) Briquet, 1914:382.

Viscid and fetid herb; leaflets 5–7; petals white; gynophore 1–5 cm long, with stamens or staminal scars about halfway; floral bracts with 3 leaflets.

Native of Old World, now pantropical weed; occasional in Dominica on dry west coastline: Goodwill (*Ernst 1844, Wilbur 7570*), Mero (*Ernst 1662*).

Cleome rutidosperma

Cleome rutidosperma A.P. Candolle, 1824, 1:211.—Iltis, 1960:290.
Cleome ciliata Schumacher, 1827:296(?); 1829, 4:68.

Weak-stemmed herb with multicellular hairs; leaflets 3; flowers axillary; petals white or pinkish with yellow spot on 2 central petals; anthers equaling petals; gynophore short, to 1.2 cm long. Resembles *Cleome aculeata*.

Native of West Tropical Africa, now pantropical weed; in Dominica along coast: W. Cabrit (*Whitefoord 3982*), Clarke Hall (*Chambers 2800, Ernst 1271*), Delices (*Whitefoord 3700*), Hatton Garden (*Hodge 3043*), Melville Hall (*Burch 1330*), Roseau (*Nicolson 2080*).

Cleome serrata

Cleome serrata Jacquin, 1760:26.
Cleome polygama Linnaeus, 1763:939.

Glabrous herb, leaflets 3, rarely unifoliolate, minutely serrulate; flowers ebracteate; petals white, rarely purplish; gynophore short, to 1 cm long.

Neotropics, including Guadeloupe; cited for Dominica, without exclamation mark, by Al-Shehbaz (in Howard, 1988, 4:303), perhaps based on an error for Dominican Republic.

Cleome speciosa

Cleome speciosa Rafinesque, 1817:86.—Kunth, 1821, 5:84, pl. 436.

Glabrous or sparsely pubescent herb; leaflets 5–9; flowers showy; petals pink to purplish, rarely white; stamens inserted 0.4–1.6 cm up the 4–5 cm long gynophore.

Probable native of Mexico but now widely cultivated; in Dominica (cult. or escaped?): Laudat (*Hodge 2001*), Roseau (some *Hodge 130, Eggers 888*), South Chiltern (*Hodge 1514*).

Cleome spinosa

Cleome spinosa Jacquin, 1760:26.

Glandular pubescent herb; petioles sometimes subtended by a pair of stipular spines; leaflets typically 5–7; petals white or (ours) flushed with pink; floral bracts obtuse to rounded; gynophore 1–5 cm long; ovary puberulous.

Neotropics; in Dominica in weedy habitats (or cultivation?) along dry west coast: Roseau area (*Ernst 1278, Hodge 430* (some), *3858, Whitefoord 4700*), South Chiltern (*Hodge 1615*).

This is not *"C. spinosa"* of gardens (*C. hassleriana*) with acute bracts, pink flowers and glabrous ovaries.

Cleome viscosa

Cleome viscosa Linnaeus, 1753:672.—Iltis, 1960:281.
Cleome icosandra Linnaeus, 1753:672.
Polanisia viscosa (Linnaeus) A.P. Candolle, 1824, 1:242.

Glandular pubescent herb; leaflets (3–) 5–7; flowers axillary; petals yellow, equaling the stamens; gynophore absent; fruit valves persistent.

Originally Asian (Australian?), now pantropical; common in Dominica on dry west coast: Batali River ridge (*Webster 13403*), Cabrit Swamp (*Whitefoord 4069*), Pointe Ronde (*Hodge 2695*), Roseau area (*Ernst 1275, 1295, Hodge 431, 3855, 3894, Nicolson 1801, 2081, Wilbur 7574*).

Morisonia Linnaeus

Morisonia americana

Morisonia americana Linnaeus, 1753:503.

Woody plant to 10 m, lepidote-stellate, becoming glabrous; leaves (acute) obtuse to rounded, blade often minutely ± peltate; flowers in cauliferous racemes; calyx closed in bud, irregularly bifid by rupture; petals to 1.2 cm long, lepidote without, pubescent within; fruit ± globose, to 8 cm thick; gynophore short, 0.3–0.8 cm long.

Neotropics; in Dominica in scrub woodlands along northwest coast: Cabrits (*Ernst 1931, Nicolson 1903, Smith 10318, Webster 13295, Whitefoord 4008*), Colihaut (DHN!), Coulibistri (*Nicolson 4112*).

CAPRIFOLIACEAE

(by R. Kiger)

Sambucus canadensis

Sambucus canadensis Linnaeus, 1753:269.—Howard, 1989, 6:473.
Sambucus canadensis var. *laciniata* Gray, 1884, 1(2):9.—D'Arcy, 1973:160.
Sambucus intermedia var. *insularis* Schwerin, 1909:38.
Sambucus simpsonii Rehder in Sargent, 1911, 2:187, pl. 175.—Little et al., 1974:980, pl. 749.

Elder, suyeau or suredu (Carib), du thé pays.

Shrubs or small trees to 5 m tall; leaves opposite, pinnately compound, leaflets (3) 5, 7 or 9, simple or the lateral leaflets trilobate or trifoliolate, serrate; inflorescence compound-cymose, peduncled; flowers numerous, small, white; ovary 3–5-celled, inferior; mature fruits reported as globose, black, ~5 mm diameter.

North America, West Indies; in Dominica only? cultivated: at Bellevue (*Taylor 5*), Bells (*Whitefoord 6141*), Carib Reserve (*Taylor 38B, 156*).

Leaves used as tea for colds and fever (Hodge and Taylor, 1975:613). Adjanohoun et al. (1985:63, pl. 30) gave similar usages.

Ed. Note: Dr. Kiger followed D'Arcy's treatment. I have taken the liberty of following Howard's.

CARICACEAE

(by R. DeFilipps)

Carica papaya

Carica papaya Linnaeus, 1753:1036.—Little & Wadsworth, 1964:374, pl. 174.

Papaya, paw-paw.

Unbranched, dioecious, herbaceous tree to 3 m with milky sap; leaves large, palmately lobed; fruit succulent, edible.

Pantropically cultivated; cultivated in Dominica: Roseau Botanic Garden (*Hodge 3891*) and fruit available in markets. Adams (1972:497) described the four types of flowers.

Caribs use the baked fruit as a poultice for local inflammations (Hodge and Taylor, 1957:590).

CARYOPHYLLACEAE

(by R. DeFilipps)

Drymaria cordata

Drymaria cordata (Linnaeus) Willdenow ex Schultes in Roemer & Schultes, 1819, 5:406.
Holosteum cordatum Linnaeus, 1753:88.

Prostrate herb; leaves orbicular to reniform, stipules lacerate, whitish; petals bifid, white.

Pantropical weed; in Dominica in lawns, walls and roads to 550 m: Clarke Hall (*Chambers 2702, Ernst 1629, Fosberg 48305*), Lisdara (*Hodge 438, 2460*), Portsmouth (*Hodge 440*), South Chiltern (*Hodge 1519*), Sylvania (*Hodge 439*).

Adjanohoun et al. (1985:65, pl. 31) reported minor medicinal usage.

CASUARINACEAE

Casuarina equisetifolia

Casuarina equisetifolia Linnaeus, 1759, Amoen. 4:123, 143, *"equisefolia"*.—J.R. & J.G. Forster, 1775:104.—Friis, 1980.
Casuarina litorea Linnaeus ex Fosberg & Sachet, 1975b:4, nom. illeg. (incl. *Casuarina equisetifolia* Linnaeus).

Beefwood.

Monoecious tree to 35 m; branchlets linear, terete, jointed with whorled, scale-like leaves; staminate flowers in spikes; pistillate flowers in heads.

Native to Australia but widely introduced; apparently only cultivated in Dominica: Roseau Botanic Garden (*Fairchild 2740*), Sylvania (*Hodge 950*).

Friis' position on the nomenclature was formalized by insertion of Ex. 2 in Art. 34 (*ICBN*) concerning Linnaean vs. Rumphian names.

CELASTRACEAE

1. Branchlet lenticels conspicuous; inflorescences racemiform; fruits ± globose, 3-lobed and 3-locular . . . . . ***Celastrus***
1. Branchlet lenticels obscure; inflorescences ± fasciculate; fruits ellipsoid, unlobed and usually 2-locular . . . . . ***Maytenus***

Celastrus Linnaeus

Celastrus racemosus

Celastrus racemosus (Reissek) Loesener, 1898:199, *"racemosa"*.—Ding Hou, 1955:279.—Whitefoord, 1989:144.
Maytenus racemosa Reissek in Martius, 1861, 11(1):30, pl. 4: fig. 15, *"racemosus."*
Celastrus grenadensis Urban, 1904, 5:51.
Celastrus racemosus var. *trinitensis* Urban, 1904, 5:52.

Shrub with alternate leaves to 15 cm × 8 cm; fruits ~1 cm ×

1 cm, 3-lobed, on an accrescent pedicel 3–4 mm long.

Widespread from Brazil through Central America; rare or overlooked new record for Dominica at 600 m: Freshwater Lake (*Whitefoord 3869*). Fruits in October.

Previously reported in the Antilles as new taxa from Trinidad and Grenada (800 m) but those names treated as doubtful by Ding Hou (1955:285).

Maytenus Molina

This generic name has been treated as feminine and masculine. Dr. Noel Robson (BM) pointed out that the epithet of the type, *M. boaria*, is adjectival (*boarius, -a, -um*, referring to cattle, *bos*) and is feminine in the original publication of the generic name.

1. Leaves ~15 cm long, ~3× longer than broad; venation slightly but clearly protuberant . . . . . ***M. guyanensis***
1. Leaves ~4 cm long, ~1.5× longer than broad; venation slightly but clearly incised . . . . . ***M. laevigata***

Maytenus guyanensis

Maytenus guyanensis Klotzsch ex Reissek in Martius, 1861, 11(1):19.—Urban, 1904, 5:55.

Cachelain grand bois.

Small tree with alternate, elliptic to oblong leaves to 25 cm; flowers unisexual, 5-merous; capsule 2-locular with 1–2 arillate seeds.

Guadeloupe, Martinique, British Guiana; apparently rare in mesophytic forests of Dominica's east coast: La Plaine (*Ramage s.n.*, flowering Jan).

The epithet commonly appears as *guianensis* but I have retained the spelling used in the place of first valid publication. The name was published earlier by Schomburgk (1849, 3:1097, non vidi) but, according to Urban, as a nomen nudum.

Maytenus laevigata

Maytenus laevigata (Vahl) Grisebach ex Eggers, 1877:109.—Eggers, 1879:39.—Bornstein in Howard, 1989, 5:122.
Rhamnus laevigatus Vahl, 1794, 3:41.
Senacia elliptica Lamarck, 1797, Tabl. 2:96.
Maytenus elliptica (Lamarck) Krug & Urban ex Duss, 1897:145.—Urban, 1904, 5:65.—Little et al., 1974:468, pl. 471.

Evergreen tree to 10 m; leaves obovate, <8 cm long; flowers greenish and 1 or few in fascicles on old wood, 5-merous.

Antilles from Hispaniola to Grenada; in dry scrub near coast (160 m) of Dominica: road to Syndicate from Spanish Mountain (*Nicolson 4163*), Pointe Michelle (*Ramage s.n.* at K). Flowers in mid-May.

New record for Dominica. There are nomenclatural difficulties with *Maytenus elliptica* as published by Duss. He made no reference to Lamarck's putative basionym and erroneously included *M. gonoclada* Grisebach, non Martius (= *M. tetragona* Grisebach), in synonymy.

CHENOPODIACEAE

(by R. DeFilipps)

Chenopodium murale Linnaeus, a cosmopolitan weed with long-petioled leaves farinaceous beneath, was reported for Dominica (Vélez, 1957:79), but his collection has not been seen.

Chenopodium ambrosioides

Chenopodium ambrosioides Linnaeus, 1753:219.

Wormseed, semen contre.

Perennial weed with short-petioled leaves resin-dotted beneath.

Pantropical; in Dominica in disturbed places to 550 m: Carib Reserve (*Hodge 3364*), Lisdara (*Hodge 444*), Sylvania (*Hodge 1247, 445, 1247*).

Caribs use a tea from this plant as a vermifuge (Hodge and Taylor, 1957:555). Adjanohoun et al. (1985:65, pl. 31) gave the same.

CHLORANTHACEAE

(by R. DeFilipps)

Hedyosmum arborescens

Hedyosmum arborescens Swartz, 1788:84.—Little & Wadsworth, 1964:52, pl. 13.

Dioecious, aromatic shrub or tree to 6 m; leaves opposite, serrate, petiole sheath conspicuous, encircling the stem at each node; pistillate flowers in sessile to ± sessile clusters on an interrupted rhachis; staminate flowers in several spikes on an interrupted rhachis, stamen 1.

Jamaica, Puerto Rico and Lesser Antilles; in Dominica frequent in montane woodlands and elfin forests 700–1350 m: Freshwater Lake area (*Ernst 1718, 1718A, Stern & Wasshausen 2561, Webster 13237, Wilbur 7391*), Morne Diablotins (*Chambers 2649*), Morne Plat Pays (*Wilbur 7848*), Morne Trois Pitons (*Wilbur 8093*).

CHRYSOBALANACEAE

1. Leaf underside with pustular-based hairs; flowers irregular . . . . . ***Hirtella***
1. Leaf underside glabrous or hairs not pustular-based; flowers regular.
   2. Shrub or small tree to 5 m; inflorescence a short, rounded, few-flowered cyme; stamens with hairy filaments, connate in groups . . . . . ***Chrysobalanus***
   2. Tree to 35 m; inflorescence an elongated, many-flowered panicle; stamens with glabrous, free filaments . . . . . ***Licania***

Chrysobalanus Linnaeus

1. Leaves elliptic-lanceolate, apex acuminate . . . . . *C. cuspidatus*
1. Leaves broadly elliptic to ± orbicular, apex retuse to acute . . . . . *C. icaco*

Chrysobalanus cuspidatus

Chrysobalanus cuspidatus Grisebach [1864:711, nom. nud.] ex Duss, 1897:258.—Howard, 1964:279.—Prance, 1972a:20.—Howard, 1988, 4:326.

Z'icaque.

Small tree; leaves acuminate, glabrate below with a strigose midvein.

Lesser Antilles; apparently rather uncommon in Dominica in inland forests ~700 m: Breakfast River (*Hodge 1893*), Laudat (*Eggers 618*), Pont Cassé (*Ernst 1200*).

Chrysobalanus icaco

Chrysobalanus icaco Linnaeus, 1753:513.—Prance, 1972a:15.

Z'icaque, fat pork, coco-plum; Carib ikaku, hikaku, nalubuno.

Shrub or small tree; leaves ± orbicular.

Subcoastal neotropics; common in Dominica on coastal beaches, in swamps and dry scrub: Anse du Me (*Wilbur 8289*), Cabrit Swamp (*Nicolson 1898, Webster 13314*), Castaways Hotel (*Stern & Wasshausen 2428*), Castle Bruce (*Ernst 1466, Wilbur 7989*), Delices (*Whitefoord 3776*), Grand Bay (*Ernst 1063, Wilbur 8003*), Grand Savanne (*Stern & Wasshausen 2462*), Hampstead (*Lloyd 613*), L'Anse Noire (*Wilbur 7524*), La Plaine (*Nicolson 2069, Wilbur 8174*), Marigot (*Hodge 584*), Pagua River mouth (*Hodge 3067*), Pointe Ronde (*Hodge 2696*), Portsmouth (*Hodge 583, 3750*), Salisbury (*Stern & Wasshausen 2590*), Salybia (*Hodge 585*), Vieille Case (*Cowan 1597*).

Caribs eat fruits and pound wood for gommier torch wicks (Hodge and Taylor, 1957:560).

Hirtella Linnaeus

Hirtella triandra

Hirtella triandra Swartz, 1788:51.—Prance, 1972a:301.

Z'icaque, zi crab, bouis, bouis poil.

Tree to 15 m; inflorescences erect, to 1.2 dm long; petals white, stamens 3, red, long exserted.

Neotropics; common in Dominica in forests to 700 m: Bagatelle (*Nicolson 4043*), Castle Bruce (*Beard 657*), Clarke Hall (*Chambers 2711, Nicolson 1857, Stern & Wasshausen 2412*), Hatton Garden (*Hodge 3074*), La Plaine (*Ernst 1912*), Laudat (*Lloyd 338*), Melville Hall (*Ernst 1030*), Milton Estate (*Hodge 2569*), Pont Cassé (*Wilbur 7708*), Riversdale (*Howard 11769*), Roseau Valley waterfalls (*Hodge 2000*), Rosehill (*Eggers 639*), Sylvania (*Hodge 579*).

The seeds are edible and eaten by small children.

Licania Aublet

1. Leaves glabrous below; petals present; stamens ~30, exserted . . . . . *L. leucosepala*
1. Leaves white-tomentose below; petals absent, stamens 3–5, included . . . . . *L. ternatensis*

Licania leucosepala

Licania leucosepala Grisebach, 1857:198.—Prance, 1972a:52.
Moquilea leucosepala (Grisebach) R.O. Williams, 1932, 1:315.

Tree to 15 m; petioles >1.5 mm thick, 0.5–1.2 cm long; stipules to 4 mm long but quickly caducous.

Lesser Antilles into Venezuela; apparently rare in Dominica in rather dry areas into forests to 450 m: Mahaut (*Duss 153*), west of Pointe Lolo (*Ernst 1203, 1954*), Sugar Loaf (*Eggers 753*).

Licania ternatensis

Licania ternatensis J. Hooker [in Rolfe, 1893:251, nom. nud.] ex Duss, 1897:258.—Prance, 1972a:122.
Licania hypoleuca sensu Grisebach, 1860:230, non Bentham.

Bois diable, bad job (difficult to cut because of hard wood).

Tree to 35 m; inner bark bright red and trees easily recognized by its "blaze" with a machete; inflorescence to 15 cm long; leaves distinctively white beneath; stipules ~1 mm long, adnate to petiole, erect.

Lesser Antilles; one of the commonest trees in Dominica in rainforests and montane thickets from 100–1000 m: Aux Delices (*Nicolson 2071*), Castle Bruce (*Ramage s.n.*), Dleau Gommier (*Nicolson 4065*), La Chaudière (*Hodge 3570*), Laudat (*Hodge 2067*), Milton (*Hodge 2672*), Morne Diablotins (*Hodge 2840*), Morne Plat Pays (*Wilbur 7886*), Pont Cassé (*Ernst 1201, Wilbur 7786, Webster 13465*), Sugar Loaf (*Eggers 742*), Sylvania (*Hodge 578*), Syndicate (*Whitefoord 4403*), Trois Pitons (*Hodge 1237, Lloyd 761*).

The wood is valuable for posts and considered the best for charcoal (Hodge and Taylor, 1957:561). The fruits are eaten by people, pigeons, and parrots.

CLUSIACEAE/GUTTIFERAE

Pentadesma butyracea Sabine, an African species cultivated for butter-like tallow of the seeds, was collected near Dr. Wide's home on Pointe Mulâtre (*Fischer 70-23* at Fairchild Garden Herbarium). It has large flowers in terminal clusters, obovate-apiculate leaves with striate venation and petioles without the basal pit.

1. Venation differentiated into primary and secondary, reticulate.

2. Leaves lanceolate; petiole without a pit at the base; flowers in elongate axillary racemes; sap clear . . . . . ***Marila***
2. Leaves ovate; petiole with margined pit at base; flowers in fascicles or short cymes; sap yellow.
3. Flowers in lateral fascicles; non-prop-rooted trees of north & eastern slopes near sea . . . . . ***Garcinia***
3. Flowers in terminal cymes; prop-rooted trees of interior rainforests . . . . . ***Tovomita***

1. Venation undifferentiated, striate.
4. Flowers in terminal cymes; leaves strongly obovate; petiole with a margined pit at base . . . . . ***Clusia***
4. Flowers axillary or in terminal fascicles; leaves elliptic to weakly obovate; petiole without margined pit at base.
5. Leaves acute; flowers red, in terminal fascicles; trees with prop roots . . . . . ***Symphonia***
5. Leaves rounded; flowers white to yellow, axillary; trees without prop roots.
6. Flowers in axillary cymes; leaves with inconspicuous glandular lines . . . . . ***Calophyllum***
6. Flowers in axillary fascicles or solitary; leaves conspicuously glandular-punctate . . . ***Mammea***

Calophyllum Linnaeus

Calophyllum antillanum

Calophyllum antillanum Britton in Britton & Wilson, 1924, 5:584.
Calophyllum calaba Jacquin, 1763:269, pl. 165, non Linnaeus.
Calophyllum brasiliense Cambessedes var. *antillanum* (Britton) Standley, 1932:7.—Little & Wadsworth, 1964:348, pl. 161.
Calophyllum jacquinii Fawcett & Rendle, 1926, 5:200, nom. illeg. [incl. type of *Calophyllum antillanum* Britton, 1924].
Calophyllum calaba sensu auctt. non Linnaeus.—Furtado, 1941.—Howard, 1962:398.—Lourteig & Fosberg, 1985.—Howard, 1989, 5:320.

Galba.

Shrub or tree to 30 m; sap white; leaves elliptic or elliptic-oblong, to 15 cm × 6 cm; petals white; drupe globoid, to 2.5 cm wide.

West Indies; common in coastal thickets along north and east coast of Dominica to 30 m, probably planted elsewhere: Calibishie area (*Ernst 1552, 1687, 1828, Hodge 3180*), Clarke Hall (*Nicolson 2006, Stern & Wasshausen 2442*), Portsmouth (*Hodge 533*), Rosalie-La Plaine (*Chambers 2725, Ernst 1917, Wilbur 8165, 8327*), Salybia (*Hodge 3199*). Flowering February-July, fruiting August-April.

Used as windbreak and for timber.

The name *Calophyllum calaba* Linnaeus has mixed usage in the sense of a neotropical element and as at least one Old World element. I think Stevens (in Manilal, 1980:168-176; 1980:256) was correct in concluding that the name must be typified on an Old World element, essentially as previously concluded by Britton (l.c.) and Fawcett and Rendle (l.c). I do not see that the Plumier element (source of the species epithet), composed only of flowers and fruits, can support (be used as lectotype) for a name validated by a nomen specificum legitimum that only pertains to leaf characters ("foliis ovatis obtusis"). Some have suggested abandoning the Linnaean name as a nomen dubium because of its mixed usage. For further discussion see Nicolson et al. (1988:81).

Clusia Linnaeus

1. Epiphytic shrub or tree (dry west coast or rainforest); petioles 1-2 cm long, fruit and flowers 1(-3), individually pedicellate . . . . . ***C. major***
1. Shrubby tree (mossy forest); leaves ± sessile; fruit and flowers many, individually sessile . . . . . ***C. mangle***

Clusia major

Clusia major Linnaeus, 1753:509.—Howard, 1989, 5:323.
Clusia alba Jacquin, 1760:34.—Grisebach, 1860:107.
Clusia plukenetii sensu Hodge, 1954, pp. 33, 40, and Hodge & Taylor, 1957:585, non Urban.

Caquelin, fige kaklin, pomme gros, lagalie, yabrico maron.

Shrub or epiphytic strangler to 20 m; sap white or yellow, sticky; petals white; staminate material rare; fruit ovoid to ellipsoid, dark purple, 3.5-6.0 cm × 5-6 cm, on a peduncle to 3 cm long, possibly indehiscent.

Lesser Antilles; in Dominica common in dry coastal areas to montane rain-forests, 35-800 m: Baiac (*Whitefoord 3778*), Clarke Hall (*Nicolson 1828*), Freshwater Lake area (*Chambers 2682, Ernst 1779, Smith 10218, Wilbur 7442*), Grand Savanne (*Stern & Wasshausen 2460*), La Chaudière (*Hodge 3668*), Pont Cassé area (*Ernst 1813, 1859, Hodge 1205, Wilbur 7846*), Salybia (*Hodge 3206, 3251*), Sylvania (*Cooper 63, Hodge 535*), Syndicate (*Whitefoord 4386*). Flowering and fruiting appear to be continuous but Howard (l.c.) reports only one male specimen and no dehiscent fruits have been seen in the field or herbarium.

Aerial roots used for basket making and the sap for bird lime (Hodge and Taylor, 1957:585).

Clusia major Linnaeus was extremely heterogeneous, as published, but has been lectotypified (Howard, 1962:392, fig. 1) on *Clusia flore albo, fructu coccineo* Plumier (1703:21, pl. 87: fig. 1). This same plate was cited in the publications of *Clusia alba* Jacquin (1760 and 1763). Linnaeus (1763:1495) adopted Jacquin's binomial and dropped his own earlier binomial, an illegitimate procedure under the present Code.

Planchon and Triana misidentified *Imray 358* (K) from Dominica as *Clusia minor* Linnaeus, a species of Central and northern South America and the Greater Antilles. Planchon and Triana's misidentification is the source of erroneous subsequent citations of *C. minor* for Dominica.

Clusia plukenetii Urban (1908, 5:432) of Martinique, St. Lucia and Barbados has a globoid fruit borne on a peduncle to 13 cm long.

Clusia mangle

Clusia mangle L. Richard ex Planchon & Triana, 1860:369.—Howard, 1962:397.
Clusia venosa sensu Grisebach, 1860:107, non Jacquin.

Kaklin.

Free-living (non-epiphytic) shrub to 2 m or tree to 8 m; sap white, sticky; leaves to 22 cm × 14 cm, coriaceous; petals greenish white or cream; fruits globoid, to 2 cm wide.

Guadeloupe, Martinique; in Dominica a dominant in mossy woodlands: Morne Diablotins (*Whitefoord 5317*), Morne Micotrin area (*Chambers 2741, Ernst 1493, 2178, Smith 10275*), Morne Plat Pays (*Hodge 1693*), Morne Trois Pitons (*Hodge 534, 1427, Nicolson 1812, Wilbur 8104*).

Garcinia Linnaeus

Garcinia edulis (Planchon & Triana) Exell was collected in Roseau Botanic Garden (*Hodge 3956*). Howard (1989, 5:327) reported that *Garcinia buchananii* Baker, *Garcinia mangostana* Linnaeus, and *Garcinia morella* (Gaertner) Desrousseaux were once cultivated in the Roseau Botanic Garden.

Garcinia humilis

Garcinia humilis (Vahl) Adams, 1970:312.
Rheedia lateriflora Linnaeus, 1753:1193, non *Garcinia lateriflora* Blume.
Mammea humilis Vahl, 1798, Eclog., 2:40, pl. 20.

Bois chica.

Shrub or tree to 5 m; sap yellow; leaves elliptic or ovate, to 28 cm × 13 cm; flowers in axillary fascicles; petals cream or yellow; berry ellipsoid, yellow.

Mainland, Jamaica, Montserrat to Trinidad; in Dominica in north and east coastal woodlands to 60 m: Capucin (*Whitefoord 5809*), Calibishie area (*Ernst 1688, 2081, 1826, Hodge 3178*), Carib Reserve area (*Hodge 3057, 3360, 3407, Nicolson 4135, Stehlé 6386*), Rosalie-La Plaine (*Nicolson 1989, Ramage s.n., Stern & Wasshausen 2470*). Apparently not seasonal.

Children eat the fruit and the sap is used as a skin healer (Hodge and Taylor, 1957:586).

Mammea Linnaeus

Mammea americana

Mammea americana Linnaeus, 1753:512.—Little & Wadsworth, 1964:354, pl. 164.

Mamey, mammee-apple, z'abricot.

Tree to 15 m; leaves elliptic to obovate, to 2.5 dm long, pellucid glands numerous and conspicuous; fruit reddish brown, with edible yellow mesocarp.

Neotropics and widely cultivated; in Dominica in coastal woodlands from sea level to 150 m: La Plaine (*Ernst 1907*), Pointe Baptiste (*Ernst 1825*), and cultivated at South Chiltern (*Hodge 1601*), Bense (DHN!), and Governor Estate (DHN!).

Marila Swartz

Marila racemosa

Marila racemosa Swartz, 1788:84.

Cachiman falaise, cachiman marron.

Tree to 9 m; leaves narrowly elliptic, to 23 cm × 6.5 cm; petals white; capsule linear, to 4 cm long, seeds many, minute, fusiform, comose on both ends.

Lesser Antilles; in Dominica common in rainforests, 400–750 m: Deux Branches (*Hodge 3419*), Freshwater Lake area (*Burch 1370, Chambers 2739, Ernst 1473, Hodge 1964, Nicolson 2023*), La Chaudière (*Hodge 3634*), Pont Cassé area (*Ernst 1198, 1258, Webster 13459, Wilbur 7809*), Riversdale (*Howard 11764*), South Chiltern (*Stern & Wasshausen 2518*), Sylvania (*Hodge 532, 1114, Nicolson 1875*), Syndicate (*Whitefoord 4315*), sine loc. (*Cooper 50*). Apparently nonseasonal.

Symphonia Linnaeus f.

Symphonia globulifera

Symphonia globulifera Linnaeus f., 1782:302.
Moronobea coccinea sensu Grisebach, 1860:107, non Aublet [corrected to *Symphonia globulifera* by Grisebach, 1864:708].

Mang blanc, yellow mang (sometimes spelled mangle), mang jaune, kulura.

Prop-rooted, light-barked tree to 20 m; blaze white; sap yellow; leaves elliptic to oblanceolate, to 12 cm × 4.5 cm (usually smaller), acuminate; flowers in fascicles; petals red; berry brown, ovoid or globoid, 3–4 cm long.

Neotropics (not Puerto Rico), Africa; in Dominica common in poorly drained places of rainforest at 100–600 m: Aux Delices (*Nicolson 2087*), Boiling Lake (*Hodge 1923*), Belle Fille (*Webster 13482, Wilbur 8313*), Freshwater Lake (*Whitefoord 4190*), Pont Cassé area (*Ernst 1799, Stern & Wasshausen 2542, Wilbur 7825*), Sylvania (*Narodny s.n.*), Syndicate (*Whitefoord 4401*).

Hodge and Taylor (1957:586) have an interesting discussion of the collection by Caribs of mani sap of true *Moronobea coccinea* from beaches.

Tovomita Aublet

Tovomita plumieri

Tovomita plumieri Grisebach, 1860:106.

Mang rouge.

Prop-rooted, dark-barked tree to 25 m; blaze red; sap yellow; leaves to 3 cm × 1.6 dm; petals greenish; berry ovoid or globoid, scarlet, 4 cm long with several large, slightly curved

seeds with a thin reddish aril.

Martinique and St. Lucia; in Dominica common in rainforest, particularly on wet slopes at 100–750 m: Belle Fille area (*Nicolson 2028, Webster 13481*), Breakfast River (*Hodge 1925*), Carib Reserve (*Hodge 3247, Taylor 38A*), Deux Branches (*Hodge 3463*), Dleau Gommier (*Nicolson 4054*), Freshwater Lake (*Wasshausen & Ayensu 332*), Jean (*Ernst 1820*), La Chaudière (*Hodge 3672*), L'Or River (*Nicolson 2068*), Morne Couronne-Pont Cassé area (*Chambers 2762, Ernst 1980, Stern & Wasshausen 2549, Webster 13229, Wilbur 7765*), Sylvania (*Hodge 536*), Syndicate (*Whitefoord 4378*).

COCHLOSPERMACEAE

(by R. DeFilipps)

Cochlospermum vitifolium (Willdenow) Willdenow ex Sprengel (including *Cochlospermum regium* (Schrank) Pilger), with glabrous leaves, doubled flowers, pubescent ovary and stamens red below, was also collected in the Roseau Botanic Garden (*Fairchild s.n.*). According to Bornstein (in Howard, 1989, 5:341) *Hodge 3950* (at GH) is *C. vitifolium*, not *C. religiosum*.

COMBRETACEAE

Neotropical whitewood, *Bucida buceras* Linnaeus, is cultivated in the Roseau Botanic Garden (*Hodge 944*). This species keys to *Buchenavia*, from which it differs by calyx lobes persistent on fruit or tardily deciduous, anthers versatile, and fruit to 6 mm long. It is native to Guadeloupe. Stehlé et al. (1949, 3:112) report that it is not on Martinique although there is a specimen (*Duss 4104* at US) collected Aug 1899 from "Case-Pilote (sur le bord de la partie superieure de la rivière de Case Pilote, sommet du Morne Laroche...alt. 160 m)" and was described as "Grand arbre...assez rare."

Combretum rotundifolium L. Richard was cultivated in Roseau Botanic Garden (*Hodge 3941*) under the name *Combretum laxum* Aublet. This is a climber with opposite leaves and spectacular, red, bottle-brush-like inflorescences.

Quisqualis indica Linnaeus, a vine with opposite leaves, fragrant, elongate, pink to white flowers (aging red) is reported from Dominica by Bornstein (in Howard, 1989, 5:460).

1. Leaves opposite, oblong-elliptic . . . . . ***Laguncularia***
1. Leaves alternate, obovate.
   2. Leaves <1 dm long; fruits ± terete; interior . . . . . ***Buchenavia***
   2. Leaves >1.5 dm long; fruits compressed; seashore . . . . . ***Terminalia***

Buchenavia Eichler

Buchenavia tetraphylla

Buchenavia tetraphylla (Aublet) Howard, 1983:266.
Cordia tetraphylla Aublet, 1775:227, pl. 88.
Bucida capitata Vahl, 1797, Eclog., 1:50.
Buchenavia capitata (Vahl) Eichler, 1866:164.—Little & Wadsworth, 1964:386, pl. 180.

Z'olivier.

Large, deciduous tree to 30 m and 3 m dbh; leaves narrowly obovate-cuneate, to 9 cm long; calyx lobes early deciduous; anthers adnate to filament, immobile; fruit ellipsoid, to 3 cm long.

Panama, Brazil, and West Indies; in Dominica common in rainforest to 550 m: Calibishie (*Hodge 3175*), Dublanc (*Hodge 2538*), La Plaine (*Ernst 1906*), Laudat (*Hodge 2023*), Lisdara (*Hodge 2494*), Magua (*Stehlé 3427*), Milton Estate (*Hodge 2665*), Sylvania (*Hodge 1313*), Syndicate (DHN!).

Laguncularia Gaertner

Laguncularia racemosa

Laguncularia racemosa (Linnaeus) C. Gaertner, 1807:207, pl. 217: fig. 3.—Little & Wadsworth, 1964:392, pl. 183.
Conocarpus racemosa Linnaeus, 1759a:930.

White mangrove.

Small, evergreen, prop-rooted tree; leaves with conspicuous open glands around outer leaf edge; petiole biglandular near apex; inflorescence spicate; calyx persistent, shortly 5-lobed; petals small.

Coastal neotropics and West Africa; new record for Dominica at edge of *Cladium jamaicense* swamp with *Annona glabra*: Cabrit swamp (*Nicolson 4177, Whitefoord 4052, 5924*).

This is one of the true mangroves, a group of plants not previously known from Dominica.

Terminalia Linnaeus, nom. cons.

Terminalia arjuna (Roxburgh) Wight & Arnott of India, with smaller, oblong-elliptic leaves and 5-winged fruits, was cultivated in the Botanic Gardens (*Hodge 943*).

Terminalia catappa

Terminalia catappa Linnaeus, 1767a:674; 1767b:128.—Little & Wadsworth, 1964:391, pl. 184.

Sea almond, z'amande, zamandier, wild almond.

Tree to 15 m; leaves obovate, to 25 cm long, with open domatia below and 2 glands at base; fruit ovoid to ellipsoid, laterally compressed, 5–6 cm long.

Native to Asia; naturalized and common in Dominica near sea level: Calibishie (*Hodge 3148*), Canefield (*Nicolson 1872*), Carib Reserve (*Hodge 3337*), Hatton Garden (*Hodge 3065*), La Plaine (*Ramage s.n.*), Mahaut (*Morden 3*), Marigot (*Hodge 531*), Mero (*Stern & Wasshausen 2432*), Pagua Bay (*Wilbur 7530*), Pointe Mulâtre (*Whitefoord 3729*), Pointe Ronde

(*Hodge 2694*), Rosalie River bridge (*Ernst 1374*).

Caribs use the wood and eat the ripe seeds (Hodge and Taylor, 1957:592).

CONNARACEAE

(by R. DeFilipps)

Connarus grandifolius

Connarus grandifolius Planchon, 1850:432.—Schellenberg in Engler, 1938, IV.127 (Heft 103):246.

Liane caco, laica.

Liana; branches, inflorescences and flowers red-tomentose; leaflets 3–5, to 28 cm × 12.5 cm, rounded, glabrous; flowers in large, axillary panicles, petals 5, stamens 10; fruits follicular, woody, stipitate, laterally compressed, obliquely obovoid, 3.0–4.5 cm long, 1-seeded; seeds black with bright yellow, fimbriate aril, oblongoid, 2.5 cm × 1.0–1.3 cm.

Guadeloupe, Martinique, St. Kitts; in Dominica (type locality) in woodlands 65–550 m: Castle Bruce, Dleau Gommier (*Shillingford 520*), upper Layou Valley (*Nicolson 4181*), Sugar Loaf (*Eggers 717*).

CONVOLVULACEAE

(by D. Powell)

Argyreia nervosa (N. Burman) Bojer, a heavy creeper with tomentose stems and large cordate leaves, the undersides of which are silvery white, velvety tomentose, the flowers lilac with dark centers in masses around Christmas.

Evolvulus tenuis subsp. *longifolius* (Choisy) Ooststroom, a subshrub (usually potted) with numerous delicate sprays of bright blue flowers.

Porana paniculata Roxburgh, a high climbing vine with large panicles of small creamy flowers in November and December.

Turbina corymbosa (Linnaeus) Rafinesque would key here to *Stictocardia* or *Ipomoea;* there may or may not be dots on the undersurface of *Turbina* leaves and the fruit is ellipsoid, beaked, circumscissile at the base with 1–2 seeds instead of valvate with 4 or 6 seeds. Its large perfumed clusters of white flowers with dark centers attract numerous bees. The abundance of flowers and winter-flowering earned it the name of Christmas pops, Christmas vine, or Christmas wreath in other islands.

1. Plants parasitic, stems yellow to orange, leaves reduced to scales . . . . . ***Cuscuta***
1. Plants autotrophic, leafy.
   2. Subshrubs or small, prostrate, creeping plants with orbicular, oval or linear leaves; corolla <1 cm long; styles 2 . . . . . ***Evolvulus***
   2. Shrubs or prostrate or climbing plants; leaves usually cordate or hastate; corolla 2 cm or more, style 1.
      3. Plants with branched hairs; capsule 8-valved or operculate.
         4. Stems without wings, pubescent at least at leaf axils; flowers blue or red-purple; fruit finally 8-valved . . . . . ***Jacquemontia***
         4. Stems usually winged, bearing very few microscopic hairs; flowers yellow, fruit operculate . . . . . ***Operculina***
      3. Plants with simple hairs or glabrous, capsule 4- or 3-valved, operculate, or indehiscent.
         5. Pollen spinulose, anthers straight; flowers lilac, red-blue or white; leaves entire to 3-lobed.
            6. Plants lacking glandular dots or, when present, restricted to leaves; fruits valvate . . . ***Ipomoea***
            6. Plants with black or brown glandular dots on under-surface of leaves, on sepals and corolla; fruit indehiscent . . . . . ***Stictocardia***
         5. Pollen smooth, anthers twisted after dehiscence; flowers white or yellow.
            7. Leaves palmately compound or lobed; flowers white or with dark centers . . . . . ***Merremia***
            7. Leaves entire or ± 3-lobed; flowers yellow
               8. Stems without wings, often pubescent, especially at the nodes; inflorescence umbellate; capsule 4-valved . . . . . ***Merremia***
               8. Stems often winged, glabrous or with very few hairs; flowers usually solitary; capsule operculate . . . . . ***Operculina***

Cuscuta Linnaeus

Cuscuta americana

Cuscuta americana Linnaeus, 1753:121.—Yuncker, 1932:219; Powell, 1979:221.

Common parasite with stems orange, the entire plant drying dark brown to black; flowers ~2 mm long, creamy white; calyx about as long as corolla tube, sepals almost completely joined, lobes rounded; corolla lobes erect, rounded; fruit circumscissile.

Lowland neotropics; in Dominica in coastal areas: Cabrit swamp (*Nicolson 1899, Whitefoord 4083*), Capucin (*Wasshausen & Ayensu 386*), Castle Bruce (*Whitefoord 5500*), Lagon Village near Portsmouth (*Ernst 1057*), Morne Daniel (*Hodge 2504, 3897*).

Adjanohoun et al. (1985:93, pl. 60) reported medicinal usage.

Two other species are likely to occur in Dominica: *C. globulosa* Bentham, very much like *C. americana,* but with larger and fewer flowers that do not turn dark in drying and *C. campestris* Yuncker with reflexed calyx and corolla, the calyx scarcely coming half-way up the depressed, globose, indehiscent capsule with its conspicuous intrastylar opening.

Evolvulus Linnaeus

1. Plants prostrate, rooting at nodes; leaves orbicular to oval, petiolate . . . . . ***E. nummularius***
1. Plants with numerous ascending wiry branches; leaves linear-lanceolate, sessile . . . . . ***E. sericeus***

Evolvulus nummularius

Evolvulus nummularius (Linnaeus) Linnaeus, 1762:391.—Stearn, 1972b:647.—Powell, 1979:229.
Convolvulus nummularius Linnaeus, 1753:157.

Prostrate plant rooting at the nodes; leaves distichous; flowers solitary in leaf axils, corolla white in Dominican specimen seen; ovary 1-celled, sometimes with remnants of a septum.

Exposed areas pantropically; in Dominica: Cabrits swamp (*Ernst 1177*).

Evolvulus convolvuloides (Willdenow) Stearn has not been reported from Dominica, but it is widespread in the West Indies. Growing in similar situations and with similar leaves, it could be confused with *E. nummularius*, but it is woodier, with stiffer, straighter stems with a tap root, and is trailing rather than prostrate. The flowers of *E. convolvuloides* are more often pale blue than white, and unlike *E. nummularius*, they are peduncled as well as pedicelled, occasionally bearing more than one flower on a peduncle.

Evolvulus sericeus

Evolvulus sericeus Swartz, 1788:55.—Powell, 1979:230.

Subshrub with numerous ascending branches ~25 cm tall; stems, leaves, outer surfaces of sepals and parts of petals sericeous; leaves very small, sessile, narrow, erect; flowers usually white; ovary 2-celled.

Neotropics; in Dominica in dry areas: Grand Savanne (*Ernst 1048, Hodge 3799, Wilbur 7642*).

Dominican specimens are typical, being glabrous on upper leaf surfaces.

Ipomoea Linnaeus

1. Plants erect shrubs . . . . . ***I. carnea***
1. Plants climbing or prostrate.
   2. Leaves almost compound, with numerous pinnate lobes . . . . . ***I. quamoclit***
   2. Leaves entire or with few lobes.
      3. Plants of beaches; leaves thick, notched or bilobed . . . . . ***I. pes-caprae***
      3. Plants otherwise.
         4. Stamens and pistils exserted; corolla tube usually curved, longer than radius of limb.
            5. Corolla white, tube 10–12 cm long, slender . . . . . ***I. alba***
            5. Corolla scarlet, cerise or pink, tube <10 cm long.
               6. Corolla scarlet, salver-shaped, limb scarcely lobed, tube ~3 cm long; sepals short with linear appendage . . . . . ***I. hederifolia***
               6. Corolla cerise to pink, not salver-shaped, limb conspicuously lobed, tube ~5 cm long; sepals rounded . . . . . ***I. repanda***
         4. Stamens and pistils included; corolla bell- or funnel-shaped, tube straight, about equal to radius of limb.
            7. Sepals hairy, acuminate; corolla pale blue or occasionally white; capsule 3-valved . . ***I. nil***
            7. Sepals glabrous; corolla never blue, if white, with a dark center; capsule 4-valved.
               8. Bracts large and persistent; sepals conspicuously ribbed, becoming winged in fruit . . . . . ***I. setifera***
               8. Bracts very small; sepals ribless.
                  9. Sepals rounded or obtuse, distinctly unequal (outer larger than inner . . . . . ***I. phyllomega***
                  9. Sepals acute or acuminate, ± equal.
                     10. Sepals <1 cm long; flowers white or cream with dark center . . . ***I. obscura***
                     10. Sepals >1 cm long; flowers pale lilac . . . . . ***I. tiliacea***

Ipomoea alba

Ipomoea alba Linnaeus, 1753:161.—Gunn, 1972a:151.—Powell, 1979:249.
Convolvulus aculeatus Linnaeus, 1753:155.
Ipomoea bona-nox Linnaeus, 1762:228.
Calonyction aculeatum (Linnaeus) House, 1904:590.

Glabrous creeper, often bearing small recurved prickles; flowers solitary to few, salver-shaped, white with pale green star and tube, primarily night-blooming. This species is easily identifiable by its slender-tubed white flowers and its long-awned sepals.

Neotropical lowlands, now pantropical; in Dominica: Sylvania (*Hodge 811*).

Ipomoea carnea

Ipomoea carnea Jacquin, 1760:13.

The typical subspecies, adapted to wetter conditions, is not known on Dominica, where the only representative is the following:

Ipomoea carnea subsp. *fistulosa*

Ipomoea carnea subsp. *fistulosa* (Choisy) D. Austin, 1977:237.—Powell, 1979:268.

Ipomoea fistulosa Martius ex Choisy in A.P. Candolle, 1845, 9:349.

Erect shrub to 4 m with showy, lavender flowers to 9 cm long.

South American, widely cultivated; escaping from cultivation in Dominica along west coast: Fond Colet, north of Roseau (*Ernst 2157*), road to Cabrits and in Portsmouth (DHN!).

Ed. Note: Miss Powell's typescript, submitted in 1969, was in agreement with and substantially anticipated Dr. Austin's conclusions.

Ipomoea hederifolia

Ipomoea hederifolia Linnaeus, 1759a:925.—Hallier, 1899:415.—O'Donell, 1959:45.—Powell, 1979:253.
Ipomoea coccinea sensu auct., non Linnaeus.
Ipomoea angulata Lamarck, 1791, Tabl., 1:164.

Herbaceous vine with scarlet, salver-shaped flowers; sepals rounded, ± equal, subulate-appendaged near the apex, the appendage equal to or longer than the sepals; capsule erect, short-beaked, 4-seeded, the transparent septae persisting after the seeds have been shed.

Neotropical but introduced into the Old World tropics; in Dominica on west coast in old citrus orchard: Colihaut (*Ernst 1118*).

This species is found throughout the West Indies. It can be distinguished by its calyx and capsule from *I. coccinea*, which is restricted to the American continent. In *I. coccinea* the sepals are larger, very clearly overlapping, decidedly unequal, and the appendage is very clearly shorter than the longest sepal. The mature capsule has a long beak (3 mm) and the pedicel makes an angle of 45° or less with the peduncle, and so the capsule is reflexed rather than erect.

Ipomoea nil

Ipomoea nil (Linnaeus) Roth, 1797, 1:36.—Powell, 1979:255.
Convolvulus nil Linnaeus, 1762:219.
Convolvulus hederaceus Linnaeus, 1762:219.

Herbaceous twiner, hairy; sepals densely pilose below, long and narrow above; corolla to 9 cm, clear blue; capsule 3-valved, 3-celled with 6 seeds.

Pantropical; an escape in Dominica: Sylvania (*Hodge 1132*).

Ipomoea obscura

Ipomoea obscura (Linnaeus) Ker, 1817a.—Powell, 1979:256.
Convolvulus obscura Linnaeus, 1762:220.

Slender vine; leaves entire, cordate, to 8 cm long; peduncles 1-3-flowered; corolla white or cream, dark-centered.

Widespread in tropics; new record for Dominica on dry west coast: Portsmouth (*Whitefoord 5500*). Whitefoord (1989:148) reported another collection (*5005*) from Massacre.

Ipomoea pes-caprae

Ipomoea pes-caprae (Linnaeus) R. Brown, 1818 [Mar]:477.
Convolvulus pes-caprae Linnaeus, 1753:159.

The typical subspecies occurs in the Old World. The species is represented in Dominica by the following:

Ipomoea pes-caprae subsp. *brasiliensis*

Ipomoea pes-caprae subsp. *brasiliensis* (Linnaeus) Ooststroom, 1940:533.—Steam, 1961:237.—Powell, 1979:257.
Convolvulus brasiliensis Linnaeus, 1753:159.
Ipomoea brasiliensis (Linnaeus) Sweet, 1818 [Jun-Jul]:35.—Meyer, 1818 [Nov]:97.

Beach morning-glory, patate bord la mer.

Seaside plant, glabrous, prostrate, rooting at nodes; leaves ± coriaceous, emarginate to bilobed; corolla showy, funnel-shaped, ~5 cm long, lavender-pink.

Tropical sea beaches; in Dominica common along sea coast: Marigot (*Hodge 810*), Hatton Garden (*Hodge 2960*), St. David's Bay (*Wilbur 7981*), mouth of Layou River (*Ernst 1544*).

Leaves of this species are used by the Caribs in ritual baths (Hodge and Taylor, 1957:598).

Ipomoea imperati (Vahl) Grisebach (incl. *Ipomoea stolonifera* Gmelin, a similar prostrate plant growing in the same kind of habitat in the Caribbean area), has not been reported from Dominica. It has white flowers and is smaller in every respect.

Ipomoea phyllomega

Ipomoea phyllomega (Vellozo) House, 1908:246, *"phillomega"*.—Powell, 1979:257.
Convolvulus phyllomega Vellozo, 1829:74, *"philomega"*; 1831, 2, pl. 63, *"phillomega."*
Ipomoea capparoides Choisy, 1839:59.
Ipomoea demerariana sensu Grisebach, 1862:471, non Choisy.

Liane douce.

High climbing forest twiner, with cordate leaves to 23 cm long, veins forming a conspicuous overall spider web pattern; inflorescence a lax cyme of magenta, bell-shaped flowers; two outer sepals larger and enclosing the other three.

Tropical America; in Dominica at mid-elevations along west coast: Deux Branches, Jean (*Ernst 1815*), Layou forest, Mt. Joy (*Ernst 1952*), Sylvania (*Hodge 809*), Syndicate Estate (*Wasshausen & Ayensu 313, Whitefoord 3902*).

A leafless fruiting (in Oct) specimen from northwest slopes of Morne Diablotins (Syndicate) seems to be this species (*Whitefoord 4390*).

Ipomoea quamoclit

Ipomoea quamoclit Linnaeus, 1753:159.—Powell, 1979:258.
Convolvulus pennatus Desrousseaux in Lamarck, 1789, 3:567.
Quamoclit pennata (Desrousseaux) Bojer, 1837:224, *"pinnata."*

Glabrous, herbaceous vine; leaf blades ovate in outline, deeply pinnately partite, segments linear, the lowest pair

subdivided; flowers scarlet, salver-shaped; stamens and pistil exserted.

Circumtropical, this frequently cultivated species often escapes, and it is not clear where it originated; in Dominica: E. Cabrit beach (*Whitefoord 4035*), Morne Bruce (*Hodge 812*).

Ipomoea repanda

Ipomoea repanda Jacquin, 1760:13, *"Ipomaea"*.—Powell, 1979:259.
Exogonium repandum (Jacquin) Choisy, 1839:50.

Capi.

High climbing twiner with tuberous roots; glabrous; flowers cerise to pink, usually in large showy clusters, sepals ± equal, rounded, tinged cerise or pink, corolla limb completely lobed, tube, pedicel and peduncles curved; seed with two rows of long, silky hairs.

Puerto Rico and the Lesser Antilles; in Dominica at low to mid-elevations on west slopes: Morne Cola Anglais (*Lellinger 630*), Glasham (*Nicolson 2089*), Imperial Road (*Fairchild 2675*), near L'Imprévue (*Narodny s.n.*), Lisdara (*Hodge 2446*), Mero (*Chambers 2506*), north of Portsmouth (*Wasshausen & Ayensu 356*), South Chiltern (*Ernst 1126, Hodge 1571*), lower Syndicate Road (*Nicolson 4074*). Flowering November–June, fruiting January–June.

Our material is the typical variety. A very attractive plant in full bloom, when several flowers are open together on a panicle. This is unlike most ipomoeas, where only one or two flowers open at once.

Ipomoea setifera

Ipomoea setifera Poiret in Lamarck, 1804, Encycl., 6:17.—Powell, 1979:260.
Convolvulus ruber Vahl, 1798, Eclog., 2:12.
Ipomoea rubra (Vahl) Millspaugh, 1900:86, *"ruber,"* non (Linnaeus) Murray.
Ipomoea rubra var. *alboflavida* Urban, 1902, 3:345.
Ipomoea rubra var. *palustris* Urban, 1902, 3:345.
Ipomoea palustris (Urban) Urban, 1925, 9:423.

Trailing-twining vine with long, stiff, yellow hairs on stems; peduncles long, bearing two large bracts (2 cm long) surrounding an inflorescence of one to several flowers; sepals unequal, longitudinal veins of two larger outer ones prominently keeled; ribs become more prominent as sepals mature and surround the capsule.

Neotropics and Africa; in Dominica near northeast coast: Hatton Garden pasturelands (*Hodge 2953*), Portsmouth (*Whitefoord 5296*). Flowering January to April.

Ipomoea tiliacea

Ipomoea tiliacea (Willdenow) Choisy in A.P. Candolle, 1845, 9:375.—Powell, 1979:261.
Convolvulus tiliaceus Willdenow, 1809, Enum. 203.
Convolvulus fastigiatus Roxburgh, 1824, 2:48.
Ipomoea fastigiata (Roxburgh) Sweet, 1826:288.

Caapi.

Climbing or trailing vine; inflorescence a compact cyme of pale lilac flowers with dark purple centers; sepals aristate with scarious edges, the outer ones shorter and narrower; flattened capsule ripens with sepals turning back to show a wide disc surrounding the base of the capsule.

Tropical America; common and widespread weed in Dominica: Cabrit swamp (*Whitefoord 5286*), Carholm Estate (*Ernst 1940*), Carib Reserve (*Hodge 3318, 3323*), Freshwater Lake (*Hodge 1788, (Wasshausen & Ayensu 316*), Lisdara (*Hodge 2445, Proctor 190*), Mahaut (*Morden 5*), Ridgefield (*Hodge 2152*), South Chiltern (*Hodge 1479*), Sylvania (*Hodge 807, 808, 1124, 3965, 3966*). Noted as a major weed covering fruit trees at Syndicate Estate (DHN!, *Whitefoord 4341*).

The compact inflorescence of slender, pointed buds, the pale lilac flowers and the fruits, quickly distinguish this from other climbers in Dominica. It is remarkably like *Ipomoea batatas* (Linnaeus) Lamarck, however, the common sweet potato, which is cultivated here as throughout the topics. *Ipomoea batatas* very often has palmately lobed leaves, which would differentiate it, but they are not always palmate. In the field it is fairly easy to tell them apart, the one being slender and climbing trees, setting fruit freely, rarely producing tubers; the other heavy and creeping on the ground, rarely if ever setting fruit, cultivated for its tuberous roots. In the herbarium, however, it is more difficult. What seems to be a constant character difference is that whereas *I. batatas* has hairs on the stamens only at the base, in *I. tiliacea* there are hairs all the way to and on the anthers. In *I. batatas* the diploid number of chromosomes is reported as 90, in *I. tiliacea* as 60.

Jacquemontia Choisy

1. Trichomes on stem long, 2-armed; inflorescence hirsute . . . . . ***J. tamnifolia***
1. Trichomes on stem short, 3-armed; inflorescence not hirsute.
   2. Leaf apex acuminate or acute, outer sepals larger, ovate, foliaceous; corolla blue, flaring; seeds not winged . . . . . ***J. pentanthos***
   2. Leaf apex rounded and mucronate; sepals ± equal; corolla reddish purple, tube narrow; seeds 3-winged . . . . . ***J. solanifolia***

Jacquemontia pentanthos

Jacquemontia pentanthos (Jacquin) G. Don, 1837, 4:283, *"pentantha"*.—Powell, 1979:234.
Convolvulus pentanthos Jacquin, 1790, Coll., 4:210; 1792, Icon., 2:316.

Stems usually tomentose with stellate hairs; leaves sometimes tomentose; inflorescence a compact cyme of few to several flowers; corolla blue with white star, wide and shallow with stamens and pistil exposed; anthers oval.

Tropical America; in Dominica along west coast: East Cabrit (*Hodge 3722, Whitefoord 4257*), South Chiltern (*Stern & Wasshausen 2532*).

The correction from *"pentantha"* to *pentanthos* was discussed by Nicolson (1986:326) in connection with Greek adjectives (*-os, -on*).

Jacquemontia solanifolia

Jacquemontia solanifolia (Linnaeus) Hallier, 1893:542.—Powell, 1979:235.
Ipomoea solanifolia Linnaeus, 1753:161.
Ipomoea filiformis Jacquin, 1760:13, *"Ipomaea."*
Exogonium solanifolium (Linnaeus) Britton, 1918:82.

Herbaceous vine with ovate leaves; stems often tomentose with stellate hairs, at least the petioles and peduncle bases tomentose; inflorescence lax with few to several flowers; corolla tube long and narrow, limb scarcely spreading, 5-lobed; stamens and pistil exserted; seeds 3-winged.

Puerto Rico and Lesser Antilles; in Dominica along road: Petite Soufrière Bay (*Nicolson 1986*).

Jacquemontia tamnifolia

Jacquemontia tamnifolia (Linnaeus) Grisebach, 1862:474.—Powell, 1979:236.
Ipomoea tamnifolia Linnaeus, 1753:162.
Thyella tamnifolia (Linnaeus) Rafinesque, 1838, Fl. Tellur., 4:84.

Hirsute or glabrate vine, hairs yellow to reddish brown; sometimes flowering before twining; peduncles sturdier and much longer than subtending petioles; inflorescence very hirsute, a head-like cyme surrounded by several lanceolate or ovate foliaceous bracts up to 4 cm long; corolla lavender-blue; seeds wingless.

Tropical America, Africa, the Mascarenes, in Dominica: Freshwater Lake (*Eggers 612* at GH).

Merremia Dennstedt ex Endlicher, nom. cons.

1. Leaves simple and entire; flowers yellow . . . . . ***M. umbellata***
1. Leaves palmate; flowers white.
   2. Leaves compound, leaflets entire; calyx hispid . . . . . ***M. aegyptia***
   2. Leaves lobed, lobes dentate; calyx glabrous . . . . . ***M. dissecta***

Merremia aegyptia

Merremia aegyptia (Linnaeus) Urban, 1910, 4:505.—Powell, 1979:239.
Ipomoea aegyptia Linnaeus, 1753:162.
Convolvulus pentaphyllus Linnaeus, 1762:223.
Ipomoea pentaphylla (Linnaeus) Jacquin, 1788, Coll., 2:297.

Twiner with hispid stems, leaves and calyx, hairs fewer and shorter on leaves; cyme lax, one- to several-flowered; corolla about twice as long as calyx, white, funnel-shaped.

Tropics; in Dominica along roads: Mero (*Nicolson 2047*), Woodford Hill (*Nicolson 4240*).

Merremia dissecta

Merremia dissecta (Jacquin) Hallier, 1893:552, *"disecta"*.—Powell, 1979:240.
Convolvulus dissectus Jacquin, 1767, 2:4, pl. 28.
Ipomoea dissecta (Jacquin) Persoon, 1797:207 [in note], non Willdenow.
Ipomoea sinuata Ortega, 1798:84.

Twiner with hispid stems, petioles and peduncle bases; leaves pedate, 5-lobed, the basal lobes divided into two; all lobes dentate to lobed; cymes 1-5-flowered, flowers erect, buds and fruits nodding; corolla white with dark center, funnel-shaped; capsule enclosed by enlarged sepals.

Neotropics but widely naturalized; in Dominica: Castle Bruce trail (*Hodge 3327*), Mero (*Ernst 1935*), below Syndicate (*Whitefoord 4441*).

It has, on occasion, been confused with other tropical American species: *Merremia quinquefolia* (Linnaeus) Hallier and *Merremia cissoides* (Lamarck) Hallier, both smaller plants with compound leaves of five ± dentate leaflets. *M. quinquefolia* has dainty, glabrous leaves and flowers, *M. cissoides* is coarse, hairy and viscid.

Merremia umbellata

Merremia umbellata (Linnaeus) Hallier, 1893:552.—Ooststroom in Steenis,1953, Fl. Males., I, 4:449.—Powell, 1979:243.
Convolvulus umbellatus Linnaeus, 1753:155.
Ipomoea umbellata (Linnaeus) Meyer, 1818:99, non Linnaeus.
Ipomoea polyanthes Roemer & Schultes, 1819, 4:234.

Glabrous or pubescent plant with cordate to ± sagittate leaves; inflorescence umbellate, flowers many to few, yellow, corolla funnel-shaped, ~3.75 cm long; capsule exceeding the persistent calyx; seeds tomentose.

Neotropics, West Africa, and introduced in the Far East; in Dominica along west coast: Pointe Ronde (*Hodge 2688*), Roseau River valley (*Fairchild 2780*), sine loc. (*Eggers 1450*).

This is the typical subspecies, differing from the Old World subspecies, which has long hairs on the seeds and, generally, white flowers.

Operculina Silva Manso

Operculina hamiltonii

Operculina hamiltonii (G. Don) Austin & Staples, 1983:487.
Convolvulus alatus Hamilton, 1825:24, non Sprengel, 1819.
Ipomoea hamiltonii G. Don, 1838, 4:268, *"hamiltoni."*
Ipomoea pterodes Choisy in A.P. Candolle, 1845, 9:361.
Ipomoea altissima Martius ex Choisy in A.P. Candolle, 1845, 9:359.
Operculina altissima (Choisy) Meisner in Martius, 1869, 7:213, pl. 75.
Operculina pterodes (Choisy) Meisner in Martius, 1869, 7:213.
Operculina alata Urban, 1902, 3:343.—Powell, 1979:244.

Petioles, peduncles and sometimes stems winged, glabrous or pubescent; flowers solitary, peduncle thicker and much longer than subtending petiole, bearing, at its apex, two bracts that fall after anthesis and a 5-angled, tapering pedicel that thickens as the fruit ripens; corolla yellow, ~4.5-5 cm long;

capsule surrounded by calyx, exocarp operculate, brown, endocarp thin, transparent, splitting irregularly.

Neotropics; in Dominica: Grand Savanne (*Nicolson 2042*). Fruiting in November.

A few stellate hairs and no simple ones were found on the Dominican specimen examined. Other West Indian specimens were glabrous or with simple hairs as in South American material.

Stictocardia Hallier

Stictocardia tiliifolia

Stictocardia tiliifolia (Desrousseaux) Hallier, 1894:159, *"tiliaefolia"*.—Austin et al., 1978:195.—Powell, 1979, 265.
Convolvulus tiliifolius Desrousseaux in Lamarck, 1789, 3:544, *"tiliaefolius."*
Argyreia tiliifolia (Desrousseaux) Wight, 1848, 4(2):12, pl. 1358.—Grisebach, 1862:466.

Creeper with large cordate to orbicular leaves bearing numerous small black or brown glands on lower surfaces and outside of sepals and corolla tube; peduncles shorter than subtending petioles; flowers usually solitary, the two outer sepals ± enclosing the others; calyx becoming very much enlarged, covering the indehiscent fruit; corolla ~9 cm long, rose-colored with a dark center.

Circumtropical; in Dominica: La Plaine (*Whitefoord 5400*), Petit Coulibri (*Whitefoord 6056*), sine loc. (*Imray 230* at K).

This should not be confused with *Ipomoea alba* nor *I. violacea*, which are similar in size, but with white flowers, valvate fruits, and without glandular dots.

Gunn (1972b) has an extensive discussion of this species. He reviewed the typification of *Ipomoea campanulata*, concluding that this binomial must be typified on an illustration (*Adamboe* of Rheede) rather than on the specimen in the Linnaean Herbarium, which is *Thespesia populnea* of the Malvaceae. We agree with this, but we disagree with the identification of *Adamboe* Rheede as a *Stictocardia*. It is *Ipomoea campanulata* Linnaeus (cf. Nicolson et al., 1988:91). Thus we exclude *Ipomoea campanulata* from *Stictocardia* and adopt what is, in our view, the oldest available and applicable epithet.

CRASSULACEAE

Kalanchoe integra (Medikus) Kuntze, with rather condensed inflorescences at ends of long peduncles, smaller flowers, and cuneate leaves was collected in the Roseau Botanic Garden (*Hodge 3930*).

Bryophyllum pinnatum

Bryophyllum pinnatum (Lamarck) Oken, 1841, 3:1966.—Howard, 1988, 4:313.
Cotyledon pinnata Lamarck, 1786, 2:141.
Bryophyllum calycinum Salisbury, 1805, 1, pl. 3.
Kalanchoe pinnata (Lamarck) Persoon, 1807, 2(2):446.—Jacobsen, 1960, 2:658.

Succulent herb to 1 m; leaves simple or 3–5-foliolate; calyx inflated. Tiny plantlets develop in leaf notches.

Originally Madagascar, now pantropical; in Dominica a naturalized weed along roadsides and in low, wet places: Cabrit Swamp (*Hodge 437*), Grand Savanne (*Hodge 3789*), Layou (*Ernst 1515*), Mt. Joy (*Hodge 1268*), Pointe Ronde (*Hodge 2644*), Rodney's Rock (*DeFilipps 169*), Soufrière (*Hodge 1642*), Wooten Waven (*Hodge 436*).

The leaves are used as a cooling tea and poultice (Honychurch, 1980:36). Adjanohoun et al. (1985:95, pl. 61) reported usage against dyspepsia.

It is debatable that *B. pinnatum* was a new combination validly published by Oken. He seemed to recognize two names, *B. pinnatum* and *B. calycinum*, as one species, "Die Gemeine." I assume that Oken was treating these as alternative names, acceptable before 1953 (Art. 34.4) (*ICBN*). All literature cited by Oken refer simply to *B. calycinum* Salisbury except one, "Sims Bot. Mag. t. 1409," which cited the basionym, *Cotyledon pinnata* Lamarck. I accept *B. pinnatum* as a new combination through indirect reference (Art. 32.4, *ICBN*).

CUCURBITACEAE

This family has special difficulties: a lack of specimens of cultivated (and escaping?) species, a classification under revision, and a need for staminate and pistillate flowers and fruits to be certain of determinations.

Cucumis melo Linnaeus, the cantaloupe or musk melon, may be cultivated in Dominica but it has not been collected.

Cucumis sativus Linnaeus, the cucumber, is cultivated on Dominica (at Bornes, *Nicolson 4226*). It has scabrous leaves shallowly 5-lobed, petioles glandless, simple tendrils, flowers small and yellow, anthers S-shaped, and a medium-sized, more or less prickly fruit. It may escape.

The genus *Cucurbita* includes a number of cultivated species, many of which include very different cultivars that are very difficult to define. The genus may be recognized by its yellow, bell-shaped corollas only lobed about half-way to the base and 3-branched tendrils. *Cucurbita maxima* Duchesne ex Lamarck, the autumn or winter squash (melon pumpkin), has a soft, round unexpanded fruit-stalk, weakly lobed leaves, obtuse corolla lobes and a plump white seed with obtuse, firm margins. *Cucurbita mixta* Pangalo, the cushaw or silverseed gourd, is like *C. moschata* but has linear calyx lobes and a unexpanded fruit-stalk. *Cucurbita moschata* (Lamarck) Duchesne ex Poiret, the winter crook-necked squash, is a softly hairy vine with a hard, ridged fruit-stalk much expanded at the apex, often foliose sepals, and pale buff seeds with a wavy, hyaline margin. *Cucurbita pepo* Linnaeus, including the true pumpkin, as well as the zucchini squash, is a harshly hispid vine with leaves often prominently lobed, a hard, ridged, little-expanded fruit-stalk, and pale buff, firm-margined seeds. I am unable to identify our one cultivated collection from Bornes (*Nicolson 4225* called pumpkin) because it is only in staminate flower; it might be *C. mixta* Pangalo.

Lagenaria siceraria (Molina) Standley, the sweet calabash or bottle gourd, was found grown as a vegetable at Bornes (DHN!). It is easily recognized by a pair of glands at the apex of the petiole. It has pubescent leaves, branched tendrils, white flowers, and a long, purple fruit.

Luffa aegyptiaca Miller (see Heiser and Schilling (1988) for generic treatment, see Nicolson et al. (1988:97), for nomenclature), the vegetable sponge or torchon, has been seen in cultivation at Salisbury (DHN!) and on a dump at Portsmouth (*Whitefoord 5294*). The leaves are palmately lobed, the flowers are yellow (males racemose with 5 stamens, female solitary) and the dried fruit opens at the top, revealing the "sponge."

Sechium edule (Jacquin) Swartz, the christophine or chayote, is cultivated at Milton (*Hodge 2884*) and may be escaping near Syndicate (*Whitefoord 3955*). The flowers are white, the leaves are shallowly but sharply lobed, and the tendrils are 3-branched. The fruit is as large as an avocado or mango with a single, large, flat seed and the flesh makes a delicious vegetable.

1. Leaves deeply 3-7-lobed (see also cult. *Luffa*).
   2. Plant parts (especially when young) woolly; tendrils bifid; leaves deeply trifid with segments pinnatifid to bipinnatifid; fruit green, smooth, sweet . . . ***Citrullus***
   2. Plant parts glabrous; tendrils unbranched, leaves pedately 5-7-lobate; fruit becoming orange, warty, bitter . . . . . ***Momordica***
1. Leaves entire to shallowly lobed.
   3. Lower leaf blade and upper petiole with glands or glandular pockets; tendrils 2-3-branched; anthers S-shaped; ovules & seeds vertical . . . . . ***Cayaponia***
   3. Leaves glandless; tendrils simple; anther locules straight; ovules and seeds horizontal . . . . ***Melothria***

Cayaponia Silva Manso, nom. cons.

Cayaponia americana

Cayaponia americana (Lamarck) Cogniaux in A.L. & A.C. Candolle, 1881, 3:785.—Jeffrey, 1971:224.
Bryonia americana Lamarck, 1785, 1:458.
Cionandra cuspidata Grisebach, 1860:287.

Leaves ~10-15 cm long, 8-10 cm wide, acutely 3-lobed (in ours), with glands at base of blade; inflorescences racemose; calyx lobes 1-4 mm long; corolla greenish white, lobes 5-8 mm long, almost as broad as long in staminate flowers, much longer than broad in pistillate flowers; seeds very few (1-3).

Antilles; in Dominica locally abundant in openings, 550-700 m: Freshwater Lake area (*Ernst 1719, 2171, Nicolson 4147, Webster 13248*), Pointe Michel (*Eggers 1045*), Portsmouth (*Wasshausen & Ayensu 374*).

Elsewhere this may have deeply lobed and more scabrous leaves.

Citrullus Schrader, nom. cons.

Citrullus lanatus

Citrullus lanatus (Thunberg) Matsumura & Nakai in Anonymous, 1920:38.—Hara, 1969:347.
Momordica lanata Thunberg, 1794, Prodr., 13.
Citrullus vulgaris Schrader in Ecklon & Zeyher, 1836:279.—Schrader, 1838:412.

Watermelon.

Young growth woolly; leaf blade >10 cm long, deeply lobed, scabrous; flower yellow.

African but now widely cultivated for fruit; in Dominica a prostrate roadside weed: Cabrits (*Whitefoord 4047*), near Coulibistri (*Ernst 1633*), probably escaped from cultivation.

Jeffrey (1980:791) said this binomial was published in 1916 but Hara (1969:346) said the basionym was not indicated.

Melothria Linnaeus

Melothria pendula

Melothria pendula Linnaeus, 1753:35.—Wunderlin, 1978:333.
Bryonia guadalupensis Sprengel, 1826, 3:15.
Melothria pervaga Grisebach, 1860:289.
Melothria guadalupensis (Sprengel) Cogniaux in A.L. & A.C. Candolle, 1881, 3:580.

Leaves entire to shallowly lobed, ~5 cm × 5 cm; flowers minute, yellow.

Antillean but reported in Mexico and Guyana; in Dominica a common weed in disturbed areas: Clarke Hall (*Ernst 1260, Stern & Wasshausen 2403*), Hatton Garden (*Hodge 3044*), above Roseau (*Whitefoord 4645*).

Jeffrey (1978:373) cited *Imray 36* from Dominica as *M. pendula*.

Momordica Linnaeus

Momordica charantia

Momordica charantia Linnaeus, 1753:1009.—Cogniaux & Harms in Engler, 1924, IV.275 (Heft 88):24.

Pomme coolie, pavecka, wild balsam apple.

Leaves deeply and pedately 5-7-lobed, ~5 cm × 5 cm; peduncle of staminate flower 5-6 cm long, with orbicular bract just below center; fruit warty, becoming orange and splitting to reveal horizontal seeds covered with red pulp.

Originally Old World, now pantropical; in Dominica a common weed: Clarke Hall (*Chambers 2703, Ernst 1259, Stern & Wasshausen 2405*), Delices (*Whitefoord 3667*), Goodwill (*Wilbur 7573*), Salybia (*Hodge 471, 3217, Nicolson 2011*). Flowering in July.

Seeds sucked by children (Hodge and Taylor, 1957:613). Adjanohoun et al. (1985:95, pl. 62) reported several medicinal uses.

CUNONIACEAE

(by R. DeFilipps)

Weinmannia pinnata

Weinmannia pinnata Linnaeus, 1759a:1005.—Little & Wadsworth, 1964:138, pl. 56.

Pubescent shrub 1–3 m; leaves opposite, pinnately compound, rhachis winged, leaflets dentate; flower in fascicled racemes, white.

Neotropics; common in Dominica in mossy forests of summits, 1000–1425 m: Laudat (*Eggers 600*), Morne Anglais (*Wilbur 7952*), Morne Diablotins (*Hodge 2799*), Morne Trois Pitons (*Chambers 2587, Hodge 577, 1389, Kimber 969, Nicolson 1817*).

CYRILLACEAE

(by R. DeFilipps)

Cyrilla racemiflora

Cyrilla racemiflora Linnaeus, 1767a:182; 1767b:50.—Thomas, 1960:77.—Little & Wadsworth, 1964:298, pl. 136.
Cyrilla antillana Michaux, 1803, 1:158.

Bois rouge.

Tree to 15 m; leaves elongate, coriaceous; inflorescence a raceme; flowers white.

United States and neotropics; common in Dominica in montane thickets and elfin woodlands, 450–1100 m: Morne Nicholls (*Nicolson 1952*), Morne Trois Pitons (*Ernst 2027*), Pont Cassé (*Wilbur 7746*), Soufrière (*Howard 11782*), South Chiltern Estate (*Stern & Wasshausen 2522*), sine loc. (*Fishlock 46*).

DICHAPETALACEAE

(by R. DeFilipps)

Tapura latifolia

Tapura latifolia Bentham, 1853:291.—Prance, 1972b:65.
Tapura antillana Gleason in North Amer. Fl., 1924, 25:382.

Bois côte, bois cotelette.

High tree with fluted trunk and blaze turning orange; leaves elliptic to ovate-oblong, bluntly acuminate, coriaceous, glabrous; flowers fascicled, borne on the upper petiole; pedicels and sepals pubescent; petals 5, yellow, connate below, 2 are hooded and broader; stamens 3, staminodes 2; fruit a drupe, rarely 2-seeded.

Guadeloupe, Martinique, and St. Lucia; common in Dominica in rainforests, 250–650 m: Bataka (*Taylor 29*), Bellevue (*Taylor 25*), Dleau Gommier (*Nicolson 4064*), Deux Branches (*Hodge 2976, 2980* at GH), Hatton Garden (*Hodge 3009* at US), Laudat (*Eggers 1037*), L'Or River (*Nicolson 2030*), Portsmouth (*Wasshausen & Ayensu 365*), Riversdale (*Proctor 25787*), Sylvania (*Hodge 1322*), Syndicate (*Whitefoord 4305*), sine loc. (*Fishlock 13*—type of *T. antillana*). Flowering in October, fruiting June–October.

The buttresses used to make canoe paddles; fruit is edible (Hodge and Taylor, 1957:572). Campers in rainforest must know this species because its wood, once split, will burn when green.

DILLENIACEAE

(by R. DeFilipps)

Dillenia indica Linnaeus, a large tree with white flowers and large fruit about 6 inches thick, is cultivated in the Roseau Botanic Garden (DHN!).

Dillenia suffruticosa (Griffith) Martelli, a Malaysian shrub with sheathing petioles, large, ovate, subserrate leaf blades and yellow flowers, was collected in the Roseau Botanic Garden (*Hodge 3915*).

Pinzona coriacea

Pinzona coriacea Martius & Zuccarini in Zuccarini, 1832:371.—Kubitzki, 1971:27.
Pinzona calineoides Eichler in Martius, 1863, 13(1):71.
Doliocarpus coriaceus (Martius & Zuccarini) Gilg in Engler & Prantl, 1893, III(6):114.
Doliocarpus calineoides (Eichler) Gilg in Engler & Prantl, 1893, III(6):114.

Liana to 5 m or higher; stems angular; leaves coriaceous, glabrous except for pilosulous veins above and below, elliptic-ovate or elliptic-obovate, entire or ± undulate; panicles pilosulous; petals 3, greenish white; carpels 2, fused at base; fruit indehiscent, 5–7 mm wide, bilobed.

Belize and Hispaniola through northern South America, Guadeloupe & Puerto Rico; in Dominica rare in woods behind Salybia (*Taylor 37*).

The specimen (GH) is sterile with a single leaf and pieces of stem (cited by Hodge and Taylor, 1957:584, as a source of drinking water from cut stems).

EBENACEAE

Howard (1964, mss.) reported *Diospyros blancoi* A.L. Candolle (as *Diospyros discolor* Willdenow, nom. illeg.) and *Diospyros ebenum* Koenig on Dominica. Both would be introduced, perhaps in the Roseau Botanic Garden. *Diospyros digyna* Jacquin was collected in the Roseau Botanic Garden (*J. Jones s.n.* at K, introduced from Mexico). *Diospyros malabarica* (Desrousseaux) Kosteletzky (as *Diospyros embryopteris* Persoon) was reported as recently cultivated on Dominica by Howard (1989, 6:71)

Diospyros revoluta

Diospyros revoluta Poiret in Lamarck, 1804, Encycl., 5:435.—Little et al., 1974:794, pl. 648.
Diospyros ebenaster sensu auctt., non Retzius.—Urban, 1910, 4:485.

Babara, bambarat, black apple.

Small dioecious tree to 20 m with dark, scaly bark; leaves leathery, obovate, apex rounded; flowers white; fruit rather large, with a flat, square, persistent calyx.

Puerto Rico to Dominica; common in E and NW Dominica from coastal woodlands to 400 m: Calibishie (*Hodge 3177*), Carib Reserve (*Hodge 3282*), Deux Branches (*Nicolson 2132*), Hampstead (*Lloyd 662*), Laudat (*Hodge 2091*), Madjini (*Nicolson 4136*), Milton (*Hodge 2676*), Pointe Baptiste (*Ernst 1831*), Rosalie (*Ernst 1364, Webster 13473*), Trois Pitons (*Lloyd 763*), Woodford Hill (*Nicolson 4239*).

Fruits or chipped bark are crushed for fish poison (Hodge and Taylor, 1957:596).

Howard (1961) clarified that *Diospyros ebenaster* Retzius (1788) had been applied to three species: Asiatic *D. ebenum* Koenig (1776), Central American *D. digyna* Jacquin (1798), and Antillean *D. revoluta* Poiret (1804).

ELAEOCARPACEAE

The Dominican species of châtaignier (*Sloanea*) are dominant, high-buttressed canopy trees of major importance for timber. They are difficult to collect and vegetatively variable. Foresters generally recognize two species as "ti fay" (little leaves, petites feuilles) and "grand fay" (big leaves, grandes feuilles) and some have noted a third species, "ti coco" (little fruit). These names are neither descriptive of the four species of Dominica nor are they discriminately applied to the same species.

I believe that "ti fay" should probably be restricted to *Sloanea caribaea*, the smallest-leaved species with petioles <1 cm long and a naked fruit. "Ti coco" probably should be restricted to *S. berteriana*, a species with medium-sized leaves tapering to each end and a naked fruit. "Grand fay" most properly refers to the biggest-leaved species, *S. dentata*, with large, stiffly spiny fruits like a chestnut (French châtaignier) but can refer to *S. massonii*, a large-leaved species with small, softly and densely hairy fruits.

It appears that fertile branches (with flowers or fruit) bear significantly smaller leaves than sterile branches, seedlings, and stump shoots, all of the latter bear larger leaves. This makes it difficult to rely on leaf size for determining sterile specimens. Fertile material is needed for certain determinations.

1. Stipules persistent (at least on youngest, fully expanded leaves); fruit armed with many rigid spines to 3 cm long . . . . . ***S. dentata***
1. Stipules very quickly deciduous (even on unexpanded leaves); fruit hairy or naked.
   2. Leaves large, 1.5× longer than broad, rounded at apex; fruit densely covered with hairs to 2 cm long . . . . . ***S. massonii***
   2. Leaves smaller, 2× or more longer than broad, apex acute to obtuse; fruit naked or puberulent with tiny hairs.
      3. Petioles typically >2 cm long; leaves usually >10 cm long; inflorescence unbranched (racemose) . . . . . ***S. berteriana***
      3. Petioles typically <1 cm long; leaves usually <10 cm long; inflorescence branching (cymose) . . . . . ***S. caribaea***

Sloanea berteriana

Sloanea berteriana Choisy ex A.P. Candolle, 1824, 1:516.—C.E. Smith, 1954:104.—Little & Wadsworth, 1964:324, pl. 149.—Bornstein in Howard, 1989, 5:180.

Châtaignier 'ti coco.

Canopy tree; petioles usually ~2 cm long; leaves tapered to both ends; inflorescence unbranched; capsules naked.

Hispaniola and Puerto Rico, St. Kitts to Martinique; mid-elevations of Dominica but rarely collected: Aux Delices (*Nicolson 2136*), upper Layou Valley (*Beard 662*), cited by Hodge (1954:30) from Sylvania as "châtaignier petit feuille" but possibly a misidentification of *S. caribaea*.

Sloanea caribaea

Sloanea caribaea Krug & Urban ex Duss, 1897:90.—C.E. Smith, 1954:78.

Châtaignier 'ti fay.

Canopy tree; petioles to 1 cm long; leaves tapered to both ends but always small (usually <10 cm long); inflorescence ± terminal, branching and cymose; capsules naked, seeds orange.

Lesser Antilles and northern South America; in Dominica a dominant in rainforest (mid-elevations), pervasive but most common on flats: Breakfast River (*Hodge 1920*), Morne Colla Anglais (*Hodge 537*), Petit Macoucheri (*Whitefoord 6168*), Syndicate (*Whitefoord 4405, 5920*).

Hodge 1920 reported "wood considered worthless because of susceptibility to dry rot but used for charcoal."

Sloanea dentata

Sloanea dentata Linnaeus, 1753:512.—C.E. Smith, 1954:64.

Châtaignier grand fay.

Dominant canopy tree; stipules persistent; petioles 3–6 cm long; leaves shallowly dentate, large (10–30 cm × 8–15 cm); inflorescence racemose, 5–8 cm long; sepals 5–6 mm long; capsule armed with many rigid, curved spines.

Lesser Antilles; common in Dominica at mid-elevations: Carib Trail (*Howard 11768*), Castle Bruce (*Ramage s.n.*), Deux Branches (*Hodge 2965*), Dleau Gommier (*Nicolson 2016*), upper Hampstead River (*Nicolson 4220*), La Chaudière (*Hodge 3657*), Lisdara (*Hodge 2356*), Morne Plat Pays (*Hodge 1736*),

Roche d'Or Estate (*Wasshausen & Ayensu 399*), Rosalie Valley (*Beard 238*), Sylvania (*Hodge 1440*), Syndicate (*Whitefoord 4350*).

Considered an indicator of rich soil. A pervasive species, but most common on upper slopes.

Sloanea massonii

Sloanea massonii Swartz, 1788:82, *"Massoni"*.—C.E. Smith, 1954:47.
Sloanea truncata Urban, 1921a:26.

Châtaignier grand fay.

Canopy tree; stipules deciduous; petioles 3–6 cm long, often with transverse epidermal cracks; leaves entire, large (8–25 cm × 7–20 cm); inflorescence 2–3 cm long, racemose; sepals 3–3.5 cm long; capsules densely covered with soft hairs to 2 cm long.

Lesser Antilles; common and codominant with *Dacryodes* in Dominican rainforests: Castle Bruce road (*Cowan 1671*), Deux Branches (*Hodge 2964, 2967, 2992*), Dleau Gommier (*De-Filipps 162, Nicolson 4179*), Fond Figues River (*Ernst 1582*), La Chaudière (*Hodge 3657*), Lisdara (*Cooper 162, Hodge 538, Proctor 539*), Marigot (*Hodge 539*), Pagayer (*Nicolson 2107*), Pleasant Valley (*Eggers 603*), Riversdale (*Howard 11762*), Sylvania (*Hodge 1323*), Syndicate (*Whitefoord 3640*), Wooten Waven (*Eggers 885*).

Reported to indicate poor soil and be a good timber tree.

ERICACEAE

1. Ovary superior; pubescent shrub with small, serrulate leaves . . . . . ***Gaultheria***
1. Ovary inferior; glabrous shrub or epiphyte with large, entire leaves.
   2. Racemes axillary, flowers 4–8, red . . . . . ***Gonocalyx***
   2. Racemes terminal, flowers 10–30, greenish white . . . . . ***Symphysia***

Gaultheria Linnaeus

Gaultheria domingensis

Gaultheria domingensis Urban, 1902, 3:329.—Hersey & Vander Kloet, 1976:2471.—Whitefoord, 1989:147.—Howard, 1989, 6:28.
Brossaea coccinea Linnaeus, 1753:1190.
Epigaea cordifolia Swartz, 1788:73, non *Gaultheria cordifolia* Kunth.
Gaultheria sphagnicola L. Richard, 1792:109, nom. illeg. [cited *Epigaea cordifolia* Swartz].—Stehlé, 1962b:432.
Gaultheria coccinea (Linnaeus) Urban, 1902, 3:330, non Kunth.
Gaultheria swartzii Howard, 1975:241.

Small, erect shrub; leaves ovate, to 2 cm long; racemes terminal; flowers red; fruits blue-black, fleshy but drying.

Hispaniola, Guadeloupe, and Martinique; new record for Dominica: Valley of Desolation (*Whitefoord 4212, 5482*).

Gonocalyx Planchon & Linden

Nevling (1970:226) concluded that this name was first validly published in Linden's "Prix-courant de l'establissement d'introduction pour les plantes nouvelles" (p. 5–6), probably in late 1855. He did not clarify the authorship of the generic name, whether it should be Planchon, Linden, or both, nor was it clear who was the author of the catalog. His arguments seem sound and, therefore, I do not cite the author as usually done, "Planchon & Linden ex Lindley," referring to the publication of 8 Mar 1856 on p. 152 of the *Gardeners' Chronicle*.

Gonocalyx smilacifolius

Gonocalyx smilacifolius (Grisebach) A.C. Smith, 1932:354.—Nevling, 1970:222.
Vaccinium smilacifolium Grisebach, 1860:144.
Hornemannia smilacifolia (Grisebach) J. Hooker in Bentham & Hooker, 1876, 2:567.
Ceratostema smilacifolium (Grisebach) Hörold, 1909:276.

Shrub, usually epiphytic; leaves ovate or lance-ovate, base rounded to cordate, apex acuminate, entire, coriaceous; raceme axis 0.5 mm thick; apical anther sac tubules 3.0–3.5 mm long; flowers and pedicels bright red; fruit green, finally dark purple.

Guadeloupe; common epiphyte in rainforests of Dominica, 550–1150 m: Castle Bruce Road (*Cowan 1604*), Freshwater Lake Road (*Gillis 8167*), Morne Anglais [Couliaboun, the type locality] (*Fennah 20, Hodge 2278, Wilbur 7969*), Pont Cassé (*Chambers 2606, Nicolson 2177*), Syndicate (*Whitefoord 4234*), Valley of Desolation (*Whitefoord 5488*).

Symphysia C.B. Presl

Symphysia racemosa

Symphysia racemosa (Vahl) Steam, 1972a:111.
Hornemannia racemosa Vahl, 1810:121.—A.C. Smith, 1935:10.—Stehlé, 1962b:432.
Vaccinium imrayi W. Hooker, 1840.
Vaccinium racemosum (Vahl) Wilbur & Luteyn in Luteyn & Wilbur, 1977:275.

Scrambling shrub; leaves elliptic, lance-ovate or ovate, base cuneate to rounded, apex acute or acuminate, entire to crenulate, ± coriaceous; raceme axis 1–2 mm thick; apical anther sac tubules 1 mm long.

Jamaica to Martinique; often common in Dominica in rainforest and elfin woodlands, 126–1300 m: Deux Branches (*Hodge 3453*), Freshwater Lake (*Chambers 2555, Ernst 1732, Gillis 8202, Hodge 1863, Smith 10242, Wilbur 7440*), Morne Anglais (*Hodge 664, 2295, Wilbur 7948*), Morne Couronne (*Webster 13210*), Morne Diablotins (*Hodge 2832, Whitefoord 4543*), Morne Nicholls (*Nicolson 1949*), Morne Plat Pays (*Hodge 1664*), Morne Trois Pitons (*Hodge 1394, 1425*), Pont Cassé (*Cowan 1605, Ernst 1016, Stern & Wasshausen 2550*), Valley of Desolation (*Hodge 1941*).

Recent transfers of this species, from *Hornemannia* to *Symphysia* (nomenclature) and from *Symphysia* to *Vaccinium*

(taxonomy), give an impression of instability. Wilbur and Luteyn were probably correct when they said, "It might seem premature to submerge *Symphysia* in *Vaccinium* since the range of diversity within that genus at present suggests that the much needed revisionary studies probably will result in its wholesale dismemberment."

ERYTHROXYLACEAE

(by R. DeFilipps)

See Plowman (1976) concerning the spelling and authorship of *Erythroxylum*.

1. Leaves deciduous, obtuse to retuse; dry west coast . . . . . ***E. havanense***
1. Leaves evergreen, acuminate; wet interior . . . . . ***E. squamatum***

Erythroxylum havanense

Erythroxylum havanense Jacquin, 1760:21.—Plowman in Howard, 1988, 4:545.

Erythroxylum ovatum Cavanilles, 1789, 8:404, pl. 233.—Schulz in Urban, 1907, 5:207.

Deciduous shrub or tree to 6 m with white flowers before leaves in spring, fruits in June–July.

Cuba and Central American into northern South America; common and dominant in xerophytic scrub thickets of Dominica: Batali (*Chambers 2788*), Cabrits (*Webster 13297, Whitefoord 5768*), Petit Coulibri (*Whitefoord 6039*), Pointe Guignard (*Wilbur 8124*), Pointe Ronde (*Hodge 2650, 2746*).

Erythroxylum squamatum

Erythroxylum squamatum Swartz, 1788:75.—Schulz in Urban, 1907, 5:191.—Plowman in Howard, 1988, 4:548.

Ti feuille.

Evergreen tree to 8 m.

Lesser Antilles into South America; in Dominican rainforests 60–800 m: Clyde River (*Ernst 1031*), Deux Branches (*Hodge 2980* at US), Grand Bay (*Eggers 627*), Hatton Gardens (*Hodge 3009* at GH), La Plaine (*Ramage s.n.*), Laudat (*Eggers 1003*), Micotrin (*Wilbur 7462*), Milton (*Hodge 2674*), Mosquito Mountain (*Webster 13538*), Sylvania (*Beard 643*).

EUPHORBIACEAE

(by Grady L. Webster)

Aleurites moluccana (Linnaeus) Willdenow, the candlenut of Asia, a tree to 20 m with stellate-pubescence, 3–5-lobed leaves, white petals and a fleshy fruit to 6 cm across, is cultivated pantropically, including Dominica: Clarke Hall (*Ernst 1437*), Mt. Joy (*Hodge 910*).

Antidesma bunius (Linnaeus) Sprengel, cultivated in Asia for fruit, with evergreen, laurel-like leaves to 23 cm × 10 cm, is cultivated in Dominica: Clarke Hall (*Ernst 1417, Nicolson 1821*), Roseau Botanic Garden (*Nicolson 4217*). Dr. J.J. Ochse stated that he introduced the species in 1959.

Breynia disticha J.R. & J.G. Forster, the snowbush of the Pacific, a hedge plant with white or mottled leaves, has been collected along village roads in the Portsmouth area (*Hodge 887, Whitefoord 5192*).

Codiaeum variegatum (Linnaeus) Adr. Jussieu, the garden croton of southeast Asia, is a glabrous, monoecious shrub with fascicled, peduncled flowers in axillary racemes. It is widely cultivated for its striking leaves of various shapes and variegation (red, yellow, etc.), including Dominica: Lisdara (*Hodge 2439*), Roseau Botanic Garden (*Hodge 988*).

Excoecaria cochinchinensis Loureiro, a much-branched shrub with subopposed leaves, has been collected in the Roseau Botanic Garden (*Hodge 3951*).

Garcia nutans Rohr was attributed to Dominica without exclamation mark, indicating no material seen, by Howard (1989, 5:52).

Hevea brasiliensis (Kunth) J. Mueller, the Pará rubber tree, has compound leaves with 3 leaflets and has been collected in the Roseau Botanic Garden (*Hodge 938*). The milky sap is used to make rubber.

Hura crepitans Linnaeus, the sandbox tree, is a large tree with many prickles on its trunk, cordate leaves, and unisexual inflorescences. Dried fruits were used to hold sand to blot ink, hence its common name. It seems to occur as isolated individuals and is presumed introduced: East Cabrit (*Fisher s.n., Whitefoord 5268*), Mero (*Ernst 1766*), Fort Shirley ruins on West Cabrit (DHN!), Roseau (?).

Manihot esculenta Crantz, known as the manioc, cassava, or tapioca plant, is pantropically cultivated for its starchy, tuberous roots, including Dominica: Carib Reserve (*Taylor 148, 149, 150*). It is herbaceous but can grow 3 m high; the leaves are deeply 3–7-parted and glaucous below. Several cultivars and their preparation were discussed by Hodge and Taylor (1957:573–575).

Pedilanthus tithymaloides (Linnaeus) Poiteau subsp. *tithymaloides*, sometimes called the slipper plant, is a succulent shrub cultivated for its variegated, almost white leaves. Dressler (1957:156) reported that a wild subspecies, *P. tithymaloides* subsp. *padifolius*, occurs in xeric habitats, including Guadeloupe and Martinique. The one collection from Dominica (*Hodge 3760*), from beach near St. Joseph, is presumed to be the cultivated subspecies, although it is too incomplete to be certain. Adjanohoun et al. (1985:101, pl. 68) reported medicinal uses.

Ricinus communis Linnaeus, the castor bean or carapate (from Carib karapa = oil), native to Africa, is now widely

cultivated as an ornamental and for its valuable seed oil. Hodge and Taylor (1957:576) discussed the extensive uses by the Caribs of Dominica. Adjanohoun et al. (1985:105, pl. 72) reported medicinal uses. The plants have an herbaceous stem, peltate 5–11-lobed leaves, and capsule to 2.5 cm across with soft spines. They tend to escape in disturbed areas and are quite common, although rarely collected: Canefield (*Hodge 570*), Goodwill (*Wilbur 7582*), Scotts Head (*Hodge 1621*).

1. Ovules 2 in each locule; leaves without petiolar or laminar glands; latex never developed; styles bifid or dilated, not decompound.
   2. Stipules intrapetiolar-connivent (sheathing); petals present . . . . . ***Amanoa***
   2. Stipules interpetiolar, not connivent; petals absent.
      3. Flowers in racemiform inflorescences; staminate flowers with pistillodes.
         4. Leaves lepidote, pointed at tip; staminate flowers pedicellate; fruit drupaceous, 1-seeded, <1 cm long . . . . . ***Hyeronima***
         4. Leaves glabrous or nearly so, rounded at tip; staminate flowers sessile; fruit capsular, >1 cm long . . . . . ***Richeria***
      3. Flowers glomerulate in axillary clusters; staminate flower without a distinct pistillode.
         5. Leaves ± coriaceous; staminate disk central; lobed carpels 1 or 2; fruit indehiscent . . . . . ***Drypetes***
         5. Leaves membranous; staminate disk not central; carpels 3–5; fruit dehiscent.
            6. Dioecious trees; carpels (3)4–5; fruit irregularly dehiscent; seeds fleshy . . . . . ***Margaritaria***
            6. Monoecious herbs or shrubs; carpels 3; fruit dehiscent into 3 cocci; seeds dry . . . . . ***Phyllanthus***
1. Ovules solitary in each locule; leaves often with glands; milky latex often present; styles bifid to decompound or dilated.
   7. Perianth absent; inflorescence a bisexual pseudo-flower (cyathium) with a fused involucre of 4–5 glanduliferous bracts around a central pistillate flower and several to many staminate flowers.
      8. Leaves all opposite, usually clearly unequal (oblique) at base (or if equal then with stems jointed); cyathium with 4 glands . . . . . ***Chamaesyce***
      8. Leaves whorled (ours) alternate below (sometimes opposite above), equal at base; stems not jointed; cyathium with 1–2 glands . . . . . ***Euphorbia***
   7. Perianth present or, if rudimentary the inflorescences spiciform; glanduliferous perianth parts absent.
      9. Stamens inflexed in bud; indument at least partly of scales or branched (stellate) hairs . . . . . ***Croton***
      9. Stamens not distinctly inflexed in bud; indument of simple or centrally attached hairs.
         10. Leaves palmately veined.
            11. Perianth biseriate (petals present) . . . . . ***Jatropha***
            11. Perianth uniseriate.
               12. Perianth petaloid, united (gamophyllous); herbs . . . . . ***Cnidoscolus***
               12. Perianth not petaloid, segments nearly or quite distinct; vines.
                  13. Leaves deeply lobed; inflorescence subtended by 2–3-lobed bracts . . . . . ***Dalechampia***
                  13. Leaves serrate to entire; inflorescence not enclosed by bracts.
                     14. Stinging hairs absent; leaves entire . . . . . ***Plukenetia***
                     14. Stinging hairs present; leaves serrate . . . . . ***Tragia***
         10. Leaves pinnately veined.
            15. Floral bracts lacking basal glands; sap not milky.
               16. Leaves opposite . . . . . ***Sebastiania***
               16. Leaves alternate.

17. Herb; styles lacerate . . . . . ***Acalypha***
17. Shrub; styles bifid . . . . . ***Bernardia***

15. Floral bracts biglandular at base; sap milky.
18. Petiole with 2 cylindrical glands at apex; seed coat fleshy . . . . . ***Sapium***
18. Petiole eglandular or uniglandular; seed coat dry.
19. Leaves serrulate, ovate and with a single gland on upper petiole; sap a contact poison . . . . . ***Hippomane***
19. Leaves entire, elliptic; petiole eglandular.
20. Fruit pedicel >1 cm long; leaves not glaucous beneath . . . . . ***Actinostemon***
20. Fruit pedicel <1 cm long; leaves glaucous beneath . . . . . ***Gymnanthes***

Acalypha Linnaeus

Two ornamental species of *Acalypha* are cultivated in Dominica, both are shrubby and taller (>1 m) than the weedy species. *Acalypha hispida* N. Burman, the chenille plant, is cultivated for its showy, red to purplish pistillate spikes, which are 50 cm × 2.5 cm. *Acalypha amentacea* subsp. *wilkesiana* (J. Mueller) Fosberg (in Fosberg and Sachet, 1980a:10), the beefsteak plant, is cultivated for its strikingly colored, variegated leaves: Chattanooga Estate (*Hodge 571*), Clarke Hall (*Ernst 1700*). The latter is widely known as *Acalypha wilkesiana* J. Mueller (see discussion by Howard (1989, 5:5) and Adjanohoun et al. (1985:97, pl. 63) reported medicinal external use of leaves.

1. Spikes clearly peduncled, appearing plumose with hirsute, filiform bract lobes; leaves typically >2 cm wide . . . . . ***A. arvensis***
1. Spikes ± sessile, bract lobes not elongated and plumose; leaves typically <2 cm wide . . . . . ***A. chamaedrifolia***

Acalypha arvensis

Acalypha arvensis Poeppig in Poeppig & Endlicher, 1841, 3:21.—Pax & Hoffmann in Engler, 1924, IV.147 (Heft 85):99.—Webster in Webster & Burch, 1968:307.

Annual, weedy, erect or spreading herb with coarsely serrate, obtuse to acute leaves; spikes axillary (in upper axils), bisexual or staminate.

Neotropics; lowland Dominica along roadsides: Portsmouth (*Nicolson 4191*).

Acalypha chamaedrifolia

Acalypha chamaedrifolia (Lamarck) J. Mueller in A.P. Candolle, 1866, 15(2):879.—Pax & Hoffmann in Engler, 1924, IV.147 (Heft 85):29.
Croton chamaedrifolius Lamarck, 1786, 2:215.

Perennial, erect or often decumbent herb; leaves serrate, mostly obtuse; axillary spikes pistillate, terminal spikes pistillate or bisexual with a few basal pistillate flowers and many terminal staminate flowers.

Southern Florida to Dominica (absent from Martinique, teste Fournet, 1978); a weed in lowland Dominica: Roseau (*Ernst 2149*).

Actinostemon Klotzsch

Actinostemon caribaeus

Actinostemon caribaeus Grisebach, 1857:168.—Jablonski, 1969:221.
Excoecaria caribaea (Grisebach) Grisebach, 1859:51.
Actinostemon concolor var. *caribaeus* (Grisebach) J. Mueller in A.P. Candolle, 1866, 15(2):1193.

Monoecious, glabrous shrub 1.5(–4) m; leaf-blade entire, acute or acuminate, elliptic, to 13 cm long, with 2 sessile, crateriform glands at the base of the blade; inflorescences enclosed in a series of bracts 7 mm long when young, the bracts deciduous in age; fruiting pedicel 1.3–2.5 mm long; capsule 1 cm wide.

Lesser Antilles to northern Venezuela; in Dominica in dry forests on west coast to 350 m: above Pointe Ronde (*Hodge 2684*), West Cabrit (*Webster 13300*). Flowering in April.

Amanoa Aublet

Amanoa caribaea

Amanoa caribaea Krug & Urban in Anonymous, 1897:326.—Pax & Hoffmann in Engler, 1922, IV.147 (Heft 81):198.

Carapite.

Large dioecious tree; leaves glabrous, elliptic, acuminate, 5–10 cm long, the petioles with connivent stipules; inflorescence a simple or branched spike bearing fasciculate, whitish flowers; capsule thick-walled, 2.0–2.5 cm across.

Guadeloupe; common in Dominican rainforests 450–950 m: Dleau Gommier (*Nicolson 4096*), Laudat area (*Eggers 694*, *Hodge 1889*), Sylvania (*Hodge 1326*), Syndicate (*Whitefoord 4314*, *5861*), sine loc. (*Eggers 603*, *Fishlock 32*). Flowering in January, fruiting in March–May.

This species is a major timber tree and is a co-dominant in

the forests. Hodge and Taylor (1957:572) described the wood as purplish black, filled with white flecks, exceedingly hard and heavy.

Bernardia Miller

Bernardia corensis

Bernardia corensis (Jacquin) J. Mueller, 1865:173.
Acalypha corensis Jacquin, 1760:32.
Polyboea corensis (Jacquin) Klotzsch ex Endlicher, 1850, Suppl., 4(2):88.

Monoecious shrub to 3 m; stems glabrous or with a few scattered hairs; leaf-blade elliptic or rhombic, denticulate to crenate-serrate, the apex acute to rounded, to 15 cm long, often smaller, ciliate, glabrous or with scattered hairs mostly on veins; axis of inflorescence pubescent; flowers in fascicles along the spikes; pedicels of male flowers disarticulating below the middle; capsule 5-7 mm wide.

West Indies, northern S. America; common in Dominica in dry scrub woodlands on west coast to 600 m: Belleville (*Eggers 581*), Clarke Hall (*Ernst 1268, Stern & Wasshausen 2397, Webster 13161, Wilbur 7374*), Dublanc (*Hodge 2525, Whitefoord 4296*), East Cabrit (*Nicolson 1907*), Gabriel (*Wilbur 8229*), Grand Savanne (*Wilbur 8346B*), Mero (*Chambers 2780*), Morne Colla Anglais (*Webster 13434*), Pointe Guignard (*Wilbur 8123*), Pointe Ronde (*Hodge 2662*). Flowering April-May.

Chamaesyce S.F. Gray

Hodge 3413 from Salybia is not one of the following species and may be *Chamaesyce balbisii* (Boissier) Millspaugh. The specimen at hand (US) is very fragmentary and is so young that critical seed characters are unclear. This species has solitary flowers, glabrous ovaries, subentire to denticulate leaves, and rugulose seeds.

1. Stems woody, conspicuously jointed . . . . ***C. articulata***
1. Stems herbaceous, not conspicuously jointed.
   2. Cyathia solitary; plants mostly prostrate.
      3. Ovary and plant ciliate in lines; stipules shorter, ± connate at distal nodes . . . . . ***C. prostrata***
      3. Ovary and plant appressed hirtellous; stipules discrete, slender, fimbriate-dentate, 1-1.3 mm long . . . . . ***C. thymifolia***
   2. Cyathia glomerulate or cymose; plants mostly erect.
      4. Stems tomentose; ovary strigose . . . . . ***C. hirta***
      4. Stems glabrous or nearly so; ovary glabrous.
         5. Cymes dense, appearing leafless (bracts greatly reduced); capsule ± globose, <1.4 mm long . . . . . ***C. hypericifolia***
         5. Cymes relatively lax, leafy (bracts less reduced); capsule more elongated, >1.6 mm long . . . . . ***C. hyssopifolia***

Chamaesyce articulata

Chamaesyce articulata (Aublet) Britton, 1916:574.—Burch 1966b:91.
Euphorbia articulata Aublet, 1775:480.

Shrub to 6 m; stems glabrous; leaves slightly oblique at base, glabrous or slightly canescent, blades of various shapes on same branchlets, linear-lanceolate to ovate, to 6 cm long, often smaller.

Bahamas, Puerto Rico, and Lesser Antilles; in Dominica along dry west coast to 400 m: Gabriel (*Wilbur 8239*), Mero (*Ernst 1984*), Roseau Botanic Garden (*Hodge 3903*), South Chiltern (*Stern 2533*).

Chamaesyce hirta

Chamaesyce hirta (Linnaeus) Millspaugh, 1909:303.—Burch, 1966b:95; in Webster & Burch, 1968:340.
Euphorbia hirta Linnaeus, 1753:454.

Herb, decumbent to 3 dm; stems tomentose with multicellular hairs; leaf-blade serrate, lanceolate-rhombiform with acute apex, to 5.5. cm long, pubescent beneath, glabrate above; capsules strigose.

Pantropical weed; common in Dominica in disturbed areas to 500 m: Baiac (*Whitefoord 3839*), Carib Reserve (*Hodge 3301*), Cabrit Swamp (*Hodge 562*), Hatton Garden (*Hodge 3040*), Melville Hall (*Nicolson 2009*), Pointe Guignard (*Wilbur 8126*), Portsmouth street weed (DHN!), Ridgefield (*Hodge 2168*), Roseau (*Hodge 560, 561, Kimber 1108*), Soufrière Village (*Ernst 1340*), South Chiltern (*Hodge 1512*).

Adjanohoun et al. (1985:99, pl. 65) reported (as *Euphorbia hirta*) medicinal usage to treat constipation.

Chamaesyce hypericifolia

Chamaesyce hypericifolia (Linnaeus) Millspaugh, 1909:302.—Burch, 1966b:91; in Webster & Burch, 1968:345.
Euphorbia hypericifolia Linnaeus, 1753:454.

Mal nommé, mal dormi, akuliarani (eye medicine), alauali aku lia (Carib).

Herb, erect or ascending to 5 dm; stems glabrous or sparsely pubescent; leaf-blade mostly glabrous, serrate, often falcate, ovate-elliptic to oblong or obovate, to 3.5 cm long; seeds wrinkled, reddish or light brown.

Neotropics and adventive in Old World; in Dominica a weed of disturbed places: Melville Hall (*Hodge 564*), Point Ronde (*Hodge 2642*), Roseau (*Hodge 563*), Salybia (*Hodge 3000* at GH?).

Hodge and Taylor (1957:572) reported the use of an infusion of this for uterine pains and the same or expressed juice to treat eyes.

Chamaesyce hyssopifolia

Chamaesyce hyssopifolia (Linnaeus) Small, 1905:429.—Burch, 1966b:91; in

Webster & Burch, 1968:345.
Euphorbia hyssopifolia Linnaeus, 1759a:1043.

Herb, erect to 6 dm; glabrous or sparsely pilose; leaf-blade often sparsely pilose when young, serrate, oblong-lanceolate or ovate-elliptic, to 3.5 cm long; seeds with 2–4 lateral ridges on each face, black.

Neotropics and adventive in Old World; a roadside weed in Dominica in moist or dry coastal areas to 50 m: Calibishie (*Hodge 3136*), Castle Bruce Road (*Ernst 1351*), Coulibistri (*Ernst 1409, 1410, Wilbur 8341*), Grand Savanne (*Wilbur 7644*), Hatton Garden (*Hodge 3039*), Hungry Hill (*Whitefoord 4477*), Melville Hall (*Nicolson 2008*), Salybia (*Hodge 3300*).

Chamaesyce prostrata

Chamaesyce prostrata (Aiton) Small, 1903:713.—Burch, 1966b:93.
Euphorbia prostrata Aiton, 1789, 2:139.

Prostrate herb; branches to 20 cm long, pubescent in lines or glabrate; leaf-blade oblong-ovate, 4–7 mm long, serrate; ovary & capsule pubescent only on angles; seeds with deep transverse furrows.

Neotropics and adventive in Old World; in Dominica a lawn weed: Clarke Hall (*Ernst 1755*), Roseau (*Hodge 393*).

Adjanohoun et al. (1985:99, pl. 66) reported (as *Euphorbia prostrata*) medicinal uses.

Chamaesyce thymifolia

Chamaesyce thymifolia (Linnaeus) Millspaugh, 1916:412.—Burch, 1966b:93; in Webster & Burch, 1968:341.
Euphorbia thymifolia Linnaeus, 1753:454.

Prostrate annual herb; stems pubescent above and naked below; leaf-blade oblong-elliptic, to 1 cm, usually glabrous above and sparsely tomentose below, serrate; capsule strigose; seed tan, strongly 4-angled, the faces concave and obscurely transversely ridged.

Neotropics; in Dominica a weed in disturbed, often dry areas to 400 m: Cabrit swamp (*Whitefoord 5279*), Coulibistri (*Ernst 1399*), *Wilbur 8335*), Grand Savanne (*Wilbur 7643*), Hatton Garden (*Hodge 3061*), Point Michel (*Gillis 8133*), Portsmouth (*Hodge 566*), Ridgefield (*Hodge 2172*), Roseau (*Hodge 561*), Scotts Head (*Ernst 1337*).

Ed. Note: I understand that F.R. Fosberg calls this species *Euphorbia rubricunda* Blume. Wheeler (1941:252) did not designate a type ("Type: (?)"), noted that Asa Gray had identified material in the Linnaean Herbarium as what Wheeler called *E. supina*, and maintained *E. thymifolia* in sense of Burman material that Linnaeus probably never saw. Burch (1966a:164) confirmed that the Linnaean specimens, 630-10 and 630-11, are prostrate *E. maculata*. Burch noted that the Linnaean citation [unnamed var. beta], "Burm. zeyl. 225, t. 105, f.3," included a synonym, "Chamaesyce, Sloane Cat. 83," which ties to a Sloane specimen that "is cited by Fawcett & Rendle... even though Sloane's plant was probably not seen by Linnaeus (Stearn, 1957)." Dr. C.E. Jarvis (letter of 17 Jul 1989) said "Syntypes appear to be [1] 630.10 LINN, [2] 2 specimens in Herb. Hermann, no. 198, vol. 1:74 (BM), and [3] the cited Plukenet illustration (with apparently no voucher in Herb. Sloane)." No. 1 (LINN) is *Euphorbia maculata* Linnaeus according to Burch. No. 2 (Hermann) is *E. hypericifolia*, according to A.T. Gage (in notula, BM). No. 3 (Plukenet) has not been identified so far as Dr. Jarvis (in litt.) knows. Howard (1989, 5:30) noted "Type: Unresolved."

Cnidoscolus Pohl

Cnidoscolus urens

Cnidoscolus urens (Linnaeus) Arthur, 1921:11.—Webster in Webster & Burch, 1968:244.
Jatropha urens Linnaeus, 1753:1007.

Herb or shrub to 1.5 m; vegetative parts with stinging, acicular hairs to 6 mm long; leaf-blade palmately 3–5-lobed, to 17 cm × 27 cm; perianth lobes white; capsule pubescent with stinging hairs, 10–12 mm long.

Neotropics; in Dominica in forest: Grand Bay (*Eggers 853*).

Croton Linnaeus

Croton astroites Dryander was reported for Dominica by Howard (1989, 5:36). It is similar to *C. flavens* but lacks glands at the petiole to leaf-base juncture. Some Dominican material (*Hodge 555*) was distributed as *C. astroites* but is *C. bixoides*.

Croton betulinus Vahl, attributed to Dominica by Vélez (1957:89) on the authority of Britton, has not been documented.

1. Trichomes lepidote (scale-like) . . . . . ***C. bixoides***
1. Trichomes hair-like or stellate.
   2. Leaves deeply 3–5-lobed . . . . . ***C. lobatus***
   2. Leaves unlobed.
      3. Leaves entire or denticulate . . . . . ***C. flavens***
      3. Leaves coarsely toothed.
         4. Shrub or tree; stamens 15–18 . . . ***C. corylifolius***
         4. Annual herbs; stamens 10–11 . . . . . ***C. hirtus***

Croton bixoides

Croton bixoides Vahl in Geiseler, 1807:53.
Croton helicoides J. Mueller, 1865:97.—J. Mueller in A.P. Candolle, 1866, 15(2):552.
Croton niveus sensu auctt. (as to Imray specimens), non Jacquin.—Grisebach, 1859:40.—Hodge, 1954:23.
Croton astroites sensu Hodge (as to *Hodge 555*), 1954:23, non Dryander.

Lepidote shrub or tree to 4 m; leaf-blades ovate or lance-ovate, ± entire, acuminate, ± cordate and eglandular at base, to 8 cm long, greenish above and silvery beneath; stipules

attenuate-acuminate at tip, foliose-auriculate at base; stamens ~12–16, filaments hirsutulous; pistillate sepals reduplicate-valvate, styles multifid.

Lesser Antilles (Dominica to St. Vincent) and Venezuela; in Dominica a dominant in xerophytic west coast scrub thickets to 125 m: Batali River lava ridges (*Webster 13404*), Dublanc (*Hodge 2520*), Fond Hunte Estate (*Whitefoord 4449*), Grand Savanne (*Ernst 1047, Hodge 3802, 3803, Wilbur 7638*), Layou village (*Ernst 1881*), West Cabrit (*Hodge 555, Webster 13301*), sine loc. (*Imray s.n.*).

The fact that Geiseler attributed the validating description to Vahl suggests that the authorship should be attributed to Vahl in Geiseler's work (Art. 46.2, *ICBN*).

Croton corylifolius

Croton corylifolius Lamarck, 1786, 2:205.

Aromatic shrub or tree to 5 m; leaf-blades ovate, lance-ovate or elliptic, irregularly serrate-dentate, acute or acuminate, to 13 cm long, densely stellate-pubescent beneath when young, sparsely pubescent above.

West Indies and northern S. America; in Dominica in dry, west coast scrub thickets to 180 m: Cabrits (*Hodge 557, Smith 10315, 10319, Webster 13304, Whitefoord 4045*), Clarke Hall (*Webster 13165, 13184*), Layou Village (*Ernst 1506, 1880*).

Croton flavens

Croton flavens Linnaeus, 1759a:1276.
Croton balsamifer Jacquin, 1760:32.

Bitter shrub, copaie, copaiba.

Shrub or tree to 5 m; stipules absent; glands at apex of petiole several; leaf-blades lanceolate or lance-ovate, entire, acuminate, to 10 cm long, stellate-pubescent beneath, sparsely pubescent above; stamens 15–16, with glabrous filaments; seeds smooth.

West Indies; in Dominica a dominant in xerophytic west and southeast coastal scrub-thickets to 190 m: Batali River lava ridges (*Webster 13179*), Cape Melville (*Chambers 2662*), Cabrits (*Hodge 556, 558, 3723, Nicolson 1894, Smith 10309, Wilbur 7636, 8266*), Carib Point (*Wilbur 7909*), Grand Savanne (*Beard 245, Ernst 1046, 1891, 2144*), Mero (*Stern 2435*), Morne Daniel (*Webster 13292*), Pointe Ronde (*Ernst 1536, Hodge 2653*), Salisbury (*Chambers 2731*), Scotts Head (*Kimber 885, Webster 13438, Wilbur 7604*), Tarou Cliffs (*Nicolson 1861*).

Our material belongs to the Lesser Antillean taxon, *Croton flavens* var. *balsamifer* (Jacquin) J. Mueller, distinguished from the Greater Antillean var. *flavens* by having more pointed, less pubescent leaves.

Honychurch (1980:38) said the wood is used for fences and the aromatic sap is distilled for toiletries. Adjanohoun et al. (1985:97, pl. 64) reported several medicinal uses.

Croton hirtus

Croton hirtus L'Héritier, 1785:17.—Webster in Webster & Burch, 1968:262.
Croton glandulosus var. *hirtus* (L'Héritier) J. Mueller in A.P. Candolle, 1866, 15(2):684.

Annual herb to 6 dm; stems stellate-pubescent, hispid; leaf-blade ovate-lanceolate, serrate, acute, stellate-pubescent above and beneath; 2 glands at petiole apex on slender stalks 0.5–1.0 mm long; inflorescence bracts usually with gland-tipped processes; stamens 11, filaments glabrous.

Tropics; in Dominica a weed on west coast near sea level: Goodwill (*Ernst 1847, Wilbur 7567*), La Plaine (*Whitefoord 5413*).

Croton lobatus

Croton lobatus Linnaeus, 1753:1005.—Webster in Webster & Burch, 1968:263.

Annual herb to 6 dm; branchlets pilose with simple and stellate hairs; petioles pilose with stellate hairs; leaf-blade deeply 3–5-lobed, serrate, lobes acuminate, to 8 cm long, pubescent with mostly simple hairs; stamens 12–15, filaments glabrous; ovary hispid; seeds tetragonal.

Neotropics, Africa, Arabia; a new record for Dominica, on roadside at 15 m: Baiac road (*Whitefoord 4622*), Cabrit Swamp (*Whitefoord 4082*), Layou River Valley (*Ernst 1132*).

Dalechampia Linnaeus

Dalechampia scandens

Dalechampia scandens Linnaeus, 1753:1054.—Webster in Webster & Burch, 1968:309.—Webster & Webster, 1972.

Pubescent vine resembling hops; leaf-blade deeply 3-lobed, denticulate or ± entire; inflorescence bracts 2, each 3-lobed, glandular-ciliate; sepals of female flowers pinnatifid, not glandular-ciliate; capsule 7–10 mm wide, pilose.

Neotropics; in Dominica in dry woodlands to 120 m: Layou River Valley ridges (*Ernst 1512*). This material falls in the typical variety.

Drypetes Vahl

Drypetes glauca

Drypetes glauca Vahl, 1807, Eclog. 3:49.—Pax & Hoffmann in Engler, 1922, IV.147 (Heft 81):229.

Dioecious shrub or tree to 20 m; young twigs and flowers yellowish sericeous; leaves ovate-lanceolate, entire or undulate, to 17 cm × 7 cm, acute or acuminate; male flowers fasciculate, stamens 6–8 with glabrous anthers; ovary 1-celled with 1 stigma; drupe obovoid, symmetric, 1–2 cm long.

West Indies; in Dominica in rainforest understory 300–550 m: Bells (*Whitefoord 6146*), Glasham (*Nicolson 2094*), Morne Plat Pays (*Wilbur 7869*), South Chiltern (*Ernst 1868, 1869,*

Stern 2524), Sylvania (*Hodge 3819*), Syndicate (*Whitefoord 3905*).

Euphorbia Linnaeus

Three taxa are cultivated on Dominica: (1) *Euphorbia pulcherrima* Willdenow ex Klotzsch (includes *Poinsettia pulcherrima* (Klotzsch) R.C. Graham) of Mexico, the poinsettia, a shrub cultivated for its showy, red, leafy bracts, (2) *Euphorbia milii* var. *splendens* (Bojer ex Hooker) Ursch & Leandri of Madagascar, the crown-of-thorns, cultivated as a spiny hedge, and (3) *Euphorbia leucocephala* Lotsy of Central America, a small shrub with conspicuous white bracts and whorled leaves.

1. Cyathial gland bilabiate; floral bracts often red at base; seeds scarcely angular . . . . . ***E. cyathophora***
1. Cyathial gland round; floral bracts never red at base; seeds angular . . . . . ***E. heterophylla***

Euphorbia cyathophora

Euphorbia cyathophora Murray, 1786.
Poinsettia cyathophora (Murray) Klotzsch & Garcke in Klotzsch, 1859:253.—Dressler, 1962:338.—Burch in Webster & Burch, 1968:338.

Herb to 1 m; leaves variable, narrowly linear to pandurate, entire or dentate, alternate below, the upper leaves often red at base; cyathia glabrous or sparsely pubescent; gland solitary, flattened, strongly bilabiate; capsule glabrous; seeds scarcely angular, tuberculate.

Neotropical weed; a garden weed in Dominica, to be expected in disturbed areas: South Chiltern (*Hodge 3881*).

Euphorbia heterophylla

Euphorbia heterophylla Linnaeus, 1753:453.
Euphorbia geniculata Ortega, 1797:18.
Poinsettia heterophylla (Linnaeus) Klotzsch & Garcke in Klotzsch, 1859:253.—Dressler, 1962:339.—Burch in Webster & Burch, 1968:336.

Herb to 7 dm; leaves alternate below, variable, often long-petiolate, entire or dentate, glabrous or pubescent, linear to pandurate; cyathia glabrous outside, the gland with a circular opening; capsule glabrous; seed angular, tuberculate.

Neotropical weed; in Dominica on roadsides and cultivated land to 600 m: Clarke Hall (*Ernst 1630, Webster 13193*), Coulibistrie (*Wilbur 8337*), Delices (*Whitefoord 3671*), Hatton Garden (*Hodge 3045*), Milton Estate (*Hodge 2931*), Ridgefield (*Hodge 2159*), Roseau (*Hodge 559*), Syndicate (*Whitefoord 4577*).

Gymnanthes Swartz

Gymnanthes hypoleuca

Gymnanthes hypoleuca Bentham, 1854:325.
Excoecaria farinosa Grisebach, 1857:169.
Gymnanthes hypoleuca var. *latifolia* J. Mueller, 1863:103.
Sebastiania hypoleuca var. *farinosa* (Grisebach) J. Mueller in A.P. Candolle, 1866, 15(2):1184, nom. illeg.
Gymnanthes hypoleuca var. *farinosa* (Grisebach) Pax & Hoffmann in Engler, 1912, IV.147 (Heft 52):84, nom. illeg.
Ateramnus hypoleucus (Bentham) Rothmaler, 1944:5.
Gymnanthes farinosa (Grisebach) Webster in Webster & Huft, 1988:1131.

Monoecious, glabrous shrub or tree; leaves whitish glaucous beneath, entire, acuminate, to 11 cm long; young inflorescences without enclosing bracts (as in *Actinostemon*); capsules 1 cm across.

Guadeloupe, St. Lucia, northern S. America; apparently rare in Dominica in moist lowlands: La Chaudière (*Hodge 3514*), La Soie (*Eggers 729*), Sugar Loaf (*Eggers 1066*).

Some authors have synonymized *Gymnanthes* under older *Ateramnus* Browne. Webster (1983:305) neotypified *Ateramnus* on *Sapium jamaicense* Swartz and made *Ateramnus* Browne a synonym of *Sapium* Browne. A challenge was made by Kruijt and Zijlstra (1989:325).

There are uncertainties about the rank, specific vs. varietal, of this taxon. Our materials are too inadequate to determine whether the Lesser Antillean material is taxonomically distinct from the typical South American populations. Those interested in recognizing an Antillean variety should note that Mueller's var. *latifolia* is the oldest available epithet at the rank and it is based on the same type as Grisebach's *Excoecaria farinosa*.

Hippomane Linnaeus

Hippomane mancinella

Hippomane mancinella Linnaeus, 1753:1191.—Burch in Webster & Burch, 1968:328.

Madjini, manchineel (from manzanilla, Spanish for "little apple"), balaubakuru (Carib for "sea venom").

Glabrous monoecious shrub or tree to 10 m; sap milky, a virulent contact poison; petiole with 1 gland at apex; leaf-blade ovate or lance-ovate, to 13 cm long, serrulate, acuminate; drupe green to red or yellow, apple-like, 3 cm across.

Widespread and locally common on upper beaches from Florida and Bahamas through Central America and West Indies to Colombia and Venezuela; in Dominica localized on west coast rocky strands with *Coccoloba* and *Thespesia:* Mero (*Ernst 1663*), Point Ronde (*Hodge 2701*), St. Joseph (*Nicolson 2041*), Scotts Head (*Nicolson 1995, Webster 13446, Wilbur 7594*).

Cited by Hodge and Taylor (1957:572) as a Carib arrow poison.

Hyeronima Allemão

Hyeronima laxiflora

Hyeronima laxiflora (Tulasne) J. Mueller, 1865:67.—Howard, 1989, 5:59.
Stilaginella laxiflora Tulasne, 1851:244.

Hyeronima clusiodes sensu Urban, 1905, 4:341, "*Hyeronimia*," non (Tulasne) J. Mueller.
Hyeronima caribaea Urban, 1919c:139.

Tree to 20 m; most parts densely lepidote; stipules foliaceous, composed of petiole-like structure 3–6 mm long and an expanded blade-like structure to 1 cm long; leaf-blade ovate, to 21 cm × 12.5 cm, obtuse; fruit drupaceous, 2–3 mm long.

Central America, northern South America into southern Antilles; cited for Dominica by Urban (1919c:139) based on a male Ramage specimen from Layou (Laiou) as type.

Jatropha Linnaeus

Jatropha integerrima Jacquin, with minute stipules, panduriform leaves and bright red petals, is a Cuban species cultivated in Dominica: Roseau Botanic Garden (*Hodge 959, 3910, 3932*).

Jatropha multifida Linnaeus, a neotropical species with stipules dissected into setaceous, eglandular segments and palmately 7–13-lobed leaves, is cultivated in Dominica and may escape: Canefield (*Nicolson 2153*), Roseau Botanic Garden (*Hodge 3929*).

Jatropha podagrica W. Hooker, a Central American species with fimbriate, glandular stipules, peltate, suborbicular leaves, and red petals was once collected in the Roseau Botanic Garden (*Fairchild s.n.*).

1. Leaves eglandular, entire to shallowly 3-lobed; capsule glabrous . . . . . ***J. curcas***
1. Leaves (margin, petiole & stipules) with viscid glands; capsule pubescent . . . . . ***J. gossypiifolia***

Jatropha curcas

Jatropha curcas Linnaeus, 1753:1006.—Dehgan and Webster, 1979:52.

Shrub or tree to 5 m; stipules minute, quickly deciduous; leaf-blade glabrous or with a few hairs on veins beneath, cordate at base, to 15 cm wide; petals greenish or yellowish white; capsule to 4 cm × 2 cm.

Probably native to Central America but widely distributed in tropics and hedge or medicinal plant and escaping; in Dominica locally common in dry scrub thickets of west coast to 60 m and cultivated by Caribs: Bataca (*Stehlé 6379*), Grand Savanne (*Wilbur 7658*), Salybia (*Hodge 3207*), Scotts Head (*Ernst 1329, Hodge 1607, Nicolson 1997, Webster 13442, Wilbur 7591*).

Seeds of this, and the following species, are used by the Caribs as an emetic or purgative (Hodge and Taylor, 1957:573). Adjanohoun et al. (1985:101, pl. 67) indicated limited medicinal use.

Jatropha gossypiifolia

Jatropha gossypiifolia Linnaeus, 1753:1006, "*gossipifolia*".—Dehgan & Webster, 1979:54.
Adenoropium gossypiifolium (Linnaeus) Pohl, 1826, 1:15, "*gossypifolium*."

Medicinier blanc, medicinier noir, medicinier rouge, physic nut.

Shrub or tree to 3 m; stipules dissected, glanduliferous, persistent; petioles with branched, viscid glands along their length, leaf-blades pubescent above and beneath, ciliate with unbranched stipitate glands, to 15 cm wide, 3–5-lobed; petals purplish red; capsule to 1 cm in diameter.

Widespread in disturbed areas of the New World and introduced into the Old World; in Dominica in dry scrub thickets of west coast and cultivated by the Caribs: Bataca (*Stehlé 6363*), Goodwill (*Nicolson 2142, Wilbur 7583*), Grand Savanne (*Ernst 1886, Hodge 3779*), Point Ronde (*Hodge 2739*), Salisbury (*Whitefoord 4527*), Salybia (*Hodge 3208*), Scotts Head (*Hodge 1611, Nicolson 1996, Webster 13439, Wilbur 7597*), sine loc. [Salybia?] (*Taylor 131, 132*).

Margaritaria Linnaeus f.

Margaritaria nobilis

Margaritaria nobilis Linnaeus f., 1782:428.—Webster, 1979:412.
Cicca antillana Adr. Jussieu, 1824:108.
Phyllanthus antillanus (Adr. Jussieu) J. Mueller, 1863:51.
Phyllanthus nobilis (Linnaeus f.) J. Mueller in A.P. Candolle, 1866, 15(2):414.
Margaritaria nobilis var. *antillana* (Adr. Jussieu) Stehlé & Quentin in Stehlé et al., 1937, 1:47.

Mille branche.

Dioecious tree to 15 m; leaves elliptic, acuminate, to 14 cm × 4 cm; flowers fasciculate or borne singly on a short raceme; styles (3)4–5, each bifid; fruiting pedicel to 1.3 cm long; capsule 6–7 mm diameter; seeds with fleshy, bluish green coat.

Neotropics; in Dominica common in coast scrub thickets and inland forests to 500 m: Cabrits (*Howard 11752*), Calibishie (*Hodge 3161*), Carholm Estate (*Ernst 1949*), Delices (*Whitefoord 3772*), Hatton Garden (*Hodge 3076*), Morne Colla Anglais (*Webster 13432*), Ridgefield Estate (*Hodge 3899*), Salybia (*Hodge 3202*), South Chiltern (*Ernst 1872, Stern 2527*), Sylvania (*Wilbur 7714*), Syndicate (DHN!), sine loc. (*Fishlock 81*).

Phyllanthus Linnaeus

Phyllanthus acidus (Linnaeus) Skeels, "*acida*," monoecious trees to 10 m with broadly ovate-lanceolate leaves 5–9 cm long and edible drupes to 2.5 cm long (called gooseberries) is introduced into Dominica: roadside east of Roseau (*Nicolson 4141*).

Excluded Species of *Phyllanthus*

Phyllanthus epiphyllanthus Linnaeus, known from Guadeloupe and Martinique, has been attributed to Dominica by Vélez (1957:90). This is a very large and distinctive species: a shrub to 2.5 m, without true leaves but the branchlets flattened

into flat phylloclades to 20 cm long and bearing flowers at the nodes, mostly found on limestone near the sea. The species probably is not on Dominica, else collectors would have picked up such a striking species.

1. Leaves on main axes not reduced to scales; lateral axes not deciduous; herb . . . . . ***P. caroliniensis***
1. Leaves on main axes reduced to cataphylls; lateral axes deciduous.
   2. Shrubs.
      3. Leaf-blades acute, symmetric (elliptic), calyx 6-lobed; male disk cupuliform; female pedicel hirtellous . . . . . ***P. subglomeratus***
      3. Leaf-blades rounded to obtuse (apiculate in *P. mimosoides*), assymetric; calyx 5-lobed; male disk of discrete segments; female pedicel glabrous.
         4. Leaf-blades obovate, ± emarginate, 2–3 cm long; styles fused into massive column higher than ovary . . . . . ***P. megapodus***
         4. Leaf-blades falcately elliptic, apiculate, <2 cm long; styles free, spreading . . . . ***P. mimosoides***
   2. Herbs.
      5. Stamens 5; pedicels capillary, >3 mm long . . . . . ***P. tenellus***
      5. Stamens 3; pedicels usually thickened, <3 mm long.
         6. Stipules conspicuously auriculate; leaf-blade hispidulous beneath on margins; ovary bullate-rugose; seeds transversely ribbed and laterally foveolate . . . . . ***P. urinaria***
         6. Stipules not auriculate; leaf-blade not hispidulous beneath; ovary smooth; seed verruculose or longitudinally ribbed.
            7. Seeds with 5–6 longitudinal ribs; cymules bisexual, each of 1 male and 1 female flower; female calyx lobes acute or apiculate . . . . . ***P. amarus***
            7. Seeds with 9–12 longitudinal striae (and many fine transverse striae); cymules unisexual, the proximal with several male flowers, the distal with 1 female flower; female calyx lobes obtuse or narrowed at apex . . . . . ***P. caribaeus***

Phyllanthus amarus

Phyllanthus amarus Schumacher, 1827:421.—Webster, 1957:313.

Graines en bas feuilles.

Herb to 5 dm; leaves 5–11 mm long, elliptic-oblong, the apex obtuse to rounded; capsule 1.9–2.1 mm in diameter.

Neotropical weed, now pantropical; in Dominica along roadsides to 150 m: Canefield (*Nicolson 2146*), Carib Point (*Wilbur 7907A*), Hampstead (*Lloyd 640*), Hatton Garden (*Hodge 3038*), Layou (*Hodge 574*), Soufrière Village (*Ernst 1339*), St. Mark (*Gillis 8155*).

Used by Caribs as an abortive agent (Hodge and Taylor, 1957:575). Adjanohoun et al. (1985:103, pl. 69) reported use to treat arterial hypertension.

Phyllanthus caribaeus

Phyllanthus caribaeus Urban, 1908, 5:382.—Webster, 1957:318.

Herb to 3.5 dm; leaves 4–8 mm long, ovate-oblong or elliptic, the apex obtuse; capsule 2 mm in diameter.

Dominica, St. Vincent, Grenada, Trinidad, and Tobago; in Dominica a weed in pastures at 450 m: Lisdara (*Hodge 2425*), Petit Macoucherie (*Webster 13540*), Syndicate (*Whitefoord 3658*).

Phyllanthus caroliniensis var. *antillanus*

Phyllanthus caroliniensis var. *antillanus* J. Mueller, 1863:36.—Webster, 1956:349.—Stehlé, 1962a:323.

Weedy herb to 4.5 dm; stipules cordate; leaves 8–22 mm long, elliptic to oblong or obovate, the apex obtuse or rounded; stamens 3, free; pedicels to 1 mm long; capsule 1.7–2.0 mm in diameter; seeds verruculose.

Lesser Antilles; in Dominica a weed in disturbed woodlands to 400 m: Clarke Hall (*Ernst 1274*), Fond Baron (*Ernst 1623*), Portsmouth-Morne Brulés (*Hodge 573A*).

Phyllanthus megapodus

Phyllanthus megapodus Webster, 1955:62; 1958:171.—Stehlé, 1962a:326.

Shrub or small tree to 5 m with slender, unbranched truck and a terminal crown of to 30 branchlets; leaves 2–3 cm long, oblong or obovate, the apex obtuse or rounded; pistillate pedicel markedly thickened; capsule 5 mm in diameter.

Dominica and(?) Martinique; rare in Dominica in rainforests 750–1000 m in Morne Diablotins area: ridge top E of Syndicate (*Webster 13322*), western ridge of Fon Pays (*Hodge 2841*).

Webster (1958:174) cited a Lloyd collection from Hampstead (north of Diablotins), presumably not *Lloyd 640*, cited above as *Phyllanthus amarus*. He also suggested that the Martinique record (type) needs confirmation.

Phyllanthus mimosoides

Phyllanthus mimosoides Swartz, 1788:27.—Webster, 1958:174.—Stehlé, 1962a:326.

Balier bois, tamarind grand bois.

Shrub to 5 m, the trunk slender, unbranched, with a terminal crown of leafy (30–60 leaves each) branchlets; stems ferruginous at top; leaves 5–15 mm long, oblong or oblong-obovate, apex rounded; female pedicel not thickened; capsule 4–5 mm in diameter.

Antigua(?), Montserrat, Guadeloupe, Martinique, and Trinidad; in Dominica very common in rainforest to 800 m and on river banks: Calibishie (*Hodge 3172*), Carib Reserve (*Hodge*

3219, Stehlé 6407, 6432), Castle Bruce Road (*Ernst 1449*), Clarke Hall (*Webster 13398*), Deux Branches (*Hodge 3439*), Dleau Gommier (*DeFilipps 161*), Green Hill Estate (*Wilbur 8287*), Hatton Garden (*Hodge 3075*), Jean (*Webster 13497*), La Chaudière (*Hodge 3558, 3662*), Lancashire (*Webster 13461*), La Savanne (*Whitefoord 4515*), Laudat (*Gillis 8204*), Layou Park (*Nicolson 2076*), Layou River Road (*Cowan 1631*), Morne aux Diables (*Wilbur 8070*), Point Lolo (*Webster 13385*), Pont Cassé (*Wilbur 8145, 8287*), Riversdale (*Howard 11779, Proctor 25785*), Roche d'Or Estate (*Stern 2583*), St. Hilaire Trace (*Beard 645, 1460*), Sugar Loaf (*Eggers 1064*).

Phyllanthus subglomeratus

Phyllanthus subglomeratus Poiret in Lamarck, 1804, Encycl., 5:304, "*subglomerata*".—Webster, 1957:368.

Phyllanthus conami sensu auctt., non Swartz, 1788:28.

Phyllanthus brasiliensis sensu Stehlé & Quentin in Stehlé et al., 1937, 1:48, non (Aublet) J. Mueller.

Phyllanthus brasiliensis var. *oblongifolius* J. Mueller, 1863:27.

Shrub or small tree to 4 m, the trunk sparsely branched; leaves 14–26 mm long, elliptic, apex acute; capsule unknown.

Guadeloupe, Martinique, Trinidad, and Tobago; in Dominica apparently rare in thickets on southeast coast: Grand Bay (*Eggers 662*).

Phyllanthus tenellus

Phyllanthus tenellus Roxburgh, 1832, 3:668.—Webster, 1957:52.

Annual herb to 5 dm; leaves 6–24 mm long, membranous, broadly elliptic to obovate, the apex acute to obtuse; pedicels filiform, the males 0.5–1.5, the females 2.5–7.0 mm, often pendant in fruit; capsule 1.7–1.9 mm in diameter; seeds roughened.

Native to Mascarene Islands, introduced in neotropics; in Dominica a weed in disturbed woodlands 150–550 m: Baiac (*Whitefoord 3836*), Fond Baron (*Ernst 1598*), South Chiltern (*Hodge 1539, 3878* ex parte), Springfield *Wilbur 7683*), Sylvania (*Hodge 572*).

Caribs were said to use this as an abortifacient by Honychurch (1980:42). Adjanohoun et al. (1985:103, pl. 70) reported limited medicinal usage.

Phyllanthus niruri Linnaeus, distinguished by its oblique leaflets and verrucose seeds, was reported for Dominica by Vélez (1957:90), apparently a misidentification of *P. tenellus*.

Phyllanthus urinaria

Phyllanthus urinaria Linnaeus, 1753:982.—Webster, 1957:194.

Graines en bas feuilles.

Herb to 5 dm; leaves 8–20 mm long, tardily sensitive to touch, oblong or oblong-obovate, the apex obtuse to acute; capsule 2 mm in diameter.

Native to Asia, now pantropical; in Dominica a weed in disturbed areas: Carib Reserve (*Taylor 142, 155*), Clarke Hall (*Wilbur 7362*), Deux Branches (*Hodge 3109*), Fern Villa (*Hodge 576*), Grand Bay (*Wilbur 7907B, 8030*), Hatton Garden (*Hodge 3287*), La Chaudière (*Hodge 3645*), La Plaine (*Whitefoord 5403*), Morne Plaissance (*Whitefoord 4423*), Ridgefield (*Hodge 2160*), Roseau (*Hodge 576*), Springfield (*Wilbur 7686*), Sylvania (*Hodge 575*).

Used by Caribs as an abortive agent (Hodge and Taylor, 1957:575:4, out of the 6 collections cited). Adjanohoun et al. (1985:105, pl. 105) reported medicinal use in baths of babies.

Plukenetia Linnaeus

Plukenetia volubilis

Plukenetia volubilis Linnaeus, 1753:1192.—Webster & Burch, 1968:294.

Vine; petioles to 7 cm long; leaf-blade cordate at base, broadly ovate, abruptly acuminate, ± entire to crenulate, to 14.5 cm long, with 2 sessile rectangular glands at base of blade; styles fused into a column 2 cm long; capsule 3.5 cm wide, the 4 cocci spreading.

St. Vincent, Central and South America; apparently rare in Dominica in rainforest at 600 m: Rosehill (*Eggers 580*), sine loc. (*Imray s.n.*).

Richeria Vahl

Richeria grandis

Richeria grandis Vahl, 1797, Eclog., 1:30, pl. 4.

Bois bandé, bois bandé rouge, mang blanc.

Dioecious tree to 20 m; leaves glabrous, obovate or oblanceolate, usually rounded at apex, to 28 cm × 17 cm; flowers yellowish green; capsule 1–1.5 cm long; seeds orange, 7 mm long.

Antigua to Brazil; in Dominica a common second growth tree in rainforests and a dominant in montane thickets from 125–700 m: Belle View (*Cooper 177, Eggers 600, 677*), Breakfast River (*Hodge 1895*), Brigandin (*Nicolson 1863*), Deux Branches (*Hodge 3425*), Dleau Gommier (*Nicolson 4095*), Fond Figues River (*Ernst 1023*), Layou Park Estate (*Nicolson 2077*), Lisdara (*Cooper 189, Hodge 568, 2357, 2441*), L'Or River (*Nicolson 2031*), Morne aux Diables (*Wilbur 8050*), Morne Couronne (*Ernst 1169, Webster 13232*), Morne Micotrin (*Wilbur 7441*), Morne Trois Pitons (*Hodge 1241*), Pont Cassé (*Ernst 1795, Nicolson 4092, Wilbur 7753, 7833, 8178*), Riversdale (*Howard 11772, Webster 13447*), Roche d'Or Estate (*Stern & Wasshausen 2586*), Sylvania (*Cooper 82, Hodge 567, 569, 1090, 1318, 3821, 3825*), Syndicate (*Hodge 2613, Whitefoord 3599*). In early fruit in mid-May.

A decoction of the bark is reported to be an aphrodisiac (Hodge and Taylor, 1957:576).

Sapium Browne

Sapium caribaeum

Sapium caribaeum Urban, 1902, 3:308.—Jablonski, 1968:409.

La glu, la gluie.

Monoecious, deciduous, glabrous tree to 20 m with white latex; petioles biglandular at apex; leaf-blade elliptic-oblong, apex acute to acuminate (not cucullate), entire to crenulate, to 19 cm long; racemes to 25 cm long; capsule 5 cm in diameter; seed coat fleshy.

Lesser Antilles; in Dominica a scattered, deciduous element in humid areas to 800 m: Clarke Hall (*Ernst 1714, Stern 2443*), Freshwater Lake (*Ernst 1781*), La Chaudière (*Hodge 3616*), Macoucherie River bridge (*Ernst 1761*), Magua (*Taylor 133*), Morne Micotrin (*Wilbur 7461*), Salybia (*Hodge 3362*), Syndicate (*Whitefoord 3521*). Leafs out in May, flowering soon after.

The white sap is used by Caribs as a bird lime (Hodge and Taylor, 1957:576).

The typification has been challenged by Kruijt and Zijlstra (1989).

Sebastiania Sprengel

Sebastiania hexaptera

Sebastiania hexaptera Urban, 1902, 3:303.—Stehlé, 1962a:321.—Whitefoord, 1989:149.

Dioecious, slender shrub or tree to 3 m; leaves opposite, short-petioled, margins with shallow, glandular crenulations; male flowers in thin spikes to 3 cm long, usually with 3 sepals and 3 stamens; female flowers to 3, styles 3, entire.

Guadeloupe and Martinique; new record for Dominica from NW rainforest ~800 m: Syndicate, i.e., slopes of Morne Diablotins (*Whitefoord 3649, 4333, 4334*).

Tragia Linnaeus

Tragia volubilis

Tragia volubilis Linnaeus, 1753:980.—Webster in Webster & Burch, 1968:291.

Fireman.

Monoecious, herbaceous twining vine with stinging hairs; leaf-blade lanceolate, serrate, acuminate; female flowers solitary on long pedicels (to 5 cm in fruit); male flowers shortly pedicellate on separate racemes; capsules covered with stinging hairs, to 7 mm across.

Neotropics; in Dominica in dry woodlands near west coast, 125–250 m: ridge above Clarke Hall (*Ernst 1267*), Colihaut (*Ernst 2115*).

FABACEAE/LEGUMINOSAE

This family breaks into three subfamilies (sometimes treated as families), Mimosoids, Caesalpinoids, and Faboids. In general, the Mimosoids have bipinnate leaves (not *Inga*), radiately symmetric flowers with showy stamens and inconspicuous petals. The Caesalpinoids also tend to have bipinnate leaves (not *Bauhinia, Swartzia,* etc.) and more bilaterally symmetric flowers with showy petals. Faboids tend to have pinnate leaves and very bilaterally symmetric flowers with showy petals. The uppermost Faboid petal is called a standard, the two lowermost petals are generally more or less united on the lower margin to form a keel, and the lateral petals are called wings.

Amherstia nobilis Wallich (Caesalpinoid) of Burma grows in the Roseau Botanic Garden (*Whitefoord 6124*), flowering in April. It has 5–8 pairs of oblong-lanceolate leaflets 1.5–3 dm long, glaucous beneath; pedicels with 2 red bracteoles 8–9 cm long; a long, narrow calyx tube and petals 5–7 cm long, red with a terminal yellow spot.

Arachis hypogaea Linnaeus (Faboid), the peanut, pistache, or mali (Carib) is cultivated (*Hodge 3328*) and easy to recognize by its even-pinnate (2 pairs) leaves and big (to 3 cm long) stipules adnate to the petiole for 1 cm. Used by Caribs for eating, oil, and in rituals (Hodge and Taylor, 1957:561). Adjanohoun et al. (1985:149, pl. 115) reported medicinal uses.

Baikiaea insignis subsp. *minor* (Oliver) J. Leonard (Caesalpinoid) of Africa was in the Roseau Botanic Garden (*Fairchild s.n.*, 28 Jan 1932; *Hodge 2512*). It has a brown-velvety fruit and large white flowers (sepals to 8 cm, petals to 12 cm × 7 cm).

Brownea latifolia Jacquin (Caesalpinoid), a native of Trinidad and Venezuela, was in the Roseau Botanic Gardens (*Hodge 3885, 3927:* the latter as *Brownea rosa* Otto). It is a tree with coral flowers in showy, dense, pendulous clusters and evenly pinnate leaves.

Butea monosperma (Lamarck) Taubert (Faboid), including *Butea frondosa* Koenig ex Roxburgh, was collected in the Botanic Garden in flower in May (*Hodge 3908*) and in fruit in July (*Hodge 940*). This Asiatic tree has a brilliant show of orange to scarlet flowers before leafing out. The leaves are trifoliolate.

Calopogonium mucunoides Desvaux (Faboid), including *C. orthocarpum* Urban, was collected at the Botanic Garden in 1932 (*Fairchild 2785*), the La Plaine Agricultural Station in 1986 (*Whitefoord 5399*), and Petit Coulibri in 1988 (*Whitefoord 6014*). It is a trailing herb with blue flowers and hairy stems and petioles, reportedly used as a cover crop. Whitefoord (1989:145) regarded it as naturalized.

Cassia (Caesalpinoid), defined in its narrow sense (excluding *Chamaecrista* and *Senna*) as having (1) 3 longest stamens with sigmoid filaments and (2) indehiscent fruits, is apparently only cultivated on Dominica. One yellow- and two red- to pink-flowered cassias have been collected or reported:

Cassia fistula Linnaeus, the golden shower tree, flowered in the Botanic Gardens in May 1940 (*Hodge 3912*) and in Apr 1987 beyond Mero (*Whitefoord 5690*). It has leaflets about 10 cm long, a gland at the base of the petiole, and long, terete fruits

(see also yellow-flowered cultivated *Senna multijuga*).

Cassia grandis Linnaeus f., the pinkshower cassia, has pink flowers, enormous woody fruits, and hairy, oblong leaflets that are rounded at each end; apparently it is cultivated in the Roseau Botanic Garden.

Cassia javanica var. *indochinensis* Gagnepain, the pink cassia, has distinctive stipules and no petiolar gland; it has been collected in the Roseau Botanic Garden (*Hodge 3909*). Whitefoord (1989:144) reported another collection from the Botanic Garden.

Copaifera guianensis Desfontaines (Caesalpinoid) was reported in the Portsmouth area by Krause (1915). This could be a misidentification of *Pterocarpus officinalis* Jacquin or *Copaifera officinalis* Linnaeus, the latter reported as cultivated in Martinique (Dwyer, 1951:169), but no Dominica collections have been seen.

Covillea racemosa Bojer ex W. Hooker (Caesalpinoid), a native of Madagascar, has spectacular congested racemes of red flowers and was collected in bud in August in the Roseau Botanic Garden (*Hodge 956*).

Pachyrrhizus erosus (Linnaeus) Urban (Faboid), the yam bean, was reported for Dominica by Grisebach (1860:195) under the name *Pachyrrhizus angulatus* L. Richard, based on *Imray 103* (K), presumably cultivated for its watery tubers. It is a twiner with 3 sublobed or toothed leaflets and the stigma is lateral and globose.

Parkinsonia aculeata Linnaeus (Caesalpinoid) is a showy and armed shrub with flattened rhachises, tiny and deciduous leaflets, showy yellow flowers and a narrowly cylindric pod. Hodge (1954:23) reported it in the dry scrub of the west coast, but this is not confirmed. It was collected in 1890 (*Dudley s.n.*) without locality, perhaps from the Botanic Garden. The only other collection seen (*Hodge 907*) is from the Botanic Garden.

Peltophorum linnaei Bentham (Caesalpinoid) was noted as having been collected on Dominica by Kellogg (in Howard, 1988, 4:377).

Phaseolus (Faboid), once a large genus but now with most species transferred to *Vigna*, is cultivated on Dominica. *Phaseolus lunatus* Linnaeus, the broad bean or lima bean, was cited for Dominica by Stehlé et al. (1948, 2:115). *Phaseolus vulgaris* Linnaeus, the kidney bean, red bean, string bean, etc. (ma kuti in Carib), has been collected from cultivation at Peinville (*Kimber 853, 868*). The latter species was discussed by Hodge and Taylor (1957:566), who pointed out several beliefs.

Pongamia pinnata (Linnaeus) Pierre (Faboid) was collected in the Botanic Garden (*Hodge 996*), flowering in September. It is remarkably similar to *Lonchocarpus*, but the flower pedicels are not bifurcate (2-flowered).

Samanea saman (Jacquin) Merrill (Mimosoid), the rain tree, is cultivated as a big tree at Antrim (*Gates Clarke s.n.*), Coulibistri (*Whitefoord 5713*), and elsewhere in Dominica. It has pink, powderpuff-like inflorescences, bipinnate leaves, each of 2–4 pinnae with up to 8 pairs of pubescent, 5 cm long leaflets (the outer being largest), and blackish, linear pods. It is known to naturalize elsewhere and may do so on Dominica. It would key here to *Albizia* but is pubescent.

Sesbania grandiflora (Linnaeus) Poiret (Faboid) was collected in the Roseau Botanic Garden (*Bassett 9* at K), a small tree with large pink flowers.

Sophora tomentosa Linnaeus (Faboid) was cultivated in the Roseau Botanic Garden (*Hodge 921*). The leaves are odd-pinnate with 5–10 pairs of tomentose leaflets, stamens are 10, free, and the pod is strongly constricted between the somewhat globose seeds.

Excluded Fabaceae

Sesbania sericea (Willdenow) Link (Faboid) is Antillean and was reported for Dominica by Vélez (1957:101) as *Sesban sericea* on the authority of Britton and Wilson (1924, 5:395), who cited "Antigua to Martinique." To be sought in wet or brackish areas. It would key to *Sabinea* but has more leaflets and yellow flowers.

Excellent keys to the subfamilies and their genera appear in Howard (1988, 4:335–440) and are recommended for those wishing to master the subfamilies. Dominica has a rich legume flora but it may be small enough to accommodate an artificial identification key that groups similar taxa rather than the usual classification key that groups related taxa.

1. Leaves unifoliolate (*Bauhinia* and *Swartzia* are Caesalpinoid, the rest Faboid).
   2. Leaves bilobed . . . . . ***Bauhinia***
   2. Leaves unlobed.
      3. Inflorescence conspicuously bracteate, the bracts persistent, papery, and enclosing the flowers and fruits . . . . . ***Flemingia***
      3. Inflorescence not so.
         4. Inflorescence axillary, <2 cm long; leaves >5 cm broad; large sprawling or scandent shrubs . . . . . ***Dalbergia***
         4. Inflorescence terminal, >2 cm long; leaves usually <5 cm broad; erect herbs, shrubs or trees.
            5. Flowers violet; stipules scarious . . . . . ***Alysicarpus***
            5. Flowers yellow; stipules not scarious.

6. Herbs; petals 5; leaves tapered to base . . . . . ***Crotalaria***
6. Trees; petal 1; leaves rounded at base . . . . . ***Swartzia***

1. Leaves 2-more-foliolate.
7. Flowers radially symmetrical, petals equal, valvate; leaves even-pinnate, bipinnate (except once-pinnate in *Inga*) (MIMOSOIDEAE).
8. Inflorescence spicate or racemose.
9. High climbing vines . . . . . ***Entada***
9. Trees.
10. Leaflets alternate . . . . . ***Adenanthera***
10. Leaflets opposite.
11. Leaves bipinnate (see also cult. *Mimosa arenosa*) . . . . . ***Acacia muricata***
11. Leaves once-pinnate . . . . . ***Inga***
8. Inflorescence capitate.
12. Plants with straight stipular spines or recurved internodal thorns.
13. Fruits unarmed . . . . . ***Acacia***
13. Fruits armed . . . . . ***Mimosa***
12. Plant unarmed.
14. Leaflets >0.5 cm broad.
15. Leaflets rhomboid-angular . . . . . ***Pithecellobium jupunba***
15. Leaflets rounded.
16. Leaflets tergeminate (6 per leaf) . . . . . ***Calliandra***
16. Leaflets 4 or 8-more per leaf.
17. Leaflets 8-more per leaf . . . . . ***Albizia***
17. Leaflets geminate (4 per leaf) . . . . ***Pithecellobium unguis-cati***
14. Leaflets <0.5 cm broad.
18. Pinnae >10 cm long.
19. Pinnae 20 or more; leaflets to 0.3 cm long . . . . ***Anadenanthera***
19. Pinnae 10 or fewer; leaflets to 1 cm long . . . . . ***Leucaena***
18. Pinnae 3-4 cm long.
20. Erect shrub; flowers white; stipules linear, hair-like . . . . . ***Desmanthus***
20. Prostrate shrub or herb; flowers yellow; stipules broader . . . . . ***Neptunia***
7. Flowers bilaterally symmetrical; petals unequal, imbricate; leaves various, including digitate, pinnate (odd-, even-, and bi-).
21. Leaves evenly pinnate (Caesalpinoids and a few Faboids).
22. Leaves bipinnate (all Caesalpinoids).
23. Pinnae <10; petals to 3 cm long; fruit to 10 cm long . . . . ***Caesalpinia***
23. Pinnae >10; petals to 5 cm long; fruit to 50 cm long . . . . . ***Delonix***
22. Leaves once-pinnate.
24. Leaflets 2.
25. Tree; leaflets >10 cm long; fruit unjointed . . . . . ***Hymenaea***
25. Herb; leaflets to 2 cm long; fruit jointed . . . . . ***Zornia***
24. Leaflets 4-more.
26. Twining climber . . . . . ***Abrus***
26. Trees, shrubs, or herbs.
27. Leaflets obcordate; fruit flattened and papery . . . ***Haematoxylum***
27. Leaflets acute; fruit various but not flattened and papery.
28. Fertile stamens opening by lateral slits.
29. Stamens 10; fruit dry . . . . . ***Sabinea***
29. Stamens 3; fruit with fleshy edible pulp . . . . . ***Tamarindus***
28. Fertile stamens poricidal (see also cult. *Cassia*).
30. Inflorescence supra-axillary; bracteoles 2;. legumes elastically dehiscent; androecium actinomorphic . . . . . ***Chamaecrista***

30. Inflorescence axillary; bracteoles 0; legumes indehiscent or inertly dehiscent; androecium zygomorphic . . . . . ***Senna***

21. Leaves odd-pinnate.
  31. Lateral leaflets alternate.
    32. Woody vines; flowers purple to white; fruit unwinged . . . . ***Dalbergia***
    32. Tree; flowers yellow; fruit winged on one side . . . . . ***Pterocarpus***
  31. Lateral leaflets opposite (including digitate).
    33. Leaflets 5-more.
      34. Plants herbaceous.
        35. Plants not twining; leaflets many, to 0.3 cm broad . . . . . ***Aeschynomene***
        35. Plants twining; leaflets to 9, >1 cm broad.
          36. Pedicel to 2 cm; calyx to 1 cm; corolla yellow . . . ***Chaetocaylx***
          36. Pedicel to 1 cm; calyx to 2 cm; corolla blue-white . . . ***Clitoria***
      34. Plants woody (shrubs or trees).
        37. Leaflets stipellate.
          38. Trees; leaflets 1 cm broad; pods globose, indehiscent . . . . . ***Andira***
          38. Shrubs; leaflets to 1 cm broad; pods elongate, dehiscent.
            39. Hairs basifixed . . . . . ***Cracca***
            39. Hairs centrifixed . . . . . ***Indigofera***
        37. Leaflets estipellate.
          40. Large trees; stamens free or only connected at base.
            41. Leaflets 3-5; primary lateral veins poorly differentiated; pistil (and fruit) stipitate . . . . . ***Swartzia caribaea***
            41. Leaflets 7-13; primary lateral veins strongly differentiated; pistil (and fruit) sessile.
              42. Secondary lateral veins straight; stamens 9 united (at base), 1 free; seeds soft, >2.5 cm long, green but covered with a red skin (aril) . . . . . ***Dussia***
              42. Secondary later veins jagged, stamens all free; seeds hard, to 1 cm long, red or red and black . . . . . ***Ormosia***
          40. Shrubs or small trees; stamens united for most of their length.
            43. Leaflets to 1 cm broad; calyx round-lobed or long-toothed.
              44. Leaflets rounded at base; venation reticulate . . . . ***Cracca***
              44. Leaflets acute at base; venation striate . . . . . ***Tephrosia***
            43. Leaflets >1 cm broad; calyx truncate or lobes about as broad as long.
              45. Pedicel bifurcate (2-flowered) or, if 1 flower has fallen, pedicel jointed; pod broad, 1-2-seeded . . . . . ***Lonchocarpus***
              45. Pedicel unbranched, unjointed; pod 5-10-seeded.
                46. Leaflets >2× longer than broad; pods unwinged . . . . . ***Gliricidia***
                46. Leaflets <2× longer than broad; pods 4-winged . . . . . ***Piscidia***
    33. Leaflets 3.
      47. Leaflets digitate, the terminal petiolule not jointed . . . . ***Crotalaria***
      47. Leaflets pinnate, the terminal petiolule jointed.
        48. Venation striate; stipules adnate to petiole . . . . . ***Stylosanthes***
        48. Venation reticulate; stipules free from petiole.

49. Standard (top petal) or keel (bottom petals) much larger than others.
  50. Keel the largest petal; pods often with stinging hairs . . . . . ***Mucuna***
  50. Standard the largest petal; pods without stinging hairs.
    51. Woody tree or shrub; flower red; pods constricted between seeds . . . . . ***Erythrina***
    51. Herbaceous twiner; pods linear.
      52. Flowers blue . . . . . ***Centrosema***
      52. Flowers yellow . . . . . ***Clitoria falcata***
49. Standard and keel ± equal.
  53. Plants woody.
    54. Shrubs . . . . . ***Cajanus***
    54. Vines . . . . . ***Dioclea***
  53. Plants herbaceous.
    55. Fruit flat, breaking into joints . . . . . ***Desmodium***
    55. Fruits various but not breaking into joints.
      56. Leaflets resin-dotted beneath; pods 1–2-seeded . . . . . ***Rhynchosia***
      56. Leaflets not resin-dotted beneath; pods several–many-seeded.
        57. Inflorescence to 4 cm long; leaflets to 2 cm wide; pubescent beneath.
          58. Leaflets rounded, sparsely pubescent beneath; calyx 4-lobed; stamens 9 (fertile & united) + 1 (free) . . . . . ***Galactia***
          58. Leaflets acute-obtuse, densely pubescent beneath; calyx 5-lobed; stamens all united, alternately sterile . . . . . ***Teramnus***
        57. Inflorescence (at maturity) at least 5 cm long; leaflets rarely <2 cm wide.
          59. Calyx lobes very unequal (upper 2 fused and large, lower 3 minute) . . . . . ***Canavalia***
          59. Calyx lobes ± equal.
            60. Pod with persistent style; style flattened . . . . . ***Lablab***
            60. Pod without persistent style; style terete.
              61. Fruiting pedicels 0.4–3.0 cm long; bracts and bracteoles persisting into flowering; style coiled through 2 revolutions; seeds 3–10 (see cult. taxa) . . . . . ***Phaseolus***
              61. Fruiting pedicels 0.1–1.7 cm long; bracts and bracteoles caducous before flowering; style various, if coiled then through 3 revolutions; seeds 6–27.
                62. Inflorescence nodes not swollen; upper calyx teeth free; wings much larger than other petals . . . . . ***Macroptilium***
                62. Inflorescence nodes conspicuously swollen; upper calyx teeth usually partly connate; wings ± equaling other petals . . . . ***Vigna***

Abrus Adanson (Faboid)

Abrus precatorius

Abrus precatorius Linnaeus, 1767a:472.
Glycine abrus Linnaeus, 1753:753.

Graines d'eglise, crabs' eyes, jumbie bead.

Slender twiner, becoming woody; leaves to 15 cm long with 10–20 pairs of oblong leaflets, the rhachis ending in a bristle (even-pinnate); corolla pale purple; pod oblong, beaked, partitioned between the 3–5 seeds; seeds shiny, bright red with a basal black spot.

Pantropical; common in Dominica near sea level: Cabrits (*Whitefoord 4023*), Dublanc (*Hodge 2515*), Grand Bay (*Wilbur 8017*), Layou (*Hodge 587*), Macoucherie (*Hodge 3767*), Mero (*Ernst 1422*), Pointe Ronde (*Hodge 2687*), Portsmouth area (DHN!), Rodney's Rock (*Nicolson 1970*).

The seeds are used in necklaces but should not be eaten (poisonous).

Acacia Miller (Mimosoid)

Woody plants, some armed; leaves bipinnately compound, stamens many, free; flower yellow (ours); pods thin or woody, not elastically dehiscent.

This genus needs collecting on Dominica; more species are expected.

1. Legume turgid, woody; small tree with stipular spines at each node . . . . . *A. farnesiana*
1. Legume flat, leathery or papery; unarmed tree or scrambler armed with interpetiolar recurved prickles.
   2. Unarmed tree; flowers on elongate spikes . . . . . *A. muricata*
   2. Scrambler with recurved prickles, flowers in heads . . . . . *A. retusa*

Acacia farnesiana

Acacia farnesiana (Linnaeus) Willdenow, 1806, 4(2):1083.—Little & Wadsworth, 1964:142, pl. 58.
Mimosa farnesiana Linnaeus, 1753:521.
Vachellia farnesiana (Linnaeus) Wight & Arnott, 1834:272.

Shrub or small tree armed with paired stipular spines; pinnae 2–6 pairs, each pinna with 10–25 pairs of small, 3–5 mm long leaflets; inflorescence capitate; pod turgid, woody, ± curved.

Pantropical; common and sometimes dominant in dry woodlands along west coast of Dominica: Cabrits (*Whitefoord 4049*), Colihaut (*Kimber 1063*), Dublanc (*Whitefoord 4272*), Grand Savanne (*Ramage s.n.*), Macoucheri (*Chambers 2732*), Point Ronde (*Hodge 2700*), Scotts Head (*Hodge 1604, Webster 13417, Wilbur 7602*). Flowering from February–September.

One specimen from near St. Joseph (*Whitefoord 5686* at BM), identified as *Acacia tortuosa* (Linnaeus) Willdenow by C.D. Adams (Whitefoord, 1989:145), may well be that species and represent a new record for Dominica. Its fruits appear to be subpubescent and rather flatter than the glabrous, fat fruits of typical *A. farnesiana*.

Acacia muricata

Acacia muricata (Linnaeus) Willdenow, 1806, 4(2):1058.—Little et al., 1974:246, pl. 356.
Mimosa muricata Linnaeus, 1759a:1311.
Senegalia muricata (Linnaeus) Britton & Rose in North Amer. Fl., 1928, 23(2):113.

Small, unarmed tree; pinnae 4–6 pairs, each pinna with 8–16 pairs of large, 1–2 cm long leaflets; inflorescence on elongate spikes; pods flat, ± leathery.

West Indies; specimens not seen from Dominica but the species was attributed to Dominica by Britton and Wilson (1925, 5:352) and reported with an exclamation mark by Howard (1988, 4:341).

Acacia retusa

Acacia retusa (Jacquin) Howard, 1973b:459; 1988, 4:342.
Mimosa retusa Jacquin, 1760:34.
Mimosa paniculata Vahl [in West, 1793:239, nom. nud.], 1807, Eclog., 3:39, non *Acacia paniculata* Willdenow.
Acacia guadalupensis A.P. Candolle, 1825, 2:464.
Acacia westiana A.P. Candolle, 1825, 2:464.
Senegalia guadalupensis (A.P. Candolle) Britton & Rose in North Amer. Fl., 1928, 23(2):119.
Senegalia westiana (A.P. Candolle) Britton & Rose in North Amer. Fl., 1928, 23(2):119.
Acacia riparia sensu auctt., non Kunth.

Scrambling woody climber with recurved prickles on stems; pinnae 7–9 pairs, each pinna with 15–20 pairs of linear leaflets 6–14 mm × 1.5–2.5 mm; flowers capitate; legume flat, papery, glabrous.

South America and West Indies; dry localities on west coast of Dominica: West Cabrit top (DHN!), Petit Coulibri (*Whitefoord 4673*), Scotts Head (*Hodge 1633*), sine loc. (*Imray 433* at GH).

Adenanthera Linnaeus (Mimosoid)

Adenanthera pavonina

Adenanthera pavonina Linnaeus, 1763:384.—Little & Wadsworth, 1964:144, pl. 145.

Savonette, jumbie bead.

Unarmed tree; leaves bipinnate with 2–5 pairs of pinnae, each with 10–20 alternate leaflets (1.5–4.5 em × 1–2.5 cm); flowers racemose, yellow; stamens 10, the anthers with a deciduous gland; pods 15–25 cm × 1–2 cm, papery, flat but twisting; seeds bright red, lenticular.

Asian but widely introduced and naturalizing; rarely collected on Dominica: Syndicate (DHN!, fr.), sine loc. (*Imray 119*).

Aeschynomene Linnaeus (Faboid)

Herbs; leaflets many, odd-pinnate; stipules peltate (ours) extended below attachment; fruit jointed, breaking up at maturity.

1. Leaflets with several primary veins; pods deeply crenate on lower margin . . . . . ***A. americana***
1. Leaflets with a single midrib; pods slightly crenate on lower margin . . . . . ***A. sensitiva***

Aeschynomene americana

Aeschynomene americana Linnaeus, 1753:713.—Rudd, 1955:24.

Flowers purplish; stipules and bracts persistent.

Neotropics and Africa; weed of disturbed places in Dominica: L'Or River in gravel dump (*Nicolson 2027*), Roseau (*Krauss 1245*), Trafalgar Falls road (*Whitefoord 4587*).

Our material seems to have fruits with glandular hairs and hispid stipules of *Aeschynomene americana* var. *glandulosa* (Poiret) Rudd.

Aeschynomene sensitiva

Aeschynomene sensitiva Swartz, 1788:107.—Rudd, 1955:50.

Flowers yellow; stipules and bracts deciduous.

Neotropics and Africa; weed of wet disturbed areas of Dominica: Cabrit Swamp (*Whitefoord 4055*), Castle Bruce Road (*Ernst 1458*), Chaudière (*Hodge 3615*), Pont Cassé area (*Webster 13467, Wilbur 7826*), Portsmouth area (*Hodge 589*), Providence Valley near Laudat (*Hodge 2053*), Sylvania Estate (*Cooper 67, Hodge 588*).

Albizia Durazzini (Mimosoid)

Albizia lebbeck

Albizia lebbeck (Linnaeus) Bentham, 1844a:87.
Mimosa lebbeck Linnaeus, 1753:516.

Unarmed trees; leaves bipinnate with 2–4 pinnae, each with 4–9 pairs of 1.5–5 cm × 0.5–2 cm leaflets; flowers umbellate, greenish white; petals united to middle; stamens many, united below, ~3 cm long; pods 15–30 cm × 2–4 cm, flat, thin, shining, rattling in the wind; seeds light brown.

Introduced from Old World and naturalizing; locality information for Dominica not available (cultivated?): (*Dudley s.n.*, Mar 1890).

Alysicarpus Desvaux, nom. cons. (Faboid)

Alysicarpus vaginalis

Alysicarpus vaginalis (Linnaeus) A.P. Candolle, 1825, 2:353.
Hedysarum vaginale Linnaeus, 1753:746.

Perennial herb with branches spreading; stipules scarious, 4–6 mm, ± united, enclosing 2 stipels; leaflet solitary, orbicular to lanceolate on the same plant; flowers purplish, in short terminal racemes, stamens 9+1; pod nearly terete, with several indehiscent joints.

Old World but now widely naturalized; low weed in Dominica from sea level to 200 m: Carib Point (*Wilbur 7911*), Coulibistri (*Ernst 1397*), Imperial Road (*Hodge 591*), Morne Daniel (*Kimber 1105*), Morne Plaisance Estate (*Whitefoord 4424, 4505*), Roseau (*Hodge 590*), St. David Bay (*Ernst 1464*), Scotts Head (*Whitefoord 5131*), Tarou Cliffs (*Ernst 1706*).

Anadenanthera Spegazzini (Mimosoid)

Anadenanthera peregrina

Anadenanthera peregrina (Linnaeus) Spegazzini, 1923:313.—Reis-Altschal, 1964:46.
Mimosa peregrina Linnaeus, 1753:520.
Piptadenia peregrina (Linnaeus) Bentham, 1841:340.—Little & Wadsworth, 1964:158, pl. 660.
Niopa peregrina (Linnaeus) Britton & Rose, 1927:37.

Unarmed tree; leaves bipinnately compound, pinnae pairs 10–30, each with 25–80 pairs of leaflets 2–8 mm × 0.5–1.5 mm; flowers capitate, white to creamy; stamens 10, without an apical gland; legume flat, straight to falcate, 5–35 cm × 1–3 cm; seeds dark brown to black, shiny, flat.

South America, believed introduced and naturalizing in the West Indies; said to be common in ravines of dry west coastal area of Dominica: Chateau Corner (*Eggers 703*), Grand Savanne (*Wilbur 8347*), Roseau vicinity (*Stehlé 6320*), Springfield road (*Whitefoord 5834*). Flowering without leaves in April.

This and other taxa of the genus are the source of an alkaloid capable of producing profound and deep changes in perception, elsewhere called yopo, coholba, or vilca.

Andira Jussieu, nom. cons. (Faboid)

Andira sapindoides

Andira sapindoides (A.P. Candolle) Bentham, 1860:123.—Howard, 1988, 4:448.
Pterocarpus sapindoides A.P. Candolle, 1825, 2:475.
Andira inermis var. *sapindoides* (A.P. Candolle) Grisebach, 1860:202.

L'angelin, bastard mahogany, na kabu (Carib).

Tall tree; leaves odd-pinnate, with 4–7 pairs of opposite, large (5–8 cm long) stipellate leaflets; flowers paniculate, pink to purple; pod globose, indehiscent; 3.5 cm drupe with a single pendulous seed.

Lesser Antilles; cited for Dominica by Hodge (1954:27, as *A. inermis*) as a component of transition zone around Milton Estate: Layou River (*Ramage s.n.* 6 Jul 1888 at K), La Plaine (*Ramage s.n.* 10 Jan 1889 at GH). Rarely collected, possibly because of the size of the trees. Cut for valuable timber with durable, red-brown wood (Hodge and Taylor, 1957:561).

This element seems within the range of variable and widespread (neotropics and Africa) *Andira inermis* (W. Wright) Kunth ex A.P. Candolle.

Bauhinia Linnaeus (Caesalpinoid)

R. Wunderlin (USF) kindly reviewed this text and the determinations.

Several species have been identified from collections made in the Roseau Botanic Garden: *Bauhinia acuminata?* Linnaeus (*Hodge 899* at GH) with large white flowers, *Bauhinia racemosa* Lamarck (*Hodge 3905*) with small white flowers, and *Bauhinia tomentosa* Linnaeus (*Hodge 902, 1000* at GH) with large yellow flowers. All have 10 stamens.

Two pink-flowered species are also expected in cultivation: *Bauhinia purpurea* Linnaeus (with 3 perfect stamens) and *Bauhinia variegata* Linnaeus (with 5 perfect stamens).

Woody; leaves mostly 2-lobed or 2-foliolate, with palmate venation.

1. Cirrhiferous climber; corolla white to pinkish yellow; stamens 10 . . . . . ***B. guianensis***
1. Tree; standard conspicuously purplish red-blotched on yellow background, other petals pinkish; stamen solitary . . . . . ***B. monandra***

Bauhinia guianensis

Bauhinia guianensis Aublet, 1775:377, pl. 145.—Wunderlin, 1976:353.
Bauhinia splendens Kunth, 1824, 6:321.
Schnella splendens (Kunth) Bentham, 1840:97.—Britton & Rose in North Amer. Fl., 1930, 23(4):207.
Schnella excisa Grisebach, 1860:211.
Bauhinia excisa (Grisebach) Hemsley, 1880, 1:337.

High and heavy climber with stems flattened; leaves coriaceous, coppery-sericeous below, leaves on juvenile growth mostly deeply 2-lobed; inflorescence racemose; calyx <1 cm long, 15-ribbed, persistent; petals to 1.5 cm with 10 stamens included.

Southern Mexico through northern South America and the Lesser Antilles; in Dominica known only from a sterile specimen from Milton Estate at 500 m (*Hodge 2924*, DHN!).

Bauhinia monandra

Bauhinia monandra Kurz, 1873:73.

Small tree with bilobed leaves; inflorescence racemose with flowers on long (4 cm) pedicels; calyx spathaceous, deciduous; petals pinkish, the upper mottled and darker, to 4 cm long; stamen solitary.

Introduced from Asia for showy flowers and escaping; in Dominica in scrub thickets near Massacre (*Ernst 1627, Webster 13290*). Flowering in June.

Caesalpinia Linnaeus (Caesalpinoid)

Trees, shrubs or climbers; leaves bipinnate; flowers orange or yellow, 5-merous; stamens 10, free; pods compressed, orbicular to linear.

Caesalpinia coriaria (Jacquin) Willdenow was cultivated in the Botanic Garden (*Hodge 955, 985*), flowering in August 1937. It is an unarmed tree with an odd number of pinnae and many tiny (0.5–0.9 cm long) leaflets.

Caesalpinia ferrea Martius, cultivated in Roseau Botanic Garden (*Nicolson 4214*), is a large tree with a short, thick trunk and sheeting bark.

1. Branchlets glabrous; lower pedicels 5.8 cm long; petals long-clawed; filaments 6–8 cm long . . . ***C. pulcherrima***
1. Branchlets puberulent; lower pedicels to 2 cm long; petals not long-clawed; filaments to 1.5 cm long.
   2. Stipules persistent, foliose; leaflets 1.5–3.0 cm wide; fruit armed; seeds (1–)2 . . . . . ***C. bonduc***
   2. Stipules caducous, not foliose; leaflets to 0.5 cm wide; fruit unarmed; seeds 6–8 . . . . . ***C. decapetala***

Caesalpinia bonduc

Caesalpinia bonduc (Linnaeus) Roxburgh, 1832, 2:362.—Dandy & Exell, 1938:179.—Hattink, 1974:17.
Guilandina bonduc Linnaeus, 1753:381.
Caesalpinia crista Linnaeus, 1753:380, partim.
Guilandina bonducella Linnaeus, 1762:545.
Caesalpinia bonducella (Linnaeus) Fleming, 1810:159.
Guilandina crista (Linnaeus) Small, 1903:591, partim.

L'epine.

Armed, vine-like shrub to 6 m, often climbing; stipules compound, to 3 cm long; leaflets ovate or oblong-elliptic, 2–4 cm long; petals yellow; pod oblong to orbicular, prickly; seeds gray, 1.5–2 cm diameter.

Native to Asia?, widely naturalizing in tropics; in Dominica forming coastal thickets: Cabrits (*Ernst 1932, Hodge 592, Nicolson 1882*), Hatton Garden Estate (*Hodge 2937*), Pringles Bay (*Whitefoord 3733*).

Caesalpinia decapetala

Caesalpinia decapetala (Roth) Alston, 1931:89.—Hattink, 1974:24.
Reichardia decapetala Roth, 1821:210.
Caesalpinia sepiaria Roxburgh [1814:32, nom. nud.], 1832, 2:360.
Biancaea sepiaria (Roxburgh) Todaro, 1876, 1:3.

Arrête negre.

Armed shrub to 3 m, often climbing; leaflets oblong, 1.0–1.5 cm long; petals yellow; pod oblong, flat, finely puberulent; seeds olive, 1 cm long.

Native to Asia, naturalizing in the West Indies; in Dominica forming thickets in interior pastures and roadsides: L'Imprévue (*Hodge 1261*), Ridgefield (*Hodge 2135*), Sylvania (*Cooper 90*), sine loc. (*Eggers s.n.*, Dec 1883, *518*, Nov 1881).

Caesalpinia pulcherrima

Caesalpinia pulcherrima (Linnaeus) Swartz, 1791:166.—Hattink, 1974:50.
Poinciana pulcherrima Linnaeus, 1753:380.

Usually armed shrub to 3 m, not climbing; leaflets oblong, to 2.3 cm long; petals red, orange or yellow; pod oblong, flat, glabrous.

New World tropics, widely cultivated in tropics for its showy flowers; in Dominica naturalized on the dry west coast near sea level and also cultivated inland: Antrim (*Gates Clarke s.n.*), Clarke Hall (*Ernst 1692*), Grand Savanne (*Wilbur 7654*), Macoucherie (*Hodge 3720*).

Cajanus A.P. Candolle, nom. cons. (Faboid)

Cajanus cajan

Cajanus cajan (Linnaeus) Millspaugh, 1900:53, "*Cajan(us) cajan*".—Maesen, 1986:65.
Cytisus cajan Linnaeus, 1753:739.
Cajan cajan (Linnaeus) Huth, 1893:133, nom. inadmiss.

Pigeon pea.

Erect shrub to 3 m; leaves 3-foliolate, resin-dotted and silvery beneath; flowers yellow inside and out or red outside; pod flattened, obliquely depressed between the seeds.

Said to have originated in India (Maesen, 1986:76) but now widespread in tropics; widely cultivated as hedge (and for seeds) in Dominica, apparently escaping: Mt. Joy (*Hodge 1299*), Pickard River (*Whitefoord 5243*), Ridgefield (*Hodge 2133*), Roseau Valley (*Nicolson 2140, 2141, Whitefoord 4591*), South Chiltern (*Hodge 1470*), Walkers Rest (*Chambers 2613*).

Adjanohoun et al. (1985:149, pl. 116) reported medicinal uses.

Although I (1975:390) argued for Huth instead of Millspaugh as the first to make the combination, I now realize that Huth's "*Cajan cajan*" cannot be corrected to "*Cajanus cajan*" because *Cajan* Adanson is a validly published generic name, not a correctable misspelling of an earlier validly published "*Cajanus.*" *Cajanus* is in the nature of a now conserved later orthographic variant of *Cajan* but is treated as a different name.

Calliandra Bentham, nom. cons. (Mimosoid)

Calliandra tergemina

Calliandra tergemina (Linnaeus) Bentham, 1844a:96.
Mimosa tergemina Linnaeus, 1753:517.
Anneslia tergemina (Linnaeus) Britton & Rose in North Amer. Fl., 1928, 23:53.

Madame ti poule.

Shrub to 2 m; leaves bipinnate with 6 leaflets, 3 on each of the two pinnae (the lower pair being reduced to a single leaflet); stamens >10, showy, 2.5 cm long, white below and reddish at end; fruits green with thickened red margin elastically opening from end by recurving.

Guadeloupe south into northeastern South America; abundant in Dominica in scrub along the west coast up to 350 m: Cabrits to Colihaut (*Hodge 2659, Nicolson 1897, Whitefoord 4422, Wilbur 8275, 8356*), Grand Savanne to Layou River (*Chambers 2779, Ernst 1041, Hodge 3775, 3791, Webster 13289, Wilbur 7640*), Layou to Roseau area (*Eggers 519, Hodge 1305, Fairchild 2690, Stehlé 6319*).

Howard (1988, 4:350) reported cultivated *Calliandra haematocephala* Hasskarl on Dominica (with exclamation mark, indicating he had seen material).

Canavalia A.P. Candolle, nom. cons. (Faboid)

Another species, *Canavalia ensiformis* (Linnaeus) A.P. Candolle, also known as horsebean, has been collected from Carib Reserve mulch plantings on Dominica (*Hodge 3346*). The leaflets are ovate to elliptic, the pods 30–35 cm long, and the seeds are white to ivory.

Canavalia rosea

Canavalia rosea (Swartz) A.P. Candolle, 1825, 2:101.— Verdcourt in Gillett et al. in Milne-Redhead & Polhill, 1971, Legum., 1(2):576.—Howard, 1988, 4:457.—Nicolson et al., 1988:128.
Dolichos maritimus Aublet, 1775:765.
Dolichos obtusifolius Lamarck, 1786, 2:295, non Jacquin, 1768.
Dolichos roseus Swartz, 1788:105.
Dolichos rotundifolius Vahl, 1791, 2:81.
Canavalia maritima Du Petit-Thouars, 1813:80.—Sauer, 1964:163.
Canavalia obtusifolia A.P. Candolle, 1825, 2:404, nom. superfl. [incl. *Dolichos rotundifolius* Vahl, 1791].
Canavalia maritima (Aublet) Urban, 1919a:400, non *C. maritima* Du Petit-Thouars, 1813.—Adams, 1972:357.

Horse bean.

Perennial herbs with prostrate or scrambling stems; leaflets pinnately 3-foliolate, orbicular to obovate, obtuse to emarginate, 4–10 cm long; inflorescence nodose-racemose; calyx 2-lipped; corolla pink to magenta; stamens monadelphous to middle; style glabrous; pods 5–15 cm × 2.5 cm; seeds oblong, brown, marbled.

Tropical sea coasts; reported as common strand plant on Dominica: Cabrits (*Whitefoord 4026*), Hatton Garden (*Hodge 2961*), Pointe Ronde (*Hodge 2752*), Tarou (*Ernst 1500*), sine loc. (*Dudley s.n.*, Mar 1890).

There is controversy on the nomenclature of this species. Adams (1972) accepted *C. maritima* (Aublet) Urban, while Gillett et al. (in Milne-Redhead and Polhill, 1971) accepted *C. rosea* (Swartz) A.P. Candolle and Sauer (1964), and Lourteig (1988b:394) accepted *C. maritima* (Aublet) Thouars. The solution to this problem lies in determining whether or not *Dolichos maritimus* Aublet and *Canavalia maritima* Thouars are based on the same type. In my opinion, they are not. *Dolichos maritimus* Aublet is solely based on *Phaseolus maritimus, fructu duro, semine variegato* Plumier (as noted by Lourteig, 1988b:393), typified by Plumier's unpublished plate 99 in vol. 2 at Paris (cited by Aublet as "Mss. 99 t. 2") of the

New World, even though Sauer (1964:163) lectotypified it on "*Phaseolus maritimus purgans* ... Pluk. Phytogr. t. 51, fig. 2. 1691," a South Indian element from Bisnagar (more correctly Vijayanagar or Victory City), an element not mentioned by Aublet or Plumier. *Canavalia maritima* Thouars may be typified by material from Madagascar or Reunion, but it clearly was considered by the author to be identical with Katu tsjandi (or Canavali in Hindi) Rheede (1688, 8:83, pl. 43) and *Phaseolus maritimus purgans* ... Pluk. Verdcourt's lectotypification on Plukenet's illustration seems acceptable. The synonymy hinges on *Dolichos maritima* Aublet (New World) and *Canavalia maritima* Thouars (Old World) being nomenclaturally heterotypic, albeit taxonomically conspecific.

Centrosema (A.P. Candolle) Bentham, nom. cons. (Faboid)

Twining vine with 3-foliolate leaves; stipules and stipels persistent; nodes of inflorescence not swollen; flowers subtended by striate bracteoles, large, with standard spurred near base; stamens 9+1; style glabrous; pod linear, flattened but twisted in age, the 2 valves thick-edged.

Centrosema plumieri (Persoon) Bentham was attributed to Dominica by Vélez (1957:99) on the authority of Britton and Wilson (1924, 5:412), who reported *Bradburya plumieri* "St. Kitts to Trinidad." This species has conspicuous bracteoles in flower that are glabrous and longer than the calyx. The pods are larger and with definite wings about one-third from each valve margin. Howard (1988, 4:459) listed this species for Dominica with an exclamation mark.

1. Calyx teeth unequal, the lower one subulate and twice as long as other deltoid teeth; pod 5–7 mm broad . . . . . ***C. pubescens***
1. Calyx teeth ± equal, the lower one only slightly longer than other linear teeth; pod <4 mm wide . . . ***C. virginianum***

Centrosema pubescens

Centrosema pubescens Bentham, 1837:55.
Bradburya pubescens (Bentham) Kuntze, 1891, 1:163.

Terminal leaflet usually >5 cm long; standard large, ~4 cm long.

Neotropical but widely introduced; vine over roadside shrubs in east Dominica: Rosalie (*Ernst 1354*).

Centrosema virginianum

Centrosema virginianum (Linnaeus) Bentham, 1837:56.
Clitoria virginiana Linnaeus, 1753:753.
Bradburya virginiana (Linnaeus) Kuntze, 1891, 1:164.

Terminal leaflet usually <5 cm long; standard smaller, <3 cm long.

Neotropics and introduced in Africa; usually low elevations in west and south Dominica: Cabrit Swamp (*Whitefoord 4064*), Clarke Hall (*Ernst 1704*), Grand Bay (*Wilbur 7905*), Grand Savanne (*Ernst 1053, Nicolson 1945, Wilbur 7626*), Roseau (*Hodge 599*), Scotts Head (*Webster 13118*), Syndicate (*Whitefoord 3882*), sine loc. (*Imray 33*).

Chaetocalyx A.P. Candolle (Faboid)

Chaetocalyx scandens

Chaetocalyx scandens (Linnaeus) Urban, 1900, 2:292.—Rudd, 1958:231.
Coronilla scandens Linnaeus, 1753:743.
Glycine vincentina Ker, 1824.
Chaetocalyx vincentina (Ker) A.P. Candolle, 1825, 2:243.

Twining, herbaceous vines; leaves 5-foliolate, leaflets glabrous, obovate, usually <2 cm long, rounded or emarginate at apex with an apiculum; calyx with a few, equal, broad-based setae; corolla yellowish; stamens united; fruit an elongate, 6–more-jointed loment.

Mexico, Hispaniola, Lesser Antilles, and northern South America; known from Dominica only from collections without locality: (*Imray 21, 367*). To be sought in dry areas.

Chamaecrista (Linnaeus) Moench (Caesalpinoid)

Herbs, shrubs or trees; leaves evenly 1-pinnate; stamens 10 or 7, often of various sizes and fertility; anthers basifixed, opening by terminal pores; pods elastically dehiscent, flattened.

Vélez (1957:99) reported "*Chamaecrista fasciculata* (Urban) Britt." for Dominica on the authority of Britton. Apparently this is *Chamaecrista chamaecrista* sensu Britton and Wilson (1924, 5:367), reported to occur in "West Indies, south to Grenada...." This is *Chamaecrista nictitans* var. *diffusa* A.P. Candolle) Irwin & Barneby, known from the Lesser Antilles but no specimens have been seen from Dominica.

Chamaecrista glandulosa

Chamaecrista glandulosa (Linnaeus) Greene, 1899:286.—Irwin & Barneby, 1982:780.
Cassia glandulosa Linnaeus, 1759a:1017.

Chamaecrista glandulosa var. *swartzii*

Chamaecrista glandulosa var. *swartzii* (Wikström) Irwin & Barneby, 1982:784.
Cassia polyadena A.P. Candolle, 1824a:132.
Cassia swartzii Wikström, 1826:430.
Chamaecrista swartzii (Wikström) Britton, 1917:9.
Chamaecrista polyadena (A.P. Candolle) Britton, 1917:10.
Cassia glandulosa var. *swartzii* (Wikström) Macbride, 1919:26.

Shrub to 3 m; leaflets 7–23 pairs, glabrous, narrowly oblong to ± obovate, 1–2 cm long, rounded, petiolar gland sessile or on a stipe, glands along rest of rhachis 0–5, sessile; peduncle supra-axillary; fruit 3–5 cm long.

Puerto Rico through Lesser Antilles, in Dominica common

in scrub thickets and along roadsides to 550 m: west coast from Scotts Head to Cabrits (*Chambers 2786, Hodge 593, 2176, 2544, 2633, Kimber 904, Nicolson 2152, Stern & Wasshausen 2593, Webster 13308, 13449, Wilbur 7623, 7629*), interior from Sylvania to Pont Cassé (*Hodge 1257, Narodny s.n., Wilbur 7748, 8140*), north and east coasts (*Hodge 594, 3052, 3277, Whitefoord 3699, Wilbur 7512, 8037, 8045*).

Clitoria Linnaeus (Faboid)

Twiners or trailers; stipules persistent; leaves 3-9-pinnate, leaflets stipellate; flowers large; style longitudinally bearded.

1. Leaflets 3; flowers yellow . . . . . ***C. falcata***
1. Leaflets 5-9; flowers blue to white . . . . . ***C. ternatea***

Clitoria falcata

Clitoria falcata Lamarck, 1786, 2:51.
Clitoria rubiginosa Jussieu ex Persoon, 1807, 2:303.
Clitoria glycinoides A.P. Candolle, 1825, 2:234.

Pubescent; stipules ovate; leaflets 3; peduncles 3-15 cm long; flowers yellow, subtended by ovate bracts; calyx villous, 2-3 cm long; pod valves with conspicuous midrib; seeds globose, viscid.

Neotropics; in NW Dominica along road: Morne Plaisance Estate (*Whitefoord 4429*). New record for Dominica, perhaps an escape.

Clitoria ternatea

Clitoria ternatea Linnaeus, 1753:753.

Pubescent when young; stipules linear-lanceolate; leaflets 5-9; flowers solitary, axillary, large, blue or white, subtended by orbicular bracts; calyx almost 2 cm long; seeds flat, black.

Old World tropics, introduced in cultivation and escaping: Portsmouth (*Nicolson 4201*).

Cracca Bentham, nom. cons. (Faboid)

Cracca caribaea

Cracca caribaea (Jacquin) Bentham in Bentham & Oersted, 1853:9.
Galega caribaea Jacquin, 1763:212.
Benthamantha caribaea (Jacquin) Kuntze, 1898, 3(2):53.

Subshrubs; odd-pinnate leaflets to 7 pairs; stipules persistent, subulate; flowers pink; pod linear, sessile, 7 cm × 0.3 cm, 10-25-seeded, septate.

Neotropical but scattered and often cited as rare, infrequent, very local; known from a single Dominica collection: sine loc. (*Imray 116* at K). To be sought in xerophytic scrub near the coast.

Crotalaria Linnaeus (Faboid)

Herbs or shrubs; leaves digitately 1-3-5-foliolate; flower yellow (or blue); stamens monadelphous; pod 2-valved, inflated.

Crotalaria pumila Ortega was credited to Dominica by Vélez (1957:99) on the authority of Stehlé. It is not mentioned in the treatment of *Crotalaria* (Stehlé and Quentin in Stehlé et al., 1948, 2:86). This is a 3-foliolate species of very small aspect (leaflets 0.7-3.5 cm long) and a short pod.

Crotalaria vasculosa Wallich ex Bentham was collected as an introduction in the Roseau Botanic Gardens (*Bassett 5* at K). It has elliptic leaflets like *C. micans* but a striking dark and densely pubescent fruit.

Crotalaria zanzibarica Bentham was collected as an introduction at Morne Nurseries (*Bassett 15* at K). It is similar to *C. anagyroides* in its acute leaflets but the calyx teeth are shorter than the rather long calyx tube.

1. Leaves unifoliolate (appearing simple).
   2. Stipules absent or minute . . . . . ***C. retusa***
   2. Stipules present and persistent.
      3. Stipules erect, decurrent on stem for 1 cm or more, free above with incurving apices; leaves <3 cm long . . . . . ***C. stipularia***
      3. Stipules deflexed, not decurrent; leaves normally >3 cm.
         4. Flowers yellow; leaves much longer than broad; stipules deltoid . . . . . ***C. spectabilis***
         4. Flowers blue; leaves slightly longer than broad; stipules lunate . . . . . ***C. verrucosa***
1. Leaves 3-foliolate.
   5. Flowers 1-3, in short, axillary racemes . . . . . ***C. lotifolia***
   5. Flowers many, in elongate, terminal racemes.
      6. Leaflets elliptic to lanceolate . . . . . ***C. micans***
      6. Leaflets ovate to orbicular or obovate.
         7. Calyx lobes much longer than short calyx tube; keel equaling the wings, ± included; pod with spreading pubescence . . . . . ***C. incana***
         7. Calyx lobes a little longer than the calyx tube; keel much longer than wings, exserted; pod with appressed pubescence . . . . . ***C. pallida***

Crotalaria incana

Crotalaria incana Linnaeus, 1753:716.—Senn, 1939:350.

Pubescent annual; leaves 3-foliolate, often subtended by much smaller leaves; leaflets broad, usually shorter than petioles, inflorescence terminal, calyx pubescent, the lobes lanceolate and much longer than the calyx tube; pods pendant, pilose with spreading hairs.

Pantropical; only one collected on Dominica: sine loc. (*Imray 62* at K).

Crotalaria lotifolia

Crotalaria lotifolia Linnaeus, 1753:349, "*latifolia*".—Senn, 1939:349.

Shrub with golden pubescence on young growth; leaves 3-foliolate, glabrous above; racemes axillary, few-flowered; pods with appressed pubescence.

Neotropics but scattered; mid-elevations in northwest Dominica: halfway between Colihaut and Syndicate Estate (*Ernst 1991*), a new record.

Crotalaria micans

Crotalaria micans Link, 1822, 2:228.—Windler & McLaughlin, 1980:606.
Crotalaria anagyroides Kunth, 1824, 6:404.—Senn, 1939:365.

Shrubs, upper branches striate; leaves 3-foliolate, about 3× longer than broad; calyx lobes considerably longer than calyx tube; inflorescence elongate, terminal, pod appressed, puberulent.

South America, scattered in neotropics; introduced on Dominica as a cover crop: Morne Nurseries (*Bassett 14* at K), sine loc. (*Imray 201* at K).

Crotalaria pallida

Crotalaria pallida Aiton, 1789, 3:20.—Polhill, 1968:262.
Crotalaria mucronata Desvaux, 1814:76.—Senn, 1939:355.
Crotalaria striata A.P. Candolle, 1825, 2:130.

Crotalaria pallida var. *obovata*

Crotalaria pallida var. *obovata* (G. Don) Polhill, 1968:365.
Crotalaria falcata Vahl ex A.P. Candolle, 1825, 2:132.—Adams, 1972:346.
Crotalaria obovata G. Don, 1832, 2:138.

Shrubby herb; leaves 3-foliolate; leaflets obovate, rounded to emarginate, ~6 cm × 4 cm; inflorescence terminal, calyx pubescent, the lobes ± longer than the tube; pod appressed, pubescent.

Pantropical, scattered weed in Dominica: Carib Reserve (*Hodge 3347*), Copt Hall (*Bassett 4* at K), Delices (*Whitefoord 3701*), Dublanc (*Hodge 2550*), Fond Figues River (*Ernst 1455*), Goodwill (*Wilbur 7581*), Milton (*Hodge 2922*), Morne Daniel (*Kimber 1074*), Pont Cassé (*Ernst 1240*), Roseau (*Anderson s.n.*, 31 Aug 1965).

The Dominican specimens, indeed most West Indian materials of this species (at US), fall into this variety. Typical *C. pallida*, with larger leaflets broadest near the middle and tapering to the apex, occurs mostly in Jamaica with a few specimens from Cuba.

Crotalaria retusa

Crotalaria retusa Linnaeus, 1753:715.—Senn, 1939:327.

Glaucous subshrub with striate stems; leaves simple, oblanceolate, rounded to retuse at apex; stipules minute, deciduous; inflorescence terminal; calyx pubescent; pods erect or spreading.

Pantropical; common field and roadside weed at low elevations all over Dominica: Cabrit Swamp (*Whitefoord 4053*), Castaways Hotel (*Stern & Wasshausen 2427*), Dublanc (*Whitefoord 4284*), Fond Figues River (*Ernst 1454*), Goodwill (*Hodge 603, Wilbur 7579*), Marigot (*Hodge 601*), Pointe Ronde (*Hodge 2691*), Ridgefield (*Hodge 2141*), Roseau (*Hodge 600*), Roseau Valley (*Fairchild 2823*), Scotts Head (*Wilbur 7599*), Sylvania (*Hodge 1246*), Wooten Waven (*Hodge 602*), sine loc. (*Cooley 8770*).

Similar to *C. spectabilis* but lacking stipules.

Crotalaria spectabilis

Crotalaria spectabilis Roth, 1821:341.—Senn, 1939:326.

Yellow sweet pea.

Robust subshrub, leaf simple; stipules persistent, ovate to deltoid, reflexed; inflorescence terminal; pods spreading to declinate.

Asia, introduced into neotropics; common roadside weed in lowlands of Dominica: Bibiay (*DeFilipps 188*), Coulibistrie (*Wilbur 8136*), Fond Figues River (*Ernst 1241*), Morne Plaisance Estate (*Whitefoord 4481*), Ridgefield (*Hodge 2142*), Wooten Waven (*Hodge 605*), sine loc. (*Bassett 3* at K).

Similar to *C. retusa* but with persistent stipules. The Bassett specimen was collected as *C. sericea* Roth (non Burman) as introduced for a cover crop.

Crotalaria stipularia

Crotalaria stipularia Desvaux, 1814:76.—Senn, 1939:332.

Plants pubescent; leaves simple; stipules large, foliaceous, decurrent below with free, incurving apices above; inflorescence axillary, elongate but few-flowered.

South American species extending into Hispaniola; dry lowlands of Dominica: Bellevue (*Eggers 830*), Grand Savanne (*Lloyd 835, Nicolson 1943*), Soufrière Village (*Lloyd 432*), sine loc. (*Bryant s.n.* 1905 at K (misidentified as *C. sagittalis* L.)).

There are problems with the nomenclature of the infraspecific taxa. Even their taxonomy is suspect, largely involving size differences that may be more environmentally than genetically determined.

Crotalaria verrucosa

Crotalaria verrucosa Linnaeus, 1753:715.—Senn, 1939:325.

Stem 4-angled, leaves simple, broadly ovate; stipules persistent, lunate, deflexed; flowers blue (ours); inflorescence terminal; pod many-seeded, stipitate.

Old World, introduced in New World; roadside weed in Dominica: Imperial Road near coast (*Lloyd 781*), Lime Exp. Station (*Bassett 8* at K), Pringles Bay (*Whitefoord 3738*), Roseau-Canefield (*Hodge 604*).

Dalbergia Linnaeus f., nom. cons. (Faboid)

Dalbergia ecastaphyllum

Dalbergia ecastaphyllum (Linnaeus) Taubert in Engler & Prantl, 1894, III(3):335.
Hedysarum ecastaphyllum Linnaeus, 1759a:1169.

Heavy scrambling shrub with simple leaves (very rarely leaflets, 5 on same plant and alternate); flowers white; stamens, by my dissections, diadelphous (5+5), opening by a terminal slit; pod 1-seeded, leathery, orbicular, flat, indehiscent.

Neotropics and west Africa; common in littoral woodlands of Dominica: Cabrits Swamp (*Hodge 606, 607, 3729, Nicolson 1881, Whitefoord 4068, Wilbur 8260*), Castle Bruce (*Ernst 1467, Wilbur 7985*), Castaways Hotel (*Stern & Wasshausen 2431*), Hatton Garden (*Hodge 2959*), L'Anse Noire (*Wilbur 7514*), La Plaine (*Ernst 1922*), Melville Hall Airport (*Gillis 8208*), Rosalie (*Chambers 2721*).

This species was reported for Dominica from an Imray collection under the misidentification "*Hecastophyllum brownei* Pers." by Grisebach (1860:202). Vélez (1957:100) also cited this species under another misidentification, "*Dalbergia monetaria* Lf."

Similar *Machaerium lunatum* (Linnaeus f.) Ducke grows in similar habitats and could be found in Dominica. It would key here but the stems are armed with stipular spines and the fruit is curved.

Delonix Rafinesque (Caesalpinoid)

Delonix regia

Delonix regia (W. Hooker) Rafinesque, 1837, Fl. Tellur., 2:92.
Poinciana regia Bojer ex W. Hooker, 1829a.

Flamboyant, flame tree, royal poinciana.

Trees with ~15 pairs of pinnae, each with ~20 pairs of leaflets; flowers showy, scarlet, ~5 cm across; stamens 10; fruit pendant, woody, sword-like, ~60 cm × 6 cm.

Madagascar but widely introduced in tropics; cultivated and apparently naturalizing in dry areas of west coast on Dominica: slopes above Mero and Salisbury (*Ernst 1422A*), Roseau Botanic Gardens (*Hodge 932*), Hatton Gardens (*Hodge 3299*). Flowering May-July.

Desmanthus Willdenow, nom. cons. (Mimosoid)

Desmanthus virgatus

Desmanthus virgatus (Linnaeus) Willdenow, 1806, 4(2):1047.
Mimosa virgata Linnaeus, 1753:519.

Herbaceous shrub to 1.5 m; leaves with 2–4 pairs of pinnae (with a conspicuous petiolar gland just below the first pinnae), leaflets ~10 pairs; flowers white; stamens 10, about twice as long as petals, filaments free, anthers lacking an apical gland; pods clustered, narrowly linear, valves not separating from sutures; seeds lengthwise or very oblique to sutures.

Neotropics but spread in Old World; locally common in dry slopes, woodlands, and roadsides of Dominica: East Cabrit (*Hodge 3713*), Coulibistrie (*Wilbur 8336*), Dublanc (*Whitefoord 4274*), Grand Bay (*Wilbur 7901*), Cocoa Center ridges (*Ernst 1533*).

We do not seem to have the smaller, prostrate element, *D. virgatus* var. *depressus* (Willdenow) B.L. Turner, which may be an ecological form.

Desmodium Desvaux, nom. cons. (Faboid)

Suffrutescent herbs with 3-foliolate stipellate leaves and a jointed pod (loment) with flat joints (segments).

1. Flowers 1–4, axillary (or leaf-opposed); leaflets <1 cm long . . . . . ***D. triflorum***
1. Flowers many, in terminal or axillary racemes or panicles; leaflets >1 cm long.
   2. Fruit unequally notched at joints (upper margin almost straight).
      3. Fruit typically 4–more-segmented . . . ***D. incanum***
      3. Fruit typically 1–3-segmented.
         4. Plants tap-rooted; leaflet apices rounded to emarginate; stipules persistent, free . . . ***D. adscendens***
         4. Plants rooting at nodes; leaflet apices acute to obtuse; stipules deciduous, united at first . . . . . ***D. axillare***
   2. Fruits equally notched at joints.
      5. Fruit segments about 2× longer than broad . . . . . ***D. scorpiurus***
      5. Fruit segments about as long as broad.
         6. Stem procumbent; stipules subulate; leaflets usually with midrib area distinctly paler above . . . . . ***D. procumbens***
         6. Stem erect; stipules semicordate, broadly lanceolate; leaflets uniformly green . . . . ***D. tortuosum***

Desmodium adscendens

Desmodium adscendens (Swartz) A.P. Candolle, 1825, 2:332.
Hedysarum adscendens Swartz, 1788:106.

Sweetheart.

Taprooted, diffuse or ascending herb; stipules free, linear, persistent; leaflets rounded, the terminal petiolule longest; upper margin or loment straight, segments 4 or fewer, on a short pedicel.

Neotropics, Asia, and Africa; common weed in disturbed areas of Dominica: Atkinson (*Hodge 2471, 3384*), Grand Bay road (*Ernst 1625*), La Chaudière (*Hodge 3550, 3686*), Laudat (*Hodge 1852, 1872*), L'Imprévue (*Hodge 1286*), Lisdara (*Hodge 625, 630, 2471*), Portsmouth swamp (*Hodge 629*),

Ridgefield (*Hodge 2174*), South Chiltern (*Hodge 1468*), Sylvania (*Cooper 20, Hodge 1139, 3982*), Syndicate (*Whitefoord 3562*), Wallhouse (*Eggers 536*).

Hodge and Taylor (1957:563) reported *Hodge 3384* as used in a decoction for treatment of gonorrhea but under a misidentification, *D. axillare* var. *axillare*.

Desmodium axillare

Desmodium axillare (Swartz) A.P. Candolle, 1825, 2:333.—Schubert, 1963:286.
Hedysarum axillare Swartz, 1788:107.

Stem repent, rooting at nodes; stipules connate; leaves long-petiolate, terminal petiolule short; loments with 2 large segments on a distinct stipe.

1. Stems with long, conspicuous pubescence; leaflets acute . . . . . var. ***acutifolium***
1. Stems with short, inconspicuous pubescence; leaflets rhombic to orbicular . . . . . var. ***axillare***

Desmodium axillare var. *acutifolium*

Desmodium axillare var. *acutifolium* (Kuntze) Urban, 1905, 4:292.—Schubert, 1941:83; 1963:287.
Meibomia axillaris var. *acutifolia* Kuntze, 1891, 1:195.

Stems long-pubescent; leaflets acute.

Central America and scattered in West Indies; reported as common along road at 900 m on south end of Dominica: above Pichelin (*Wilbur 7608*), Lisdara (*Hodge s.n.*, 27 Aug 1937, *Hodge 618*).

Desmodium axillare var. *axillare*

Desmodium axillare var. *axillare*.

Tick trefoil, cacoyer.

Stems short-pubescent; leaflets rounded to obtuse at apex.

Neotropics; weedy along roads in Dominica: Carib Reserve (*Hodge 3232*), Deux Branches (*Hodge 3005*), Grand Bay (*Eggers 537, Ernst 1604*), La Chaudière (*Hodge 3687*), Pointe Guignard (*Wilbur 7621*), South Chiltern (*Hodge 3879*), Trafalgar Falls road (*Whitefoord 4585*), sine loc. (*Fishlock 23, 60*).

Hodge and Taylor (1957:563) reported this species and its common names as used in making a decoction for treatment of gonorrhea by Caribs, based on *Hodge 3384*. That collection is *Desmodium adscendens*, q.v.

Desmodium incanum

Desmodium incanum A.P. Candolle, 1825, 2:332.—Bentham in Martius, 1859, 15:98.—Grisebach, 1860:186.—Nicolson, 1978b:365.—Howard, 1988, 4:480.
Hedysarum racemosum Aublet, 1775:774, non *D. racemosum* A.P. Candolle.
Hedysarum incanum Swartz, 1788:107, non Thunberg.
Hedysarum supinum Swartz, 1788:106, non Chaix ex Villars.
Hedysarum canum Gmelin, 1792:1125, nom. illeg. [incl. type of *H. racemosum* Aublet].
Hedysarum racemiferum Gmelin, 1792:1225, nom. illeg. [incl. type of *H. racemosum* Aublet].
Aeschynomene spicata Poiret in Lamarck, 1797, Encycl., 4:452, "*Aeschinomene*," non *Desmodium spicatum* Rehder.
Desmodium supinum A.P. Candolle, 1825, 2:332, nom. illeg. [incl. type of *Aeschynomene spicata* Poiret].
Meibomia incana (A.P. Candolle) Vail, 1892 [Apr]:118, nom. illeg. [incl. type of *Hedysarum racemosum* Aublet].
Meibomia supina Britton in Morong & Britton, 1892 [Dec]:83, nom. illeg. [incl. type of *Desmodium incanum* A.P. Candolle and *Hedysarum racemosum* Aublet].
Desmodium canum Schinz & Thellung in Schellenberg et al., 1913:371.—Thellung, 1913:428.—Schubert, 1943:423.—Exell, 1944:156.—Schubert in Milne-Redhead & Polhill, 1971, Legum. Subfam. Papil. 1:456, nom. illeg. [incl. type of *Desmodium incanum* A.P. Candolle].

Suffrutescent, puberulent herb; stipules connate below, persistent; petioles short, usually <2 cm, terminal petiolule long, usually >0.5 cm; leaflets variable on the same plant, from rotund to lanceolate, mostly elliptic, pale beneath, sometimes mottled above; loments short stipitate, 4–7-jointed, the upper margin straight, the lower deeply undulate.

Pantropical weed; scattered in lowlands of Dominica: Atkinson (*Hodge 3388*), Baiac (*Whitefoord 5461*), Cabrits (*Hodge 3877, Howard 11715*), Grand Bay road (*Ernst 1602*), Layou mouth (*Hodge 628*), Lisdara (*Hodge 626*), Roseau (*Hodge 627*), South Chiltern (*Hodge 1530*) Syndicate (*Whitefoord 4441*).

Our material is the 3-foliolate broad-leaved typical form.

Adjanohoun et al. (1985:151, pl. 118) reported (as *D. canum*) medicinal uses.

Most authors dealing with this taxon for the past 80 years have attempted to adopt the epithet of the earliest available name. The Code, however, has three requirements for a correct epithet; it must not only be part of the earliest available name, but that name must also be legitimate (Arts. 11.3, 45.3, and 67, Note 1, *ICBN*). This fact, coupled with the procedures for handling names with illegitimate "basionyms" of the Note under Article 72, establishes that *D. incanum* A.P. Candolle (1825) is the earliest available legitimate name for this species (see Nicolson 1978:365) in *Desmodium*.

Desmodium procumbens

Desmodium procumbens (Miller) Hitchcock, 1893:76.—Schubert, 1940.
Hedysarum procumbens Miller, 1768.
Hedysarum spirale Swartz, 1788:107, nom. illeg. [incl. *H. procumbens* Miller].
Desmodium spirale A.P. Candolle, 1825, 2:332, nom. illeg. [incl. *H. procumbens* Miller].

Slender annual herb; stipule free, filiform, persistent; petiole to 3 cm long, terminal petiolules ~1 cm long, leaflets lanceolate to ovate; loment 2–8-jointed, both margins ± equally notched.

Scattered in the tropics; reported for Dominica by Vélez (1957:100) on the basis of a distribution note in Britton and Wilson (1925, 5:194) "Cuba to Trinidad." Not cited for Dominica by Schubert (1940), but collections from Martinique

and Guadeloupe are at US. Expected on Dominica, but no collections yet seen.

Desmodium scorpiurus

Desmodium scorpiurus (Swartz) Desvaux, 1813:122.
Hedysarum scorpiurus Swartz, 1788:107.
Meibomia scorpiurus (Swartz) Kuntze, 1891, 1:198.

Subshrub with prostrate to spreading branches; stipules semicordate-acuminate, <0.5 cm long, persistent; petiole to 2 cm long, terminal petiolule <1 cm long; leaflets elliptic, rounded at both ends; pedicels <1 cm long; loment ± sessile, margins equally notched into 4–7 joints that are about twice as long as broad.

Neotropical weed; occasional in Dominica: Cabrit Swamp (*Whitefoord 4048*), Roseau (*Ernst 2152*).

Desmodium tortuosum

Desmodium tortuosum (Swartz) A.P. Candolle, 1825, 2:332.
Hedysarum purpureum Miller, 1768.
Hedysarum tortuosum Swartz, 1788:107.
Meibomia tortuosa (Swartz) Kuntze, 1891, 1:198.
Meibomia purpurea (Miller) Vail in Small, 1903:639.
Desmodium purpureum (Miller) Fawcett & Rendle, 1920, 4(2), non Hooker & Arnott.

Erect, branched herb, stipules deciduous, auriculate at base; petioles long, the terminal petiolule typically >1 cm; leaflets inconspicuously puberulent below, rounded; pedicels filiform, >1 cm long; loment ± sessile, 3–6-jointed, often much twisted, both margins deeply undulate.

Florida into northern South America and in Africa; western lowlands of Dominica: Grand Savanne (*Ernst 2124*), lower Layou valley (*Ernst 1505*).

Desmodium triflorum

Desmodium triflorum (Linnaeus) A.P. Candolle, 1825, 2:334.
Hedysarum triflorum Linnaeus, 1753:749.
Sagotia triflora (Linnaeus) Duchassaing & Walpers, 1850:738.
Meibomia triflora (Linnaeus) Kuntze, 1891, 1:197.

Diffuse or prostrate, pubescent herbs; stipules lanceolate, persistent; petioles short, ~1 cm; leaflets small, <1 cm long, obovate; loment sessile with upper margin straight and lower margin crenate, joints 3–6.

Pantropical; roadside weed in Dominica in dry places: Grand Savanne (*Ernst 2127*), La Plaine (*Whitefoord 5385*), Morne [Bruce in Roseau?] (*Fairchild 2782*), Scotts Head (*Whitefoord 5130*).

Adjanohoun et al. (1985:151, pl. 118) reported medicinal uses.

Dioclea Kunth (Faboid)

Dioclea mollicoma

Dioclea mollicoma Ducke, 1947:19.
Dioclea reflexa sensu Urban, 1900, 1:473, as to Dominican specimen, non J. Hooker.

Woody vine; stipules peltate, acute; leaflets 3, large, 8–16 cm × 5–10 cm, thinly pilose; inflorescence racemose and nodose; bracts linear-lanceolate, reflexed, 1.5–2 cm long, deciduous; calyx 4-lobed, 1.5 cm long, silky; petals ± equal, standard reddish violet with yellow spot at base; vexillary stamen ± united; pod ± compressed, the upper margin thickened, 9–13 cm × 4–6 cm, 1–4-seeded; seeds 2–3 cm long, rounded.

Apparently scattered in tropics; only once collected on Dominica: Layou ("Laion") River Flats (*Ramage s.n.*, 18 Jun 1888 at K (det. R.H. Maxwell, 1968)).

Sometimes cultivated for its rotenone concentration.

Dussia Krug & Urban ex Taubert (Faboid)

Dussia martinicensis

Dussia martinicensis Krug & Urban ex Taubert in Engler & Prantl, 1892, III(3):193.—Rudd, 1963:255.

Pommier.

Immense buttressed tree with smooth, tan bark and white interior; stipules and stipels lacking; leaflets 7–13, 4–15 cm × 3–8 cm, ovate, glabrous above, crisped-pubescent below; inflorescence ± terminal, racemose; calyx ± oblique, 5-toothed; petals whitish, standard pubescent on back, green at center surrounded by pink; stamens 10, 9 united at base; pods 1–2-seeded, yellowish, usually persisting on tree after dropping the large (2.5–1.5 cm × 1.5–2 cm) red-skinned green seeds.

Several Lesser Antilles and northeastern Venezuela; a common (but hard to collect) tree in interior rain forests: Deux Branches (*Ernst 1760, Nicolson 2014*), upper Layou Valley at 460 m (*Nicolson 4182*), Syndicate Estate (DHN!).

Flowers in late June. Seeds dropped in late May. Parrots (and agouti?) gnaw the thin, red seed cover and leave the green seeds.

Chromosomes were counted as n = 14 on the Ernst collection.

Entada Adanson (Mimosoid)

High climbing vines with bipinnate leaves; flowers polygamous in spiciform racemes; calyx 5-toothed; petals equal; stamens 10, distinct, slightly exserted, the anther with a terminal gland; pod very large, flattened, transversely jointed within the continuous margins, the joints woody separating from each other and leaving the persistent border (replum); seeds large, orbicular.

Entada gigas (Linnaeus) Fawcett & Rendle might be found on Dominica. It has an enormous, woody fruit and only 1–2 pairs of pinnae, and a 0–1-branched inflorescence. The above species have coriaceous pods, 2-more pairs of pinnae, and much-branched inflorescences.

1. Leaflets 10–20 pairs on each pinna, ~1 cm long . . . . . *E. polyphylla*
1. Leaflets 6–8 pairs on each pinna, ~2.5 cm long . . . . . *E. polystachya*

Entada polyphylla

Entada polyphylla Bentham, 1840:133.
Entadopsis polyphylla (Bentham) Britton in North Amer. Fl., 1928, 23:191.

Liane pak, liane paques.

Puerto Rico to Brazil; 100–300 m on east side of Dominica: Carib Reserve (*Stehlé 6376, 6417*), sterile but a new record.

Entada polystachya

Entada polystachya (Linnaeus) A.P. Candolle, 1825, 2:424.
Mimosa polystachya Linnaeus, 1753:520, "*polystochia.*"
Entadopsis polystachya (Linnaeus) Britton in North Amer. Fl., 1928, 23:191.

Neotropics; only once collected on Dominica: sine loc. (*Imray 185* at K).

Erythrina Linnaeus (Faboid)

Erythrina poeppigiana (Walpers) Cook has been collected in cultivation with cocoa at Clarke Hall (*Chambers 2704*) and below Springfield (*Nicolson 4090, Whitefoord 5836*). It has a rather narrowly obovate standard almost equaled by the narrow keel and tiny wings; the stipels are large; the pod is chartaceous with brown seeds.

Erythrina corallodendron

Erythrina corallodendron Linnaeus, 1753:706.—Krukoff, 1939:272.—Krukoff & Barneby, 1974:399.

Bois immortelle, immortelle, coral tree.

Tree to 3 m; leaflets 3, rhombic, stipels inconspicuous; calyx truncate; standard narrow, to 5 cm long, the free keel petals and wings ~1 cm long; pods linear, strongly constricted between seeds; seeds solid red (in *Ernst 1988, Whitefoord 5780, Wilbur 8243*).

Supposed to be native to Jamaica and Haiti and believed cultivated in Bahamas; in dry areas along west coast of Dominica: ridge north of Cocoa Center (*Ernst 1988*), Gabriel (*Wilbur 8243*), Grand Savanne (*Ernst 1648*), Lisdara (*Hodge 2474*, fl.), Pointe Ronde (*Hodge 2685*, fl.), Portsmouth road (*Whitefoord 5780*), Providence Valley (*Hodge 2054*, fl.), South Chiltern (*Hodge 1585*, fl.). Flowering February–June, seeds in August–April.

I am surprised by the solid red seeds on three specimens, distinctive for the type variety of the species. The seeds are supposed to be bicolored, 1/3 black and 2/3 red, typical of *Erythrina corallodendron* var. *bicolor* Krukoff, supposedly endemic to the Lesser Antilles. The information on our specimens gives no indication of cultivation, but of natural occurrence in uncultivated dry woodlands.

Krukoff (1939:276) reported two Dominican collections as var. *bicolor: Ramage s.n.* at K and *Lloyd 848* at NY.

Hodge and Taylor (1957:563) reported that the Caribs use the trees "as living and permanent ("immortal") boundary or fence posts." A tea is made from the leaves. This based on a Hodge collection (*2054*) identified by them as *E. corallodendron* var. *bicolor*.

Adjanohoun et al. (1985:153, pl. 119) reported medicinal use of a leaf infusion to treat wounds.

Flemingia Roxburgh ex W.T. Aiton, nom. cons. (Faboid)

Flemingia strobilifera

Flemingia strobilifera (Linnaeus) W.T. Aiton, 1812, 4:350.
Hedysarum strobiliferum Linnaeus, 1753:746.
Moghania strobilifera (Linnaeus) St. Hilaire ex Kuntze, 1891, 1:199.

Zeb crare.

Shrub to 2 m; leaves 1-foliolate, gland-dotted beneath; inflorescence of small cymes enclosed by large, persistent bracts; calyx lobes ± equal, lanceolate, almost including flowers; pod short, turgid, 1–2-seeded.

Native of Asia, widely naturalized; common in disturbed areas of Dominica: Clarke Hall (*Chambers 2696*), Lisdara (*Hodge 2941*), La Plaine (*Whitefoord 5366*), Mahaut (*Morden 2*), Milton Estate (*Hodge 2551*), Ridgefield (*Hodge 2122*), South Chiltern (*Hodge 1487*), Wallhouse (*Eggers 631*).

Galactia Browne (Faboid)

Perennial vines (some shrubby) with pinnately 3-foliolate leaves; flowers racemose, axillary; calyx 4-lobed, the lobes acute, usually longer than tube; standard orbicular to obovate, appendaged with 2 inflexed auricles, equally keeled, wings narrow, adherent to the narrow, straight keel; stamens 9+1; styles glabrous; pod elongated, flattened, 2-valved, several-seeded.

Galactia dubia A.P. Candolle was reported for Dominica by Vélez (1957:101) based on Vélez's personal recognizance. This epithet seems eminently appropriate since it (and its differences from other "species") seems quite dubious to me. Dr. V. Rudd (US) annotated the covers of *G. dubia* as = *Galactia tenuiflora* (Willdenow) Wight and Arnott. Burkhart (1971:709) recognized *Galactia dubia* and reduced *G. tenuiflora* to *Galactia striata* (Jacquin) Urban var. *tenuiflora* (Willdenow) Burkart (1971:721). Gillett et al. (in Milne-Redhead and Polhill, 1971, Legum. Papil., (2):579) accepted *G. tenuiflora*, warning that *G. striata* might be the correct name.

1. Corolla 20–26 mm long; calyx lobes >0.5 mm long . . . . . *G. rubra*
1. Corolla 7–15 mm long; calyx lobes <0.5 mm long . . . . . *G. striata*

Galactia rubra

Galactia rubra (Jacquin) Urban, 1900, 2:309.
Dolichos ruber Jacquin, 1763:204, pl. 123.

Flowers bright pink, standard 24–26 mm long; keel as wide as wings.

Endemic to northern Lesser Antilles to Martinique; rarely collected on Dominica: Petit Coulibri (*Whitefoord 6010*), Rivière Douce (*Eggers 118* at K), sine loc. (*Imray 30* at A, *Imray 192* at K).

The Imray material was reported by Grisebach (1860:194) as *Galactia longiflora* Arnott, a different species with standard only 16–18 mm long and keel almost 2× broader than wings. To be sought in exposed xerophytic and mesophytic locations.

Galactia striata

Galactia striata (Jacquin) Urban, 1900, 2:320.—Howard, 1988, 4:496.
Glycine striata Jacquin, 1770, Hort., 1:32.

Flowers mauve, standard ~7 mm long.

Lesser Antilles and a new record for Dominica: in aloe field in southwest corner of Dominica: Petit Coulibri (*Whitefoord 6011*).

Gliricidia Kunth (Faboid)

There is some controversy over the author and place of valid publication of this generic name. ING (*Index Nominum Genericorum*) accepted Kunth (1824, 6:393) while Adams (1972:347) accepted Kunth ex Endlicher (1840:1273). On page 393, Kunth (1824) said, "perhaps (*forte*) to be distinguished (present participle) as a genus under the name of *Gliricidia* of which the character will be (future)..." and gave a full description. It is true that the word *forte* (perhaps) indicates that Kunth might not actually accept this generic concept and it can be interpreted that he still regards *Robinia sepium* Jacquin, which he cites, as a member of *Robinia*. However, on the previous page he clearly stated that there are (present tense) only three species of *Robinia: R. pseudacacia, viscosa,* and *hispida* and that the remaining species are to be excluded (present participle)...citing them and the genera to which they belong, including "R. sepium Jacq. (Gliricidia)." In view of this statement, I believe that Kunth does not regard *Robinia sepium* Jacquin as a member of *Robinia* but of *Gliricidia* and accept the description as validating his new generic concept.

Gliricidia sepium

Gliricidia sepium (Jacquin) Kunth ex Walpers, 1842, 1:679.—Little & Wadsworth, 1964:196, pl. 85.
Robinia sepium Jacquin, 1760:28.

Tree to 6 m; leaflets 9-more-pinnate, 3–6 cm × 1.5–3 cm; racemes axillary on leafless branches; calyx oblique, ± truncate; standard pinkish white with yellow patch at base, wings oblong, curved, keel up-turned, blunt; stamens 9+1; ovary stipitate; pod flat, linear.

Continental neotropics, elsewhere introduced and capable of naturalizing: Cabrits (*Smith 10326*), Clarke Hall (*Chambers 2705*), Grand Savanne (*Nicolson 4111*), Mahaut (*Hodge 1308*), Mt. Joy (*Hodge 1255*). Flowering January–March.

Used as hedge or fence plant, also in citrus and cocoa plantations. Dried plants have a distinct smell of coumarin. Adjanohoun et al. (1985:153, pl. 120) reported several medical uses.

The combination is often attributed to Steudel but Steudel used the combination as a synonym of *Lonchocarpus sepium.*

Haematoxylum Linnaeus (Caesalpinoid)

Haematoxylum campechianum

Haematoxylum campechianum Linnaeus, 1753:384.—Little et al., 1974:286, pl. 276.

Logwood.

Tree to 10 m, sometimes armed with single axillary spines; leaves evenly pinnate (sometimes bipinnate), leaflets in 3–4 pairs, obcordate, 1–3 cm × 0.7–2 cm, closely veined; flowers yellow, in showy axillary racemes; stamens 10, free, pilose at base; pod flat, splitting in middle (not on suture), pointed at both ends, papery, 1–3-seeded.

Native to Central America, supposedly introduced and naturalizing elsewhere; a dominant of dry scrub on west coast to 200 m: Cabrits Swamp (*Hodge 608*), Cabrits (*Hodge 3732, Smith 10311*), Grand Savanne area (*Chambers 2712, Nicolson 2151*), Mahaut (*Hodge 1306*), Massacre (*Whitefoord 5504*), Rodney's Rock (*Nicolson 4032*), Wallhouse (*Eggers 637*). Flowering in winter (December–March).

Hymenaea Linnaeus (Caesalpinoid)

Hymenaea courbaril

Hymenaea courbaril Linnaeus, 1753:1192.—Little & Wadsworth, 1964:178, pl. 76.

Courbaril, West Indian locust, kaurubali (Carib).

Tree to 10 m with smooth bark; leaflets 2, very unequal, 6–9 cm × 2–4 cm; corymbose panicles terminal; calyx 4-lobed, deciduous; petals 5, white; stamens 10, free, reflexed; pods 10–15 cm × 4–6 cm and 3 cm thick-woody and indehiscent; seeds 2–6, bony, embedded in edible pulp.

Neotropics; one of the largest trees in dry scrub woodlands of west coast of Dominica: Bataka (*Hodge 3222*), Canefield (*Nicolson 2147*), Carib Point (*Wilbur 631*), Grand Savanne area (*Ernst 1383, 1859, Hodge 3793*), South Chiltern (*Hodge 1654*), Syndicate turnoff (*Whitefoord 4322*). Flowering in June, fruits in October–May.

Hodge and Taylor (1957:514) discussed the timber (heavy but used for furniture), resin, and pulp (eaten by children and used to make a beverage).

Indigofera Linnaeus (Faboid)

Herbs or shrubs; hairs medifixed; leaves odd-pinnate with 7 or more stipellate leaflets; stamens mostly monadelphous; pod terete or 4-angled, septate between seeds.

1. Leaves 2–3(–5) cm long; leaflets alternate . . . . . ***I. spicata***
1. Leaves 5–10 cm long; leaflets paired.
   2. Pods short (1–1.5 cm), strongly curved; leaflets obtuse to acute . . . . . ***I. suffruticosa***
   2. Pods elongate (2.5–3.5 cm), slightly curved; leaflets rounded to emarginate . . . . . ***I. tinctoria***

Indigofera spicata

Indigofera spicata Forsskål, 1775:138.—Gillett, 1958:119.
Indigofera endecaphylla Jacquin, 1788, Coll., 2:358, "*hendecaphylla.*"

Prostrate herb; flowers pink, on erect spikes; pods deflexed, slightly down-curved.

Old World weed introduced into neotropics; new record for Dominica: Scotts Head (*Whitefoord 5550*). Whitefoord (1989:145) reported this collection as *Indigofera hartwegii* Rydberg.

Indigofera suffruticosa

Indigofera suffruticosa Miller, 1768.

Shrub to 1.5 m; leaflets 5–6 pairs, 1.5–3 cm × 0.5–1 cm, mucronulate; flowers salmon-colored.

Neotropics, now widespread; lowlands and midlands of Dominica, often in damp places: Cabrit swamp (*Hodge 609, Wilbur 8256*), Carib Reserve (*Hodge 3396*), Colihaut (*Ernst 1134*), Dublanc (*Whitefoord 4289*), Grand Savanne area (*Chambers 2791, Hodge 3769, Wilbur 8342*), Scotts Head (*Hodge 1619, Wilbur 7601*), South Chiltern (*Stern & Wasshausen 2531*).

Indigofera tinctoria

Indigofera tinctoria Linnaeus, 1753:751.

Shrub; leaflets 7–13, 1.5 cm × 1 cm, obovate, rounded at apex; pod slightly torulose.

Paleotropics, formerly widely cultivated as a dye source, now naturalized: Pointe Michel (*Gillis 8118*).

Inga Miller (Mimosoid)

Trees with evenly pinnate leaves and a gland between the leaflet pairs; flowers spicate or racemose; calyx 5-parted; corolla tubular to middle or beyond; stamens many, long exserted, united below; pod flat or terete and ribbed, indehiscent.

1. Petiolar rhachis winged; legume terete, grooved or ribbed . . . . . ***I. ingoides***
1. Petiolar rhachis unwinged, fruit flattened.
   2. Inflorescence to 5 cm long; calyx and corolla sericeous to strigose, staminal tube included in corolla tube; legume with markedly elevated borders . . . . . ***I. dominicensis***
   2. Inflorescence >5 cm long; calyx and corolla glabrous; staminal tube exserted from corolla tube; legume with borders not markedly elevated . . . . . ***I. laurina***

Inga dominicensis

Inga dominicensis Bentham, 1875:612.—Leon, 1966:296.

Small tree to 4 m; leaflets in 2 to 4 pairs, ovate-lanceolate, 6–12 cm × 3–4 cm; flowers white, pedicels 1–2 mm long; calyx 2–4 mm long; pods 7–11 cm × 2–2.5 cm, the margins elevated.

Endemic; apparently rare in wet interior uplands from 750 to 1000 m: Laudat to Micotrin area (*Ernst 1171, 2164, Hodge 1924, Whitefoord 4189*), upper Layou drainage (*Stehlé 6330*), sine loc. (*Imray 336* at K, fl. (type)). Ernst collections flowering in August, fruiting in May; Stehlé collection flowering in April.

The Imray collection was cited as *I. martinicensis* Presl by Grisebach (1860:227), another high elevation endemic (of Martinique) that has broader and bullate leaves.

Inga ingoides

Inga ingoides (L. Richard) Willdenow, 1806, 4:1012.—Leon, 1966:342.
Mimosa ingoides L. Richard, 1792:113.

Poix doux marrons.

Tree to 25 m; rhachis winged, with 3–5 pairs of leaflets; flowers forming a rather flat-topped raceme, pedicels to 1 cm long; calyx <1 cm long, red-pubescent; pods elongate, terete, grooved to ribbed.

South American species penetrating the Antilles to Guadeloupe; frequent tree in lowlands and midlands of Dominica: Bellevue (*Eggers 644*), Carib Reserve (*Taylor 12*), Clarke Hall area (*Clarke D6, Ernst 1209, Hodge 610, Nicolson 1803*), Indian River (*Finlay? s.n.*, 16 Jul 1792 at K), La Chaudière (*Hodge 3546*), La Plaine (*Whitefoord 5363*), above Laudat, ~700 m (*Beard 654, Chambers 2684*), Lisdara (*Cooper 183, Hodge 2352*), Morne Aux Diables (*Wasshausen & Ayensu 378*), 2 miles [3 km] south of Pagua Bay (*Long & Norstog 3386*), Rosalie Valley (*Lloyd 707*), Soufrière (*Eggers 110*), Sylvania (*Hodge 1046*), Syndicate (*Hodge 2707, Whitefoord 4342, 5634, 5958*), sine loc. (*Imray 340* at K).

This species can be confused with *Inga vera* Willdenow of Central America and the Greater Antilles, which has a spiciform raceme with almost sessile flowers and calyces 1 cm

long or longer. Whitefoord (1989:145) reported her second collection as first Dominica record of *I. vera*.

Inga laurina

Inga laurina (Swartz) Willdenow, 1806, 4:1018.—Little & Wadsworth, 1964:150, pl. 62.
Mimosa fagifolia Linnaeus, 1753:516 [petiole marginate!].
Mimosa laurina Swartz, 1788:85.
Inga fagifolia (Linnaeus) Willdenow ex Bentham, 1875:607, non G. Don, 1832.—Leon, 1966:283.

Poix doux.

Small to medium tree to 30 cm dbh; leaflets usually in 2 pairs, 6–10 cm × 2–4.5 cm; inflorescence of axillary, spicate racemes with pedicels to 0.5 mm long; pods 10 cm × 2.5 cm and 1 cm thick (± terete), smooth.

Neotropics; common in Dominica in drier lowlands and midlands, sometimes planted as hedge row: Calibishie (*Hodge 3737*), Carib Reserve (*Hodge 3367, Stehlé 6437*), La Chaudière (*Hodge 3524*), Coulibistrie (*Ernst 1393*), Clarke Hall (*Ernst 2154, Nicolson 2179*), Deux Branches (*Hodge 3493*), Dublanc (*Hodge 2527*), Fond Hunte Estate (*Whitefoord 4451*), Lisdara (*Cooper 185, Hodge 612*), Macoucherie (*Hodge 3766*), west of Rosalie (*Ernst 1357*), St. Aromant (*Lloyd 564*), Sylvania (*Hodge 611*), sine loc. (*Imray 188* at K).

Hodge and Taylor (1957:561) noted the use of this species to shade cacao and coffee. A tea is made with the bark.

Leon (1966:284) pointed out that the type of *Inga fagifolia* (Linnaeus) Bentham is from Barbados and is applicable to this species (although I note that Linnaeus described the petioles as marginate, i.e., winged) and reduced *I. laurina*. However, he overlooked the earlier publication of *Inga fagifolia* G. Don (1832) for a different species, which makes *Inga fagifolia* (Linnaeus) Bentham (1875) an illegitimate later homonym.

Lablab Adanson (Faboid)

Lablab purpureus

Lablab purpureus (Linnaeus) Sweet, 1826:481.—Verdcourt, 1970:410.
Dolichos lablab Linnaeus, 1753:725.
Dolichos purpureus Linnaeus, 1763:1021.
Lablab niger Medikus, 1787b:354.

Perennial twiner; leaflets 3, stipellate, to 10 cm × 8 cm; inflorescences ± racemose; calyx campanulate, the upper two teeth united; petals white to purple; standard orbicular, wings obovate, curved and adnate to incurved keel; stamens 9+1; stigma penicillate below terminal style; pods rough, flattened, with warty margins; seeds dark with prominent white hilum.

Probably native to Africa, now widely cultivated; apparently escaped in Dominica: Baiac (*Whitefoord 3826*), between Woodford Hill Estate and Calibishie (*Ernst 1837*).

Leucaena Bentham (Mimosoid)

Leucaena leucocephala

Leucaena leucocephala (Lamarck) de Wit, 1961:54; 1975:352.—Polhill & Steam, 1976:325.—Shaw & Schubert, 1976:117.
Mimosa leucocephala Lamarck, 1783, 1:12.
Leucaena glauca sensu Bentham, 1842:416, not as to basionym.—Little & Wadsworth, 1964:156, pl. 65.
Leucaena latisiliqua sensu Gillis in Gillis & Steam, 1974:190, not as to basionym.

Unarmed trees or shrubs; leaves bipinnate, pinnae in 3–8 pairs, leaflets 10–20 per pinna, oblique at base and acute at apex; heads terminal or axillary; calyx 1 mm long, 5-toothed; petals 5, linear; stamens 10, 3× longer than petals; pods flat, membranous, valves with raised margins; seeds ovate, transverse.

Neotropical but naturalized in Old World; western lowlands and midlands of Dominica to 600 m: Cabrits (*Hodge 3705*), Canefield (*Kimber 1095*), Dublanc (*Whitefoord 4275*), Morne Bruce, Roseau (*Hodge 613*), Morne Daniel, Pointe Ronde (*Hodge 2741*), Pont Cassé (*Ernst 1233*), Sylvania (*Hodge 3848*).

Lonchocarpus Kunth, nom. cons. (Faboid)

Trees or shrubs (ours); leaves pinnately 5-more compound, stipels none; inflorescence ± paniculate, the pedicels bifurcate (2-flowered); calyx cupulate, truncate, or toothed; pod oblong, usually flat, membranous to coriaceous, indehiscent.

1. Standard glabrous; leaves glabrous below, pellucid-punctate; pod coriaceous . . . . . ***L. benthamianus***
1. Standard pubescent outside; leaves pubescent below; pod papery . . . . . ***L. heptaphyllus***

Both these taxa have small, lanceolate bracts (or scars) near the middle of the floral pedicels, which serves to distinguish them from other taxa occurring in the Lesser Antilles that bear orbicular bracts (or their scars) immediately below the flowers. Mario Sousa (MEXU) is working on the genus but, as yet (Jan 1990), he has not published.

Lonchocarpus benthamianus

Lonchocarpus benthamianus Pittier, 1917:86.
Lonchocarpus caribaeus Urban, 1921b:156.

Savonette.

Shrub or small tree to 4 m; leaflets usually 7 or more, glabrous, glandular-punctate, often acuminate and notched at end, ovate, to 9 cm × 3 cm; calyx truncate; corolla pink to lavender, >1 cm long; standard glabrous, with a green patch at base; pods leathery, usually 1-seeded but when 2-seeded, constricted between.

Apparently northern South America north to Mexico and

Antigua; common tree in dry scrub on west coast of Dominica: Cabrits (*Ernst 2095, Hodge 614*), Clarke Hall (*Stern & Wasshausen 2419*), Dublanc (*Whitefoord 4299*), Grand Savanne (*Wilbur 7645*), Rodney's Rock (*Nicolson 1972*), Scotts Head (*Ernst 1325, Webster 13441, Wilbur 7603*). Flowering May–July, fruiting August–November.

Source of fish poison (Hodge and Taylor, 1957:565).

Pittier and Urban independently concluded that *Robinia violacea* Jacquin (from Colombia) could not be identified and each gave a new name for the taxon occurring in the Lesser Antilles. Correspondence in 1984 with Mario Sousa indicates that he regards the Lesser Antillean taxon as a subspecies of *Lonchocarpus punctatus* Kunth. He did not respond to repeated questions about how he applied the name *Robinia violacea*.

Howard (1988, 4:504) argued for restoring Jacquin's name, pointing out the need for neotypification of Jacquin's name to settle its application. He also indicated that *Lonchocarpus roseus* (Miller) A.P. Candolle might be a correct name for the Lesser Antillean element.

Lourteig (1988b:396) accepted *Lonchocarpus punctatus* Kunth as the correct name for this species (including the Antillean material). She (l.c., 398) identified the included Plumier element with *Lonchocarpus domingensis* (Persoon) A.P. Candolle. She essentially lectotypified *Robinia rosea* Miller on Houston material from Campeche that she does not identify beyond quoting Miller's diagnosis "...single winged leaves."

Lonchocarpus heptaphyllus

Lonchocarpus heptaphyllus (Poiret) A.P. Candolle, 1825, 2:259.—Lourteig, 1988b:397.
Dalbergia pentaphylla Poiret in Lamarck, 1812, Encycl., Suppl., 2:445.
Dalbergia heptaphylla Poiret in Lamarck, 1812, Encycl., Suppl., 2:446.
Lonchocarpus pentaphyllus (Poiret) A.P. Candolle, 1825, 2:259.—Johnston, 1949a:154.
Lonchocarpus latifolius Kunth ex A.P. Candolle, 1825, 2:260.—Little & Wadsworth, 1964:198, pl. 86.

Savonette.

Tree to 6 m; leaflets puberulent below, obovate, to 15 cm × 7.5 cm; flowers white, <1 cm long.

Neotropics; scattered along west and north coast of Dominica at low elevations: Calibishie (*Hodge 3735*), Clarke Hall (*Ernst 1436*), Roseau Botanic Garden (*Hodge 996*), South Chiltern (*Stern & Wasshausen 2521*), Sugar Loaf (*Eggers 1070*). Flowering April–July.

Bark of roots crushed for fish poison (Hodge and Taylor, 1957:565).

The name *L. latifolius* published by de Candolle is a legitimate new species name based on a Balbis collection from Puerto Rico. It is not a new combination based on the Willdenow epithet-bringing synonym (*Amerimnum latifolium*, an illegitimate renaming of *A. pinnatum* Jacquin), expressly excluded by de Candolle. I fear that Lourteig (1988b:397) was the first to unite Poiret's two equally priorable species names and chose one (*L. heptaphyllus*) over the other (*L. pentaphyllus*), upsetting usage initiated by Johnston (l.c.) who first pointed out that *L. latifolius* couldn't be used and revived *L. pentaphyllus*.

Macroptilium (Bentham) Urban (Faboid)

Macroptilium lathyroides

Macroptilium lathyroides (Linnaeus) Urban, 1928, 9:457.
Phaseolus lathyroides Linnaeus, 1763:1018.

Suberect herb; leaflets 3, stipellate, stipules scarious; calyx 5-toothed; flowers dark red, keel twisted; stamens 9+1; stigma lateral; pods linear, to 10 cm × 0.2 cm, the valves twisting.

Pantropical, common weed in fields and roadsides on north and west coasts of Dominica: Cabrits (*Whitefoord 3991*), Calibishie (*Hodge 3145*), Clarke Hall (*Nicolson 2114*), Goodwill (*Wilbur 7569*), Marigot (*Hodge 622*, as *Vigna repens*), Pointe Ronde (*Ernst 1562*).

Mimosa Linnaeus (Mimosoid)

Herbs or shrubs, ours armed, with bipinnate leaves (often sensitive); flowers 3–5-merous, ours in peduncled heads; petals connate below; stamens as many as petals or twice as many, exserted on filiform filaments; pod armed (along margin), often transversely jointed, 2-valved but with continuous margin persistent.

Mimosa arenosa (Willdenow) Poiret, native to Venezuela, has been collected along the roadside near Coulibistri (*Whitefoord 5360*), a new record for the Lesser Antilles. It is a shrub with white, spicate inflorescences. The flowers have 4 petals and 8 stamens. I am grateful to Dr. R. Barneby (NY) for confirming the identification.

1. Leaflets rounded; pods not jointed, armed with curved and flattened prickles . . . . . ***M. ceratonia***
1. Leaflets acute; pods jointed, armed with straight and hair-like spines.
   2. Pinnae 2; leaflets in 3–5 pairs, ~3 cm × 1 cm . . . . . ***M. casta***
   2. Pinnae 4; leaflets in 15–25 pairs, ~1 cm × 0.2 cm . . . . . ***M. pudica***

Mimosa casta

Mimosa casta Linnaeus, 1753:518.
Mimosa dominiciana Desvaux, 1826b:424.

Coc chien.

Trailing shrub; flowers whitish; pods ~3 cm × 1 cm, with ~4 joints.

Neotropics, weed in Dominica: Canefield (*Hodge 615*), Dublanc (*Whitefoord 5525*), Grand Bay (*Eggers 564*), road to Jean (*Nicolson 2154*), Londonderry (*Chambers 2695*), Pointe

Ronde (*Hodge 2753*), Ridgefield (*Hodge 2140*), Soufrière Valley (*Cooper 140*), South Chiltern (*Hodge 1576*, mixed with *M. pudica*). Flowering November–December; fruiting February–August.

Mimosa ceratonia

Mimosa ceratonia Linnaeus, 1753:523.

Mountain l'epine.

Trailing shrub; pinnae 6–10; leaflets ~2 cm × 2 cm; flowers whitish; pods ~4 cm × 2 cm, not jointed.

West Indies; weed but apparently a new record for Dominica: Cabrit swamp margin (*Webster 13314*), Dublanc (*Whitefoord 4293*), Salisbury road (*Stern & Wasshausen 2589*), road near Sylvania (*Nicolson 1864*). Flowering June and August; fruiting October–January.

Mimosa pudica

Mimosa pudica Linnaeus, 1753:518.

Honteuse.

Suffrutescent herb; pinnae and leaflets "sensitive" to touch; pods to 2 cm × 0.5 cm, constricted at joints.

Neotropics but widely naturalized; weed in Dominica: Fond Figues (*Ernst 1457*), Lisdara (*Hodge 616*), Pointe Ronde (*Hodge 2647*), Salybia (*Hodge 3286*), Sylvania area (*Cooper 85, Hodge 1143, 1284, Wilbur 7721*), Syndicate (*Whitefoord 3949*). Flowering and fruiting continuously.

Used as a "charm" plant by Caribs (Hodge and Taylor, 1957:565). Adjanohoun et al. (1985:139, pl. 106) reported medicinal usage and possibly toxic.

Mucuna Adanson, nom. cons. (Faboid)

Woody vines with 3-foliolate leaves and large flowers in axillary, long-peduncled clusters; calyx campanulate, the upper two teeth united; standard auricled at base, wings longer than standard, keel as long as wings or longer; stamens 9+1, alternately long and short; ovary sessile, usually villous, ovules few; pod thick, 2-valved, usually covered with stinging hairs; seeds orbicular, large, with a thick coat and a linear hilum.

1. Leaflets glabrous beneath; stipels none; standard equaling wings . . . . . ***M. urens***
1. Leaflets pubescent beneath; stipels present; standard shorter than wings.
   2. Leaflets only apiculate; inflorescence a loose raceme; flowers purple; pod ± terete; seed ovoid with short hilum . . . . . ***M. pruriens***
   2. Leaflets acuminate; inflorescence a compact, ± umbellate raceme; flowers creamy; pod flattened; seed globose with elongate hilum . . . . . ***M. sloanei***

Mucuna pruriens

Mucuna pruriens (Linnaeus) A.P. Candolle, 1825, 2:405.
Dolichos pruriens Linnaeus, 1754:23; 1759a:1162.
Stizolobium pruriens (Linnaeus) Medikus, 1787b:399.

Leaflets apiculate, pubescent below; flowers purple; seeds almost black with short hilum surrounded by a white aril.

Widespread in tropics; once collected (leafless fruit) in dry scrub of northwestern Dominica: road to Dublanc (*Whitefoord 5562*).

A specimen (US) labeled *Mucuna pruriens* f. *cochinchinensis* (Loureiro) Backer from Guadeloupe (*Stehlé 5288*) reported introduction from Dominica. The pods are white-velvety and without stinging hairs. The complex needs study and I confine myself to three observations: (1) Backer's forma *cochinchinensis* (as well as f. *utilis*) was invalidly published in Backer and Bakhuizen (1963, 1:629) for lack of direct reference to place of publication of the basionym, (2) *M. derringiana* (Bort) Merrill sounds very much like another *M. pruriens* with non-urticaceous pod hairs, and (3) Lubis et al. (1979, not seen) has evidence that pod hairs are determined by two genes.

Mucuna sloanei

Mucuna sloanei Fawcett & Rendle, 1917:36.

Leaflets acuminate, pubescent below; flowers cream-yellow.

Neotropics and West Africa, including Guadeloupe and Martinique in the Lesser Antilles (US); reported for Dominica by Vélez (1957:101) on the statement by Britton and Wilson (1924, 5:425) "Guadeloupe to Trinidad."

Mucuna urens

Mucuna urens (Linnaeus) Medikus, 1787b:399.—A.P. Candolle, 1825, 2:405.
Dolichos urens Linnaeus, 1759a:1162.

Leaves acuminate, glabrous below; flowers purple.

Neotropics, including St. Kitts, Marie Galante, and Guadeloupe (US) in Lesser Antilles; cited for Dominica by Vélez (1957:101) on the authority of Stehlé, but the place of this attribution was not located.

Neptunia Loureiro (Mimosoid)

Herbs (often aquatic) with bipinnate leaves; flowers yellow, borne on long-peduncled heads; stamens 10; pods flat, oblong to linear, commonly recurved, impressed between seeds, the valves thin-coriaceous.

1. Vegetative parts glabrous; petiole with gland below attachment of lowest pinnae; stipules and peduncular bracts auriculate . . . . . ***N. plena***
1. Vegetative parts pubescent or ciliate; petiole glandless; stipules and peduncular bracts lanceolate . . . . . ***N. pubescens***

Neptunia plena

Neptunia plena (Linnaeus) Bentham, 1841:355.—Windler, 1966:398.
Mimosa plena Linnaeus, 1753:519.

Neotropics, including Guadeloupe and Martinique, and tropical Asia; attributed to Dominica by Vélez (1957:102) on the authority of Britton and Wilson (1924, 5:358), who stated "Antigua to Grenada." Howard (1988, 4:370) reported this for Dominica with an exclamation mark.

Neptunia pubescens

Neptunia pubescens Bentham, 1841:356.—Windler, 1966:389.

Neotropics, in Dominica on west coast: Grand Savanne (*Ernst 2130, Imray 26, Lloyd 825*), sine loc. (*Imray 28* at K).

Our material is of the typical subspecies with 3 pairs of pinnae.

Ormosia G. Jackson, nom. cons. (Faboid)

Trees with odd-pinnate leaves; inflorescence paniculately racemose; flowers 5-merous, white to purple; standard orbicular, keel petals free; stamens 10, free, unequal; pod oblong-linear, woody, compressed between seeds; seeds shiny, red or red with black.

1. Leaf large (rhachis 20–50 cm long); leaflets >5 cm broad, rounded at apex; pods minutely velvety, seeds 10–13 mm broad and long, red or red and black . . . . . ***O. krugii***
1. Leaf small (rhachis to 15 cm long); leaflets to 5 cm broad, acute at apex; pods densely velvety to tomentose; seeds 15–17 mm broad and long, red and black . . . . . ***O. monosperma***

Ormosia krugii

Ormosia krugii Urban, 1899, 1:320.—Little & Wadsworth, 1964:200, pl. 87.—Rudd, 1965:341.

Caconnier blanc.

Hispaniola, Puerto Rico, Guadeloupe; occasional in rain forests of Dominica from 120–750 m: Bibiay (*Nicolson 2072*), Riversdale (*Beard 240*).

Sterile material is confusable with *Trichilia septentrionalis* A.C. Candolle (Meliaceae).

Ormosia monosperma

Ormosia monosperma (Swartz) Urban, 1899, 1:321.—Rudd, 1965:355.
Sophora monosperma Swartz, 1788:66.
Ormosia dasycarpa G. Jackson, 1811:362.

Caconnier rouge.

Lesser Antilles, Trinidad, and Venezuela; occasional in Dominica in rain forest: Deux Branches (*Nicolson 2131*), Laudat (*Hodge 2037*), Castle Bruce Road (*Cowan 1621*), sine loc. (*Eggers 924, Imray s.n.*).

Piscidia Linnaeus, nom. cons. (Faboid)

Piscidia carthagenensis

Piscidia carthagenensis Jacquin, 1760:27.—Rudd, 1969:490.

Shrub or tree; leaves odd-pinnate; flowers pink, racemose to paniculate; calyx shortly 5-lobed; corolla with ± orbicular vexillum, wings falcate equaling vexillum, adherent to keel; stamens 10, united except the vexillary stamen at the base; pod 1–10-seeded, with 4 longitudinal wings.

Central America and northern South America into the Lesser Antilles; new record for Dominica on dry west coast: Bioche (*Whitefoord 5717*), Coulibistri (*Whitefoord 5710*), Petit Coulibri (*Whitefoord 6034*). Flowering and fruiting in April.

Pithecellobium Martius, nom. cons. (Mimosoid)

Shrub or tree; leaves evenly bipinnate; flowers clustered in heads; petals united above middle; stamens many, long-exserted, united below; pods curved or coiled, the valves thin-walled, twisting.

Pithecellobium dulce (Roxburgh) Bentham was recently collected in the Botanic Garden (*Whitefoord 6063*). It is similar to *P. unguis-cati* but has a tomentose inflorescence and a longer corolla.

1. Leaflets 3–4 pairs per pinna, rather quadrangular; seeds not arillate . . . . . ***P. jupunba***
1. Leaflets 1 pair per pinna, ovate; seeds black with red aril . . . . . ***P. unguis-cati***

Pithecellobium jupunba

Pithecellobium jupunba (Willdenow) Urban, 1900, 2:257.
Acacia jupunba Willdenow, 1806, 4:1067.
Pithecellobium micradenium Bentham, 1844:217.

Bois cicerou, bois pipirit.

Medium tree; pinnae 3–4 pairs; leaflets 1–2 cm × 0.6–1.5 cm; pods red inside.

Lesser Antilles and South America; frequent tree of rain forest in Dominica: northwest, Syndicate area (*Ernst 2113, Hodge 2677*), northeast (*Hodge 3137, 3412, Ramage s.n.*), Hatton Garden Estate (*Hodge 3020*), Sylvania area (*Hodge 617, 1013, Nicolson 1865*), Laudat area (*Eggers 771, 1047, Hodge 2074*), southwest area (*Hodge 1652, 2314, 2442*).

Several uses reported by Hodge and Taylor (1957:566), including fish poison, soap, dysentery, and boards.

Pithecellobium unguis-cati

Pithecellobium unguis-cati (Linnaeus) Bentham, 1844:200.—Little et al., 1974:262, pl. 365.
Mimosa unguis-cati Linnaeus, 1753:517.

Shrub or small tree; pinnae of 1 pair; leaflets ~4 cm × 3 cm, rounded; flowers pink, glabrous.

Neotropics; common in dry scrub along west coast of Dominica: Canefield (*Whitefoord 6084*), Grand Savanne (*DeFilipps 172, Ernst 1043, Ramage s.n.*), Pointe Michel (*Gillis 8117*).

Pterocarpus Jacquin, nom. cons. (Faboid)

Pterocarpus officinalis

Pterocarpus officinalis Jacquin, 1763 [Jul]:283.
Pterocarpus draco Linnaeus, 1763 [Aug]:1662.

Tree with fluted base; leaves odd-pinnate, leaflets alternate; flowers yellow, standard orbicular; pod flat, indehiscent, obliquely orbicular, broadly winged on one side, 1-seeded.

Neotropics; dominant along sluggish rivers on north end of Dominica: Cabrit Swamp (*Whitefoord 4067*), Calibishie (*Hodge 3147*), Eden River (*Chambers 2601, Ernst 2090*), Indian River (*Hodge 3752*), near St. Johns (*Eggers 777*), Woodford Hill River (*Howard 11748*), sine loc. (*Fishlock 15*).

Rhynchosia Loureiro, nom. cons. (Faboid)

Perennial vines with 3-foliolate, often resin-dotted, stipellate or estipellate leaves; stamens 9+1; ovules (1-)2; pod flat, 1-2-seeded, sometimes constricted between seeds; seeds with red around the hilum and the rest black or only a tip black, or brown (with black spots) or black.

1. Stipels present; calyx lobes all lanceolate; pods not constricted between brown or black seeds.
   2. Leaflets puberulent only on veins below; calyx <4.5 mm long; petals yellow with standard streaked with purple . . . . . ***R. minima***
   2. Leaflets tomentose below; calyx >5 mm long; petals yellow . . . . . ***R. reticulata***
1. Stipels absent; calyx lobes ovate, except for lower lanceolate lobe; pods constricted between red and black seeds.
   3. Leaflet puberulent below; bracts (soon deciduous) lanceolate, less than 1 mm broad; pods glabrous . . . . . ***R. erythrinoides***
   3. Leaflet tomentose below; bracts (soon deciduous) oblanceolate, about 2 mm broad; pods puberulent . . . . . ***R. phaseoloides***

Rhynchosia erythrinoides

Rhynchosia erythrinoides Schlechtendal & Chamisso, 1830:587.—Grear, 1978:50.

Leaflets puberulent below, slightly (1.2×) longer than broad; pod glabrous, often blackish; seed mostly black with red around the hilum.

Mostly Central America, but also Jamaica, Hispaniola, Ecuador, and Colombia; known from Dominica only from flowering material (*Imray s.n.* at GH) mixed with fruiting material of *R. phaseoloides*.

This record is dubious. Could flowering Jamaican material been accidentally added to Imray's fruiting Dominican material, say by Grisebach?

This taxon is commonly treated as a synonym of *R. phaseoloides* (an older name) or *R. pyramidalis* (an even older name) but Grear separates it. What is called *R. phaseoloides* in Adams (1972:355) is *R. erythrinoides*, although true *R. pyramidalis* also occurs there (*Miller 1421*).

Rhynchosia minima

Rhynchosia minima (Linnaeus) A.P. Candolle, 1825, 2:385.—Grear, 1978:76.
Dolichos minimus Linnaeus, 1753:726.

Leaflets stipellate, conspicuously black-resin-dotted below, to 3 cm × 2 cm; calyx <4.5 mm long; pod not constricted; seeds black to brown.

General in tropics; infrequent in dry scrub on west coast of Dominica: Dublanc (*Whitefoord 4291*) Grand Savanne (*Wilbur 8351*), sine loc. (*Imray 22* at K).

Rhynchosia phaseoloides

Rhynchosia phaseoloides (Swartz) A.P. Candolle, 1825, 2:385.—Grear, 1978:53.
Glycine phaseoloides Swartz, 1788:105.

Leaflets estipellate, tomentose below, slightly (1.2×) longer than broad; bracts ~2 mm broad, oblanceolate; pods constricted, puberulent; seeds mostly black with red around hilum.

Greater Antilles into South America; known from Dominica from few collections: Dublanc-Syndicate road (*Whitefoord 5704*, fruiting in April), sine loc. (*Imray 281* at K, *s.n.* at GH), the latter mixed with flowering material of *R. erythrinoides*).

This taxon has been considered a synonym of *R. pyramidalis* (Lamarck) Urban, although Urban (1918b:318) separated them. *R. pyramidalis* has leaflets tomentose only on the veins beneath, the terminal leaflet is clearly (1.75×) longer than broad and the seeds are mostly red with a small black tip.

Rhynchosia reticulata

Rhynchosia reticulata (Swartz) A.P. Candolle, 1825, 2:385.—Grear, 1978:112.
Glycine reticulata Swartz, 1788:105.

Leaflets stipellate, to 6 cm × 3.5 cm; calyx about 1 cm long; pods not constricted; seeds brown to black.

Neotropics; reported as collected on Dominica by Vélez (1957:100) under the name *Dolicholus reticulatus* (Swartz) Millspaugh.

Sabinea A.P. Candolle (Faboid)

Sabinea carinalis

Sabinea carinalis Grisebach, 1860:183.

Shrub to 3 m; leaflets in 6–8 pairs, ~1.5 cm × 0.5 cm, oblong with mucro; inflorescences on old wood, just before leafing; calyx nearly truncate; flowers deep red to scarlet, showy, keel 2.5 cm; stamens equal, 9+1; style subulate with stigma terminal; pod flattened, long-stipitate, the thin valves twisting.

Endemic to Dominica, along west coast in dry scrub: Batali (*Ramage s.n.*, 28 Feb 1888), Canefield ravine (*Whitefoord 6100*), Dublanc (*Whitefoord 5705*), Mero-Layou area (*Chambers 2802, Imray 33* at K, *Wasshausen & Ayensu 406, Webster 13273*), Spanish Mountain near summit (*Whitefoord 5660*), sine loc. (*Imray 92, 93, 102* (type) at K).

Flowering February–April (rarely June), the time appears to be controlled by rains during or after the dry season. A showy species, perhaps rather rare.

A specimen (*Atchison 98*) cultivated at Atkins Garden, Cuba, gives the chromosome count as 2n = 16.

Grisebach cited an Imray collection of *Sabinia florida*, apparently *Imray 33*, actually *S. carinalis*. *Sabinia florida* is an endemic of Puerto Rico and the Virgin Islands and differs from *S. carinalis* by its lavender to pale purple flowers and having five stamens half as long as the other five.

Senna Miller (Caesalpinoid)

Herbs, shrubs or trees; leaves evenly 1-pinnate; stamens 10, 3 sterile; anthers basifixed, opening by terminal pores; pods inertly dehiscent, flattened or terete.

Rupert Barneby (NY) reviewed identifications and an early draft during a visit in 1977. I am most grateful for his invaluable help.

Senna bacillaris (Linnaeus f.) Irwin & Barneby (incl. *Cassia bacillaris* Linnaeus f.) is shrubby and has only two pairs of leaflets with a gland between the lowest pair (Botanic Gardens, *Fairchild 2765, Hodge 903*).

Spectacular, yellow-flowered *Senna multijuga* (L. Richard) Irwin & Barneby is planted in the Antrim Valley (*Nicolson 1866*) and has >15 pairs of leaflets that are <2 cm long with a gland only between the lowest pair.

Senna sophera (Linnaeus) Roxburgh, is very similar to *S. occidentalis* and was reported for Dominica by Kellogg (in Howard, 1988, 4:428). It has longer (1 cm or more) floral peduncles, a recurved style strongly dilated at apex, and a subterete fruit.

1. Petiole lacking glands; leaflets large (~10 cm × 4 cm), rounded at apex; fruits 4-winged . . . . . ***S. alata***
1. Petiole bearing 1-several glands, either below or between the leaflets; leaflets smaller (to 5 cm) or, if larger, then acute at apex; fruits unwinged.
   2. Petiolar gland at base of petiole, far below first pair of leaflets; leaflets acute.
      3. Petiole and leaflets pubescent . . . . . ***S. hirsuta***
      3. Petiole and leaflets glabrous . . . . . ***S. occidentalis***
   2. Petiolar gland(s) between lowest pair(s) of leaflets; leaflets rounded to obtuse.
      4. Stipules deciduous, glabrous; leaflets rounded, not apiculate . . . . . ***S. bicapsularis***
      4. Stipules persistent, pubescent; leaflets rounded to obtuse, apiculate.
         5. Areoles on both sides of seed linear (0.3–0.5 mm); the 3 larger anthers narrowed just below the apex, forming a bottle-like neck, pedicels longer (of flowers usually 1.2–3.5 cm, of fruits 1.5–4.5 cm); usually a single gland between only the lowest pair of leaflets but sometimes between both lower pairs . . . . . ***S. obtusifolia***
         5. Areoles on both sides of seed broad (1.5–2.0 mm), almost as wide as the seed itself; the 3 larger anthers abruptly rounded at the apex; pedicels shorter (of flowers 0.5–1.0 cm, of fruits to 1.5 cm); a gland between both lower pairs of leaflets . . . . . ***S. tora***

Senna alata

Senna alata (Linnaeus) Roxburgh, 1832, 2:349.—Irwin & Barneby, 1982:460.
Cassia alata Linnaeus, 1753:378.
Herpetica alata (Linnaeus) Rafinesque, 1838:123.

Ringworm shrub, desay (Carib).

Shrub to 4 m; leaflets 6–12 pairs, the lowest pair widely separated from rest of pairs, minutely puberulent, oblong, the upper pair obovate, 5–17 cm long, retuse or obtuse; fruit pendant, 10–15 cm long, longitudinally undulate-winged, the wings 5 mm wide.

Neotropics but widely naturalized; hillsides and waste ground in Dominica at lower elevations: Carib Reserve (*Hodge 3400*), Mahaut (*Hodge 1303*).

Caribs bathe themselves with the juice of crushed leaves to treat skin diseases (Hodge and Taylor, 1957:561).

Senna bicapsularis

Senna bicapsularis (Linnaeus) Roxburgh, 1832:342.—Irwin & Barneby, 1982:399.
Cassia bicapsularis Linnaeus, 1753:376.
Adipera bicapsularis (Linnaeus) Britton & Rose ex Britton & Wilson, 1924, 5:370.

Sou marqué.

Shrub ± climbing, to 3.5 m; leaflets 3–5 pairs, glabrous, elliptic to orbiculate, 1–4 cm long, rounded; fruit pendant, 6–15 cm long, ± terete.

Neotropical but widely spread; in dry scrub woodland at low elevations in Dominica: Bataka (*Taylor 143*), Cabrit Swamp (*Whitefoord 5274*), Dublanc (*Hodge 2516*), Hatton Estate

(*Hodge 2936*), Salisbury (*Stern & Wasshausen 2592, Whitefoord 4520*), Scotts Head (*Hodge 1620*), sine loc. (*Hodge 2936, Imray s.n.*).

Cultivated by Caribs for ritual use (Hodge and Taylor, 1957:562).

Senna hirsuta

Senna hirsuta (Linnaeus) Irwin & Barneby, 1979:499; 1982:425.
Cassia hirsuta Linnaeus, 1753:378.
Ditremexa hirsuta (Linnaeus) Britton & Rose ex Britton & Wilson, 1924, 5:372.

Zepiante marrow, z'herbes puantes (male), kulabule (Carib), nhakere haho (Carib women talk, meaning ants' hammock).

Herb to 1.5 m; leaflets 3–5 pairs, hirsute, ovate to lanceolate, 4–7 cm long, acute or acuminate, fruit 8–15 cm long, curved, erect.

Neotropics; in disturbed areas of Dominica: Carib Reserve (*Stehlé 6370, Taylor 122*), without locality (*Eggers 522, 814*).

This is considered as male by Caribs, *S. occidentalis* being female. An infusion of the ground seeds of either species is used as a coffee substitute and a febrifuge, the preparation from the "female" species being preferred (to coffee) by pregnant women (see Hodge and Taylor, 1957:562).

Senna obtusifolia

Senna obtusifolia (Linnaeus) Irwin & Barneby, 1982:252.
Cassia obtusifolia Linnaeus, 1753:377.—Brenan, 1958:248.

Herb to 1 m; leaflets in 3 pairs, a clavate gland between the lowest pair, obovate, to 5 cm long; fruit to 20 cm long, usually falcate, erect; seed dark, with a linear areole on both sides.

Originally neotropical, now widely distributed; Dominica: Dublanc (*Whitefoord 4290*), Belmont in St. Georges Parish (*Broadway s.n.* 17 Apr 1966 at NY), Roseau-Canefield (*Hodge 595*). Adjanohoun et al. (1985:63, pl. 29) warned against confusing this "male" taxon with *S. occidentalis*, the "female."

This originally neotropical species is easily confused with introduced Old World *S. tora* Linnaeus.

Senna occidentalis

Senna occidentalis (Linnaeus) Link, 1831, 2:140.—Irwin & Barneby, 1982:436.
Cassia occidentalis Linnaeus, 1753:377.
Ditremexa occidentalis (Linnaeus) Britton & Rose ex Britton & Wilson, 1924, 5:377.

Coffee senna, jumbie coffee, wild coffee, negro coffee, stinking weed, z'herbes puantes (female), kulabule (Carib).

Herb to 2 m; leaflets 4–5 pairs, glabrous, ciliate, ovate to lanceolate, 3–7 cm long, acute or acuminate; floral peduncles <1 cm long; styles slightly dilated and only gently recurved; fruit 6–12 cm long, compressed, erect.

Pantropical; in disturbed lowlands of Dominica: Clarke Hall (*Ernst 1693*), Colihaut (*Kimber 1065*), Delices (*Whitefoord 3684*), Goodwill (*Wilbur 7580*), Hatton Garden (*Hodge 3030, 3187*), Lisdara (*Hodge 598*), Portsmouth (*Hodge 596*), Pointe Michel (*Gillis 8156*), Roseau-Canefield (*Hodge 597*), Scotts Head (*Hodge 1618*), Soufrière (*Lloyd 408*), West Cabrit (*Smith 10328*), Bot. Gard. (*Hodge 989*), sine loc. (*Taylor 123*).

Stehlé 6370 from Bataca in the Carib Reserve is mixed, the leaves are *S. hirsuta* and the fruits are *S. occidentalis*.

Hodge and Taylor (1957:563) discussed the use of this species by the Caribs. See discussion above under *S. hirsuta*. Adjanohoun et al. (1985:61, pl. 28) reported medicinal usages.

Senna tora

Senna tora (Linnaeus) Roxburgh, 1832, 2:340.—Irwin & Barneby, 1982:255 [sub *Senna obtusifolia*].
Cassia tora Linnaeus, 1753:376.—Brenan, 1958:249.

Shrubby herb to 1 m; leaflets in 3 pairs, a clavate gland between the two lowest pairs, obovate, to 3 cm long; young fruits to 15 cm long, usually falcate, erect; seeds not collected on Dominica.

Asia to Pacific but now a widespread weed; in Dominica reported to form a low thicket: Canefield Estate (*Whitefoord 3740*).

This species is easily confused with *Senna obtusifolia*. Adams (1972:325) reported that true *S. tora* occurs on Jamaica (one collection) and on Guadeloupe. At US, *Proctor 19847* (Guadeloupe) and *Smith & Smith 824* (St. Vincent) are true *S. tora*.

Stylosanthes Swartz (Faboid)

Stylosanthes hamata

Stylosanthes hamata (Linnaeus) Taubert, 1890:22.—Mohlenbrock, 1957:324.
Hedysarum hamatum Linnaeus, 1759a:1170.

Herbs; stipules adnate to petioles, with subulate apices; leaflets 3, estipellate, narrow to 17 cm × 5 mm, strongly striately veined; flowers small, capitate, terminal; upper 4 calyx lobes ± united; stamens united; style elongated, lower part persistent and hooked (hamate); pod 1–2-jointed.

Neotropics, attributed to Dominica by Vélez (1957:101) based on his own observation. To be sought along littoral on west coast.

Swartzia Schreber, nom. cons. (Caesalpinoid)

Trees; leaves odd-pinnate, 1–5-foliolate; calyx reflexing; corolla none or of one petal; stamens 2-many; pod orange, rounded 1(–2)-seeded; seed black with a large white aril.

1. Leaflets (3–)5–7; petals absent; inflorescence ~15 cm long; pedicel 1 cm long . . . . . ***S. caribaea***
1. Leaflets 1; petal 1; inflorescence ~5 cm long; pedicel 2 cm long . . . . . ***S. simplex***

Swartzia caribaea

Swartzia caribaea Grisebach, 1860:212.—Cowan, 1968:147.
Tounatea caribaea (Grisebach) Taubert, 1891:390.

Z'oranger blanc, coco negre hebrew.

Straight tree to 20 m; leaflets acuminate, 7–12 cm × 2–3.5 cm; seeds black, ovoid, with white aril covering upper one-fourth of the seed.

Guadeloupe and St. Lucia; scattered canopy tree in Dominica in rainforest at middle elevations: Glasham (*Nicolson 2117*), Laudat (*Hodge 2038*), Sylvania (*Cooper 48, Hodge 1169*), Syndicate (*Whitefoord 4399*). Apparently flowering in winter, fruits January–June.

Swartzia simplex

Swartzia simplex (Swartz) Sprengel, 1825, 2:567.—Cowan, 1968:170.
Possira simplex Swartz, 1788:82.
Rittera grandiflora Vahl, 1798, Eclog., 2:37.
Swartzia grandiflora (Vahl) Willdenow, 1800, 2:1220.
Tounatea simplex (Swartz) Taubert, 1891:391.
Swartzia simplex var. *genuina* Urban, 1908, 5:364.

Abricotier bois, wild orange, z'oranger rouge.

Tree to 35 m; leaflet solitary, emarginate, 5–21 cm × 2–8 cm; petal yellow, 15–35 mm broad; seeds glossy black, ellipsoid to reniform, white aril covering central one- to two-thirds of the seed.

Typical subspecies in Lesser Antilles and northern South America; common in Dominica in dry scrub woodland and rain forest from near sea level to 500 m: Anse Du Me (*Wilbur 8302*), Aux Delices (*Nicolson 2139*), Carib Reserve (*Hodge 3250, Stehlé 6421*), Castle Bruce Road (*Cowan 1612*), Clarke Hall (*Stern & Wasshausen 2356*), Clyde River Valley (*Ernst 1035*), Deux Branches (*Hodge 3480*), La Chaudière (*Hodge 3527*), Londonderry (*Chambers 2614*), Marigot (*Hodge 586*), Pointe Ronde (*Ernst 1567, Hodge 2683*), Ravine Sonde (*Ernst 1924*), Roseau Botanic Garden (*Hodge 3902*), sine loc. (*Fishlock 14*).

Primary flowering in July–September, secondary in January–December. Our specimens annotated by Cowan as the typical subspecies.

Tamarindus Linnaeus (Caesalpinoid)

Tamarindus indica

Tamarindus indica Linnaeus, 1753:34.—Little & Wadsworth, 1964:186, pl. 80.

Tamarind.

Thick-trunked tree; leaves evenly pinnate, ~12 cm long, leaflets 1–2 cm × 0.3–0.6 cm; flowers racemose; calyx 4-lobed; corolla with 3 large and 2 minute petals; stamens 3, united; pod oblong, indehiscent with hard skin, pulpy flesh and leathery endocarp septate between fat seeds.

Cultivated and naturalized pantropically; in dry areas along west coast of Dominica: Canefield (*Hodge 620*), Chattanooga (*Hodge 619*), above Colihaut (DHN!), Macoucherie (*Chambers 2734*), Massacre (*Whitefoord 4635*).

Pulpy fruit good in chutney, drinks, etc.

Tephrosia Persoon, nom. cons. (Faboid)

Shrubs or herbs; leaves odd-pinnate, leaflets 4–12 pairs, apiculate; inflorescence terminal, racemose; pod dehiscent, not septate.

1. Flowers 2 cm long; leaflets acute; calyx lobes rounded; style bearded . . . . . ***T. candida***
1. Flowers <2 cm long; leaflets rounded to emarginate; calyx lobes acute, style glabrous.
   2. Calyx and pod densely villous with brownish hairs, calyx teeth broad, shorter than tube except for the elongate, lowest lobe . . . . . ***T. noctiflora***
   2. Calyx and pod thinly villous or puberulent with grayish hairs; calyx teeth all narrow and equaling or longer than tube . . . . . ***T. purpurea***

Tephrosia candida

Tephrosia candida A.P. Candolle, 1825, 2:249.—Wood, 1949:374.
Robinia candida (A.P. Candolle) Roxburgh [1814:56, nom. nud.], 1832, 3:327.

Ti frosia, a pun on the generic name meaning little (petit) Frosia.

Shrub to 3 m, branches velvety-pubescent; leaflets acute, 9–12 pairs, 1–5 cm × 0.7–1 cm; flowers white or rarely yellow.

Asian but widely introduced for windbreaks and escaping; in western lowlands and interior of Dominica: Clarke Hall (*Nicolson 1854*), Morne Anglais (*Hodge 2255*), Pointe Michel (*Ernst 1347*), Pont Cassé (*Wilbur 7782*), Wooten Waven (*Hodge 395*).

De Candolle validly published his binomial before Roxburgh's, thus the epithet was transferred from *Tephrosia* to *Robinia*, not the other way around.

Tephrosia noctiflora

Tephrosia noctiflora Bojer ex Baker in Oliver, 1871, 2:112.—Wood, 1949:379.

Herb or undershrub to 2 m, brownish-pubescent; leaflets in 6–9 pairs, narrowly oblanceolate, 2.5–4.5 cm × 0.5–0.8 cm; corolla white, marked with purple lines and a spot; pod 3–4 cm long, covered with spreading brownish hairs.

African but widespread in tropics; cultivated as cover crop and fish poison and escaping along dry west coast of Dominica: Layou (*Ernst 1526*), Lisdara (*Hodge 621*), Pointe Guignard (*Wilbur 7614*), Pointe Michel (*Gillis 8135*), Roseau Botanic Garden (*Bassett 10, Fairchild 2658, 2770*), Syndicate turnoff (*Whitefoord 4320*).

Tephrosia purpurea

Tephrosia purpurea (Linnaeus) Persoon, 1807, 2:328.—Wood, 1949:379.—Brummitt, 1968:240.
Cracca purpurea Linnaeus, 1753:752.

Undershrub; leaflets 4-6(-9) pairs, linear-oblanceolate, glabrous above, 1-2.5 cm × 0.3-0.7 cm; flowers reddish purple to white; pod 3-4 cm long.

Asiatic but widespread; on dry west coast of Dominica: Soufrière (*Lloyd 448*), sine loc. (*Imray 29* at K). The Imray specimen was misidentified by Grisebach (1860:182) as *T. cinerea*.

Teramnus Browne (Faboid)

Teramnus labialis

Teramnus labialis (Linnaeus f.) Sprengel, 1826, 3:235.
Glycine labialis Linnaeus f., 1782:325.

Slender twiner; stems villous; leaflets 3, ovate, ± acute, 1-5.5 cm × ~3 cm; calyx 5-lobed; corolla white or pink; stamens united, alternately sterile; pod 3-5 cm × 0.3 cm, the glabrous style bent at right angle to pod; seeds dark brown.

Pantropical; reported for Dominica by Vélez (1957:101), confirmed by vegetative elements mixed with *Rhynchosia minima* from Grand Savanne (*Wilbur 8351*).

This taxon was named *Teramnus labialis* subsp. *arabicus* Verdcourt (1970:272), the subspecies (Africa and Neotropics) being defined by granulate rather than shining seeds.

Vigna Savi (Faboid)

1. Style coiled through 3 revolutions . . . . . ***V. adenantha***
1. Style erect . . . . . ***V. luteola***

Vigna adenantha

Vigna adenantha (Meyer) Maréchal et al., 1978:202.
Phaseolus adenanthus Meyer, 1818:239.

Perennial; leaflets 7-12 cm × 4-6 cm; peduncle stout, ~10 cm long; flowers short-pedicelled, aggregated in short racemes with swollen nodes; corolla showy, pink or mauve, variegated; pod 8-10 cm × 1 cm, straight or a little curved; seeds 10-15, ~2 mm long.

Pantropical; southwestern Dominica at 500 m: South Chiltern (*Hodge 1577*).

Vigna luteola

Vigna luteola (Jacquin) Bentham in Martius, 1859, 15(1):194.
Dolichos repens Linnaeus, 1759a:1163.
Dolichos luteolus Jacquin, 1770, Hort., 1:39.
Vigna repens (Linnaeus) Kuntze, 1891, 1:212, non Baker.

Trailing vine; stems glabrous; leaves 3-foliolate, stipellate; stipules not auricled; leaflets 3-9 cm × 1-5 cm, rounded; flowers yellow, clustered in short raceme on a long peduncle; standard ~1.5 cm long; stamens 9+1; style bearded along inner side, stigma oblique; pod turgid, elongate, 2-valved.

Pantropical; common strand plant in Dominica along coasts: Cabrit Swamp (*Hodge 624*), Castle Bruce (*Ernst 1468, Wilbur 7991*), Hatton Garden (*Hodge 2962*), Layou (*Fosberg 48305*), Marigot (*Hodge 622, 623*), Melville Hall (*Wilbur 8039*), Pointe Ronde (*Hodge 2737*), Rosalie Point (*Whitefoord 3732*), Salybia (*Chambers 2636*).

Lackey and D'Arcy (1980:797-799) noted that *Vigna marina* (Burman) Merrill may be the correct name for this species. Alston (1931) separated *V. marina* from *V. luteola*. Other species may be found on Dominica. *Vigna unguiculata* (Linnaeus) Walpers, the black-eyed pea, with auricled stipules, was collected on road beside the Macoucheri River (*Whitefoord 5970*).

Zornia Gmelin (Faboid)

Zornia microphylla

Zornia microphylla Desvaux, 1826a:324.—Mohlenbrock, 1961:123.

Herbs; stipules persistent, attached above base; leaflets 2, to 1.5 cm × 0.7 cm; bracts ~2 mm broad, ~3× longer than broad; calyx campanulate, upper 2 lobes united; corolla yellow; stamens united, alternately long and short; loment articulated, upper suture straight, the articles indehiscent, armed.

Cuba, Hispaniola, Antigua, Guadeloupe, Martinique, Grenada; reported as common in one locality on east coast and an occasional weed along west coast of Dominica: Colihaut (*Wilbur 8270*), Fond Hunte Estate (*Whitefoord 4455*), Hatton Garden (*Hodge 2963*), Mero (*Ernst 1936, 2143*). Flowering April-July, fruiting August.

FLACOURTIACEAE

(by R. Kiger)

Flacourtia jangomas (Loureiro) Raeuschel (including *Flacourtia cataphracta* Roxburgh ex Willdenow), is a dioecious shrub with thorny stems and a berry-like fruit. It was cultivated in the Roseau Botanic Garden and has been collected as a hedge at Clarke Hall (*Ernst 1416, 1978, Stern & Wasshausen 2421*), in thicket at Morne Daniel (*Whitefoord 6060*), and beside the Canefield River (*Whitefoord 6112*).

Hydnocarpus pentandra (Hamilton) Oken (incl. *Hydnocarpus wightiana* Blume and *Hydnocarpus laurifolia* Sleumer, see Nicolson et al., 1988:147) is a large tree with woody, spherical fruits, the source of chaulmoogra oil once used to treat leprosy. Several rows were found in the Roseau Botanic Garden (*Nicolson 4216*). It has 5 stamens and serrate leaves.

Scopolia chinensis (Loureiro) Clos collected in the Roseau Botanic Garden (*Hodge 908, 968*) but was misidentified as

Flacourtia sepiaria Roxburgh (= *Flacourtia indica* (N. Burman) Merrill).

1. Leaves palmately veined, biglandular above petiole apex; inflorescence terminal; sepals 3-4, valvate; fruit baccate, 3-5-celled, seeds numerous . . . . . ***Prockia***
1. Leaves pinnately veined, without glands above petiole apex; inflorescence axillary; sepals 5-6, imbricate; fruit capsular, 1-celled, seeds few.
   2. Leaves pellucid-glandular; inflorescence fasciculate; pedicels jointed below middle; sepals 5; petals absent; stamens inserted singly with staminodes alternating; style 1; ovary superior; seeds arillate . . . . . ***Casearia***
   2. Leaves opaque, not pellucid-glandular; inflorescences racemose or paniculate; pedicels jointed above middle; sepals 6; petals present; stamens in fascicles with short glands alternating; styles 3; ovary half-inferior; seeds without arils . . . . . ***Homalium***

Casearia Jacquin

Casearia decandra

Casearia decandra Jacquin, 1760:21; 1763:133, pl. 85.—Little & Wadsworth, 1964:366, pl. 170.
Casearia parviflora Jacquin, 1780:66, pl. 127, nom. superfl.
Casearia parvifolia Willdenow, 1799, 2:629, nom. superfl.

Shrub or tree to 8 m; flowers greenish white to white, fragrant; calyx 4-6 mm long, sepals reflexed in anthesis; style simple; mature fruits 8-12 mm broad, white, arils deep yellow.

Hispaniola through Antilles to northern South America; in Dominica in west coast woodlands from near sea level to ~200 m: Cabrits (*Hodge 469*, *Webster 13315*), Petit Coulibri (*Whitefoord 6036*), sine loc. (*Duss s.n.*).

It is remarkable that no collections have been made of *Casearia sylvestris* Swartz, a species to be expected on Dominica. It has a calyx 2-3 mm long, sepals erect at anthesis, a trifid style, and a mature fruit only 3-4 mm broad.

The nomenclature of these two species is excessively intertwined, involving easily (and frequently) confused epithets *parviflora* and *parvifolia* (discussed by Kiger, 1984:458) under *Samyda parviflora*.

Homalium Jacquin

Homalium racemosum

Homalium racemosum Jacquin, 1760:24; 1763:170, pl. 183.—Little & Wadsworth, 1964:372, pl. 173.

Acomat blanc.

Shrub or tree to 20 m; leaves 5-15 cm long; inflorescence to 20 cm long; petals greenish white to white or cream; mature fruit conic.

Neotropics; common in Dominica in dry west coast woodlands from near sea level to ~500 m: Badineau Estate (*Hodge 2211*), Batali River (*Ernst 1394*), Laudat (*Eggers 640*), Manicou River (*Ernst 1056*), Milton (*Hodge 2926*), Pointe Ronde (*Hodge 2770*), Syndicate (*Whitefoord 4339*), sine loc. (*Nicholls 24*).

Prockia Browne ex Linnaeus

Prockia crucis

Prockia crucis Linnaeus, 1759a:1074.—Little et al., 1974:588, pl. 513.
Trilix crucis (Linnaeus) Grisebach, 1857:165.

Shrub or tree to 10 m; leaves 3-15 cm long, serrate; flowers fragrant; sepals reflexed; petals present or absent, yellowish; stamens numerous, yellow; mature fruit ± globose, black.

Neotropics; in Dominica in rainforest 400-700 m; Morne Colla Anglais (*Webster 13431*).

GENTIANACEAE

Other herbaceous and leafless saprophytes like *Voyria* of Dominica are in the Orchidaceae (*Wullschlaegelia*) and Burmanniaceae (*Gymnosiphon* and *Apteria*). All have more than one flower, alternate scale-leaves, and inferior ovaries.

1. Plants colorless saprophytes, leafless . . . . . ***Voyria***
1. Plants green, leafy.
   2. Flowers small, white, sessile, many and axillary . . . . . ***Enicostema***
   2. Flowers large, yellow, stalked, 1-2 and terminal . . . . . ***Irlbachia***

Enicostema Blume, nom. cons.

Enicostema verticillatum

Enicostema verticillatum (Linnaeus) Engler ex Gilg in Engler & Prantl, 1895, IV(2):67, *"Enicostemma"*.—Raynal, 1969:79.
Gentiana verticillata Linnaeus, 1759a:952.

Balier savane bâtard, balier verveine.

Herb to 1 m; leaves succulent, triplinerved; petals greenish white, inconspicuous, persistent; calyx lobes lanceolate.

Introduced from Asia, also reaching Venezuela and Panama; common in Dominica in open places near sea or roads to 650 m: Anse Du Me (*Wilbur 8299*), Cabrits (*Webster 13311*), Castle Bruce (*Wilbur 7990*), Hatton Garden (*Hodge 3028*), L'Anse Noire (*Wilbur 7532*), Marigot (*Hodge 783*), Pagua Bay (*Wilbur 7529*), Pointe Ronde (*Ernst 1571*, *Hodge 2679*), Pont Cassé (*Ernst 1244*), Rodney's Rock (*Nicolson 1967*), Rosalie (*Chambers 2723*), Syndicate (*Whitefoord 3912*).

Used by Caribs for ritual baths to unbind spells (Hodge and Taylor, 1957:596).

Irlbachia Martius

Irlbachia frigida

Irlbachia frigida (Swartz) Maas, 1985:410.—Howard, 1989, 6:92.
Lisianthius frigidus Swartz, 1788:40, *"Lisianthus."*

Calolisianthus frigidus (Swartz) Gilg in Engler & Prantl, 1895, IV(2):101.
Chelonanthus frigidus (Swartz) Urban, 1902, 3:334.
Wurdackanthus frigidus (Swartz) Maguire & Boom, 1989:9.

Herb to 0.5 m; leaves succulent, with pinnate venation; flowers yellow, showy (~5 cm long), deciduous; calyx lobes rounded.

Guadeloupe and St. Vincent; rare in Dominica above 700 m: cliff edge on Morne Diablotins (*Whitefoord 5315*), cliff overlooking Valley of Desolation (*Nicolson 1953*), upper slopes of Morne Anglais (*Fennah 16*). Flowering November to January.

Voyria Aublet

Voyria aphylla

Voyria aphylla (Jacquin) Persoon, 1805, 1:284, *"Vohiria"*.—Maas et al., 1986:39.
Gentiana aphylla Jacquin, 1760:15.
Leiphaimos aphylla (Jacquin) Gilg in Engler & Prantl, 1895, IV(2):104.

Leafless, straw-colored herbs to 10 cm; flower single, terminal, with yellow, persistent corolla.

Widespread in neotropics; rare in Dominica in dense, humid forests 200–800 m: Carib Reserve (*Stehlé 6429*), Morne Au Diable (*Nicolson 1929*), Morne Plat Pays (*Hodge 1741*), Roseau River hot spring (*Howard 11738*), upper Hampstead River (*Nicolson 4233*).

We follow Raynal (1967) in including this species in *Voyria* and restricting *Leiphaimos* to its Mexican type.

GESNERIACEAE

(by L. Skog)

Achimenes longiflora A.P. Candolle, a native of Central America, is widely cultivated and has been found on Dominica near Lisdara (*Hodge 833*) and at Mt. Joy (*Ernst 1280*). The leaves are purple beneath and subsessile, as are the violet flowers.

Chrysothemis pulchella (Donn ex Sims) Decaisne of northern South America was recently collected, presumably as an escape, in a banana plantation at Syndicate (*Whitefoord 3638*) and in the garden of a deserted house at Petit Coulibri (*Whitefoord 6047*). It is a large terrestrial herb from tubers with opposite, equal leaves that are purple beneath, axillary and umbellate inflorescences, showy orange calyces, and a superior ovary.

Gloxinia perennis (Linnaeus) Fritsch, sometimes called canterbury bells, of South America was collected in cultivation at Baiac (*Whitefoord 5458*). It has opposite leaves that are red below, a lavender corolla, a persistent, large 5-lobed calyx, and an inferior ovary.

Kohleria cultivars, probably derived from *Kohleria bogotensis* (Nicholson) Fritsch, a species native to northern South America, are cultivated at South Chiltern (*Hodge 1542*) and Baiac (*Whitefoord 4134, 4220*) and would key here to *Nautilocalyx melittifolius* but have velvety-hirsute leaves and stems and an inferior ovary. Howard (pers. comm.) identified *Whitefoord 4220* as *Kohleria hirsuta* (Kunth) Regel.

1. Epiphytic subshrubs or woody vines, rarely terrestrial; flowers usually solitary in the leaf axils; ovary superior.
   2. Fruit a fleshy capsule; pedicel 2–4 cm long; corolla <2× as long as the calyx, yellow, 2–3 cm long . . . . . ***Alloplectus***
   2. Fruit a berry; pedicel <2 cm long; corolla >3× as long as the calyx, scarlet, 4–8 cm long . . . . . ***Columnea***
1. Terrestrial herbs or shrubs; flowers 2 or usually more in the leaf axils, rarely solitary (in *Besleria*), often on elongate flower stalks; ovary superior or inferior.
   3. Leaves alternate; stamens long-exserted . . . ***Gesneria***
   3. Leaves opposite or whorled; stamens included.
      4. Shrubs; corolla yellow to orange, limb small; fruit a berry . . . . . ***Besleria***
      4. Herbs; corolla red, pink, magenta, or purple, limb broad; fruit a capsule . . . . . ***Nautilocalyx***

Alloplectus Martius, nom. cons.

Alloplectus cristatus var. *brevicalyx*

Alloplectus cristatus (Linnaeus) Martius var. *brevicalyx* Morton, 1944:17.—Stehlé, 1962c:32.—Morley, 1974:418.
Besleria cristata Linnaeus, 1753:619.

Pendent or creeping epiphytes, rarely terrestrial; stem pubescent near the apex; leaves of a pair nearly equal, petioles pubescent, blades ovate to elliptic, 2–8 cm long, serrate, pubescent, green on both sides; sepals reddish, ovate to deltoid or elliptic, to 2 cm long, usually shorter, serrate; corolla tubular, to 3 cm long, yellow and pubescent; stamens not exserted; capsule fleshy, white.

Lesser Antilles; in Dominica at borders of and in rainforests and mossy forests, 450–1000 m: Boiling Lake (*Eggers 602*), Laudat & Freshwater Lake area, the type locality (*DeFilipps 141, Fosberg 48283, Hodge 1757, Lloyd 191, Smith 10214, Wilbur 7408*), Pont Cassé area (*Chambers 2540, Cowan 1610, Ernst 1193, 1283, Hodge 1214, Stern & Wasshausen 2551, Webster 13213, Wilbur 7747, 8180A*), Morne Plat Pays (*Hodge 1670*), Sylvania area (*Hodge 825, 3987, Narodny s.n.*), Syndicate (*Whitefoord 3637*), sine loc. (*Cooper 43*).

Materials from Dominica and other islands of the Lesser Antilles fall into var. *brevicalyx* Morton, distinguished by having serrate sepals <2 cm long. Variety *crenatus* (St. Vincent) has crenate sepals <2 cm long. Variety *cristatus* (Martinique and St. Lucia) has laciniate sepals >2 cm long. Howard (1989, 6:343) did not recognize these varieties.

Besleria Linnaeus

1. Flowers densely clustered on stem, pedicels to 0.5 cm long; leaves and stems densely pubescent . . . . . ***B. petiolaris***

1. Flowers loose on pedicels >1.5 cm long; leaves and stems rarely pubescent.
   2. Leaves with petioles 1–5 cm long; pedicels >2 cm long;calyx lobes united only at the base . . . ***B. filipes***
   2. Leaves usually ± sessile, petioles rarely to 1.5 cm long; pedicels to 2 cm long; calyx lobes united beyond middle . . . . . ***B. lutea***

Besleria filipes

Besleria filipes Urban, 1901, 2:350.
Besleria filipes f. *latior* Morton, 1939:426.
Besleria filipes f. *glaberrima* Morton, 1939:426.
Besleria filipes f. *pilicaulis* Morton, 1939:426.

Shrubs to 3 m tall; stem nearly glabrous to strigose; leaves with blades elliptic, to 15 cm long; calyx lobes ovate, 3–6 mm long; corolla orange to yellow, 1.3–1.8 cm long; berry orange to red, succulent.

Guadeloupe and Dominica; in Dominica in wet forests, 200–1400 m: Deux Branches (*Ernst 1803, Hodge 2982*), La Chaudière (*Hodge 3588*), Pont Cassé area [including Morne Negres Marrons and Trois Pitons] (*Cowan 1628, Ernst 2049, Hodge 1070, 1424, Wasshausen & Ayensu 390, Wilbur 8092, 8322*), South Chiltern-Lisdara (*Cooper 157, Ernst 1125, 1862, Stern & Wasshausen 2508, 2508A*), Sylvania (*Hodge 1103*), Syndicate area [including Milton and Morne Diablotins] (*Ernst 2072, Hodge 2812, 2918, Webster 13343, Whitefoord 4547*), sine loc. (*Cooper 47, Fishlock 12*).

The amount of pubescence on the stems and condition of the leaf margins, by which Morton distinguished the four forms of *Besleria filipes* on Dominica, are probably ecologically dependent.

A specimen collected in Dominica by Anderson (K), attributed by Morton (1939:418) to *Besleria solanoides* Kunth (otherwise unknown from the Lesser Antilles), has not been seen but may be *B. filipes*.

Besleria lutea

Besleria lutea Linnaeus, 1753:619.—Howard, 1989, 6:346.
Besleria imrayi J. Hooker, 1878a, *"Imray."*
Besleria lutea var. *imrayi* (J. Hooker) Urban, 1901, 2:348.—Morton, 1939:457.
Besleria lutea var. *intermedia* Urban, 1901, 2:348.

Erect shrubs to 3 m tall, stem glabrous and nitid at maturity; leaves ovate to elliptic; calyx lobes ~1 cm long; berry red, enclosed in the persistent calyx.

Antilles; on Dominica in rainforests at borders or wet openings, 100–850 m: Deux Branches-Hatton Garden (*Hodge 831, 3437, Long & Norstog 3387*), Freshwater-Boeri Lake area (*Burch 1369, Chambers 2558, Eggers s.n., Ernst 1853, Fosberg 48273, Hodge 1803, Smith 10213, Stern & Wasshausen 2569, Webster 13250, Whitefoord 4140*), *Wilbur 7451, 8217*), Lisdara (*Hodge 832, 2424*), Milton (*Hodge 2556*), Morne Aux Diables (*Wilbur 8063*), Pont Cassé area [including Trois Pitons] (*Ernst 1021, 2053, Nicolson 1850, Skog 1582, Wilbur 8186*), Springfield-Sylvania area (*Hodge 1335, 3990, Wilbur 7695*), Syndicate area [including Morne Diablotins] (*Whitefoord 3497, 4104, 4571*).

Variety *imrayi* was considered by Morton as the most distinctive of the local varieties recognized by Urban, on the basis of its subsessile leaves. Most specimens from Dominica have subsessile leaves, but sometimes (*Hodge 2556, Whitefoord 3497, 4104, 4140*) the leaves are distinctly petiolate. Variety *intermedia* is supposed to have the leaf-pairs unequally petiolate.

Howard (pers. comm.) identified *Whitefoord 4571* at A as *Besleria solanoides* Kunth, a new record for Dominica if true (material at US is *B. lutea*).

Urban (1901, 2:347–349) cited Duss collections from Dominica under the typical variety and under var. *intermedia*, but none have been seen.

Besleria petiolaris

Besleria petiolaris (Grisebach) Urban, 1901, 2:352.
Collandra petiolaris Grisebach, 1862:463.

Shrubs to 1.5 m tall; stems, leaves, and inflorescences pilose; leaves succulent, petioles 2–7 cm long, blades oblanceolate to broadly elliptic, 17–26 cm long; calyx lobes ~1 cm long, free; berry red to orange.

Endemic to Dominica in wet forests, from 100–850 m: Boeri Lake (*Whitefoord 4167*), Deux Branches (*Hodge 3129*), Freshwater Lake (*Wilbur 8200*), Jean (*Ernst 1819*), La Chaudière (*Hodge 3566, 3588*), Morne Diablotins (*Nicolson 1914, Webster 13326, Whitefoord 3655, 4246, 4569*), Pont Cassé area (*Cowan 1608, Ernst 2021, Hodge 1073, 1377, Webster 13216, Wilbur 7795*), Sylvania (*Hodge 1121*).

Columnea Linnaeus

Columnea scandens

Columnea scandens Linnaeus, 1753:638.—Morley, 1974:427.
Columnea scandens var. *vincentina* Morton, 1944:13.

Scandent epiphytic shrubs, rooting at the nodes; stems pubescent to strigose when young, glabrescent with age; leaves of a pair equal, petioles densely strigose, blades ovate to ± orbicular, 1–6 cm long, usually ~2 cm long, ± entire, strigose; calyx usually green, lobes linear-lanceolate to elliptic, usually ~1 cm long, entire or basally toothed; corolla with a long narrow tube, 4–8.5 cm long, red and pubescent, limb with upper lobes erect, basal lobe reflexed; stamens exserted; berry white.

West Indies and northern South America; in Dominica in wet forests on rocks or trees, 700–850 m: En Haut Jean (*Nicolson 4116*), Laudat (*Eggers 716*), Morne Negres Marrons (*Hodge 1075*), Morne Diablotins (*Whitefoord 4393*), Roche d'Or (*Wasshausen & Ayensu 397*).

Columnea hirsuta Swartz, a Jamaican endemic, was reported from Dominica by Grisebach (1862:465) based on a collection by Imray. This collection (K) is *Columnea scandens* Linnaeus.

Gesneria Linnaeus

Gesneria ventricosa

Gesneria ventricosa Swartz, 1788:90.—Skog, 1976:72.
Pentarhaphia longiflora Lindley, 1827, sub pl. 1110, nom. superfl., *"Pentaraphia."*
Conradia ventricosa (Swartz) Martius ex G. Don, 1838, 4:650.

Shrubs, scandent or erect; stem to 3 m tall, resinous; leaves alternate, glabrous, petioles to 4.5 cm long, blades ovate, elliptic to oblanceolate, often falcate, to 22.7 cm long; flowers glabrous, 1 to many, usually 4 on a peduncle to 16 cm long; calyx lobes filiform to narrowly triangular, to 2 cm long, persistent; corolla tubular, 2.1–3.2 cm long, orange to red, glabrous; ovary inferior; capsule dry, turbinate or nearly spherical.

Lesser Antilles from St. Croix to St. Vincent; in southern Dominica on cliffs and wet slopes in rainforests, 60–750 m: Clarke Hall (*Ernst 1061, Stern & Wasshausen 2401*), Goodwill Valley (*Eggers s.n.*), La Plaine area (*Nicolson 2065*), Macoucheri River (*Whitefoord 5973*), Roseau Valley (*Eggers s.n., Howard 11741*), S. Chiltern-Grand Bay Road (*Ernst 1616, Hodge 1551, Skog 1583, Wilbur 7871*), Sylvania (*Hodge 835, 1185*).

Nautilocalyx Linden ex Hanstein

Nautilocalyx melittifolius

Nautilocalyx melittifolius (Linnaeus) Wiehler, 1973:307.
Besleria melittifolia Linnaeus, 1753:619.
Besleria guadalupensis A.P. Candolle, 1839, 7:538.
Episcia melittifolia (Linnaeus) Martius, 1829, 3:42.
Episcia melittifolia f. *guadalupensis* (A.P. Candolle) Stehlé, 1962c:32.
Skiophila melittifolia (Linnaeus) Hanstein, 1854:207.
Nautilocalyx melittifolius var. *guadalupensis* (A.P. Candolle) Fournet, 1978:1325, nom. invalid. [basionym incompletely cited].

Succulent herb; stem erect or ascending, pubescent to glabrescent, rooting at the base; leaves with petioles 1–8 cm long, blades elliptic to ovate, to 27 cm long, occasionally purplish on lower side; peduncles about 2 cm long, bearing 1 to 12 flowers in an umbel or cyme; sepals lanceolate, green; corolla to 3 cm long, tubular with a broad limb; stamens included; ovary superior.

Lesser Antilles; common in Dominica in shady ravines or wet forest margins, 60–750 m: east side (Melville Hall, Carib Reserve, Deux Branches, La Plaine) (*Cowan 1618, Chambers 2504, Hodge 827, 2947, 3122, 3241, Nicolson 2058*), northwestern area (Morne Aux Diables, Syndicate, La Chaudière) (*Hodge 2710, 3555, Wilbur 8062, Whitefoord 3572, 3616*), central uplands (Pont Cassé, Freshwater Lake, Lisdara) (*Hodge 829, 830, 1199, 1855, 2335, Smith 10277, Webster 13253*), southwestern area (Clarke Hall, Sylvania, Roseau Valley to S. Chiltern) (*Cooper 57, Eggers 613, Ernst 1002, Hodge 828, 1162, 1345, 1144, Howard 11743, Stern & Wasshausen 2402, Wilbur 7673*).

Leaves and pink flowers are used by Caribs in a tea for colds (Hodge and Taylor, 1957:608). Adjanohoun et al. (1985:107, pl. 74) reported the same.

HALORAGACEAE

Myriophyllum aquaticum

Myriophyllum aquaticum (Vellozo) Verdcourt, 1973:36.—Aiken, 1981:60.—Whitefoord, 1989:146.
Enydria aquatica Vellozo, 1829, 1:57; 1831, 1, pl. 150.
Myriophyllum brasiliense Cambessedes in Saint-Hilaire, 1831, 2:52.

Parrot's feather, water feather.

Submersed aquatic with whorled, pectinate leaves to 3 cm long; tips of stems rising out of water.

South America but widely used by aquarists and naturalizing; new record for Dominica collected in 1983: small pond in pasture at Canefield (*Whitefoord 3745* at BM).

HERNANDIACEAE

(by R. DeFilipps)

Gyrocarpus americanus Jacquin (1763:282), a widely naturalized monoecious tree of the continental neotropics with palmately veined, entire or lobed (not peltate) leaves and a fruit with two apical wings to 11 cm long, has been collected in the Roseau Botanical Garden (*Hodge 3942*), fruiting in May.

HIPPOCRATEACEAE

Lianas; leaves opposite; flowers 4-merous; stamens 3; fruit of 3 flattened capsules. This family is often placed in the Celastraceae.

1. Branchlets and inflorescence puberulent; leaf-blades drying brownish; floral disk conspicuous (about as high as broad) . . . . . ***Hippocratea***
1. Branchlets and inflorescence glabrous; leaf-blades drying greenish; floral disk inconspicuous, flat . . . . ***Pristimera***

Hippocratea Linnaeus

Hippocratea volubilis

Hippocratea volubilis Linnaeus, 1753:1153.—A.C. Smith, 1940:359.

Petals transversally barbellate inside; seed wings not thickened.

Florida to Argentina; known from Dominica only from the estuary of the Indian River: near Portsmouth (*Hodge 3754*). Fruiting in May.

Pristimera Miers

Pristimera caribaea

Pristimera caribaea (Urban) A.C. Smith, 1940:378.
Hippocratea caribaea Urban, 1909, 6:55.
Hippocratea volubilis var. *caribaea* (Urban) Stehlé & Quentin in Stehlé et al., 1937, 1:177.

Petals not barbellate; seed wings thickened.

Hispaniola, Puerto Rico, Antigua, Guadeloupe; collected (sterile) on top of dry West Cabrit (*Nicolson 4205*).

This species was reported from Dominica (*Duss s.n.*) "in littoralibus") in the original description of the species. The locality suggests *H. volubilis*. The specimen (B) is presumed destroyed.

Robinson and Smith (in Reitz, 1971:4) separated genera of this family on microscopic epidermal characters, including *Hippocratea* (without idioblasts) and *Pristimera* (with idioblasts containing angular, plate-like crystals). Dr. Robinson kindly confirmed that the sterile specimen cited above is *Pristimera*.

HYDROPHYLLACEAE

Hydrolea spinosa

Hydrolea spinosa Linnaeus, 1762:328.

Erect, glandular-pilose herb with alternate leaves and axillary spines; flowers corymbose, blue.

Neotropics; found in Dominica creeping in sunny swamp: Antrim (*Hodge 2503*).

Cited for Dominica by Grisebach (1862:477) but no specimens located at Kew. The usual Antillean distribution is Jamaica and Cuba. Material from Antrim often involves introduced species. The status of this in Dominica is uncertain, possibly an escape.

LAMIACEAE/LABIATAE

(by A.C. Nicolson)

Mentha × *piperata* Linnaeus (peppermint), *Mentha* × *piperata* var. *citrata* (J.H. Ehrhart) Briquet (bergamot mint), *Mentha pulegium* Linnaeus (pennyroyal), and *Mentha spicata* Linnaeus (spearmint) were reported to have medicinal usages on Dominica by Adjanohoun et al. (1985:117–119, pls. 83–86).

Origanum majorana Linnaeus (marjoram) was reported as having medicinal uses on Dominica by Adjanohoun et al. (1985:123, pl. 90).

Orthosiphon aristatus (Blume) Miquel, including *Orthosiphon spicatus* (Thunberg) Backer et al., non Bentham, was introduced from Indonesia and is cultivated. It has a bilabiate calyx with 4 lobes below and 1 entire lobe above and the stamens are long-exserted (to 5 cm), whence the name "cat's whiskers": Clarke Hall (*Fosberg 48309, Nicolson 1820*).

Plectranthus amboinicus (Loureiro) Sprengel, a tomentose species, was reported by Adjanohoun et al. (1985:125, pl. 91) as having medicinal uses on Dominica; it is also known as *Coleus amboinicus* Loureiro.

Variegated and commonly cultivated *Plectranthus scutellarioides* (Linnaeus) R. Brown (also known as *Solenostemon scutellarioides* (Linnaeus) Codd) has been seen as *Coleus blumei* Bentham.

Plectranthus verticillatus (Linnaeus f.) Druce (incl. *Plectranthus thunbergii* Bentham) has been collected in cultivation at Baiac (*Whitefoord 4222*).

Pogostemon heyneanus Bentham (patchouli) was reported by Adjanohoun et al. (1985:125, pl. 125) to have medicinal uses on Dominica.

Thymus vulgaris Linnaeus (thyme) was reported by Adjanohoun et al. (1985:127, pl. 93) to have medicinal uses on Dominica.

1. Calyx distinctly bilabiate.
   2. Calyx lips entire; corolla >1 cm long, showy . . . . . ***Scutellaria***
   2. At least one calyx lip toothed; corollas <1 cm long.
      3. Upper calyx lip entire, prominent, lower with 3 sharp teeth; fertile stamens 4, declinate . . . . . ***Ocimum***
      3. Upper and lower calyx lips toothed, ± equal; calyx glandular-pubescent; fertile stamens 2, ascending . . . . . ***Salvia***
1. Calyx with 5–10 ± equal teeth.
   4. Calyx with 8–10 teeth, some unequal, stamens ascending.
      5. Calyx teeth 8; corolla orange . . . . . ***Leonotis***
      5. Calyx teeth 10; corolla white . . . . . ***Leucas***
   4. Calyx with 5 equal teeth.
      6. Leaves deeply palmately lobed; stamens ascending . . . . . ***Leonurus***
      6. Leaves serrate, unlobed; stamens declinate.
         7. Nutlet unwinged; calyx not inflated in fruit, long-tubular (except campanulate in *H. suaveolens*), lobes subulate (except acute in *H. verticillata*). . . . . ***Hyptis***
         7. Nutlet with fimbriate wing; calyx inflated in fruit, campanulate, lobes deltoid . . . . ***Marsypianthes***

Hyptis Jacquin, nom. cons.

Hyptis mutabilis (L. Richard) Briquet (including *Hyptis spicata* Poiteau) of the neotropics is found on Guadeloupe and Martinique. It resembles *H. pectinata* but has a calyx tube to 1 cm long, narrow calyx teeth to 1 mm long, the inflorescences are few-(to 8-)flowered and the persistent bracteoles are obovate to 1.5 mm wide.

1. Flowers in dense, pedunculate, ± globose, axillary heads.
   2. Involucral bracts >3 mm wide; prostrate herb . . . . . ***H. atrorubens***

2. Involucral bracts <2 mm wide; erect, sometimes suffrutescent herb.
3. Involucral bracts ovate-lanceolate, membranous . . . . . ***H. capitata***
3. Involucral bracts lanceolate, stiff-pointed . . . . . ***H. lanceolata***

1. Flowers in scattered cymules or verticels, not capitate.
4. Calyx to 1 cm long, ± campanulate; leaves cordate . . . . . ***H. suaveolens***
4. Calyx to 0.6 cm long, tubular; leaves tapered to base.
5. Flowers secund, on short pedicels; sinuses of calyx with tufts of white hairs; calyx lobes setiform . . . . . ***H. pectinata***
5. Flowers whorled; calyx without tufts; calyx lobes acute . . . . . ***H. verticillata***

Hyptis atrorubens

Hyptis atrorubens Poiteau, 1806:466.

Ti baume, menthe grand chemin.

Prostrate weedy herb; leaves often purplish beneath; fruiting calyx tube to 3.5 mm, teeth pectinate; flowers white.

Neotropics; common in Dominica: Bellevue (*Taylor 13a*), Delices (*Whitefoord 3677*), Freshwater Lake (*Lloyd 45, Smith 10276, Webster 13251, Zusi 301*), Goodwill (*Eggers 108*), La Plaine (*Wilbur 8167*), Layou Valley (*Wilbur 8180B*), Lisdara (*Hodge 882, 2332*), Pont Cassé (*Chambers 2668*), South Chiltern (*Hodge 1485*), Sylvania (*Cooper 9*).

Sometimes confused with *Marsypianthes*, q.v.

Caribs use this in a ritual hunting bath (Hodge and Taylor, 1957:602). Adjanohoun et al. (1985:113, pl. 80) reported several medicinal uses.

Hyptis capitata

Hyptis capitata Jacquin, 1781, Icon., 1:11, pl. 114; 1787, Coll., 1:102.

Erect, suffrutescent herb to 2 m; heads 2–2.5 cm in diameter; tube of fruiting calyx 6–7 mm long, teeth puberulent; peduncle 2–6 cm long.

Neotropics; in lowlands of Dominica: Clarke Hall (*Chambers 2697*).

This and *H. lanceolata* are easily and often confused because of their habit similarity.

Keller and Armbruster (1989) gave an account of the pollination of this species by eumenid wasps in Panama. There is an explosive stamen release as a petal lobe is "tripped."

Hyptis lanceolata

Hyptis lanceolata Poiret in Lamarck, 1813, Encycl., Suppl., 3:114.

Herb to 2 m; head 1–1.5 cm in diameter; tube of fruiting calyx to 5 mm long, teeth short-pectinate; peduncle 2–6 cm long.

Mainland neotropics, Trinidad, Guadeloupe, and Martinique; in Dominica at mid-elevations: En Haut Jean (*Nicolson 4118*), Laudat (*Vélez 3588*), Syndicate (*Whitefoord 3639, 5648*), sine loc. (*Eggers 883*).

Hyptis pectinata

Hyptis pectinata (Linnaeus) Poiteau, 1806:471.
Nepeta pectinata Linnaeus, 1759a:1097.

Suffrutescent herb to 2 m; leaves rounded at base; fruiting calyx tube to 4 mm long, with a tuft of white hairs in the throat, teeth puberulent; flowers each subtended by a persistent, linear bracteole.

Pantropic weed; occasional in Dominica: La Chaudière (*Hodge 3622*), Pointe Ronde (*Hodge 2645, Chambers 2656*), Syndicate (*Whitefoord 4465*).

Adjanohoun et al. (1985:115, pl. 81) reported an infusion used against fever.

Hyptis suaveolens

Hyptis suaveolens (Linnaeus) Poiteau, 1806:472.
Ballota suaveolens Linnaeus, 1759a:1100.

Erect, pubescent, suffrutescent herb to 1.5 m; leaves ± cordate; fruiting calyx tube to 8 mm, campanulate, teeth to 3 mm long, spreading; inflorescence few-flowered, on 0.5–1.5 cm pedicel from the axil of a leaf-like bract; bracteoles apparently quickly deciduous.

Neotropics; on Dominica: sine loc. (*Curator, Botanic Station #64*, at K).

Used as a tea.

Hyptis verticillata

Hyptis verticillata Jacquin, 1781, Icon., 1:11; 1787, Coll., 1:101.

Suffrutescent, ± glabrous herb to 2 m; pedicel 1 mm; calyx tube 1.5 mm, lobes triangular, 0.5 mm.

Neotropics; weedy roadside plant on west coast of Dominica: Goodwill (*Nicolson 1800*), Loubière (*Hodge 3860*), Pringles Bay (*Whitefoord 3735*), Soufrière (*Ernst 1312*), Swamp Gutter (*Ernst 1178*).

Leonotis (Persoon) R. Brown

Leonotis nepetifolia

Leonotis nepetifolia (Linnaeus) W.T. Aiton, 1811, 3:409.
Phlomis nepetifolia Linnaeus, 1753:586, *"nepetaefolia."*

Gros tête, ball head.

Erect weedy fine-puberulent herb to 2 m with showy axillary balls of orange flowers; calyx lobes spine-tipped.

Native of tropical Africa, now pantropic; along west coast of Dominica: Batali River (*Ernst 1406*), Grand Bay road (*Hodge*

877), Pointe Ronde (*Hodge 2733*), Pringles Bay (*Whitefoord 3737*), Roseau (*Nicolson 2082*), Soufrière (*Lloyd 485*), South Chiltern (*Hodge 1541*), West Cabrit (*Smith 10329*).

Used in a febrifuge tea by Caribs (Hodge and Taylor, 1957:602). Adjanohoun et al. (1985:115, pl. 82) cited several other medicinal uses.

Leonurus Linnaeus

Leonurus sibiricus

Leonurus sibiricus Linnaeus, 1753:584.—Keng in Steenis, 1978, 8:336.

Erect herb to 1 m; leaves deeply dissected, light green beneath; flowers in axillary glomerules; corolla lavender, showy.

Eastern Asiatic, now pantropic; occasional in Dominica along west coast: Coulibistri (*Ernst 1899*), Pointe Ronde (*Hodge 2768*), Roseau (*Cooper 134*), Soufrière (*Lloyd 413*).

Leucas R. Brown

Leucas martinicensis

Leucas martinicensis (Jacquin) W.T. Aiton, 1811, 3:109.
Clinopodium martinicense Jacquin, 1760:25.

Weedy pubescent herb to 0.5 m; flowers white, in axillary glomerules.

Neotropics; infrequent along west coast of Dominica: Colihaut (*Ernst 1661*), sine loc. (*Eggers s.n.*, Feb 1882).

Marsypianthes Martius ex Bentham

Marsypianthes chamaedrys

Marsypianthes chamaedrys (Vahl) Kuntze, 1891, 1:524.
Clinopodium chamaedrys Vahl, 1794, 3:77.
Marsypianthes hyptoides Martius ex Bentham, 1833:64, nom. illeg.

Prostrate, much branched, glandular-pubescent herb; fruiting calyx expanded, purplish, calyx lobes triangular, not setose; corolla lavender.

Neotropics; infrequent in dry areas of Dominica: Grand Savanne (*Ernst 2128, Wilbur 7632*), Morne Bruce (*Lloyd 738*).

This species is easily confused with *Hyptis atrorubens*, from which it may be distinguished by its linear floral bracts; those of *H. atrorubens* are obovate.

Ocimum Linnaeus

Ocimum tenuiflorum Linnaeus (including *Ocimum sanctum* Linnaeus), with decurrent margins of fruiting calyx not running to calyx base and leaves with more obtuse apex and base, may be cultivated on Dominica. Adjanohoun et al. (1985:123, pl. 89) reported its use in a tea.

1. Leaves lanceolate-elliptic, regularly and coarsely serrate, pubescent . . . . . ***O. gratissimum***
1. Leaves ovate to elliptic, entire or irregularly serrate, glabrous, except sometimes on veins.
   2. Flowers ± sessile; upper lobe of fruiting calyx rotund-cordate, wider than long, margins slightly reflexed . . . . . ***O. basilicum***
   2. Flowers pedicellate; upper lobe of fruiting calyx oblong-ovate, longer than wide, decurrent margins strongly reflexed . . . . . ***O. campechianum***

Ocimum basilicum

Ocimum basilicum Linnaeus, 1753:597.

Basilique, basimum.

Vigorous suffrutescent weed to 1 m; floral bracts persisting past anthesis; upper calyx lobe broad, winged, and decurrent, shorter than lower lip; nutlets elongate, black.

Old World, now cultivated worldwide; cultivated in Dominica and apparently occasionally escaping: Cabrit swamp (*Whitefoord 4081*), Coulibistri (*Ernst 1398, 1689*), La Plaine (*Nicolson 2053*).

Adjanohoun et al. (1985:121, pl. 87) reported a number of medicinal usages.

One collection (*Nicolson 2053*) would fall within the pubescence and size range of *Ocimum americanum* Linnaeus (also called *Ocimum canum* Sims). According to Keng (1969:128), chromosome studies on African collections may indicate that *O. basilicum* (2n = 48) is a tetraploid of *O. americanum* (2n = 24).

Ocimum campechianum

Ocimum campechianum Miller, 1768.—Howard, 1989, 6:255.
Ocimum micranthum Willdenow, 1809, Enum., 630.

Wild basil, fon bazin, basilique, fromboisin.

Vigorous weedy herb to 0.5 m; floral bracts quickly deciduous; upper calyx lobe broad, winged, and decurrent, shorter than lower lip; nutlets elongate, brown.

Neotropics; sometimes cultivated in Dominica: Clarke Hall (*Nicolson 2075*), Grand Savanne (*Ernst 1052, Wilbur 7661*), Soufrière (*Lloyd 440*), Swamp Gutter (*Hodge 880*), Tarou Cliffs (*DeFilipps 160*), West Cabrit (*Smith 10335, Whitefoord 3985*).

Hodge and Taylor (1957:603) reported uses for this plant in Carib good luck rituals, but one voucher (*Hodge 3200* at US) is *O. gratissimum*.

Ocimum gratissimum

Ocimum gratissimum Linnaeus, 1753:1197.

French basilique.

Shrubby weed to 1.2 m; leaves serrate, 5–12 cm long; upper calyx lip upcurved, much longer than the lower lip, closing the

mouth of the fruiting calyx; nutlets ± spherical, brown.

Native in Old World, occasional in West Indies and South America; locally common in Dominica: Belvedere (*Whitefoord 3702*), Grand Bay (*Wilbur 7941*), Salybia (*Hodge 3200*).

Aromatic foliage used for tea to bring down fever. Adjanohoun et al. (1985:121, pl. 88) reported medicinal and magic usages.

Salvia Linnaeus

Two species with red flowers may be cultivated on Dominica. *Salvia coccinea* Etlinger with a greenish calyx was collected on Dominica sine loc. (*Imray 125* at K).

Salvia splendens Sellow ex Nees (1821, 2:334) with a large scarlet calyx may be expected in cultivation.

The attribution of *Salvia densiflora* Bentham, with the type locality "in ins. Dominica," to Dominica is an error for Santo Domingo. This Hispaniolan endemic is not found in the Lesser Antilles.

1. Flowers blue to purple; leaves sharply serrate; floral bracts persistent, broadly ovate and acuminate . . . . . ***S. occidentalis***
1. Flowers usually white; leaves bluntly serrate; bracts deciduous, lanceolate . . . . . ***S. serotina***

Salvia occidentalis

Salvia occidentalis Swartz, 1788:11.

Sprawling herb with small, blue flowers.

Neotropics; a common weed on the western side of Dominica: East Cabrit (*Whitefoord 5262*), Fond Baron (*Ernst 1612*), Goodwill (*Ernst 1298*), Sylvania (*Cooper 86*), West Cabrit (*Smith 10322*).

Salvia serotina

Salvia serotina Linnaeus, 1767b:25.

Suffrutescent low herb; flowers white, sometimes blue.

West Indies and Yucatan; in xerophytic areas of Dominica's west coast: Batali River (*Ernst 2121*), West Cabrit (*Whitefoord 3980*), Roseau (*Duss s.n.*), Scotts Head (*Ernst 1967, Webster 13440, Wilbur 7586*), Soufrière (*Lloyd 414*), Swamp Gutter (*Hodge 883, Whitefoord 4050*).

Scutellaria Linnaeus

Scutellaria coccinea Kunth, with showy purple-red flowers and elliptic leaf with attenuate base, may be cultivated on Dominica.

Scutellaria havanensis Jacquin of the Greater Antilles was listed by Vélez (1957:98) for Dominica. It is a weak herb with blue flowers and shortly petioled leaves (<1 cm long).

1. Corolla blue to purplish . . . . . ***S. purpurascens***
1. Corolla scarlet . . . . . ***S. ventenatii***

Scutellaria purpurascens

Scutellaria purpurascens Swartz, 1788:89.

Weedy herb to 0.5 m; leaf blades ovate with obtuse to truncate base and margin slightly crenate; petiole as long as the blade.

Northern neotropics; occasional in Dominica at lower elevations: Batali (*Ernst 2118*), Fon Pays (*Hodge 2837*), Lisdara (*Hodge 2452*), Magua (*Stehlé 6383*), Soufrière (*Lloyd 480*), South Chiltern (*Nicolson 2175*), sine loc. (*Imray 44*).

Scutellaria ventenatii

Scutellaria ventenatii W. Hooker, 1846.

Straggling herb to 1 m; leaf blade ovate with ± cordate base and acuminate apex, margin entire to slightly dentate.

Native of northern South America, introduced and naturalized elsewhere; occasional in Dominica at mid-elevations on west side: Laudat (*Lloyd 256*), Lisdara (*Cooper 148, Hodge 2342*), Morne aux Diables (*Wasshausen & Ayensu 367*), Soufrière (*Lloyd 472*), Springfield (*Wolf 2*), sine loc. (*Eggers 840*).

LAURACEAE

An economically important family with beautiful, often aromatic wood but rarely collected in flower and fruit; hence, I find the species difficult.

The family is easy to recognize in flower by its unique stamens. The outer stamens open by 2 or 4 valves, which open upwards by flaps. The genera are primarily defined by variations in the stamens, viewed as evolved from an idealized ancestral form with 12 stamens in 4 whorls of 3 stamens each. The outer two series (whorls) open toward the center of the flower, the third whorl opens toward the outside of the flower and often has 2 large and swollen glands at the base of each of the 3 stamens. The fourth series is usually aborted and sterile (staminodia), sometimes absent.

Three Asiatic species of *Cinnamomum* have been collected from cultivation in Dominica: (1) *Cinnamomum burmanni* (C. & T. Nees) Nees ex Blume, the padang-cassia of which the bark is used like cinnamon, collected at Magua (*Stehlé 6350*, flowering in April); (2) *Cinnamomum camphora* (Linnaeus) Presl, the camphor tree, collected at the Roseau Botanic Garden, Experimental Station and Morne Bruce Plot (*Jones s.n.*, sterile); (3) *Cinnamomum verum* Presl (including *Cinnamomum zeylanicum* Garcin ex Blume), the true cinnamon, collected at La Plaine (*Ernst 1911, Nicolson 2051*) and Mahaut (*Hodge 1304*, flowering in February). These triplinerved species may be distinguished as follows:

1. Buds large, many-scaled, outer scales smaller than inner; petioles long (~1/3 the leaf blade length); midrib giving rise to several major lateral veins above the middle; plants smelling of camphor . . . . . ***C. camphora***
1. Buds small, few-scaled, outer scales about as large as bud; petioles short (~1/6 the leaf blade length); midrib not giving rise to major veins above the middle; plant smelling of cinnamon.
   2. Leaves narrowly lanceolate, long-tapered at apex; basal veins arising well above leaf base, attenuating well before apex . . . . . ***C. burmanni***
   2. Leaves broadly ovate, blunt or round at apex; basal veins arising at leaf base, continuing almost to apex . . . . . ***C. verum***

Adjanohoun et al. (1985:127, pl. 94) reported medicinal use of *Cinnamomum verum* (as *C. zeylanicum*) on Dominica.

Excluded Lauraceae

The genus *Phoebe* (united with *Cinnamomum* by Kostermans, 1961) is similar to *Persea* in that it also has an inner (fourth series) group of 3 sagittate staminodia and a persistent perianth in fruit. However, it has triplinerved leaves, a character also exhibited by *Cinnamomum*. Grisebach (1864:711) reported identifications of Imray collections from Dominica under the names *Phoebe membranacea* and *Persea nutans*. Both binomials were cited by Mez (1889:202) in synonmy of *Phoebe cubensis*, although Mez didn't cite the Imray collections. The Imray collections were cited by Mez (*Imray 149, 335*) under *Ocotea imrayana* Mez (1889:274). Thus, the attribution of *Phoebe cubensis* to Dominica by Mez (in Urban, 1905, 4:245) is apparently an error. No material attributable to *Phoebe* has been seen from Dominica, although it can be expected. Howard (1981:45; 1988, 4:254) followed Kostermans in treating *Phoebe* in *Cinnamomum*.

Cassytha filiformis Linnaeus was reported for Dominica by Vélez (1957:79). This is a parasitic, aphyllous vine, like Dodder (*Cuscuta*) but has the typical Lauraceous androecium with 9 bilocular stamens and 3 staminodes. Although this species is widely scattered and expected, no collections from Dominica have been seen.

1. Anthers of fertile stamens quadrilocular (inner 3 anthers sometimes bilocular in *Persea urbaniana*).
   2. Calyx lobes early deciduous (cupule truncated); fourth series of stamens absent; flowers bisexual or unisexual . . . . . ***Ocotea***
   2. Calyx lobes persistent in fruit (cupule lobed, not truncated); fourth series of stamens present as sagittate staminodia; flowers bisexual . . . . . ***Persea***
1. Anthers of fertile stamens bilocular.
   3. Leaves to 3 cm wide; fertile stamens 3; cupule 2-margined . . . . . ***Licaria***
   3. Leaves >3 cm wide; fertile stamens 9; cupule absent or 1-margined.
      4. Leaves silky-pubescent below; flowers functionally unisexual . . . . . ***Endlicheria***
      4. Leaves glabrous below; flowers bisexual.
         5. Fourth series of stamens absent; fruiting cupule present . . . . . ***Aniba***
         5. Fourth series of stamens present as sagittate staminodia; fruiting cupule absent . . . . . ***Beilschmiedia***

Key to genera (including those cultivated and expected), not using floral characters:

1. Leaves densely silky-sericeous below . . . . ***Endlicheria***
1. Leaves not so.
   2. Leaves triplinerved at or near base . . . ***Cinnamomum***
   2. Leaves pinnately veined.
      4. Fruit without cupule . . . . . ***Beilschmiedia***
      4. Fruit with accrescent cupule.
         5. Tepals deciduous . . . . . ***Aniba, Ocotea***
         5. Tepals persistent.
            6. Leaves narrow; cupule 2-margined . . . ***Licaria***
            6. Leaves broad . . . . . ***Persea***

Aniba Aublet

Flowers bisexual; stamens 9, bilocular, inner staminodia absent; fruit with an accrescent cupule.

1. Leaves ± verticillate, large (>15 cm long); style 4–5× longer than ovary . . . . . ***A. bracteata***
1. Leaves alternate, small (to 10 cm long); style equaling the ovary . . . . . ***A. ramageana***

Aniba bracteata

Aniba bracteata (Nees) Mez, 1889:66.—Kostermans, 1938:879.—Little et al., 1974:184, pl. 325.
Aydendron bracteatum Nees, 1836:256.
Aydendron argenteum Grisebach, 1860:285.

Laurier isabelle, laurier rouge, bois jaune.

Tree to 15 m; petioles <1 cm long; leaves narrowly elliptic to oblanceolate; fruit 2 cm long.

Puerto Rico to St. Vincent; in Dominica on east coast and in rainforest to 550 m: Breakfast River (*Hodge 1835*), Calibishie (*Hodge 3738*), Dleau Gommier (*Nicolson 2134*), Salybia (*Hodge 3408*), Sylvania (*Hodge 1321*), Syndicate (*Whitefoord 5346*).

Aniba ramageana

Aniba ramageana Mez, 1889:494.—Kostermans, 1938:901.

Laurier de rose.

Aromatic tree to 5 m; leaves elliptic to elliptic-ovate; fruit to 4 cm long.

Martinique; in Dominica in rainforest at 450–1000 m: Carib

Reserve (*Stehlé 6102*), Freshwater Lake (*Ernst 1773, 2177, Stern & Wasshausen 2575*), Magua (*Taylor s.n.*), Pegoua River (*Stehlé 7176*).

Beilschmiedia Nees

Flowers bisexual; stamens 9, bilocular; inner staminodia present; fruit without cupule.

Beilschmiedia pendula

Beilschmiedia pendula (Swartz) Hemsley, 1887, 3:70.—Kostermans, 1938:843.—Little & Wadsworth, 1964:110, pl. 42.
Laurus pendula Swartz, 1788:65.
Hufelandia pendula (Swartz) Nees, 1833a:22.

Laurier madame.

Tree to 20 m; leaves glabrous, broadly elliptic to ± obovate, to 18 cm × 8 cm; inflorescence and flowers pubescent; filaments pilose; drupe ellipsoid, to 3 cm long.

West Indies; in Dominica in rainforests at 650 m: Laudat (*Hodge 1958*), Sylvania (*Beard 636, 1454*).

Endlicheria Nees, nom. cons.

Flowers unisexual; stamens 9, bilocular, staminodes absent; fruit with accrescent cupule.

Endlicheria sericea

Endlicheria sericea Nees, 1833b:38.—Kostermans, 1937:545.
Aydendron sericeum (Nees) Grisebach, 1860:284.

Bois marble, laurier bord de mer, marbuy, laurier caca, laurier pété.

Tree to 15 m or more; leaves elliptic or elliptic-ovate, the blades to 3.2 cm × 11.5 cm, glabrous above, short-sericeous below, the hairs giving a silky appearance to the leaves; inflorescences and flowers yellow, short-sericeous.

Lesser Antilles and northern South America; in Dominica frequent in rainforest from 150–750 m: Carholm (*Ernst 1950*), Castle Bruce (*Beard 628*), Laudat (*Eggers 403*), Magua (*Stehlé 6337*), Morne Anglais (*Hodge 2252*), Morne Colla Anglais (*Hodge 400*), South Chiltern (*Ernst 1867*), Sylvania (*Hodge 1123, 1317, 3843*), Syndicate (*Whitefoord 3533*), Trace (*Cowan 1624*), sine loc. (*Imray 334* at GOET, *185* at GH). Flowering July–August, fruiting February–May.

Licaria Aublet

Flowers bisexual; stamens 3 (third series), bilocular, extrorse, biglandular at base, the first and second series of minute foliaceous staminodia, fourth series absent; fruit cupular, 2-margined.

Licaria sericea

Licaria sericea (Grisebach) Kostermans, 1937:597.
Acrodiclidium sericeum Grisebach, 1860:280.
Acrodiclidium dominicense Meisner in A.P. Candolle, 1864, 15(1):86.

Tree to 20 m; leaves lanceolate, acuminate, to 12 cm × 3 cm; inflorescence multiflorous; filaments free.

Guadeloupe to St. Lucia; in Dominica: sine loc. (*Imray s.n* at K, GOET).

Ocotea Aublet

Flowers bisexual or unisexual; fertile stamens 9, quadrilocular, the locules paired; staminodes none; cupule truncate.

I go along with those who treat *Nectandra* as a subgenus but grant that I have had as much difficulty as others in deciding how to apply the stamen character (lead 1 below). I tried Howard's key but found it no better than mine. It appears that it is hopeless to go on trying to identify taxa in herbaria and strongly recommend learning the taxa in the field.

1. Locules of each anther in 2 pairs, one pair located directly above the other (*Ocotea* sensu stricto).
   2. Peduncles, pedicels and perianth glabrous.
      3. Flowers unisexual; leaves long-acuminate . . . . . ***O. cernua***
      3. Flowers bisexual; leaves obtuse to short-acuminate . . . . . ***O. imrayana***
   2. Peduncles, pedicels and perianth pubescent.
      4. Leaves without domatia; flowers unisexual . . . . . ***O. leucoxylon***
      4. Leaves with domatia in axils of midrib and lateral veins beneath.
         5. Flowers unisexual; leaves to 4 cm wide . . . . . ***O. eggersiana***
         5. Flowers bisexual; leaves to 9 cm wide . . . . . ***O. martinicensis***
1. Locules of each anther in a linear row or arc, not paired (*Nectandra* sensu stricto).
   6. Veinlets not or only weakly elevated; plants pubescent (particularly when young).
      7. Flowers large (almost 1 cm across); plants rusty-tomentose; fruit ellipsoid . . . . . ***O. krugii***
      7. Flowers small (to 0.5 cm across); plants gray-puberulent; fruit globose . . . . . ***O. membranacea***
   6. Veinlets strongly elevated, particularly on lower leaf surface.
      8. Domatia (hairy tufts) in vein axils on lower leaf surface . . . . . ***O. patens***
      8. Plants glabrous; domatia absent.
         9. Leaves ~10 cm long, rarely 15 cm; flowers bisexual; fruit ± globose, slightly longer than wide; plants of dry northwest area . . . . . ***O. coriacea***
         9. Leaves >10 cm long, rarely less; flowers unisexual; fruit ellipsoid, about twice as long as broad, plants of moist interior . . . . . ***O. dominicana***

Ocotea cernua

Ocotea cernua (Nees) Mez, 1888:422; 1889:377.—Howard, 1981:52; 1988, 4:262.
Oreodaphne cernua Nees, 1836:421.

Laurier fer, laurier isabelle.

Tree to 15 m; leaf blades glabrous, long-acuminate; fruit to 1.5 cm long, the cupule red, the drupe black.

Mexico, Central America, West Indies; in Dominica in rainforest and east coastal slopes at 15–550 m: Clarke Hall (*Ernst 1210, 1977, Nicolson 1823, Wilbur 8332*), Glasham (*Nicolson 2116*), La Fanchette (*Chambers 2729*), Londonderry (*Chambers 2609*), Petit Coulibri (*Whitefoord 4662*), Petite Soufrière Bay (*Stern & Wasshausen 2466*), St. Hilaire Trace (*Beard 1461*), Sylvania (*Hodge 404, 405*), Syndicate (*Ernst 2016*).

Collected in flower throughout the year, but mature fruits in July and August.

Ocotea coriacea

Ocotea coriacea (Swartz) Britton in Britton & Millspaugh, 1920:143.—Howard, 1988, 4:262.
Laurus coriacea Swartz, 1788:65.
Nectandra coriacea (Swartz) Grisebach, 1860:281.—Little & Wadsworth, 1964:116, pl. 45.
Nectandra sanguinea sensu Grisebach, 1860:281, non Rolander ex Rottbøll, fide Mez, 1889:460.

Shrub or tree to 6 m; leaf blades glabrous above, glabrous to glabrescent below, shining, elliptic, elliptic-lanceolate, or elliptic-ovate, the veins prominent above and below, to 14 cm × 6 cm; fruit broadly ellipsoid, to 1.5 cm long.

Caribbean area; in Dominica confined to a small swampland area and adjacent slopes on the northwest coast to 180 m: Cabrits (*Ernst 1925, Hodge 3727, 3731, Whitefoord 4043, 5984, 6128*), Swamp Gutter (*Hodge 401, 403, Wilbur 8262*). Flowering April–May, fruits well developed in August.

Ocotea dominicana

Ocotea dominicana (Meisner) Howard, 1981:53; 1988, 4:263.
Oreodaphne dominicana Meisner in A.P. Candolle, 1864, 15(1):139.
Nectandra dominicana (Meisner) Mez, 1889:399.

Laurier, laurier blanc, laurier cip, laurier riverside, laurier yaboca, laurier zaboca.

Shrub or tree to 15 m; leaf blades glabrous, elliptic to lance-ovate, coriaceous, to 35 cm × 19 cm; inflorescence glabrous; flowers unisexual; fruit ellipsoid, to 4 cm long, pendent on long peduncles, the cupule red, the drupe green, becoming purplish black.

Guadeloupe to Martinique; common in Dominica in montane rainforest 200–1300 m: Breakfast River (*Hodge 1888, 1890*), Freshwater Lake area (*Chambers 2551, Eggers 658, Ernst 1101, 1769, 2159B, 2173, Fosberg 48281, Gillis 8206, Nicolson 1813, 2110, Smith 10250, Stern & Wasshausen 2568, Wasshausen & Ayensu 312, Webster 13265, Whitefoord 3813, Wilbur 7455*), Morne Diablotins (*Nicolson 1926*), Morne Trois Pitons (*Wilbur 8079*), Mosquito Mountain (*Webster 13537*), Pont Cassé (*Wilbur 7763*), Sylvania (*Beard 649*). Flowering July–January, fruit March–October.

Ocotea eggersiana

Ocotea eggersiana Mez, 1889:363.—Howard, 1981:264; 1988, 4:264.

Laurier caca, laurier fetide.

Tree or shrub; leaves small, to 7.5 cm × 4 cm, with domatia; flowers unisexual.

Lesser Antilles; not recently collected in Dominica but reported from La Plaine (*Ramage s.n.* at K), Rosehill [near Lisdara Estate] (*Eggers 657* at GOET), sine loc. (*Eggers 988, Imray 127, 147* at K, *Eggers 327* at GOET).

The Dominican materials cited by Grisebach (1860:281) as *Nectandra exaltata* belong here, according to Mez (1889:364).

This species is part of a complex apparently involving the larger-leaved *O. floribunda* and other "species" with small (<10 cm long) leaves: *O. dussii* (flowers bisexual; domatia present); *O. l'herminieri* (flowers bisexual; domatia absent); this species (flowers unisexual; domatia present), and even material called *O. eggersiana* (flowers unisexual; domatia absent). Only *O. eggersiana* is reported from Dominica, although the others are reported from the French islands (Fournet, 1978).

Much of the material (US) from the French islands that was distributed as *O. eggersii* (sic) appears to be *O. dussii*, some (*Duss 3829*) being syntypes of *O. dussii*.

Ocotea imrayana

Ocotea imrayana Mez, 1889:274.—Howard, 1981:55; 1988, 4:265.

Small tree; leaf blades glabrous, obtuse to short-acuminate; flowers bisexual.

Guadeloupe to Martinique; in Dominica without locality: *Imray 335* at K, GOET. This material was identified by Grisebach as *O. cernua*.

A collection (US) from Martinique (*Duss 4562*) appears to be this species. A specimen (W) from 100 m at La Chaudière (*Hodge 3507*) is doubtfully referred here. The flowers seem quite glabrous but, unlike what I assume to be the case in true *O. imrayana*, a young leaf bud is remarkably ferruginous-tomentose and the pistil appears to be aborted (flowers unisexual). The stamens are 4-locular but the lower two locules appear to be latrorse (opening to the side) rather than introrse (on the outer six stamens) and extrorse (on the inner three stamens). I am unable to identify it with any certainty.

A duplicate (GH) was identified by Barneby and Allen as *Nectandra dominicana*, but I do not find that the flowers have the distinctive densely glandular-punctate tepals of that species.

Ocotea krugii

Ocotea krugii (Mez) Howard, 1981:56; 1988, 4:265.
Nectandra krugii Mez, 1889:422.—Little et al., 1974:194, pl. 331.
Nectandra discolor sensu Grisebach, 1860:282, non Nees.

Tree to 25 m; leaves tomentose, elliptic to elliptic-lanceolate, acuminate, to 24 cm × 9 cm; flowers large, to 1 cm across, outer and inner surfaces of perianth villous; filaments absent, anthers pubescent; fruit ellipsoid, to 1.5 cm long.

Hispaniola, Puerto Rico, Saba, Guadeloupe, and Dominica; cited for Dominica by Grisebach (1860:282) and Mez (1889:422), based on *Imray 214* (K), a syntype.

This species is easy to recognize by its copious rusty tomentum, but has not been recently collected on Dominica. It has remarkably large flowers, compared to other species of Dominica, a character shared with *N. antillana* Meisner that has more appressed puberulence. The specimen at Kew has been annotated (by C. Allen and R. Barneby) as *N. globosa* (Aublet) Mez, here regarded as a misidentification.

Ocotea leucoxylon

Ocotea leucoxylon (Swartz) Lanessan, 1886:158.—Gomez de la Maza, 1889:12.—Mez, 1889:329.—Little & Wadsworth, 1964:122, pl. 48.—Howard, 1981:56; 1988, 4:266.
Laurus leucoxylon Swartz, 1788:65.
Oreodaphne leucoxylon (Swartz) Nees, 1836:413.

Laurier badinier, laurier marbre, laurier mabui.

Tree with leaves without domatia, elliptic, ~12 cm × 5 cm, obtuse to acuminate; flowers unisexual; fruits globose, the pedicel and cupule red, swollen and often with light-colored warts (lenticels?).

West Indies; occasional in Dominica in lowland and midland forests to 550 m: Delices (*Whitefoord 5499*), La Fanchette (*Chambers 2728*), Layou (*Ramage s.n.* at K), Marigot (*Hodge 406*), Morne Anglais (*Nicolson 4109*), Morne Couronne (*Webster 13215A*), Pont Cassé (*Skog 1576*), South Chiltern (*Stern & Wasshausen 2489*), Syndicate (*Whitefoord 3889*), Trafalgar Falls (*Whitefoord 4598*), sine loc. (*Imray 325* at GOET, *Cooper 41*). Flowering June-July; fruits immature in January-February, mature in June.

A similar species, *O. floribunda*, is reported from the French Islands, but it has a different fine venation and very different "double-rimmed" cupule.

Ocotea martinicensis

Ocotea martinicensis Mez, 1889:270.—Howard, 1981:59; 1988, 4:267.

Reported to be a tall tree; leaves large (to 18 cm × 9 cm) and with domatia (sometimes absent?) in the axils of the main lateral veins; flowers puberulent, bisexual; the drupe described as 2.5 cm × 1.4 cm.

Lesser Antilles; known from Dominica only from the Imray collections cited in the original description (*Imray 135* at K, *270* at GOET, K).

Described by Fournet (1978:487) as inhabiting the dry and rocky littoral or in hills on lava and muddy draws.

This species, supposedly distinguished by its bisexual, pubescent flowers and the domatia, was broadly defined by Mez, including material from Jamaica that seems anomalous on phytogeographic grounds. At US we have more than 12 collections from the Lesser Antilles, some with domatia and some without, and I am unsure they represent one variable species or more than one. The materials from Guadeloupe (except *Stehlé 56610*) lack domatia but those from Martinique and Grenada have domatia.

Ocotea jacquinii Mez, discussed by Fournet (1978:488) as occurring in Guadeloupe and St. Lucia, may be confused with *O. martinicensis* but seems to have more coriaceous and glabrous leaves with a striking elongate acumen. This is exemplified by a photo (US) of the type from the Jacquin Herbarium (W) collected in Martinique by Benedict Aquart, a co-traveler with Jacquin for whom Jacquin named *Aquartia* in 1760. This specimen, in my opinion, served as the basis for description and illustration (a long-acuminate leaf) of *Laurus martinicensis* Jacquin (1789, Coll., 2:109, pl. 5: fig. 2). The name *Oreodaphne jacquinii* Meisner (in A.P. Candolle, 1864, 15(1):114, *"jacquini"*) was illegitimate as a superfluous name when published because it included *Laurus martinicensis* Jacquin. *Ocotea jacquinii* Mez (1889:242, *"jacquini"*) is legitimate (Art. 72, Note, *ICBN*) because Mez established a separate *Ocotea martinicensis*, making Jacquin's epithet unavailable in *Ocotea*. However, I do not consider that Mez was correct in separating the Aquart type (under *Ocotea jacquinii*) from Jacquin's illustration (under *Nectandra martinicensis* (Jacquin) Mez, 1889:459) and regard the combination in *Nectandra* as a nomenclatural synonym of *O. jacquinii*.

The above, written before I saw Howard's (1981:56-57) discussions of *O. jacquinii* and *Laurus martinicensis*, agrees with Howard (1988, 4:265) except the epithet should be with double "i" (*jacquinii*, not *"jacquini"*) and the parenthetic citation of Meisner's name should be omitted (the epithet-bringing synonym is illegitimate).

Ocotea membranacea

Ocotea membranacea (Swartz) Howard, 1981:59; 1988, 4:267.
Laurus membranacea Swartz, 1788:65.
Nectandra membranacea (Swartz) Grisebach, 1860:282.

Laurier neglesse, laurier noir.

Tree to 10 m; leaves puberulent to glabrescent below, ± coriaceous, not shining, elliptic, elliptic-lanceolate or lance-ovate, acuminate, to 2.3 cm × 8.5 cm, the veins immersed above and either elevated or immersed below; inflorescences pubescent, flowers very small, 4-5 mm across; fruit globoid, ~1.5 cm diameter.

West Indies; in Dominica in lowland and midland rainforests from 65-800 m: Carholm (*Ernst 1947*), Clyde River valley

(*Ernst 1036*), Freshwater Lake (*Ernst 2160, Wasshausen & Ayensu 320*), Lisdara (*Cooper 169*), Morne Anglais (*Hodge 2248*), Pont Cassé (*Stern & Wasshausen 2544*), Sylvania (*Hodge 402*. Flowering July–August, fruiting March–May.

Grisebach (1860:282) misidentified material of this species from Dominica as *N. leucantha* var. *rodiaei* (Schomburgk) Grisebach, according to Mez (1889:450), who puts the basionym under *Ocotea rodiaei* (Schomburgk) Mez.

Ocotea patens

Ocotea patens (Swartz) Nees, 1833a:10.—Howard, 1988, 4:269.
Laurus patens Swartz, 1788:65.
Nectandra patens (Swartz) Grisebach, 1860:281.

Leaves glabrous except for tufts (domatia) in vein axils below; venation prominent, coarsely reticulate on both surfaces; panicles branched from base, puberulous; cupules shallow, red; berry oblong-ellipsoid, 2–2.5 cm long, black [description from Howard, l.c.].

Antilles; reported for Dominica by Howard (l.c.) with exclamation mark but I have not seen the Dominican specimens.

Persea Miller, nom. cons.

Flowers bisexual; tepals lanceolate (equal in *P. americana* and inner distinctly longer in *P. urbaniana*); stamens 9, quadrilocular (sometimes inner 3 bilocular in *P. urbaniana*), filaments elongate, locules paired, staminodia 3 (inside the stamens); fruit with accrescent pedicel and persistent tepals.

The avocado or z'aboca, *Persea americana* Miller of Central America, is cultivated in Dominica in the Carib Reserve, Lisdara (*Hodge 2420*) and Petit Macoucheri (*Whitefoord 6033*). It is a large tree with large, edible fruits. The fruit is pear-shaped, the tepals are all equal, and all anthers are 4-locular. Adjanohoun et al. (1985:129, pl. 95) reported medicinal uses on Dominica.

Persea urbaniana

Persea urbaniana Mez, 1889:143.—Kopp, 1966:90.—Little et al., 1974:210, pl. 339.
Persea glaberrima Mez, 1889:144.

Laurier muscat.

Tree to 7 m; petals twice the length of the sepals; inner (third) series of anthers sometimes 2-locular; fruit globose, small.

Jamaica, Puerto Rico, Montserrat to St. Lucia; in Dominica without locality (*Imray 133* at K).

LECYTHIDACEAE

The following introduced trees have been collected or observed in the Roseau Botanic Garden and environs:

Barringtonia asiatica (Linnaeus) Kurz, a native of Asia with large, white flowers with four petals and many, long-exserted stamens.

Couroupita guianensis Aublet, the cannonball tree, noted for its curious reddish flowers and spherical cannonball-like fruits borne on the trunk (*Hodge 903*).

Gustavia augusta Linnaeus of northern South America with axillary white flowers (*Hodge 3935*).

Napoleonaea imperialis Palisot de Beauvois (incl. *Napoleonaea miersii* J. Hooker) of West Africa with large, variegated leaves and large, apetalous flowers 3–4 cm across with a 70-radiate, tricolored pseudocorolla and 40-fid, white central corona (*Hodge 3906*).

LENTIBULARIACEAE

(by R. DeFilipps)

Utricularia gibba Linnaeus (cf. Fernandez-Perez, 1964:69), another yellow-flowered species but with dissected "leaves," is reported from Guadeloupe and Martinique, but has not been collected on Dominica, presumably because it grows in quiet water, rare in Dominica.

Grisebach (1860:162) reported *Utricularia amethystina* Salzmann ex St. Hilaire & Girard for Dominica, based on an Imray collection. I have not seen the specimen, but it is almost certain that it cannot be this species. According to Peter Taylor (pers. comm.) *U. amethystina* does not occur north of Trinidad. It could be *Utricularia jamesoniana* Oliver, known from Guadeloupe and Martinique, which, like *U. alpina*, is epiphytic (growing in moss), but very small and with a long spur, longer than the 3-lobed lip.

1. "Leaves" to 20 cm × 3 cm; pedicels 2–3 cm long; flowers white, 3–5 cm in diameter, spur to 3 cm long . . . . . ***U. alpina***
1. "Leaves" to 8 mm × 1.5 mm; pedicels to 6 mm long; flowers yellow, to 6 mm in diameter, spur 2 mm long . . . . . ***U. pusilla***

Utricularia alpina

Utricularia alpina Jacquin, 1760:11.—Fernández-Pérez, 1964:28.
Utricularia montana Jacquin, 1763:7, pl. 6.
Orchyllium alpinum (Jacquin) Barnhart, 1916:53.

Epiphytic, scapose herb to 40 cm; rhizoids bearing translucent pseudobulbs to 2 cm in diameter and utricles 1 mm in diameter; "leaves" elliptic, spatulate or oblanceolate; bracts basifixed; flowers white, tinged with yellow and lavender; capsule globoid, 1.3 cm long.

Central America, northwestern South America, Lesser Antilles; in Dominica on moist banks or epiphytic in rainforests, 425–1200 m: Dleau Gommier (*Ernst 1183*), Freshwater Lake area (*Eggers s.n., Hodge 1844, Wasshausen & Ayensu 323, Webster 13264, Wilbur 7410*), Morne Anglais

(*Hodge 823*), Morne Trois Pitons (*Hodge 824*), Pont Cassé (*Ernst 1009, Nicolson 1807, Stern & Wasshausen 2559, Wilbur 7723, 7770*), Sylvania (*Stehlé 6321*).

Utricularia pusilla

Utricularia pusilla Vahl, 1804, Enum., 1:202.—Fernández-Pérez, 1964:63.

Terrestrial scapose herb to 12 cm; stolons and portions of "leaves" decurrent on ground, bearing utricles 0.5 mm in diameter; "leaves" ligulate or linear; bracts peltate; flowers yellow; capsule globoid, 1.8 mm long.

Neotropics; in Dominica in wet meadows and ditches, 550–600 m: Castle Bruce (*Hodge 1239*), Pont Cassé (*Ernst 2089, Webster 13475*), Sylvania (*Hodge 822, 3846, Knowlton s.n.*).

LOBELIACEAE

(by L. Skog)

These irregularly flowered genera are sometimes included in the Campanulaceae.

1. Corolla tube cleft to base above; inflorescence a terminal raceme (except flowers solitary and axillary in *Lobelia kraussii*) . . . . . ***Lobelia***
1. Corolla tube not cleft to base; inflorescence a single axillary flower.
   2. Leaves glabrous, petiolate, bases obtuse to rounded; corolla 2.5–3.0 cm long, red; stamens not epipetalous; fruit indehiscent . . . . . ***Centropogon***
   2. Leaves pubescent, ± sessile, bases tapered; corolla 10–15 cm long, white; stamens epipetalous, attached near apex of corolla tube; fruit dehiscent . . . . . ***Hippobroma***

The genera of Lobeliaceae, even in Dominica, are heterogeneous and require study of technical characters. The species are easy to recognize by superficial characters. The following key is to species.

1. Flowers solitary, axillary.
   2. Flowers white . . . . . ***Hippobroma longiflora***
   2. Flowers red (or yellow).
      3. Leaves ovate, rounded at base . . . . . ***Centropogon berterianus***
      3. Leaves lanceolate, acute at base . . . . . ***Lobelia kraussii***
1. Flowers many, in terminal racemes.
   4. Flowers blue; leaves ovate, to 3 cm long . . . . . ***Lobelia cliffortiana***
   4. Flowers greenish white-yellow; leaves lanceolate, >10 cm long.
      5. Bracts linear, to 0.1 mm wide, shorter than pedicels; all 5 anthers tufted . . . . . ***Lobelia cirsiifolia***
      5. Bracts lanceolate, to 0.3 mm wide, longer than pedicels; upper anthers glabrous and longer than lower tufted anthers . . . . . ***Lobelia stricta***

Centropogon Presl

Centropogon berterianus

Centropogon berterianus (Sprengel) A.L. Candolle in A.P. Candolle, 1839, 7:345.
Lobelia berteriana Sprengel, 1825, 1:712.
Siphocampylus berterianus (Sprengel) G. Don, 1834, 3:703.

Weak, succulent herbs with milky sap; leaves ± cordate; flowers axillary, solitary; calyx lobes <0.5 cm long; corolla bright red, 2.5–3.0 cm long; staminal column included or ± exserted; lower 2 anthers penicillate; fruit fleshy.

Lesser Antilles; in Dominica in rainforest clearings, ~750 m: Freshwater Lake (*Ernst 2185*), Petite Macoucheri (*Webster 13554*), Roseau River (*Eggers 602*), sine loc. (*Eggers 1007*).

Easily confused with *Lobelia kraussii*, which has lanceolate leaves acute at base while this has ovate leaves with rounded bases.

Hippobroma G. Don

Hippobroma longiflora

Hippobroma longiflora (Linnaeus) G. Don, 1834, 3:717.—Adams, 1972:737.
Lobelia longiflora Linnaeus, 1753:930.
Isotoma longiflora (Linnaeus) Presl, 1836:42.
Laurentia longiflora (Linnaeus) Petermann, 1845:444.—Wimmer in Engler, 1953, IV.276 (Heft 107):405.

Pipe-shank, pipe-zombi.

Pubescent herbs with poisonous milky sap; leaves oblanceolate, irregularly toothed; flowers axillary, solitary, white, 10–15 cm long; fruit a capsule.

West Indies, Central and tropical South America; in Dominica on road banks and wet clearings from near sea level to 800 m: Anse Du Me (*Wilbur 8042*), Carib Reserve (*Stehlé 6433*), Clarke Hall (*Ernst 1153, 1171*), Hatton Garden (*Hodge 2944*), Marigot (*Hodge 785*), Petite Soufrière Bay (*Nicolson 1985*).

Chopped leaves are used as a poultice (Hodge and Taylor, 1957:614). Adjanohoun et al. (1985:131, pl. 98) reported a medicinal usage.

Lobelia Linnaeus

Lobelia cardinalis Linnaeus was collected (*Duss 505* at NY) from "dans le haut de la vallée de Roseau à la Dominique" in August 1884. This is the only record of this North America mainland species I have seen from the West Indies and it is presumed to come from cultivation. It differs from native Dominican species by its red flowers in terminal racemes.

Lobelia persicifolia Lamarck of Guadeloupe is often cited for Dominica. This species differs from *L. kraussii* in having

strongly arcuate, nonfenestrate corollas, generally longer filament tubes, and wider hypanthia.

1. Anthers all (5) densely white-tufted at apex.
   2. Flowers in terminal racemes; corolla white-greenish yellow . . . . . ***L. cirsiifolia***
   2. Flowers solitary, axillary, corolla red or yellow . . . . . ***L. kraussii***
1. Anthers of two kinds, lower two densely white-tufted and upper three glabrous at apex.
   3. Annual herbs; leaves deltoid, toothed, 2–3 cm long, pubescent; corolla 5–6 mm long; upper 3 anthers pubescent below apex . . . . . ***L. cliffortiana***
   3. Perennial shrubs; leaves linear-lanceolate, spinulose, 9–24 cm long, glabrous; corolla 1.3–1.5 cm long; upper 3 anthers glabrous . . . . . ***L. stricta***

Lobelia cirsiifolia

Lobelia cirsiifolia Lamarck, 1792, Encycl., 3:584.
Tupa cirsiifolia (Lamarck) A.L. Candolle in A.P. Candolle, 1839, 7:395.
Tupa digitalifolia Grisebach, 1861:387.
Lobelia digitalifolia (Grisebach) Urban, 1899, 1:455.

Z'eb apite.

Herbs 1.0–1.5 m; leaves lanceolate, to 21 cm long, teeth ascending to spreading, to 1 mm long; sepals entire to ± entire.

Lesser Antilles; in Dominica on ridges in rainforest, 600–800 m: Breakfast River (*Hodge 1897*), En Haut Jean (*Webster 13527*), Fon Pays (*Hodge 2839*), Freshwater Lake (*Eggers s.n.*), Laudat (*Hodge 1859, Lloyd 257*), Morne Anglais (*Hodge 2299*), Syndicate (*Ernst 2001, 2109, Webster 13320*).

Lobelia digitalifolia apparently differs from *L. cirsiifolia* only in having small (<1 mm long) incurved spinules along the leaf margin. In *L. cirsiifolia* the teeth are larger (1–4 mm long) and ascending to spreading. The floral measurements given in the key by McVaugh (in North Amer. Fl., 1943, 32A:37) do not serve to separate the species because measurements of recent collections apparently bridge the supposed gap. McVaugh's note that flower color is brownish purple in *L. digitalifolia* is not supported by Grisebach's description as "pale." The differences between these taxa seems insufficient to differentiate species.

What Sastre (1985:167) called *Lobelia stricta* belongs to this complex (5 anthers tufted). It is not clear what the taxon is but from what Sastre said, it is only known from St. Kitts and Nevis, apparently *Lobelia infesta* (Grisebach) Urban.

Lobelia cliffortiana var. *xalapensis*

Lobelia cliffortiana var. *xalapensis* (Kunth) Gray, 1878, 2:7.
Lobelia xalapensis Kunth, 1819, 3:315.
Lobelia mollis Graham, 1830a:185.

Herbs with deltoid, toothed leaves with sparse pubescence; pedicels prickly to scabrous; corolla 5–6 mm long, bluish; capsule nearly superior.

Central and South America, Lesser Antilles; in Dominica in cultivated areas: Magua (*Stehlé 6336, 6358, 6292*), Milton (*Hodge 2559*), Ridgefield (*Hodge 2136*), Rivière Douce (*Eggers 80*).

Lobelia cliffortiana and *L. xalapensis* have been maintained as separate species by the most recent monographers of the group, McVaugh and Wimmer. However, the taxa are apparently very close morphologically and differ in what appear to be minor characters from a survey of specimens from the range of the two. The typical element, distinguished by its usually glabrous pedicels and nearly half-inferior capsule, is frequently attributed to Dominica, but is limited to the Greater Antilles and introduced in a few localities in the Old and New World tropics. Within the range of the species, the distinguishing characters are seemingly variable, but reliable enough to separate the taxa at an infraspecific level.

Lobelia kraussii

Lobelia kraussii Graham, 1830a [Apr]:379; 1830b [Sep].

Glabrous herbs to 1 m tall; leaves petiolate; pedicels 4–6 cm long; corollas 2.5–3.5 cm long, fenestrate, straight or nearly so, red, rarely yellow. Fenestrae are two basal, elliptic openings in the corolla, one on each side of the main cleft through which the filament tube protrudes. One opening is discrete, the other is part of an elongated but incomplete cleft in the corolla.

Dominica and Martinique; in Dominica common on road banks in rainforest, 150–1500 m: Baiac (*Whitefoord 3782*), Fon Pays (*Hodge 2858*), Imperial Road (*Fairchild 2674*), Laudat (*Eggers 694, Lloyd 242, Nicolson 1844*), Lisdara (*Hodge 788*), Morne Anglais (*Hodge 2257*), Morne Plat Pays (*Wilbur 7854*), Pichelin (*Ernst 1615, Wilbur 7612*), Roseau Valley (*Howard 11742*), South Chiltern (*Hodge 1450, Stern & Wasshausen 2514*), Sylvania (*Cooper 87, 87A, Hodge 1172, Proctor 25761*), Syndicate (*Ernst 2014, 2015, Wasshausen & Ayensu 345*).

Ernst 2015 is the yellow-flowered phase.

Lobelia stricta

Lobelia stricta Swartz, 1788:117.—McVaugh in North Amer. Fl., 1943, 32A:89.
Lobelia areolata L. Richard ex Jussieu, 1811:3.—Sastre, 1985:168.
[*Tylomium flavescens* Presl, 1836:32, nom. nud.]
Tupa flavescens Presl ex A.L. Candolle in A.P. Candolle, 1839, 7:395.
Lobelia flavescens (A.L. Candolle) Wimmer in Engler, 1953, IV.276 (Heft 107):626.

Coarse, colonial shrubs to 2 m, single-stemmed or with candelabra-like habit; stems with prominent leaf scars; leaves 9–24 cm long, with wide-spread spines to 5 mm long; sepals toothed; corolla white, greenish white-yellow.

Lesser Antilles; in Dominica in rainforests and mountain peaks, 450–1100 m: Boeri Lake (*Wilbur 8196*), Freshwater

Lake (*Chambers 2574, Eggers 693, Ernst 1789, Fosberg 48270, Gillis 8218A, Smith 10282, Stern & Wasshausen 2562, Webster 13267, Wilbur 7456*), Morne Anglais (*Fennah 19, Hodge 786, 2308, Wilbur 7953*), Morne Couronne (*Webster 13204*), Morne Diablotins (*Hodge 2829, Wasshausen & Ayensu 411, 412, Webster 13356, Whitefoord 5736*), Morne Micotrin (*Ernst 1096*), Morne Plat Pays (*Wilbur 7849*), Morne Trois Pitons (*Ernst 2033, Hodge 787, 1408, Nicolson 1813, Wilbur 8073*), Mosquito Mountain (*Webster 13545*).

Swartz's type (BM), "Guadeloupe in regione muscosa montis la Soufrière copiosa. De Ponthieu," has only two anthers tufted. Wimmer's position that *Lobelia stricta* Swartz is a nomen delendum under *Lobelia infesta* (Grisebach) Urban, a St. Kitts-Nevis species with five tufted anthers, is untenable. Sastre (1985:167) applied Swartz's name in the sense of material in Swartz's herbarium (with five anthers tufted). Swartz's name, being marked with an asterisk in his original publication, must be typified on the BM material. Swartz's introduction explains that he uses the asterisk to denote new taxa found, through the generosity of Sir Hans Sloane, in the Sloane Herbarium that he had not previously seen. The material in his herbarium is probably the Masson collection from St. Christopher, cited as a second collection under *Lobelia stricta* in Solander's mss. "Florula Indiae Occidentalis," which is now missing, perhaps given to Swartz during his 1787 stay to work with Dryander at Banks' Museum, and mislabeled as "de Ponthieu, Guadeloupe."

LOGANIACEAE

(by R. DeFilipps)

Buddleia davidii Franchet, a flowering shrub, sometimes called butterfly bush, with leaves white-tomentose beneath, has been collected in cultivation at Baiac (*Whitefoord 5555*).

Mitreola petiolata (Gmelin) Torrey & Gray, a neotropical weed with petiolate, glabrous leaves and distinct styles, has been collected on Guadeloupe and Martinique.

Spigeila anthelmia

Spigeila anthelmia Linnaeus, 1753:149.

Annual herb to 5 dm; leaves ± sessile, scabrid above, opposite and connected by a stipular sheath, the uppermost pairs appearing whorled; flowers whitish to lavender, 5–9 mm long, in unilateral spikes; sepals unequal; styles 2, united; capsule tuberculate.

Neotropical weed; in Dominica near sea level, often along roadsides: Cabrits (*Whitefoord 4029*), Coulibistri (*Wilbur 8340*), L'Anse Noire (*Ernst 2075*), lower Layou Valley (*Ernst 1523*), Marigot (*Hodge 671*), Portsmouth (*Hodge 670*), Roseau (*Hodge 669*), Soufrière (*Fishlock 20*).

LORANTHACEAE

Epiphytic parasites with opposite leaves.

Dr. Delbert Wiens kindly reviewed an early draft the typescript. Recent workers recognize the viscoid genera (*Phoradendron* and *Dendrophthora* here) as a separate family, Viscaceae.

1. Flowers conspicuous (corolla 3 cm long or longer) . . . . . ***Psittacanthus***
1. Flowers inconspicuous (corolla <5 mm long).
   2. Flowers shortly but distinctly pedicelled (racemose); perianth segments 6, white . . . . . ***Dendropemon***
   2. Flowers sessile or imbedded on the rhachis (spicate); perianth segments 3, green.
      3. Anthers unilocular; leaves <2 cm long (ours) . . . . . ***Dendrophthora***
      3. Anthers bilocular; leaves >2 cm long (ours) . . . . . ***Phoradendron***

Dendropemon (Blume) J.A. & J.H. Schultes

Dendropemon caribaeus

Dendropemon caribaeus Krug & Urban in Urban, 1897:27.
Phthirusa caribaea (Krug & Urban) Engler in Engler & Prantl, 1897, Nachtr., II-IV(1):135.
Struthanthus caribaeus (Krug & Urban) Stehlé, 1954a:32.

Inflorescence racemose; petals white.

Puerto Rico and Lesser Antilles; in lowlands of Dominica: Laudat [?] (*Lloyd 205*), Layou River mouth (*Ernst 1106, 1814, 1989*), Salisbury (*Whitefoord 4522*). On *Eugenia, Citrus, Thespesia populnea,* and *Terminalia catapa.*

This species is often treated under *Phthirusa* or *Struthanthus.* Barlow and Wiens (1973:34) treated *Phthirusa* and *Dendropemon* in a summary comment on *Struthanthus.* Kuijt (pers. comm.) said that *Dendropemon* (flowers in pairs of monads) is Antillean, *Phthirusa* (flowers in pairs of triads), and *Struthanthus* (flowers in pairs of triads except monads at tip) is confined to the mainland.

Krug and Urban (in Urban, 1897:28) recognized *Dendropemon caribaeus* var. *wabyanus* with furfuraceous pedicels. Our material appears to fall there, rather than the typical variety, but the distinction needs study.

Dendrophthora Eichler

Dendrophthora elliptica var. *platyphylla*

Dendrophthora elliptica var. *platyphylla* Krug & Urban in Urban, 1897:69.
Phoradendron myrtilloides sensu Grisebach, 1860:314, as to material from Dominica, non (Willdenow) Grisebach.

Leaves small (to 2 cm × 1.2 cm), obovate, retuse.

Lesser Antilles and South America; rare in wet areas of Dominica, 540–900 m: Boiling Lake (*Hodge 1946, Nicolson*

2022), Morne Anglais (*DeFilipps 181, Hodge 2258*), Morne Micotrin (*Hodge 2096*), sine loc. (*Imray 425* at K, *281* at GOET).

Similar to *Phoradendron mucronatum* but leaves smaller and localities much higher.

Imray 281 is a type of this variety. Kuijt (1961:66) was dissatisfied with the groupings in *D. elliptica* and provisionally left it without infraspecific taxa. Kuijt's (1961:53) citation of *Imray 425* from "Hispaniola, Dom. Rep." involves confusing Dominica with the Dominican Republic.

Kellogg (in Howard, 1988, 4:103) called this taxon *Dendrophthora buxifolia* (Lamarck) Eichler. It is not clear why she thought that Kuijt claimed that the species (*D. elliptica*) occurred only in South America, because he cited Dominican (Imray) material.

Phoradendron Nuttall

The inflorescence has fertile internodes separated by a pair of bracts. Several arrangements of flowers are found on fertile internodes, the basic ones being tetrastichous with two parallel columns with an apical flower between the columns above each bract (called type 1a by Kellogg and Howard, 1986) and hexastichous with three parallel columns above each bract (called type 1b). When more than 6 flowers are found above each bract the two basic types are easier to recognize but when only 3-6 flowers are found above each bract the basic "types" are become unclear and Kellogg and Howard (1986) recognized three in the Antilles: 3-flowered triad (the apical one staminate), 4-flowered (type 1d), and 6-flowered (type 1e), the latter 2 (like 1b) with a basal flower. Rarely only 1 flower is found per bract (*P. trinervium*).

1. At least one pair of cataphylls between leaf nodes.
   2. Leaves pinnately veined, veins obscure; flowers >7 per bract, in two columns (type 1a) . . . . . ***P. piperoides***
   2. Leaves palmately veined, with 3-5 basal to ± basal veins.
      3. Inflorescences only at leaf axils; flowers >7 per bract, in three columns (type 1b) . . . . . ***P. chrysocladon***
      3. Inflorescences in cataphyll and leaf axils; flowers 3 per bract (in triads) . . . . . ***P. martinicense***
1. Cataphylls only at bases of lateral branches.
   4. Flowers >7 per bract and in 3 columns (type 1b); inflorescences prominently hexastichous, clavate . . . . . ***P. hexastichum***
   4. Flowers <7 per bract (various other types); inflorescences tetrastichous or not prominently hexastichous, slender.
      5. Fruits warty throughout; inflorescence appearing tetrastichous with 4 pistillate flower per fertile internode (actually with two triads, each with the apical flower staminate, lower 2 pistillate) . . . . . ***P. mucronatum***
      5. Fruits smooth, wrinkled or warty only on upper part; inflorescence not appearing tetrastichous and with >4 pistillate flowers per fertile internode (if flowers in triads then apical flower pistillate or all flowers unisexual).
         6. Stems becoming slightly but distinctly quadrangular; flowers all in triads (rarely 1-flowered) . . . . . ***P. trinervium***
         6. Stems sometimes flattened but becoming terete.
            7. Leaves >3× longer than wide; fruits pyriform, drying with a golden sheen; inflorescence type 1a or 1e . . . . . ***P. hartii***
            7. Leaves <3× longer than wide.
               8. Fruits pyriform, drying with a golden sheen; inflorescence type 1d or 1e . . . . ***P. anceps***
               8. Fruits globose, white; inflorescence type 1a . . . . . ***P. undulatum***

Phoradendron anceps

Phoradendron anceps (Sprengel) Gomez de la Maza, 1895:170.—Krug & Urban in Urban, 1897:41.—Trelease, 1916:98.—Kellogg & Howard, 1986:72.

Viscum anceps Sprengel, 1824, 1:487.

Phoradendron chrysocarpum Krug & Urban in Urban, 1897:39.—Trelease, 1916:98.

Stems flattened, ± terete; leaves palmately and inconspicuously veined; inflorescence type 1d or 1e (rarely 1a or in triads; young fruits with golden sheen (easily seen with 10xx lens, sepals partially open in fruit.

Scattered from Cuba to Venezuela; midlands of Dominica: Sylvania (*Hodge 1119*), sine loc. (*Eggers 926* at K, *Imray 212*).

The Imray collection was misidentified as *Phoradendron martinicense* by Grisebach (1860:314), according to Trelease (1916:198), who identified it as *P. chrysocarpum*.

Phoradendron chrysocladon

Phoradendron chrysocladon A. Gray, 1854:754.—Trelease, 1916:152.

Viscum flavens sensu Swartz, 1788:32, as to Swartz materials, non Swartz, l.c., nom. illeg. [incl. *Viscum racemosum* Aublet, 1775].

Phoradendron flavens Grisebach, 1860:313, nom. illeg. [incl. *Phoradendron chrysocladon* A. Gray].—Trelease, 1916:154.—Kellogg & Howard, 1986:76.

Phoradendron flavens var. *australe* Trelease, 1916:155.

Leaves drying yellowish, 3-5-veined; spikes to 6-jointed with 11-18 flowers per bract and in three columns (type 1b); fruits globose, white to yellowish, drying rough-wrinkled, sepals closed.

Widely distributed in neotropics; midlands of Dominica: Deux Branches (*Hodge 2975*), Freshwater Lake-Laudat (*Hodge 1832, Lloyd 208*), Morne Anglais (*Hodge 3981, Wilbur 7973*), Morne Diablotins in Picard River Gorge (*Whitefoord*

3974), Sylvania (*Hodge 3981*), Syndicate (*Whitefoord 4412*), sine loc. (*Imray 216, 386, Eggers 94b* at K). Seen on *Sloanea* at Syndicate (Nicolson!).

Phoradendron hartii

Phoradendron hartii Krug & Urban in Urban, 1897:40.—Trelease, 1916:98.—Kellogg & Howard, 1986:80.

Leaves lance-linear to oblong, ± falcate, 3-5-veined; inflorescence to 3 cm long, type 1a or 1e; young fruits pyriform, drying with a golden sheen visible under 10× lens, sepals closed.

Trinidad; new record for Dominica: Sylvania (*Wilbur 7713*). On *Citrus*.

Phoradendron hexastichum

Phoradendron hexastichum A.P. Candolle) Grisebach, 1860:313.—Trelease, 1916:135.—Kellogg & Howard, 1986:80.
Viscum hexastichum A.P. Candolle, 1830, 4:282.

Branchlets strongly flattened; leaves smooth, ovate to rotund, pinnately veined; inflorescences strongly hexastichous to 5 cm long, type 1b; fruits white, with closed sepals.

From Brazil through West Indies to Mexico; new record for Dominica: Pointe Lolo (*Ernst 1171*). On *Richeria grandis*.

Phoradendron martinicense

Phoradendron martinicense (A.P. Candolle) Grisebach, 1860:314.—Trelease, 1916:145.—Kellogg & Howard, 1986:83.
Viscum martinicense A.P. Candolle, 1830, 4:280.

Bois capitaine.

A species distinguished by bearing > one pair of bracts between leaves, often with inflorescences; leaves large, palmately veined; inflorescence to 6 cm long, triads or five (type 1a); fruits globose, yellow to orange and rough, sepals open.

Northern South America to Guadeloupe; apparently frequent in wet interior of Dominica: Fond Figues River (*Ernst 1583*), Morne Micotrin (*Hodge 2085*), Pont Cassé (*Ernst 1202, Wilbur 7836*), Sylvania (*Hodge 1439*), Syndicate (*Whitefoord 4370*). On *Sloanea* sp. and *Licania ternatensis*.

Phoradendron mucronatum

Phoradendron mucronatum (A.P. Candolle) Krug & Urban in Urban, 1897:34.—Trelease, 1916:118.—Kellogg & Howard, 1986:84.
Viscum mucronatum A.P. Candolle, 1830, 4:282.

Stems minutely glandular-papillate; leaves small (<5 cm long); inflorescence short (<2 cm long), flowers in triads, the lower 2 being pistillate, so fruiting inflorescence appears tetrastichous; fruits prominently warty, white to orange, sepals erect.

Brazil to Panama, scattered in Antilles; apparently a new record for Dominica but rather frequent along dry west coast: Badineau Estate (*Hodge 2231, 2233*), Batali River (*Ernst 1640, Webster 13176*), Pointe Ronde (*Ernst 1569*), West Cabrit (*Smith 10315*). On *Zanthoxylum spinifex, Eugenia ligustrina*. Seen on W. Cabrit on *Croton* (Nicolson!).

One specimen, *Hodge 1946* from the wet interior (Boiling Lake), was redetermined as *Dendrophthora*.

Phoradendron piperoides

Phoradendron piperoides (Lamarck) Trelease, 1916:145.—Kellogg & Howard, 1986:85.
Viscum latifolium Swartz, 1797:268, non Lamarck.
Loranthus piperoides Kunth, 1820, 3:443.
Viscum sauruoides A.P. Candolle, 1830, 4:280.
Phoradendron latifolium Grisebach, 1860:314.
Phoradendron latifolium var. *sauruoides* (A.P. Candolle) Grisebach, 1860:314.

Stems with bracts between nodes; leaves 6–12 cm × 2–3 cm, venation pinnate but obscure; inflorescences erect, type 1a or in triads; fruits ovoid, yellow to orange, drying wrinkled; sepals stiffly erect.

Widespread in neotropics; in wet interior of Dominica: South Chiltern (*Ernst 1107*), Syndicate (*Wasshausen & Ayensu 354*). The Ernst collection is on *Stylogyne lateriflora*, the other said to be on *Dacryodes excelsa*. These are the first collections from Dominica since Ramage collected it in 1888.

Phoradendron trinervium

Phoradendron trinervium (Lamarck) Grisebach, 1860:314.—Trelease, 1916:103.—Kellogg & Howard, 1986:92.
Viscum trinervium Lamarck, 1789, 3:57.
Viscum myrtilloides Willdenow, 1806, 4:739.
Phoradendron myrtilloides (Willdenow) Grisebach, 1860:314.
Phoradendron verticillatum Fawcett & Rendle, 1914 [Nov], 3:96, non (Linnaeus) Druce.

Young stems quadrangular; leaves with obscure venation; inflorescence type 1a, 1d, 1e (rarely solitary); fruits globose, yellow to orange or reddish, rather elongate, often papillate around top, sepals erect.

Most of Antilles (not Cuba) into Venezuela and Panama; commonly collected along dry west coast, occasionally elsewhere (Rosalie) in Dominica: Cabrits (*Ernst 1180, Hodge 650*), Cocoa Centre (*Nicolson 1862*), Gabriel (*Wilbur 8280*), Grand Savanne (*Hodge 3784*), Mero Valley (*Kimber 917*), Milton (*Hodge 2521*), Pointe Ronde (*Chambers 2661, Ernst 1572*), Rosalie (*Ernst 1365*), Salisbury (*Wilbur 8113*), below Syndicate (*Whitefoord 4321*).

Flowering material collected in January–May, young fruit in June–August and the only specimen in ripe fruit was collected in late October. On *Diospyros revoluta, Zanthoxylum*, and *Calliandra tergemina*.

Nicolson and Jarvis (1984:726) discussed the confusion that arose when *Viscum verticillatum* Linnaeus (1753), involving a diseased aspect of *Cissus sicyoides* Linnaeus (1759) that is represented by a Sloane illustration and specimen, was expanded by Linnaeus (1763) to include elements (Browne and Plumier) attributable to *Phoradendron trinervium*. When Grisebach published *Phoradendron trinervium* he referred to *Viscum verticillatum* Linnaeus, explicitly excluding the Sloane element. Both Druce (Feb 1914) and Fawcett and Rendle (Nov 1914) published *Phoradendron verticillatum*, the former not managing to exclude the Sloane element and the latter doing so, hence Fawcett and Rendle's later homonym pertains to *Phoradendron* and Druce's to *Cissus*. The correct name for the latter is *Cissus verticillata* (Linnaeus) Nicolson & Jarvis.

The only addition to the Nicolson and Jarvis paper concerns the apparently Asiatic Linnaean specimen (from "Angor utan"), which was superseded as the lectotype of neotropical *Cissus sicyoides* Linnaeus (1759). Planchon (in A.L. and A.C. Candolle, 1887, 5(2):522, see also 503–504) identified it as *Cissus repens* Lamarck, an Asiatic species.

Phoradendron undulatum

Phoradendron undulatum (Pohl) Eichler in Martius, 1868, 5(2):122.—Trelease, 1916:130.—Kellogg & Howard, 1986:94.
Viscum undulatum Pohl in A.P. Candolle, 1830, 4:282.
Phoradendron herminieri Trelease, 1916:131.

Branchlets ± terete; leaves 10–12 cm × 2–3.5 cm, lanceolate; inflorescences to 4 cm long in flower, type 1a; fruits globose, becoming white and strongly wrinkled, sepals ± parted.

Widely distributed in South America to Costa Rica but of limited distribution in the Antilles (Guadeloupe and Martinique); midlands of Dominica: Laudat (*Lloyd 207*).

Psittacanthus Martius

1. Flowers red, curved; calyx deciduous . . . ***P. americanus***
1. Flowers yellow, straight; calyx (at top of ovary) persistent in fruit . . . . . ***P. martinicensis***

Psittacanthus americanus

Psittacanthus americanus (Linnaeus) Martius, 1830:108.
Loranthus americanus Linnaeus, 1753:331.

Guadeloupe, Martinique, Trinidad, and Venezuela (Central America unless those are *P. calyculatus*); rare in Dominica in less wet forests at 30–450 m: Cocoa Center (*Ernst 2184*), South Chiltern (*Hodge 1582*). The Ernst collection notes that it is growing on *Lonchocarpus* sp.

Psittacanthus martinicensis

Psittacanthus martinicensis (J.A. & J.H. Schultes) Eichler in Martius, 1868, 5(2):26.
Loranthus martinicensis Presl ex J.A. & J.H. Schultes in Roemer & Schultes, 1830, 7(2):1640.
Psittacanthus dominicensis Domin, 1930a:3.

Capitaine bois, maitre bois, roi bois, kingwood, roi de l'arbre.

Guadeloupe and Martinique; common in Dominica in wet midlands: Grand Bay road (*Ernst 1607, Stehlé 6345*), Laudat (*Hodge 2046, Lloyd 211*), Point Lolo-Pont Cassé (*Ernst 1957, Wilbur 7829*), Providence Valley (*Hodge 2046*), Roche d'Or Estate (*Stern & Wasshausen 2584*), Sylvania area (*Hodge 651, 1263, Nicolson 1876, Wasshausen & Ayensu 393, Webster 13415, Wilbur 7715*), Syndicate (*Ernst 2102, Whitefoord 3880*), Trafalgar Falls (*Gillis 8199*), sine loc. (*Cooper 39*).

Often parasitizing cultivated or naturalized species: *Citrus, Eugenia jambos, Inga laurina, Mangifera indica, Persea, Pimenta racemosa,* and *Psidium guajava.*

Adjanohoun et al. (1985:133, pl. 99) reported a medicinal use.

Domin (l.c.) separated *Psittacanthus dominicensis* from *P. martinicensis* apparently solely on the basis of anther lengths, *P. dominicensis* having anthers 5 mm long and *P. martinicensis* having anthers 3 mm long. Our specimens appear to have two kinds of stamens in the same flowers, the upper three stamens with anthers 3.5–4.6 mm long and the lower three with anthers 4.0–5.7 mm long. Recognition of species on the basis of anther lengths does not seem appropriate in this case. Kellogg (in Howard, 1988, 4:101) considered *P. dominicensis* to be a narrowly leaved aspect of *P. martinicensis*.

LYTHRACEAE

Dr. S. Graham (KE) kindly advised me on the underlying information for names treated here as excluded. Her treatment (in Howard, 1989, 5:426–440) is excellent and must be consulted by anyone suspecting a new family record for Dominica.

Lawsonia inermis Linnaeus, a shrub introduced from the Old World with white or yellow terminal flowers, is cultivated in Dominica at Côte d'Or (*Nicolson 2064*) and the Roseau Botanic Garden (*Hodge 1009, 3939*).

Lagerstroemia speciosa (Linnaeus) Persoon, the queen's flower tree, is cultivated and was collected in Portsmouth as a tree 50 ft [15 m] high (*Whitefoord 5828*).

Excluded Lythraceae

Ammannia coccinea Rottbøll was attributed to Dominica by Graham (in Howard, 1989, 5:429). She advises me that this was based on material (P) now known to be from Haiti (Marquissant, Saint Domingue).

Cuphea Browne

Cuphea hyssopifolia Kunth of Central America was attributed to Dominica by Grisebach (1860:270) based on an Imray collection (not seen). This is believed to be a misidentification of *C. carthagenensis*. A recent collection from Baiac (*White-*

foord 5457) is *C. hyssopifolia*, said by Whitefoord (1989:146) to be cultivated.

Cuphea melanium (Linnaeus) R. Brown ex Steudel was attributed to Dominica in Graham's treatment (in Howard, 1989, 5:434). The author advised me that this was an inadvertent error for a species not otherwise occurring in the Lesser Antilles. Two collections (*Wilbur 7624* and *8060*) were distributed as *C. melanium* but are *C. strigilosa*.

Cuphea micrantha Kunth was attributed to Dominica in Graham's treatment (in Howard, 1989, 5:435). While it is possible that this species occurs in Dominica (known in Guadeloupe and Martinique), it has not yet been documented. Vélez (1957:103) attributed this species to Dominica but this seems to rest on a misidentification of *C. strigilosa* (cf. *Vélez 3569* at US from Portsmouth).

Cuphea parsonsia (Linnaeus) R. Brown ex Steudel was attributed to Dominica and Martinique in Graham's treatment (in Howard, 1989, 5:435). Two Dominica specimens (*Wilbur 7463* and *7755*) were distributed as *C. parsonsia* but are *C. carthagenensis*. Adams (1972:505) reported Dominica for *C. parsonsia* but this is likely a lapsus for the Dominican Republic. The Martinique record is based on a Plée collection that may have been from Puerto Rico.

1. Stems with spreading glandular hairs 1.0–1.5 mm long; hypanthium to 5 mm long, mouth contracted in fruit . . . . . ***C. carthagenensis***
1. Stems hirsute with appressed hairs to 0.5 mm long; hypanthium 8 mm long, mouth remaining open in fruit . . . . . ***C. strigulosa***

Cuphea carthagenensis

Cuphea carthagenensis (Jacquin) Macbride, 1930:124.
Lythrum carthagenense Jacquin, 1760:22.
Cuphea balsamona Chamisso & Schlechtendal, 1827:363.—Koehne in Engler, 1903, IV.216 (Heft 17):122.

Suffrutescent herb to 1 m; leaves scabrous above, tapered to short petiole; hypanthium ~5 mm, basally gibbous; petals purple; stamens 11; seeds 3–6, flat, orbicular, with pale wing.

A neotropical weed (except Greater Antilles) now adventive in Pacific; weedy herb of wet roadsides of Dominica, 60–820 m: Atkinson [Carib Reserve] (*Hodge 3374*), Cabrits (*Whitefoord 5272*), Delices (*Whitefoord 3668*), Hungry Hill (*Whitefoord 4476*), La Plaine (*Nicolson 2067*), Laudat to Freshwater Lake (*Burch 1382A, Hodge 1982, Wilbur 7463*), Pont Cassé (*Ernst 1191, Wilbur 7755*), Portsmouth (*Krauss 1674*), Syndicate Estate (DHN!).

Cuphea strigulosa

Cuphea strigulosa Kunth, 1823, 6:161 (folio); 1824, 6:204 (quarto).—Koehne in Engler, 1903, IV.216 (Heft 17):123.

Perennial small shrub to 4.5 dm, stems ± decumbent; leaves scabrous with stiff, appressed hairs; hypanthium to 1 cm long, clearly spurred; petals purple; stamens 11; seeds usually 7 or more (6–13), orbicular with a narrow wing.

Caribbean into South America but only Dominica in the Lesser Antilles; common roadside weed in Dominica in dry areas of the west coast to 500 m: Grand Savanne to St. Joseph (*Chambers 2803, Ernst 1703, Hodge 3778, Kimber 930, Nicolson 1941, Stern & Wasshausen 2425, Webster 135170, Whitefoord 4518, 5419, Wilbur 7621*), Morne aux Diables (*Wilbur 8060*), Portsmouth (*Hodge 460, Vélez 3569*), Roseau (*Stehlé 6333*).

Koehne (lc, p. 124) cited Dominica specimens for *Cuphea strigulosa* subsp. *nitens* Koehne and subsp. *opaca* Koehne. The characteristics of these subspecies overlap in his descriptions. Recent Dominica collections have scabrous leaves (supposedly a characteristic of subsp. *nitens* but not subsp. *opaca*) and no vesicles below the filaments (a characteristic of subsp. *opaca*, while subsp. *nitens* supposedly has eight vesicles).

MAGNOLIACEAE

(by R. DeFilipps)

Michelia champaca Linnaeus, trees with flowers axillary and carpels widely spaced on the axis, separating at maturity, is native to India and cultivated in the Roseau Botanic Gardens (*Hodge 947*).

Talauma dodecapetala

Talauma dodecapetala (Lamarck) Urban, 1918b:306.—Howard, 1948:356.—Stehlé, 1962a:318.
Annona dodecapetala Lamarck, 1786, 2:127.
Magnolia plumieri Swartz, 1788:87, nom. illeg.
Talauma plumieri A.P. Candolle, 1824, 1:81, nom. illeg.
Talauma plumieri var. *longifolia* A.P. Candolle, 1824, 1:82.

Straight-boled timber tree to 40 m; leaves large, coriaceous; stipule scars encircling the stem; flowers terminal; carpels closely packed on the axis, inside a woody cover, which irregularly separates at maturity, exposing the red seeds.

Guadeloupe to St. Vincent; in Dominica a common canopy (difficult to collect) species in rainforest 500–800 m: Jean (*Nicolson 2160*), Laudat (*Hodge 2121*), Morne Diablotins (*Nicolson 1964*). Seeds ripening December–May.

MALPIGHIACEAE

This family has opposite leaves, often with conspicuous paired glands on the leaves and calyx, medifixed hairs, and clawed petals. I am grateful to Dr. William Anderson, who commented on a draft and shared his typescript of this family for Howard (1988, 4:596–633).

Galphimia gracilis Bartling is cultivated as a hedge around the Forestry Office in Roseau Botanic Garden where I observed it. It is yellow-flowered and the calyx, unlike the native genera, is eglandular.

Tetrapteris inaequalis Cavanilles was attributed to Domin-

ica on the authority of Britton and Wilson (1924, 5:438), who cited "Antigua to Tobago." This species is scattered in the Antilles, but no specimens from Dominica have been seen. Each samara has 4 oblong wings in an x-shape.

1. Vines (rarely shrubs); fruit with separate winged carpels (samaras).
   2. Leaf-blade eglandular; samara thickest on outer (dorsal or lower) margin, the thin margin facing in or up . . . . . ***Heteropteris***
   2. Leaf-blade with glands at petiole apex or on either side of midvein at the base; samara thickest on inner (ventral or upper) margin, the thin margin facing out or down . . . . . ***Stigmaphyllon***
1. Trees (often shrubs); fruit a leathery or fleshy berry or drupe.
   3. Styles united into 1 (sometimes branched near apex) . . . . . ***Bunchosia***
   3. Styles 3, free to base.
      4. Stigmas (styles) subulate; inflorescences terminal, racemose . . . . . ***Byrsonima***
      4. Stigmas broad; inflorescences axillary, 1-2-flowered . . . . . ***Malpighia***

Bunchosia L. Richard ex Kunth

This is the only genus of the family in the Antilles with united styles. It needs revision.

Bunchosia polystachia

Bunchosia polystachia (Andrews) A.P. Candolle, 1824, 1:581.
Malpighia polystachia Andrews, 1810.
Bunchosia nitida sensu Niedenzu in Engler, 1928, IV.141 (Heft 94:657, non (Jacquin) A.P. Candolle [type from Colombia].

Bois massé.

Small tree to 7 m; leaves ~15 cm × 6 cm, essentially glabrous, acuminate at apex and cuneate (sometimes rounded) at base, with two large, elongate glandular spots near the leaf base at or near the midrib; inflorescences racemose, commonly axillary; petals yellow; style divided into 2 branches near apex; fruits pulpy to leathery, orange to dark reddish orange, spheroid, 1 cm diameter, with 2 large seeds.

Antilles and Costa Rica; in interior forests of Dominica from 100-700 m: Deux Branches, La Chaudière (*Hodge 3531, 3635*), Laudat or above (*Hodge 1989, Webster 13241*), Riversdale (*Howard 11763*), South Chiltern (*Stern & Wasshausen 2528*), Sylvania (*Hodge 550*), Syndicate (*Wasshausen & Ayensu 353, Whitefoord 3646*), Warner (*Ernst 1960*). Flowering April-June, fruiting July-August.

There is one aberrant collection from Dominica (*Ernst 2096*) from the dry woodlands of the Cabrits. This material (flowering in mid-August) might be an ecological variant of the interior species, because its floral characters do not seem to differ and it has the same oval glands near the midrib toward the base of the leaves. However, the leaves are significantly smaller (~5 cm × 2 cm) and obtuse to rounded at the apex. Indeed, the aspect of the specimen is extremely similar to *Bunchosia glandulosa* (Cavanilles) A.P. Candolle, attributed to Dominica by Grisebach (1860:115) without citation of a collector. That species is easily recognized by its dark brown connectives, which are not exceeded by the anther locules, while the Ernst specimen clearly has yellow connectives and locules 2× longer than the connective (hanging down below the connective). I believe the attribution of *B. glandulosa* to Dominica (and adjacent islands) represents a misidentification of the small-leaved, dry woodland ecological aspect of *B. polystachia*. The attribution of *Bunchosia lindeniana* Adr. Jussieu to Dominica by Grisebach (1860:115), based on an Imray collection (not seen) is also probably a misidentification, but of the large-leaved, interior aspect of *B. polystachia*.

Byrsonima L. Richard ex Kunth

1. Petals yellow, yellowish orange or orange; leaves puberulent below; connectives equaling the anther sacs, the latter not apiculate . . . . . ***B. spicata***
1. Petals white, pink, or red; leaves glabrous below.
   2. Shrub to 3 m; connectives equaling the anther sacs, the latter not apiculate . . . . . ***B. lucida***
   2. Tree to 12 m; connectives exceeding the anther sacs by 1.0-1.5 mm, the latter apiculate . . . . . ***B. trinitensis***

Byrsonima lucida

Byrsonima lucida (Miller) A.P. Candolle, 1824, 1:580.—Niedenzu in Engler, 1928, IV.128 (Heft 94):709.—Little et al., 1974:366, pl. 419.—Gillis, 1974b:94.
Malpighia lucida Miller, 1768.
Malpighia cuneata Turczaninov, 1858:390.
Byrsonima cuneata (Turczaninov) Wilson, 1917:394.

Densely branching shrub 1-3 m; leaves narrowly obovate to spatulate, 2-4(-5) cm long, glossy; petals white or pink, turning red; mature fruit yellow.

Florida through Antilles; common in Dominica in xerophytic woodlands below 100 m: Grand Savanne (*Beard 243, Ernst 1143, 2134, Hodge 3772, Nicolson 2045, Stern & Wasshausen 2449, Webster 13168, Wilbur 7628*), Pointe Baptiste (*Hodge 3498*), Sugar Loaf (*Eggers 1084*). Major flowering April-May.

This small-leaved, white- to pink-flowered species can hybridize with the large-leaved, yellow-flowered species, *B. spicata*, q.v.

Byrsonima spicata

Byrsonima spicata (Cavanilles) A.P. Candolle, 1824, 1:580.—Cuatrecasas, 1958:602.
Malpighia spicata Cavanilles, 1789, 8:409, pl. 237.

Byrsonima coriacea var. *spicata* (Cavanilles) Niedenzu in Engler, 1928, IV.141 (Heft 94):700.

Bois tan.

Tree 5–11 m; leaves narrowly elliptic to lanceolate, puberulent below, ~4 cm × 12 cm; petals yellow to orange; interior surface of anther connective pubescent with a few long, appressed hairs, the anther sacs glabrous; fruits orange.

Antilles (except Jamaica) and South America; a widespread species in Dominica in mesophytic habitats including windward coastal thickets: below Syndicate to Marigot (*Chambers 2621, Hodge 3163, Nicolson 1908, Wasshausen & Ayensu 364, Whitefoord 4311, Wilbur 7626, 8310*), east coast, including Carib Reserve (*Ernst 1362, Hodge 3904, Nicolson 4129, Taylor 14*), south from Grand Bay to Scotts Head (*Taylor 13, Webster 13445, Wilbur 8006*), interior, near Imperial road (*Narodny 2, Skog 1577*), cultivated Roseau Botanic Garden (*Hodge 928*). A spectacular show when flowering in May–June.

The bark is used for tanning and hunting potions (Hodge and Taylor, 1957:570).

It is of biological interest to note that this mesophytic yellow-flowered, large-leaved species can hybridize with the xerophytic, white- to pink-flowered, small-leaved species *B. lucida*. A collection (*Stern & Wasshausen 2444*) from Grand Savanne (where *B. lucida* is common) is quite intermediate in leaf characters. The leaves are obovate (as *B. lucida*) but much larger (~3 cm × 7 cm) than *B. lucida* and smaller than *B. spicata*. The flowers are yellow (as *B. spicata*). At first glance one might think this was *B. trinitensis*, but the flower color and habitat are wrong and the stamens do not have the distinctive prolonged connective of *B. trinitensis*. Anderson (ms.) reported most pollen grains were not stainable, implying a sterile hybrid between these quite unrelated species. Hybrids between these species are postulated in Puerto Rico (Little et al., 1974:366) and were named as species *B. ophiticola* and *B. horneana*).

Byrsonima trinitensis

Byrsonima trinitensis Adr. Jussieu, 1840:334.
Byrsonima martinicensis Krug & Urban ex Duss, 1897:111.
Byrsonima crassifolia sensu Grisebach, 1860:114, non (Linnaeus) Kunth.

Bois moricipre, mauricif, bois du vin.

Tree 3–12 m; leaf blades elliptic, oblanceolate or obovate, 4.5–11.5 cm long, petioles 2–12 mm long; petals white to pink; mature fruits red.

Lesser Antilles; common in wet interior forests and montane thickets (100 m at La Chaudière is remarkable) in Dominica: Boiling Lake (*Hodge 1900*), Castle Bruce (*Ramage s.n.*, Feb 1889), La Chaudière (*Hodge 3572*), Morne Diablotins (*Nicolson 1924*), Morne Micotrin to Laudat (*Chambers 2740, Ernst 1099, Nicolson 1834, Wasshausen & Ayensu 328*), within 5 miles [8 km] of Pont Cassé (*Ernst 1670, 1980A, 2087, Hodge 552, 553, 2978, Stern & Wasshausen 2543, Wilbur 7844*), Syndicate (*Whitefoord 4536*). Flowering July–August at lower elevations, October–November at higher elevations.

Williams (1947, 2:498) suggested that this species is conspecific with *B. martinicensis*. The small-leaved aspect with short (2–4 mm) petioles, referable to typical *B. trinitensis*, occurs in Dominica at higher elevations. The larger-leaved aspect with longer (5–12 mm) petioles, referable to typical *B. martinicensis*, occurs at lower elevations.

According to Anderson (in Howard, 1988, 4:607) the type is from Martinique and was mislabeled as "Fl. Trinitatis" (confusion with La Trinité of Martinique?). The similar Trinidad species is *B. kariniana* Anderson.

Grisebach (1860:114) cited an Imray collection from Dominica as *Byrsonima crassifolia* (Linnaeus) Kunth. An Imray collection (GOET) is sterile but the leaves are glabrous (unlike *B. crassifolia*), although material in the pocket (taken from a different collection?) is *B. crassifolia*. A specimen of *Imray 332* (K) is clearly *B. trinitensis*. A flowering specimen of *Imray 210* (GH) was annotated by Grisebach as "*crassifolia* var. *glabrata*" but has the prolonged staminal connectives of *B. trinitensis*. The attribution of *B. crassifolia* to Dominica appears to be due to a misidentification of *B. trinitensis*.

Heteropteris Kunth, nom. cons.

Heteropteris purpurea (Linnaeus) Kunth, was reported for Dominica by Vélez (1957:103) as *Banisteria purpurea* Linnaeus on the authority of Stehlé. No specimens from Dominica have been seen, but it is possible that it could be found in very dry areas. It has pink flowers and small, oval leaves, which usually bear two small glands at or slightly below the middle of the petiole.

Heteropteris platyptera

Heteropteris platyptera A.P. Candolle, 1824, 1:592.—Macbride, 1934:11.
Banisteria longifolia Swartz, 1788:75.
Heteropteris longifolia (Swartz) Niedenzu, 1903:53, non Kunth [= *Heteropteris laurifolia* (Linnaeus) Adr. Jussieu].
Heteropteris longifolia var. *borealis* Niedenzu, 1903:53.
Heteropteris longifolia var. *martinicensis* Niedenzu, 1903:54.
Heteropteris platyptera var. *martinicensis* (Niedenzu) Macbride, 1934:12.

Corde caco, liane cacao, sec cacao.

Liana (or dense shrub); leaves glandular, glabrous, >15 cm long; flowers yellow, paniculate; carpels 3, samaras 1–3, to 3 cm × 6 cm, the wings thickest at bottom, reddish at end.

Guadeloupe to St. Vincent; northern Dominica in mesic to wet woodlands to 600 m: western slopes—Clarke Hall (*Wasshausen & Ayensu 301*), Milton (*Hodge 2678*), Sugar Loaf (*Eggers 730, 1062*), Syndicate (*Hodge 3832*); northern and eastern slopes—Calibishie (*Hodge 3167*), Carib Reserve (*Hodge 3270, Stehlé 6416*), La Chaudière (*Hodge 3506*); wet interior, within 5 miles [8 km] of Pont Cassé (*Beard 660, Ernst 1167, 1289, 1352, Hodge 551, 2983, 3473, Nicolson 4180, Webster 13392*); sine loc. (*Fishlock 23A, Imray 405*). Flowering April to June and fruits quickly maturing.

Used in various artifacts by Caribs (Hodge and Taylor, 1957:570).

Malpighia Linnaeus

The West Indian Cherry, widely misidentified as *Malpighia punicifolia* Linnaeus, is *Malpighia emarginata* Sessé & Moçiño ex A.P. Candolle, according to Vivaldi (in Cuatrecasas and Croat, 1980:899). It is cultivated at Canefield Estate (*Nicolson 4218*), Morne Daniel (*Whitefoord 6127*), and at the Cherry Lodge Hotel in Roseau (DHN!), for which the hotel is named.

Malpighia coccigera

Malpighia coccigera Linnaeus, 1753:426.

Leaves ovate, small (~1 cm long), spiny-toothed; flowers pink.

Cuba, Hispaniola, Puerto Rico, Guadeloupe, Martinique; in Dominica only known from Cabrits: Inner Cabrite of Prince Rupert's Head 19 Jun 1792 (*Anonymous* [Finlay?] *s.n.* at K), crest of NE side of West Cabrit (*Nicolson 4207*), sine loc. (*Imray 412* at K).

Stigmaphyllon Adr. Jussieu

The attribution of *Stigmaphyllon emarginatum* (Cavanilles) Adr. Jussieu (as *Stigmaphyllon lingulatum* (Poiret) Small) to Dominica by Vélez (1957:103) on the authority of Britton and Wilson (1924, 5:441), who stated "St. Martin to St. Lucia," has not been confirmed. This species is superficially similar to *S. diversifolium* but the leaves are glabrate at maturity.

Stigmaphyllon ovatum (Cavanilles) Niedenzu was attributed to Dominica by Vélez (1957:103) as *Brachypterys ovata* (Cavanilles) Small on the authority of Britton and Wilson (1924, 5:439), who cited "Guadeloupe to Trinidad." This species grows in wet coastal areas (mangroves), a rare habitat on Dominica.

1. Leaf-blade small (to 6 cm), obtuse to rounded and short-apiculate at apex; petiole to 1 cm long; styles unequal, the shorter with a slender beak; xerophyte . . . . . ***S. diversifolium***
1. Leaf-blade large (>6 cm), long-acuminate at apex; petioles to 5 cm long; styles ± equal, all foliaceous at apex; mesophyte . . . . . ***S. puberum***

Stigmaphyllon diversifolium

Stigmaphyllon diversifolium (Kunth) Adr. Jussieu, 1840:290.—Grisebach, 1860:119.
Banisteria diversifolia Kunth, 1822, 5:159.
Stigmaphyllon cordifolium Niedenzu, 1899:8.

Vine or shrub; leaves elliptic, lanceolate or ovate, tomentose beneath, apex acute, obtuse, or truncate; petals erose, yellow; samara smaller, the wing to 2 cm long.

Lesser Antilles; frequent in Dominica in lowland dry scrub on west coast: Batali River (*Webster 13175*), Cabrits (*Hodge 3717, 4010*), Dublanc (*Hodge 2540*), Grand Savanne (*Beard 244, 1459, Ernst 1413, Hodge 3807, Stern & Wasshausen 2539, Wilbur 7641*), Massacre (*Whitefoord 4638*), Mero (*Chambers 2508, 2509*), Pointe Ronde (*Chambers 2659, Hodge 2646*), Spanish Mt. (DHN!), Tarou Cliffs (*Nicolson 1860*). Apparently flowering throughout the year.

Stigmaphyllon puberum

Stigmaphyllon puberum (L. Richard) Adr. Jussieu, 1840:289.
Banisteria pubera L. Richard, 1792:109.

Kalábuli.

Vine; leaves lanceolate or elliptic, apex acuminate; petals fimbriate, yellow; samara large, the wing >3 cm long.

Northern South America to Belize, West Indies; occasional in Dominica in mesic (secondary?) woodlands to 700 m: Carib Reserve (*Hodge 3356, Howard 554, Taylor 18*), Clarke Hall (*Ernst 1711, 1299, Stern & Wasshausen 2422*), Hatton Garden (*Hodge 2956*), La Chaudière (*Hodge 3641*), Layou Bridge (*Whitefoord 4381*), Morne Anglais [Couliaboune] (*Eggers 651*), Pont Cassé area (*Howard 11716*), Rosalie (*Ernst 1358*). Flowering April to August, fruit quickly maturing.

Stems used as twine by Caribs was reported by Hodge and Taylor (1957:571).

MALVACEAE

There is a commonly cultivated hedge shrub in Dominica with bright red, non-spreading petals, which I assume is *Malvaviscus arboreus* Cavanilles, although no voucher has been seen. Adjanohoun et al. (1985:137, pl. 136) reported medicinal use on Dominica.

1. Petals (3-)4 cm long or longer; fruit a loculicidal capsule or indehiscent.
   2. Leaves 3-5-lobed.
      3. Plant not covered with glands . . . . ***Abelmoschus***
      3. Plant covered with black glands . . . . ***Gossypium***
   2. Leaves not or only very shallowly lobed.
      4. Calyx truncate; fruit indehiscent . . . . . ***Thespesia***
      4. Calyx 5- or 10-lobed; fruit dehiscent.
         5. Leaves serrate, ± broader than long; fruits 4–5 cm long, broadly winged, stipitate, stellate-pubescent, long-pedicellate . . . . . ***Wercklea***
         5. Leaves entire to crenulate, usually longer than broad; fruits smaller and not as above.
            6. Fruits depressed, 5-winged, hispid . . . ***Fioria***
            6. Fruits ovoid, longer than broad . . . ***Hibiscus***
1. Petals to 3 cm long; fruit a schizocarp of several to many separating carpels (mericarps).

7. Calyx or inflorescence not subtended by bracts (epicalyx).
   8. Leaves cuneate to shallowly cordate; fruits <1 cm wide; carpels 1-seeded . . . . . ***Sida***
   8. Leaves deeply cordate; fruits >1.5 cm wide; carpels 3-seeded.
      9. Carpels not inflated, the walls firm . . . . . ***Abutilon***
      9. Carpels inflated at maturity, the walls membranous . . . . . ***Herissantia***
7. Calyx or inflorescence subtended by bracts (epicalyx).
   10. Calyx without epicalyx but inflorescence subtended by large, conspicuously veined bracts . . . . . ***Malachra***
   10. Calyx subtended by epicalyx; inflorescence without large bracts.
      11. Involucral bracts 3 . . . . . ***Malvastrum***
      11. Involucral bracts 5–8.
         12. Leaf blades eglandular, usually unlobed; petals yellow to greenish; carpels unarmed or with only 3 barbed spines . . . . . ***Pavonia***
         12. Leaf blades with 1–3 open nectaries near base, usually lobed; petals pink; carpels with numerous hooked spines . . . . . ***Urena***

Abelmoschus Medikus

Calyx spathaceous, 5-toothed on one side, deciduous; corolla subtended by a ± persistent epicalyx.

Abelmoschus esculentus (Linnaeus) Moench, okra or gumbo, is cultivated on Dominica at Fort Shirley (*Whitefoord 6166*). It has stems glabrous or with spreading (not deflexed) hairs and a mature fruit about 20 cm long. Hodge and Taylor (1957:580) discussed the Carib beliefs concerning this species under the name *Hibiscus esculentus* Linnaeus. Adjanohoun et al. (1985:135, pl. 101) reported medicinal uses.

Abelmoschus moschatus

Abelmoschus moschatus Medikus, 1787a:46.—Bates, 1968:104.
Hibiscus abelmoschus Linnaeus, 1753:696.

Annual herb; stem with deflexed hairs; flowers yellow with dark brown spot at base of each petal; pedicel usually >3 cm long; fruit <10 cm long.

Asiatic but widely introduced and escaping; in lowlands of Dominica: beside river at Hatton Garden Estate (*Hodge 3182*).

Abutilon Miller

Calyx 5-lobed, not subtended by epicalyx; staminal column with stamens at apex; carpels 2-more-ovuled, leathery at maturity.

Abutilon indicum

Abutilon indicum (Linnaeus) Sweet, 1826:54.
Sida indica Linnaeus, 1756:26.

Shrub to 1.2 m; leaves tomentose below; petals yellow to pale orange.

Pantropical; in Dominica in disturbed areas on west coast: Gabriel (*Wilbur 8228*), West Cabrit (*Hodge 3709, Smith 10332*).

Fioria Mattei

Fioria vitifolia

Fioria vitifolia (Linnaeus) Mattei, 1917:72.—Fryxell in Howard, 1989, 5:214.
Hibiscus vitifolius Linnaeus, 1753:696.

Densely pubescent shrub or herb to 2 m; leaves trilobed, dentate; petals yellow; capsule winged at apex.

Native to Old World tropics, naturalized in the West Indies; only record from Dominica: sine loc. (*Imray 54* at GH, *152* at GOET).

Gossypium Linnaeus

The species are variable and hybridization, followed by introgression, results in intermediate specimens that can be difficult to determine.

Used by Caribs to make cloth (Hodge and Taylor, 1957:579).

1. Involucellar bract teeth gradually acuminate, sinuses ± rounded; leaves 3–7-lobed, central lobe ovate to lanceolate, usually >1.5× as long as broad; capsules usually 3-celled, ± elongate, pitted . . . . . ***G. barbadense***
1. Involucellar bract teeth triangular and acute or lanceolate and acuminate, sinuses ± acute; leaves 3–5-lobed, central lobe triangular to ovate, usually <1.5× as long as broad; capsules 3–5-celled, usually ovoid or ± globose, smooth . . . . . ***G. hirsutum***

Gossypium barbadense

Gossypium barbadense Linnaeus, 1753:693.—Borssum Waalkes, 1966:123.—Fryxell, 1979:70.

Coton blanc, coton noir.

Stipules 1–5 cm long; petals to 8 cm, yellow.

Originally South American, now widely cultivated; cultivated and apparently escaping in Dominica: Carib Reserve (*Stehlé 6398, 6422*).

Adjanohoun et al. (1985:133, pl. 100) reported use to treat tachycardia.

Kidney cotton (with seeds fused) is *Gossypium barbadense* var. *brasiliense* (Rafinesque) Fryxell.

Gossypium hirsutum

Gossypium hirsutum Linnaeus, 1763:975.—Borssum Waalkes, 1966:123.—Fryxell, 1979:68.
Gossypium marie-galante Watt, 1927:344.
Gossypium hirsutum var. *marie-galante* (Watt) J.B. Hutchinson et al., 1947:43.—Adams, 1972:473.

Cotton tree, coton noir.

Stipules 0.5–1.5 cm; petals to 5 cm, cream to pale yellow.

Originally from Central America and Greater Antilles, now widely cultivated; cultivated and apparently naturalizing in Dominica, particularly in the west: Bataca (*Stehlé 6373, 6403*), Dublanc (*Hodge 2541*), Mahaut (*Morden 7*), Mero (*Whitefoord 5693*) [*Chambers 2514* from Coulibistri is intermediate].

The Mahaut specimen was cultivated for cotton seed oil.

Herissantia Medikus

Herissantia crispa

Herissantia crispa (Linnaeus) Brizicky, 1968:279.
Sida crispa Linnaeus, 1753:685.
Abutilon crispum (Linnaeus) Medikus, 1787a:29, "*cryspum.*"
Gayoides crispum (Linnaeus) Small, 1903:764.
Bogenhardia crispa (Linnaeus) Kearney, 1954:120.

Herb or shrub, often procumbent; petals white or yellowish; carpels tardily dehiscent.

Old and New World tropics and subtropics; cited for Dominica by Vélez (1957:104) as *Gayoides crispum*, apparently based solely on the distribution report by Britton and Wilson (1924, 5:549) of "West Indies, south to Grenada." I have seen material from Guadeloupe, Martinique, St. Vincent, and Grenada and suppose it is expected on Dominica near beaches.

Hibiscus Linnaeus, nom. cons.

Several species are native to the Old World tropics and cultivated on Dominica. The following have regularly toothed or lobed, persistent calyces. *Hibiscus sabdariffa* Linnaeus, roselle, was cited for Dominica by Vélez (1957:104) and has thick, succulent, edible calyx-involucres. *Hibiscus rosa-sinensis* Linnaeus, rose of China, is cultivated for its showy flowers and cv. Cooperi for its variegated leaves (*Hodge 972*). *Hibiscus rosa-sinensis* var. *schizopetalus* Dyer (also known as *Hibiscus schizopetalus* (Dyer) J. Hooker; see Cheek, 1989) has laciniate, recurved petals (*Hodge 967*).

1. Involucral bracts linear, apex bifurcate; petals purplish-pink . . . . . ***H. furcellatus***
1. Involucral bracts linear or lanceolate, apex entire; petals yellow-orange.
   2. Calyx >3 cm long, deciduous (with bracts) after anthesis; petals fading and drying deep red; trees (introduced in interior) . . . . . ***H. elatus***
   2. Calyx <3 cm long, persistent (with bracts) on ripe fruit; petals fading orange and drying greenish; shrubs or trees (usually of lowlands) . . . . . ***H. pernambucensis***

Hibiscus elatus

Hibiscus elatus Swartz, 1788:102.—Bates, 1965:64.—Kimber, 1970.

Blue mahoe.

Tall, straight tree to 20 m; petals usually >9 cm long, orange-red, fading quickly to dark crimson.

Central America and West Indies; apparently introduced into Dominica: East Cabrit (*Whitefoord 5256*), Dleau Gommier (*Nicolson 2015*), Riversdale (*Nicolson 4060*).

Planted as a fast-growing timber tree and discussed by Kimber. Adams also (1972:475) pointed out that this apparently can hybridize with *"H. tiliaceus,"* i.e., *H. pernambucensis* here.

Hibiscus furcellatus

Hibiscus furcellatus Lamarck, 1789, 3:358.

Densely pubescent shrub to 2 m; leaves cordate; petals purplish pink.

Neotropics; in Dominica in lowlands: Soufrière Valley (*Cooper 138*).

Hibiscus pernambucensis

Hibiscus pernambucensis Arruda, 1810:44.—Fryxell in Howard, 1989, 5:225.
Hibiscus tiliaceus sensu auctt. as to Lesser Antilles, non Linnaeus.

Seaside mahoe, mahoe doux.

Shrub to 2 m or tree to 10 m; petals usually <8 cm long, lemon yellow, fading quickly to tawny orange.

New World tropics; in Dominica in estuaries near sea: Carib Reserve (*Hodge 3381, Taylor 20*), Portsmouth (*Hodge 3753*).

Rope, twine, and caulking made from fibrous bark by Caribs (Hodge and Taylor, 1957:581). According to Fryxell, Asiatic *H. tiliaceaus* Linnaeus probably is a different species than *H. pernambucensis*.

Malachra Linnaeus

Coarse, pubescent herbs with whitish, conspicuously veined inflorescence bracts.

1. Inflorescence ± sessile; outer bracts broadly triangular . . . . . ***M. alceifolia***
1. Inflorescence long-stalked; outer bracts rounded . . . . . ***M. capitata***

Malachra alceifolia

Malachra alceifolia Jacquin, 1789, Coll., 2:350, "*alceaefolia*".—Guerke, 1892:350.

Gumbo zombie.

Stiffly hispid herbs to 2 m; petals 1.5 cm long, yellow.

South America and West Indies; in Dominica along roads: Barakua (*Nicolson 4069*), East Cabrits (*Whitefoord 5260*), Carib Reserve (*Hodge 3294*), bridge above Clarke Hall (*Ernst 1294*), Hatton Garden (*Hodge 3007*).

Malachra capitata

Malachra capitata Linnaeus, 1767a:458.

Velutinous herbs; petals 1 cm long.

Central America and West Indies; cited for Dominica by Urban (1920, 8:420).

The fact that there are no recent collections suggests this record is dubious; it does occur in Martinique and Guadeloupe.

Malvastrum A. Gray, nom. cons.

Malvastrum americanum

Malvastrum americanum (Linnaeus) Torrey in Emory, 1859, 2:38.—Adams, 1972:159.—Hill; 1982:187.
Malva americana Linnaeus, 1753:687.

Suffrutescent herb; inflorescence terminal, spicate; petals yellow; fruiting carpels without spines.

Tropics; reported for Dominica by Vélez (1957:104) as *Malvastrum spicatum.*

Malvastrum coromandelianum (Linnaeus) Garcke has a similar distribution, including Guadeloupe and Martinique (Hill, 1982:324) and was recently (1990) collected at the Fort Shirley ruins of the Cabrits (*Hill 21322*). Adjanohoun et al. (1985:135, pl. 102) reported medicinal usage in Dominica. It differs from *M. americanum* by its solitary axillary, pedicellate flowers and 3-spined fruiting carpels.

Pavonia Cavanilles, nom. cons.

It is difficult to dispose of the attribution of *Pavonia spinifex* (Linnaeus) Cavanilles to Dominica by Vélez (1957:104). On one hand Vélez failed to include the armed-fruited Antillean species *P. fruticosa*, which does occur on Dominica, and "*spinifex*" might be a misidentification of *P. fruticosa*. Secondly, it is possible that, by a slip of the pen, he meant *P. paludicola*, then known as *spicata* (called *P. racemosa* by him) by "*spinifex.*" Finally, it is possible he did see *P. spinifex* from Dominica, although I have seen no material. *Pavonia spinifex* does occur in Martinique and Guadeloupe and may be expected in Dominica. It has spiny carpels like *P. paludicola*, but the leaves are ovate and serrate while the flowers are axillary and solitary.

1. Inflorescence ± capitate; mericarps armed, the awns with deflexed hairs; leaves serrate, lanceolate . . . ***P. fruticosa***
1. Inflorescence racemose; mericarps unarmed, leaves ± entire, ovate . . . . . ***P. paludicola***

Pavonia fruticosa

Pavonia fruticosa (Miller) Fawcett & Rendle, 1926, 5:130.
Sida fruticosa Miller, 1768.
Urena typhalaea Linnaeus, 1771:258.
Pavonia typhalaea (Linnaeus) Cavanilles, 1787, 3:134.

Herb or small shrub.

South America and West Indies; weed in plantations and roadsides on Dominica: Grand Savanne (*Ernst 2123*), Syndicate (*Ernst 1896, Whitefoord 3945*).

Pavonia paludicola

Pavonia paludicola Nicolson in Howard, 1989, 5:241.
Malache scabra B. Vogel in Trew, 1772:50, pl. 90.
Pavonia spicata Cavanilles, 1787, 3:136, pl. 46, nom. illeg.
Althaea racemosa Swartz, 1788:102, nom. illeg.
Pavonia racemosa Swartz, 1800:1215, nom. illeg.
Malache spicata Kuntze, 1891, 1:70, nom. illeg.
Pavonia scabra (B. Vogel) Ciferri, 1936, 321.—Stehlé et al., 1937, 1:104.—Stehlé, 1943:42, non Presl.

Small sprawling shrub; flowers yellowish.

Neotropics; in water along river in Dominica: Indian River estuary (*Hodge 3744*), sine loc. (*Imray s.n.* at GH).

Cavanilles' name is illegitimate because he cited earlier *Malache scabra* Vogel in synonymy and, by his comments, appears to indicate errors in Ehret's illustration published by Trew, rather than exclude it.

Sida Linnaeus

Sida glabra Miller (also known as *Sida glutinosa* Cavanilles) was reported for Dominica by Vélez (1957:105) on his own recognizance. This species occurs around the Caribbean but its actual distribution in the Lesser Antilles is obscure (at US we have materials from Antigua, St. Barthelmy, Montserrat, and Guadeloupe). Fournet (1978:1502) reported it from several localities in Martinique. It would key here to *S. urens*, from which it differs by having pedicels 1–2 cm long and it has much shorter pubescence.

Sida spinosa Linnaeus was also reported for Dominica by Vélez (1957:105), on the authority of Britton and Wilson, 1924, 5:551), who stated "West Indies, south to Barbados, Grenada, and Aruba." It would key to *Sida urens* but differs by its 1.2 cm pedicels and its thin stellate pubescence. The leaves are much smaller than in *Sida glabra*, which approximates *S. urens*, but is instantly differentiated from both by being densely pubescent (velvety) on the lower leaf surface.

1. Petioles 1 cm or longer; leaves rounded to cordate at base.
   2. Plants densely stellate-pubescent (velvety); pedicels to 1.5 cm long in fruit; carpels ~10, each 2-awned, awns slender, retrorsely hispid and as long as the carpels . . . . . ***S. cordifolia***
   2. Plants thinly covered with spreading, elongate hairs; pedicels <0.5 cm long; carpels 5, each 2-callose . . . . . ***S. urens***

1. Petioles <1 cm long; leaves obtuse to acute at base.
   3. Leaves spirally arranged; pedicels 2–3 cm long; stipules hair-like; carpels ~10, each 2-beaked . . . . . ***S. rhombifolia***
   3. Leaves distichous; pedicels <1 cm long; stipules lanceolate to falcate, often several-nerved.
      4. Plants scabrid with sparse, short, stellate hairs; flowers usually dark yellow; carpels 7 or more, each 2-beaked, beaks straight, hispid . . . . . ***S. acuta***
      4. Plants soft-pubescent with dense, elongate, stellate hairs; flowers yellowish white; carpels 5, each 2-beaked, beaks out-curved, smooth . . . . . ***S. glomerata***

Sida acuta

Sida acuta N. Burman, 1768:147.—Fryxell in Howard, 1989, 5:246.
Sida carpinifolia Linnaeus f., 1782:307.—Stehlé, 1943:37.

Sweet broom, balié.

Sparsely stellate pubescent shrub; stipules lanceolate, 1 mm × 10 mm, ciliate; leaves elliptic-lanceolate, ~1.5 cm × 4 cm but variable; flowers 1(-2) per axil, pale orange; pedicel usually <0.5 cm but sometimes (on same specimen) about 1 cm long and jointed; carpels 7 or more, each 2-beaked, the beaks hirsute.

Tropical and subtropical weed; common in dry or disturbed habitats in lowlands of Dominica: Bornes (*Nicolson 4222, 4224*), Canefield (*Whitefoord 6093*), Carib Reserve (*Stehlé 6414, 6440*), Clarke Hall (*Nicolson 1855*), Coulibistri (*Ernst 1400*), Grand Savanne (*DeFilipps 175, Wilbur 8353*), Hatton Garden (*Hodge 2933, 2935*), La Chaudière (*Hodge 3625*), Marigot (*Hodge 547*), Pichelin (*Ernst 1590*), Portsmouth street weed (DHN!), Pointe Ronde (*Hodge 2637*), Roseau (*Hodge 546*), sine loc. (*Imray s.n.*).

All our specimens appear to be the typical subspecies, sensu Borssum Waalkes (1966:186).

The pulp is used as a poultice for sprains (Honychurch, 1980:56). Adjanohoun et al. (1985:137, pl. 104) reported medicinal uses.

Sida cordifolia

Sida cordifolia Linnaeus, 1753:684.

Suffrutescent herbs, with dense, velvety pubescence covering all parts; stipules hair-like; petioles several cm long; leaves velvety, ovate, usually ~3 cm × 5 cm, rounded to ± cordate at base and obtuse at apex, flowers ± clustered or solitary, yellow with a dark spot; pedicel short but to 1.5 cm in fruit; carpels 10, 2-awned, the awns as long as or longer than the carpels, slender, retrorsely hispid.

Tropical and subtropical; occasional along dry west coast of Dominica: Dublanc (*Whitefoord 4273*), Grand Savanne and vicinity (*Ernst 1386, 2116, 2132, Wilbur 8114*), South Chiltern to Scotts Head (*Hodge 1623*).

Sida glomerata

Sida glomerata Cavanilles, 1785, 1:18, pl. 2: fig. 6.

Suffrutescent, covered with ± spreading hairs; stipules lanceolate, 2 mm × 10 mm, ciliate; petiole <1 cm; leaves elliptic lanceolate, ~2.5 cm × 1 cm but variable on same plant; flowers solitary, white with yellowish tinge; pedicels very short, to 2 mm in fruit; carpels 5, 2-beaked, the beaks smooth, often out-curved.

Neotropics; occasional in Dominica on dry west coast: Grand Savanne and vicinity (*Ernst 1101, Hodge 3782, Wilbur 8353*).

Sida rhombifolia

Sida rhombifolia Linnaeus, 1753:684.
Sida retusa Linnaeus, 1763:961.
Sida rhombifolia var. *retusa* (Linnaeus) Grisebach, 1859:75.

Balié.

Suffrutescent, sparsely stellate pubescent; stipules hair-like; petiole <1 cm; leaves lanceolate, 0.6–2 cm × 3–6 cm, acute at base; flowers solitary, yellow; pedicel 2.3 cm long, pointed; carpels ~10, 2-beaked, lightly hispid.

Pantropical weed; common in Dominica in mesic lowlands to 650 m: Bornes (*Nicolson 4223*), Carib Reserve (*Hodge 3373*), near Grand Bay (*Ernst 1590*), *Wilbur 8018*), Hatton Garden (*Hodge 2934*), La Chaudière (*Hodge 3693*), Layou (*Hodge 548*), Lisdara (*Hodge 545, 2419*), Mt. Joy (*Hodge 1287*), Sylvania (*Cooper 13*), Syndicate (*Whitefoord 3508*).

Used to make brooms by Caribs (Hodge and Taylor, 1957:581). Three of five specimens cited there are this species, the other two are *Sida acuta*. Adjanohoun et al. (1985:139, pl. 105) reported the flowers were indicated as aphrodisiac.

Sida urens

Sida urens Linnaeus, 1759a:1145.

Suffrutescent, covered with erect, spreading hairs; stipules hair-like; petioles ~2 cm; leaves ovate, usually cordate at base and long-tapered at apex, ~4 cm × 7 cm; flowers in glomerules, yellowish with purple center; pedicels to 0.5 cm; carpels 5, each bi-apiculate.

Widespread in Africa and neotropics; apparently rare in Dominica: sine loc. (*Imray s.n.* at GH).

Reported for Dominica by Stehlé et al. (1937, 1:96).

Thespesia Solander ex Correa, nom. cons.

Thespesia populnea

Thespesia populnea (Linnaeus) Solander ex Correa, 1807:290.—Howard, 1949:94.—Fryxell, 1979:86.
Hibiscus populneus Linnaeus, 1753:694.

Tree to 9 m; leaves entire, broadly ovate, cordate; calyx

crateriform, ± entire; petals yellow, cream or reddish, with a dark base, black-punctate; fruit 3–4.5 cm in diameter.

Pantropical; in Dominica a dominant of coastal strand vegetation: Cabrit Swamp (*Hodge 544, Nicolson 1886, Wilbur 8257*), L'Anse Noire (*Ernst 1827*), Pointe Ronde (*Hodge 2693*).

Urena Linnaeus

Easily recognized by the hooked spines on the fruits (like *Triumfetta* of the Tiliaceae).

1. Sinuses of leaf blades shallow, angular at base . . . . . ***U. lobata***
1. Sinuses of leaf blades deep, rounded at base . . . . . ***U. sinuata***

Urena lobata

Urena lobata Linnaeus, 1753:692.—Borssum Waalkes, 1966:140 [as var. *lobata*].

Shrub with shallowly lobed leaves; epicalyx cupular, stiff and appressed to mericarps.

Pantropic weed; known in Dominica only from dry northwest corner of the island: Pointe Ronde (*Hodge 2765*), Portsmouth (*Whitefoord 5295*).

Urena sinuata

Urena sinuata Linnaeus, 1753:692.
Urena swartzii A.P. Candolle, 1824, 1:442.
Urena lobata f. *sinuosa* Miquel, 1854:283.
Urena lobata var. *swartzii* (A.P. Candolle) Grisebach, 1859:81.
Urena lobata var. *sinuata* (Linnaeus) Miquel ex Kuntze, 1891, 1:74.—Hochreutiner, 1901:141.
Urena lobata subsp. *sinuata* (Linnaeus) Borssum Waalkes, 1966:142.

Mahoe cousin, matérebe (Carib, without food).

Shrub with deeply lobed leaves; epicalyx spreading or reflexed in fruit.

Pantropic weed; occasional in Dominica in lowland and midland disturbed areas: Bellevue (*Eggers 599*), Carib Reserve (*Stehlé 6100*), Hatton Garden (*Hodge 2955, 3041*), La Chaudière (*Hodge 3692*), Milton (*Hodge 2927*), Sylvania (*Cooper 71, Hodge 1105*), Wallhouse (*Eggers s.n.*, Nov 1887), sine loc. (*Imray s.n., Taylor 1*).

Used medicinally by Caribs (Hodge and Taylor, 1957:581).

Wercklea Pittier & Standley

Wercklea tulipiflora

Wercklea tulipiflora (J. Hooker) Fryxell, 1981:476.—Fryxell in Howard, 1989, 5:260.
Hibiscus tulipiflorus J. Hooker, 1845, "*tulipaeflorus*."

Gombo montagne, gombo marron.

Tree to 13 m; leaves large, cordate, coarsely toothed; flowers yellow, pendent; capsule erect.

Lesser Antilles (Montserrat to St. Lucia); in places common on Dominica, 450–800 m: Freshwater Lake vicinity (*Beard 235, Hodge 1127, 1879, Nicolson 1957, 4146, Smith 10234, Wasshausen & Ayensu 311, Whitefoord 3863*), summit of Morne Negres Marrons (*Hodge 1079*), Sylvania (*Hodge 549*), sine loc. (*Cooper 40, Imray 251*, the type).

MARCGRAVIACEAE

(by John Utley)

1. Inflorescence ± umbellate; leaves dimorphic, distichous, acute on fertile branches; central flowers aborted, each with a pitcher-shaped nectary ("bract") long-decurrent on pedicel; fertile flowers with calyptrate corolla . . . . . ***Marcgravia***
1. Inflorescence racemose, elongated; leaves monomorphic, spiralled, obtuse to retuse; flowers all fertile, each with a ladle-shaped nectary attached to pedicel; corolla lobes free (at least apically).
   2. Raceme axis to 20 cm long; pedicels to 0.5 cm, scarcely longer than flowers; nectary inserted at flower base; stamens 5 . . . . . ***Ruyschia***
   2. Raceme axis to 10 cm long; pedicels to 4 cm, much longer than flowers; nectary inserted below mid-pedicel; stamens 20 . . . . . ***Schwartzia***

Marcgravia Linnaeus

1. Inflorescences erect; flowers erect on pedicels; stamens ~60 . . . . . ***M. trinitatis***
1. Inflorescences pendulous; flowers angled on pedicels; stamens to 20.
   2. Flowers at oblique angle on 2 cm pedicel, buds acute; leaves leathery, 6–10 cm long; nectary apices of central abortive flowers extending ~5 mm beyond pedicel apices . . . . . ***M. lineolata***
   2. Flowers at almost right angle on 3 cm pedicel, buds rounded; leaves not leathery, 10–13 cm long; nectary apices of central abortive flowers equaling or slightly below than pedicel apices . . . . . ***M. umbellata***

Marcgravia lineolata

Marcgravia lineolata Krug & Urban in Urban, 1896:517.

Leaves leathery, with inconspicuous venation; leaf glands slightly inset (3–5 mm); lower third of midrib with 4–5 domatia on each side; petioles 4–5 mm long; flowers at 45° angle on ~2 cm pedicels; stamens 8.

Martinique and St. Lucia; apparently rare in interior forests of Dominica: 5 miles [8 km] east of Pont Cassé (*Nicolson 4178, Wilbur 7830*), Syndicate (*Ernst 2065, Whitefoord 3491, 4268,*

4377, 4397, 4402, 4545).

Determinations are tentative pending revision of the genus. Our specimens agree reasonably well with specimens (US) from Martinique (*Stehlé 4861, 6148, 6813, 6836*) but others determined as this species have conspicuously reticulate venation and lack the revolute margins.

Marcgravia trinitatis

Marcgravia trinitatis Presl, 1845:122.—Urban, 1896:516.
Marcgravia rectiflora Triana & Planchon, 1862:364.
Marcgravia rectiflora var. *jacquinii* Triana & Planchon, 1862:366.—Urban, 1896:515.—Howard, 1970.

Leaves leathery, with inconspicuous venation, marginal glands as a line of inconspicuous glands 2–3 mm from margins and 1–2 conspicuous domatia (pocket glands) ~2–3 mm from midrib ~1 cm above leaf base; petioles 1–2 mm long, essentially sessile; flowers erect on 4–5 cm pedicels; stamens ~60.

[Martinique?] and St. Lucia; apparently rare in interior rainforest of Dominica: Laudat (*Ramage s.n.*), Sylvania (*Hodge 475, 1147*), Syndicate (*Nicolson 4083*).

The type, *Sieber 342*, supposedly collected in Trinidad by Franz Wrbna, probably involves an error, because the species does not occur on Trinidad. It may have been collected on Martinique by Franz Kohaut, perhaps at La Trinité. The same situation exists for *Rauvolfia biauriculata* (Apocynaceae).

Marcgravia umbellata

Marcgravia umbellata Linnaeus, 1753:503.—Urban, 1896:517.

Leaves not leathery, with conspicuous venation; glands on leaf margin (line of dark dots on pale margin), the lower third of midrib with 1–2 domatia on each side below; petioles 7–9 mm; flowers at ~90° angle on ~3 cm pedicels; stamens ~15.

Lesser Antilles to Guyana and Colombia; common in treetops of Dominican rainforests 100–800 m: Carib Reserve (*Stehlé 6099*), Delices (*Whitefoord 3705*), Deux Branches (*Hodge 1977, 3469*), Fon Pays (*Hodge 2863*), Freshwater Lake (*Hodge 1775, Nicolson 1838, Whitefoord 5141*), La Chaudière (*Hodge 3513*), Laudat (*Hodge 1968*), Lisdara (*Hodge 477, 2386*), Morne Colla Anglais (*Hodge 1048*), Morne Micotrin (*Chambers 2571, Stern & Wasshausen 2563, Wasshausen & Ayensu 339, Webster 13238, Wilbur 7395*), Morne Plat Pays (*Hodge 1729*), Mosquito Mountain (*Webster 13568*), Petite Soufrière Bay (*Stern & Wasshausen 2485*), Pointe Lolo (*Chambers 2518*), Pont Cassé (*Fosberg 48300, Wasshausen & Ayensu 368*), Sylvania (*Hodge 1048*), Syndicate (*Hodge 2708, Whitefoord 5631*).

Ruyschia Jacquin

Ruyschia clusiifolia

Ruyschia clusiifolia Jacquin, 1760:17, *"clusiaefolia"*.—Urban, 1896:520.

Climbing shrub; leaves obovate, retuse; floral nectaries attached near pedicel apex.

Guadeloupe to Martinique; occasional high-climbing epiphyte in Dominican rainforests, 300–610 m: Boiling Lake (*Eggers 1098*), La Soie at 2000′ [670 m] (*Eggers s.n.*), Laudat (*Eggers 787*), Syndicate (*Hodge 2901, Nicolson 2901*).

Schwartzia Vellozo

There is a possibility that *Schwartzia* is so similar to earlier *Swartzia* that it is confusable and to be treated as a later homonym under Art. 64.3 (*ICBN*). Both genera were named for Olof Swartz (also *Swartsia*).

Schwartzia spiciflora

Schwartzia spiciflora (Jussieu) Beddell in Howard, 1989, 5:309.
Marcgravia spiciflora Jussieu, 1809:402.
Norantea spiciflora (Jussieu) Krug & Urban in Urban, 1896:520.

Climbing shrub; leaves obovate, obtuse, coriaceous; floral nectaries mostly attached below mid-pedicel.

Guadeloupe, St. Vincent, Venezuela; in Dominican rainforests 700–1400 m: Couliaboune [Morne Anglais] (*Wilbur 7962*), Dleau Gommier (*DeFilipps 179*), Laudat (*Chambers 2683*), Morne Diablotins (*Chambers 2648, Nicolson 1985*), Pont Cassé (*Ernst 1129*), Valley of Desolation (*Whitefoord 5495*).

MARTYNIACEAE

(by R.W. Kiger)

Martynia annua

Martynia annua Linnaeus, 1753:618.—Van Eseltine, 1929:36.
Martynia diandra Gloxin, 1785:14, nom. superfl.
Martynia angulosa Lamarck, 1786, 2:112, nom. superfl.

Coarse annual herbs to 3 m; corolla white to pink, tube yellow-spotted, the lobes with magenta blotches; mature fruits to 4.5 cm long, with 2 recurved apical horns ~1 cm long.

Central America and West Indies, pantropically cultivated and escaping; on dry west coast of Dominica in open areas near sea level, probably not native: between Colihaut and Coulibistri (*Ernst 2117*), Goodwill (*Ernst 2145*), cult. in Roseau Botanic Garden (*Hodge 1002*).

MELASTOMATACEAE

(by A.C. Nicolson)

Ed. Note: Members of this family are usually called cré-cré on Dominica. Many are weedy and common, others are rare. Generic limits are sometimes difficult to define, although the species are relatively well defined. I thank Dr. John Wurdack for reviewing this treatment.

Generic Key
(by J. Wurdack)

1. Ovary superior (free from hypanthium); fruit capsular.
   2. Leaves 1 cm or shorter; flowers 5-merous . . . . . ***Tibouchina***
   2. Leaves 3 cm or longer; flowers 4-merous.
      3. Upper leaf-surface strigose; hypanthium densely setose with stalked hairs . . . . . ***Pterolepis***
      3. Upper leaf-surface glabrous; hypanthium glandular- or stellulate-puberulent.
         4. Leaves 7–9-veined, 10–20 cm wide . . . . . ***Graffenrieda***
         4. Leaves 5-(or faintly 7-)veined, 2–4 cm wide . . . . . ***Nepsera***
1. Ovary partly or completely inferior; fruit baccate.
   5. Flower invested by 2 pairs of bracts 1.2–2.0 cm wide . . . . . ***Blakea***
   5. Flower without prominent bracts or with only 1 pair <1 cm wide.
      6. Inflorescences on old wood below the leaves, pedicels arising in fascicles directly from the branches . . . . . ***Henriettella***
      6. Inflorescences terminal or in well-defined panicles from upper leaf-axils.
         7. Calyx-limb calyptrate, shed as bud expands; flowers pleiostemonous . . . . . ***Conostegia***
         7. Calyx-limb truncate or regularly lobed, persistent at anthesis; flowers with no more than 2× as many stamens as petals.
            8. Inflorescences lateral; flowers 4-merous . . . . . ***Clidemia***
            8. Inflorescences terminal or appearing so; flowers 4–6-merous.
               9. Anthers rimose (opening by longitudinal slits) . . . . . ***Charianthus***
               9. Anthers opening by apical pores.
                  10. Leaves moderately appressed-setose above . . . . . ***Clidemia hirta***
                  10. Leaves glabrous on upper surface.
                     11. Mature leaves glabrous or sparsely puberulous beneath, the surface visible between the hairs . . . . . ***Miconia***
                     11. Mature leaves completely covered with stellate or lepidote hairs.
                        12. Bracteoles inconspicuous, <1 mm long, caducous . . . . . ***Tetrazygia***
                        12. Bracteoles 2, 6–12 mm long, persistent nearly to anthesis . . . . . ***Miconia dodecandra*** and ***M. mirabilis***

Alternate Key
(by A.C. Nicolson)

1. Branchlets and inflorescences with tufts of hair at nodes.
   2. Flowers 4-merous; anthers rimose (slits) . . . . . ***Charianthus purpureus***
   2. Flowers 5-merous; anthers with apical pores . . . . . ***Miconia globuliflora***
1. Branchlets glabrous or with vesture not localized at nodes.
   3. Herbs.
      4. Leaves thin, glabrous; inflorescence diffuse, branches filiform . . . . . ***Nepsera aquatica***
      4. Leaves thicker, pubescent or scabrous; inflorescence not as above.
         5. Leaves large (>5 cm), 5-veined; inflorescences not glomerulate; hypanthium with simple hairs . . . . . ***Clidemia***
         5. Leaves small (<4 cm), 3-veined; inflorescence glomerulate; hypanthium with stalked hairs . . . . . ***Pterolepis glomerata***
   3. Shrubs or trees.
      6. Calyx limb calyptrate.
         7. Stamens many . . . . . ***Conostegia***
         7. Stamens 10 . . . . . ***Miconia striata***

6. Calyx limb not calyptrate.
  8. Flowers with conspicuous bracts.
    9. Leaves 3-veined, glabrous; flowers with 2 pairs of bracts, 6-merous . . . . . ***Blakea pulverulenta***
    9. Leaves 5-veined; stellate pubescent beneath; flowers with 1 pair of bracts, 5–6-merous . . . . . ***Miconia***
  8. Flowers without conspicuous bracts.
    10. Leaves tiny, <1 cm long . . . . . ***Tibouchina ornata***
    10. Leaves >1 cm long.
      11. Hypanthium densely setose with coarse, branched hairs; calyx lobes ovate, rigid, erect, persistent . . . . . ***Pterolepis glomerata***
      11. Hypanthium and calyx not as above.
        12. Leaves large, >10 cm broad, 1–9-veined . . . . . ***Graffenrieda latifolia***
        12. Leaves not as broad, 3–5-veined.
          13. Inflorescences borne below leaves; flowers 4-merous.
            14. Plants hirsute; leaves 5-veined . . . ***Clidemia guadalupensis***
            14. Plants glabrous; leaves 3-veined . . . ***Henriettella lateriflora***
          13. Inflorescences terminal or in leaf axils; flowers 4–5-merous.
            15. Mature leaves hirsute above . . . . . ***Clidemia***
            15. Mature leaves glabrous above.
              16. Mature leaves pubescent beneath, at least on veins.
                17. Pubescence rusty; flowers 5-merous . . . . . ***Miconia***
                17. Pubescence white; flowers 4-merous.
                  18. Leaves 3-veined, elliptic; inflorescences pyramidal-paniculate . . . . . ***Miconia tetrandra***
                  18. Leaves 3–5-veined, ovate-lanceolate; inflorescences corymbiform . . . . . ***Tetrazygia***
              16. Mature leaves glabrous beneath.
                19. Leaves ± sessile (petiole 5 mm); base ± cordate . . . . . ***Miconia ernstii***
                19. Leaves distinctly petioled; base rounded, at most.
                  20. Leaves 3-veined . . . . . ***Miconia***
                  20. Leaves 5-veined.
                    21. Anthers rimose (slit) . . . . . ***Charianthus***
                    21. Anthers with apical pores . . . . . ***Miconia***

Blakea Browne

Blakea pulverulenta

Blakea pulverulenta Vahl, 1794, 3:61.—Domin, 1930b:44.
Blakea laurifolia Naudin, 1852:143.

Lavande.

Epiphytic shrub or tree to 8 m; leaves 3-veined, glabrous, coriaceous, ovate to obovate, short-acuminate, base tapering, to 10 cm × 5 cm; petiole to 1.5 cm; flowers large, fragrant 6-merous, 1 or 2 per axil; pedicel to 4 cm; 4 large bracts to 1.3 cm enclosing bud; sepals 4 mm; petals 1 cm, pink; stamens 12, creamy yellow.

Lesser Antilles and Trinidad; locally abundant in moist forests at mid-elevations (400–800 m) of Dominica: Bells (*Whitefoord 6143*), Boiling Lake (*Eggers 614* at GH), Deux Branches (*Hodge 3467, Howard 11773*), En Haut Jean (*Webster 13526*), Freshwater Lake (*Whitefoord 3854*), Laudat (*Lloyd 190*), Lisdara (*Hodge 2368, 2482*), Morne Micotrin (*Ernst 1472, Gillis 8162, Wilbur 7424*), Morne Plat Pays (*Gillis 8111*), Riversdale (*Howard 11773*), South Chiltern (*Stern & Wasshausen 2488*). Flowering March–July.

Charianthus D. Don

1. Branchlets and petioles ± setose; leaves ± rugose, white-scurfy beneath along veins . . . . . ***C. purpureus***
1. Plants not setose; leaves not rugose, glabrescent.
  2. Leaves coriaceous, veins often red beneath; inflorescence a paniculate cyme; flowers large (petals >1 cm long) . . . . . ***C. alpinus***
  2. Leaves not coriaceous, veins not reddish; inflorescence

a corymbose cyme; flowers smaller (petals <0.8 cm) . . . . . ***C. corymbosus***

Charianthus alpinus

Charianthus alpinus (Swartz) Howard, 1972:401.
Melastoma alpinum Swartz, 1788:71, "*alpina*."
Melastoma coccineum L. Richard, 1792:109, "*coccinea*."
Charianthus coccineus (L. Richard) D. Don, 1823:328.—Domin, 1930b:37.—Hodge, 1941:121.

Shrub or small tree to 10 m; leaves 5-veined (veins sometimes reddish), ovate-lanceolate, attenuate, base acute to obtuse, dark punctate-glandular beneath, to 12 cm × 6 cm; petiole to 3 cm; inflorescence to 7 cm; flowers bright red; hypanthium to 5 mm; calyx to 3 cm, wavy-lobed, persistent; petals to 1.3 cm; stamens long-exserted; style 2.3 cm; berry ± globose, 8 mm, red but turning black, on 2 mm pedicel.

Endemic from Guadeloupe to St. Vincent; on Dominica, an infrequent understory tree at mid- to upper elevations: Bernard Estate (*Wasshausen & Ayensu 363*), Morne Anglais (*Hodge 516*), Morne Couronne (*Webster 13212*), Morne Trois Pitons (*Ernst 1499, 2025*), Pont Cassé (*Skog 1580, Wilbur 7788*). Collected in flower May–August and in fruit in June–July.

Charianthus corymbosus

Charianthus corymbosus (L. Richard) Cogniaux in A.L. & A.C. Candolle, 1891, 7:714.—Domin, 1930b:37.
Melastoma corymbosum L. Richard, 1792:109, "*corymbosa*."
Charianthus longifolius Cogniaux in A.L. and A.C. Candolle, 1891, 7:715.—Domin, 1930b:37.

Cré-cré.

Shrubby tree to 5 m; leaves 5-veined, ovate-lanceolate, apex attenuate to acuminate, base obtuse to cuneate, glabrescent, gland dots, if present, brownish and inconspicuous, to 19 cm × 11 cm; petioles to 8 cm; inflorescences to 15 cm, long-peduncled; hypanthium 3 mm, sepals 2 mm, both dark red; petals to 8 mm, pinkish; anthers and style to 11 mm, shortly exserted; fruit globose, purple, 6 mm.

Endemic from Guadeloupe to Martinique; locally frequent on Dominica at mid-elevations (300–900 m): Baiac (*Whitefoord 3784*), Deux Branches (*Hodge 3436*), Dleau Gommier (*Ernst 1664*), Laudat-Freshwater Lake area (*Beard 236, Burch 1383A, Chambers 2557, Gillis 8170, Kimber 955, King 6387, Nicolson 1829, Smith 10227, Wilbur 8359*), Layou River heights (*Stehlé 6331*), Lisdara (*Hodge 2451*), Morne Anglais (*Hodge 2256*), Morne Colla Anglais (*Hodge 515*), Morne Negres Marrons (*Hodge 1066*), Morne Nicholls (*Hodge 1931*), South Chiltern (*Stern & Wasshausen 2507*, Sylvania (*Cooper 31, 79, Hodge 515, 1310*), Trafalgar Falls (*Ernst 1080, Hodge 2021*), sine loc. (*Eggers 984, Imray 196*, E). Flowering and fruiting erratically throughout the year.

Hodge (1941:124–127) described three varieties of this species and reported var. *typicus* at low elevations and *longifolius* (at mid- to upper elevations) from Dominica, differentiated on the basis of leaf-shape, as well as altitude. Most of the material at US and GH falls loosely in var. *longifolius*. The species apparently hybridizes with *C. purpureus*.

Charianthus purpureus var. *rugosus*

Charianthus purpureus D. Don var. *rugosus* Hodge, 1941:130.

Cré-cré rouge.

Dense shrub to 6 m; twigs setaceous, especially at nodes; leaves strongly rugose, veins beneath white-furfuraceous, ovate, short-apiculate, base rounded to obtuse, margins revolute and distally crenulate, to 9 cm × 5 cm; petioles furfuraceous, grooved above, setaceous along edge of grooves, to 2 cm; corymbose cyme short-pedunculate, 8 cm; hypanthium furfuraceous, to 4 mm; sepals to 3 mm; petals 1 cm, scarlet; anthers barely exserted; fruits purple, globose, 6 mm.

Species on the Leeward Islands and Grenada; this variety endemic to Dominica and best developed at summits: Freshwater Lake (*Hodge 1751*), Morne au Diable (*Beard 1474*), Morne Micotrin (*Hodge 1850*), *Nicolson 1980*), Morne Trois Pitons (*Ernst 1215, 2037A, Hodge 509, 1421* (type of var.), *Kimber 985, Wilbur 8080*).

The description is based on the materials cited above. Other materials from lower elevations or not on exposed ridges often deviate and begin to lack the distinctive revolute margins and the strong rugose character, perhaps hybridizing with *C. corymbosus* (* = hybrids?): Freshwater Lake (*Ernst 1784**, *King 23**, *Smith 10227A, Wilbur 7407**), Morne Diablotins (*Chambers 2642**, *Whitefoord 5308**), Morne Micotrin (*Chambers 2557A, DeFilipps 153, Wasshausen & Ayensu 317, 334*), Morne Plat Pays (*Hodge 1685*).

Howard (1989, 5:541) treated this variety as a full synonym of *C. purpureus*, commenting that "an extreme form with rugose or bullate leaves, but at lower elevations this intergrades with material he [Hodge] called var. *brevisetosus* [of Grenada]."

Clidemia D. Don

1. Flowers 5-merous; calyx-teeth >2 mm long, petals over 5 mm . . . . . ***C. hirta***
1. Flowers 4-merous; floral parts more minute.
   2. Leaves ovate-lanceolate to elliptic, <7 cm broad . . . . . ***C. guadalupensis***
   2. Leaves broadly ovate, >8 cm broad . . . . ***C. umbrosa***

Clidemia guadalupensis

Clidemia guadalupensis (A.P. Candolle) Grisebach, 1857:70.—Domin, 1930b:43.
Melastoma verticillatum Vahl, 1797, Eclog., 1:47, "*verticillata*," non Miller.
Clidemia verticillata A.P. Candolle, 1828, 3:160.—Domin, 1930b:43.
Sagraea guadalupensis A.P. Candolle, 1828, 3:170.
Sagraea tetragona A.P. Candolle, 1828, 3:171.

Clidemia guadalupensis var. *verticillata* (A.P. Candolle) Stehlé & Quentin in Stehlé et al., 1949, 3:78.
[*Clidemia tetragona* (A.P. Candolle) Fournet, 1978:912, nom. invalid. (Art. 33.2, *ICBN*).]

Shrub to 3 m, sometimes epiphytic; branches rusty-pubescent to glabrescent; leaves 5-veined, scabrous above, ± hirsute on veins beneath, elliptic to ovate-lanceolate, attenuate, base rounded to obtuse, to 25 cm × 7.5 cm; petiole to 4.5 cm; inflorescence racemose, often "sheltered" beneath leaf-blades, to 8 cm, few-flowered, arising from nodes and leaf-axils the whole length of stems; flower to 5 mm, white; fruit to 6 mm, dark blue.

Guadeloupe; occasionally common on Dominica in wet forests at mid- to upper elevations (450–1200 m): Bois Diable area (*Wilbur 8150*), Dleau Gommier (*Ernst 1189*), Morne Anglais (*Wilbur 7967*), Morne Couronne (*Ernst 1983*), Morne Diablotins (*Webster 13323*), Morne Micotrin (*Smith 10271, Webster 13261A, Wilbur 7396*), Morne Trois Pitons (*Ernst 2038, 2052, Hodge 1210*), Mosquito Mountain (*Webster 13546*), sine loc. (*Imray 217* at K, photo at GH). Collected in flower and fruit from March to August.

Clidemia hirta

Clidemia hirta (Linnaeus) D. Don, 1823:309.—Domin, 1930b:42.
Melastoma hirtum Linnaeus, 1753:390, "*hirta.*"
Melastoma elegans Aublet, 1775:427.
Clidemia hirta var. *elegans* (Aublet) Grisebach, 1860:247.

Rangout.

Weedy, long-hirsute shrub to 2 m; leaves 5-veined, broad-ovate, acuminate, base rounded to cordate, margin ± crenate, to 15 cm × 8.5 cm; few-flowered; hypanthium 3 mm, calyx 3 mm, lobed, persistent; petals 8 mm, white, anthers 6 mm, white or yellow; fruit hirsute, dark blue, 3 mm × 5 mm.

Neotropics; common in woods and roadsides of Dominica at low to mid elevations: Bellevue (*King 6304*), Castle Bruce Road (*Cowan 1620*), Clarke Hall (*Gates Clarke D12, Webster 13198, Wilbur 7366*, Concord area (*Norstog 3367*), Côte d'Or (*Nicolson 2055*), Deux Branches (*Chambers 2505, Ernst 1804*), Grand Bay (*Wilbur 7607, 8024*), La Chaudière (*Hodge 3690*), La Plaine area (*King 6369, Whitefoord 5367, Wilbur 8176*), Laudat-Freshwater Lake (*Gillis 8185*), Morne Brulés of Portsmouth (*Hodge 520*), Syndicate (*Whitefoord 3548*). Flowering and fruiting continuously.

Clidemia umbrosa

Clidemia umbrosa (Swartz) Cogniaux in A.L. & A.C. Candolle, 1892, 7:1019.—Domin, 1930b:43.
Melastoma umbrosum Swartz, 1788:72, "*umbrosa.*"
Melastoma latifolium Desrousseaux in Lamarck, 1797, Encycl., 4:31, "*latifolia.*"
Clidemia latifolia (Desrousseaux) A.P. Candolle, 1828, 3:159.

Shrub to 3 m, long-hirsute; leaves 5-veined, margin finely crenulate, broad-ovate, acuminate, base rounded, to 31 cm × 21 cm; petiole to 14 cm; axillary inflorescence to 13 cm in fruit, sparsely flowered; flowers tiny, greenish; hypanthium 2 mm, calyx 0.5 mm, style 4 mm; fruit hirsute, purple, 5 mm.

Lesser Antilles; ± common on Dominica in disturbed rainforest, 100–700 m: Bois Diable area (*Wilbur 7834*), Deux Branches (*Ernst 1805, Hodge 2997*), Fond Figues River (*Ernst 1017*), Freshwater Lake (*King 6380*), Hampstead (*Lloyd 638*), La Chaudière (*Hodge 3560*), L'Imprévue (*Narodny s.n.*), Laudat (*Hodge 1756*), Lisdara (*Hodge 581, 1010*), Magua (*Stehlé 634*), Morne Gombo (*Hodge 99, 529*), Pont Cassé area (*Ernst 1284, Wilbur 7535*), Providence Valley (*Hodge 2048*), South Chiltern (*Hodge 1481*), Springfield (*King 6331, Wilbur 7703*), Sylvania (*Cooper 27, 27A, Hodge 519*), Syndicate (*Whitefoord 3530, 4380*). Apparently flowering and fruiting continuously.

Conostegia D. Don

1. Leaves strigulose; calyptra rounded . . . . . ***C. icosandra***
1. Leaves glabrous; calyptra pointed . . . . . ***C. montana***

Conostegia icosandra

Conostegia icosandra (Wikström) Urban, 1921c:404.
Melastoma icosandrum Swartz ex Wikström, 1828:64, "*icosandra.*"
Conostegia subhirsuta A.P. Candolle, 1828, 3:174.—Domin, 1930b:36.

Cré-cré grand feuilles.

Tree to 9 m; leaves (3–)5-veined, strigulose above, stellate-pubescent along veins beneath, elliptic, short-acuminate, base obtuse to acute, to 15 cm × 7 cm; petiole 1–2 cm; young growth hirsute with long stellate hairs; paniculate cyme to 12 cm; buds ± globose, 8 mm × 6 mm; hypanthium 5 mm; petals to 8 mm, creamy; ripe fruit bluish, globose, 8 mm.

Neotropics; locally common on Dominica at low and mid-elevations: Bataca (*Stehlé 6103*), La Chaudière (*Hodge 3618* at GH), Roseau Valley Waterfalls (*Hodge 2010*), sine loc. (*Imray 113* at NY).

Conostegia montana

Conostegia montana (Swartz) D. Don ex A.P. Candolle, 1828, 3:175.
Melastoma montanum Swartz, 1788:69, "*montana.*"
Melastoma calyptratum Desrousseaux in Lamarck, 1797, Encycl., 4:51, "*calyptrata.*"
Conostegia calyptrata (Desrousseaux) D. Don ex A.P. Candolle, 1828, 3:174.—Domin, 1930b:36.

Cré-cré bois, cré-cré blanc.

Shrub or small tree to 7 m; leaves 5-veined, glabrous, elliptic or oblong, short-acuminate, base acute to obtuse, to 22 cm × 8 cm; petiole 2–6 cm; paniculate cyme to 15 cm, many-flowered; buds cylindric with conical top, 6 mm × 3 mm; hypanthium to 4 mm; petals 4–7 mm; berry blackish, globose, 5 mm.

Antilles; common in Dominica at mid-upper elevations, 400–1200 m: Boeri Lake (*Whitefoord 4153*), Carib Reserve

(*Stehlé 6101, 6105*), Castle Bruce road (*Cowan 1622*), Deux Branches (*Chambers 2763, Ernst 1807, Hodge 3126, 3441*), La Chaudière (*Hodge 3570*), Laudat (*Beard 1467, Eggers 621* at GH, *s.n., Hodge 1985, Lloyd 188*), Lisdara (*Hodge 2350*), Milton Estate (*Hodge 2579*), Morne Anglais (*Wilbur 7957*), Morne Couronne (*Webster 13206, 13223, 13230*), Morne Diablotins (*Webster 13325*), Morne Negres Marrons (*Hodge 1059*), Morne Micotrin (*Ernst 1768, 2175, Chambers 2563, 2570, Kimber 949, Nicolson 1992, Stern & Wasshausen 2572, Wilbur 7427*), Morne Plat Pays (*Wilbur 7879*), Mahaut River (*Proctor 17512*), Pont Cassé area (*Ernst 1288, Hodge 1197, Webster 13387, Wilbur 7565*), Sylvania (*Cooper 95, Hodge 3972*), Syndicate (*Ernst 2000, Whitefoord 4355, 5575*), sine loc. (*Imray 175* at GH).

Graffenrieda A.P. Candolle

Graffenrieda latifolia

Graffenrieda latifolia (Naudin) Triana, 1871:71.—Domin, 1930b:36.
Cycnopodium latifolium Naudin, 1845:52.
Miconia catalpifolia Kränzlin, 1931:153.

Tree to 9 m; twigs stout with conspicuous leaf scars; leaves 7–9-veined, broadly ovate to orbicular, short-acuminate, base obtuse, to 20 cm × 20 cm; petiole to 13 cm; panicle terminal, to 30 cm; hypanthium 2.5 mm, sepals 1.5 mm, petals to 5 mm, white; capsule 4 mm × 2.5 mm, ribbed, ± urceolate.

Lesser Antilles to northern South America; at mid- to upper elevations (400–800 m) on Dominica: Bois Diable Ridge (*Stern & Wasshausen 2547*), Castle Bruce Road (*Cowan 1600*), Diablotins (*Lloyd 907*), En Haut Jean (*Webster 13508*), Laudat (*Eggers 750*), Morne Micotrin (*Burch 1363, Ernst 1724, Webster 13240*), Morne Plat Pays (*Hodge 1739*), Pont Cassé (*Ernst 1127, Wilbur 7764*), Sylvania (*Cooper 120, Hodge 517, 3852, 3971*), sine loc. *Krauss s.n.*, E). Flowering April–July, fruiting June–July.

Henriettella Naudin

Henriettella lateriflora

Henriettella lateriflora (Vahl) Triana, 1871:144.—Domin, 1930b:44.
Melastoma lateriflorum Vahl, 1797, Eclog., 1:48, "*lateriflora*."
Ossaea lateriflora (Vahl) A.P. Candolle, 1828, 3:169.
Henriettea lateriflora (Vahl) Howard [ex Fournet, 1978:914, nom. invalid. (Art. 33.2)] & Kellogg, 1986:246.—Howard, 1988:286.

Small tree to 7 m; leaves clustered at ends of branches, glabrous, 3-veined, elliptic, acuminate, base attenuate, to 6.5 cm × 2.5 cm; petiole 1.5 cm; flowers 4-merous, clustered at nodes below leaves, few per cluster; pedicels 1 cm; hypanthium and calyx green, 2 mm; corolla 3 mm, white, calyptrate.

Montserrat, Guadeloupe, Martinique; collected in Dominica only in vicinity of Freshwater Lake, 800 m: (*Eggers 638* at GH, *Ernst 2167*), sine loc. (*Imray 190, 330* at GH). Young flower in August.

Miconia Ruiz & Pavón

Miconia cornifolia (Desrousseaux) Naudin (incl. *Miconia cinnamomifolia* (Jacquin) Triana, non Naudin), another Lesser Antillean endemic species, was reported for Dominica by Cogniaux (in A.L. and A.C. Candolle, 1891, 7:765) and Howard (1989, 5:557). This may involve misidentification of Dominican material of variable *M. striata* (Vahl) Cogniaux. *Miconia cornifolia* has distinctly larger flowers and a calyptrate calyx. Fruiting specimens are difficult to distinguish.

Miconia splendens (Swartz) Grisebach (1860:256) was reported from Dominica by Grisebach (l.c.), based on an Imray collection. The range of this species seems to exclude the Lesser Antilles. This record may be a misidentification, perhaps of *M. trichotoma* or *M. furfuracea*.

1. Mature leaf-blades glabrous beneath.
  2. Branchlets and inflorescences with tufts of hairs at nodes . . . . . ***M. globuliflora***
  2. Branchlets and inflorescences not as above.
    3. Leaves 3-veined, usually >15 cm long.
      4. Leaves ± sessile, base ± cordate; petiole 0.5 cm . . . . . ***M. ernstii***
      4. Leaves clearly petioled, base rounded (at most); petiole >1 cm.
        5. Flowers 5-merous, mid-sized (petals >5 mm); leaf-apex long-attenuate . . . . . ***M. striata***
        5. Flowers 4-merous, minute (petals to 1 mm); leaf-apex acuminate to short-attenuate . . . . . ***M. trichotoma***
    3. Leaves 5-veined, usually <11 cm long.
      6. Leaves small (<6 cm), apex blunt-apiculate . . . . . ***M. mornicola***
      6. Leaves large (>6 cm), apex attenuate to acuminate.
        7. Leaf-margins usually revolute; sepal lobes round with a dorsal lobed spine . . . . . ***M. coriacea***
        7. Leaf-margins not revolute; sepals triangular, spine indistinct or wanting . . ***M. globuliflora***
1. Mature leaf-blades pubescent beneath, at least on veins.
  8. Leaves pubescent beneath only on veins.
    9. Leaf-veins pubescent above and beneath; margins crenate-setose; flowers minute . . . . ***M. racemosa***
    9. Leaf-veins glabrous above; margins entire or serrate; flowers not minute.
      10. Flowers large (petals 7 mm); leaves broadly ovate-elliptic, apex acuminate, margins entire . . . . . ***M. furfuracea***
      10. Flowers small (petals 3 mm); leaf ovate-lanceolate, apex attenuate, margins serrate with sparse setae . . . . . ***M. laevigata***
  8. Leaves pubescent on and between veins.

11. Leaves 3-veined, white-pubescent beneath; flowers 4-merous . . . . . ***M. tetrandra***
11. Leaves 5-veined; flowers 5-6-merous.
    12. Leaves large, base slightly cordate-clasping; petiole short (<1 cm); flower small . . . . . ***M. impetiolaris***
    12. Leaves <20 cm long; petiole >1 cm; flower large, showy, with 2 white, caducous bracts.
        13. Flowers usually 6-merous; hypanthium stellate-pubescent . . . . . ***M. dodecandra***
        13. Flowers usually 5-merous; hypanthium glabrous . . . . . ***M. mirabilis***

Miconia coriacea

Miconia coriacea (Swartz) A.P. Candolle, 1828, 3:189.—Domin, 1930b:41.—Howard & Kellogg, 1986:239.
Melastoma coriaceum Swartz, 1788:70, "*coriacea.*"

Shrubby dioecious tree to 6 m; young leaves and shoots sparsely rusty-scurfy; branches sparsely hairy, leaves 5-veined, glabrous, margin usually revolute and obscurely toothed, elliptic, apex acute, base obtuse, to 11 cm × 4.5 cm; petiole to 3 cm; inflorescence terminal, paniculate, to 10 cm; flowers 5-merous, erect, sessile, subtended by obovate, deciduous bracts; hypanthium 3 mm, glandular-dotted; sepals 0.8 mm, with a broad dorsal spine to 0.6 mm; petals 2 mm; fertile stamens 4.5 mm, sterile ones 3 mm; style 3 mm, capitate.

Guadeloupe; on Dominica in dwarf forest on summits (900–1400 m): Morne Diablotins (*Chambers 2641, Wasshausen & Ayensu 410, Webster 13358*), Morne Micotrin (*Beard 1467* at NY, *Nicolson 1979*), Morne Nicholls (*Beard 250* at GH, *Hodge 1904, 1928*), Morne Trois Pitons (*Beard 631* at NY, *Ernst 1216C, 2040, Hodge 497*), Morne Watt (*Hodge 1904*), toward Valley of Desolation (*Whitefoord 5492*), sine loc. (*Fishlock 7*). Apparently flowering throughout the year (January, March, May, June, November), fruiting June and August.

Miconia dodecandra

Miconia dodecandra (Desrousseaux) Cogniaux in Martius, 1887, 14(4):243.—Howard & Kellogg, 1986:240.
Melastoma dodecandrum Desrousseaux in Lamarck, 1797, Encycl., 4:46, "*dodecandra.*"

Shrub to 4 m; leaves 5-veined, stellate-pubescent beneath, elliptic, acuminate, base obtuse, to 15 cm × 8 cm; petiole to 5 cm; paniculate cyme stellate-pubescent, to 15 cm, branches sparsely flowered and dichasial; pedicels to 5 mm; flowers 6-merous, enclosed in 2 caducous bracts; hypanthium 4 mm, ± stellate-pubescent; calyx lobes 2 mm, persistent; petals to 5 mm, white; filaments red, 8 mm, anthers yellow, curved, 8 mm; style 10 mm, pubescent, stigma peltate; fruit about 5 mm, purplish.

Neotropics; in Dominica only in Freshwater Lake area: (*Burch 1462, Chambers 2562, Eggers 562, Ernst 1783, Kimber 935, Smith 10296, Wasshausen & Ayensu 327, Wilbur 7421*). Flowering January–June, fruiting March–July.

This is similar to *Miconia mirabilis* and was treated as a synonym of the latter by Howard (1989, 5:562)

Miconia ernstii

Miconia ernstii Wurdack, 1965:385.—Howard & Kellogg, 1986:240.

Shrub or tree to 8 m; leaves 3-veined, glabrous, oblong-elliptic, acute to acuminate, base ± cordate, to 17 cm × 6 cm; petiole <5 mm; inflorescence to 10 cm; flowers 5-merous, sessile; hypanthium 1.5 mm, 10-ribbed; calyx lobes 0.5 mm; petals 2 mm, slightly emarginate, white, reflexed; anthers 1.5 mm, yellow, prominent; young fruits pinkish.

Endemic to Dominica, rainforests 700–1100 m: En Haut Jean (*Webster 13516*), Morne Anglais (*Hodge 513, 514*), Morne Diablotins (*Lloyd 911* at GH), Morne Micotrin (*Ernst 1723* type, *1767, 2162*), Morne Trois Pitons (*Ernst 2032*), Mosquito Mountain (*Webster 13560*). Flowering and fruiting June–August.

Miconia furfuracea

Miconia furfuracea (Vahl) Grisebach, 1860:257.—Domin, 1930b:39.—Howard & Kellogg, 1986:241.
Melastoma furfuraceum Vahl, 1799, Icon., 3, pl. 22, "*furfuracea.*"

Cré-cré.

Shrubby tree to 5 m; leaves 5-veined, glossy above, rusty-pubescent on veins beneath, margins entire or obscurely dentate, broad elliptic, acuminate, base rounded, to 28 cm × 17 cm; petiole 2–9 cm; inflorescence racemose, to 15 cm, sparsely flowered; pedicels 2–4 mm; flowers 5-merous; hypanthium to 7 mm; calyx 1 mm, scarcely lobed; petals 7 mm, white, reflexed; filaments 4 mm, anthers 4 mm; style 8 mm; fruits bright pink, ribbed, turning black, to 1 cm.

Guadeloupe, Martinique, and St. Lucia; common "weed" in Dominica in rain forests or cleared areas at low to mid-elevations, 100–800 m: Castle Bruce road (*Cowan 1625, Ernst 1020, 1450, Wilbur 7997*), Deux Branches (*Ernst 1806*), En Haut Jean (*Webster 13525*), Freshwater Lake (*Eggers s.n.*), La Chaudière (*Hodge 3525*), Lisdara (*Hodge 510, 511, 2359*), Morne Couronne (*Webster 13228*), Morne Plat Pays (*Hodge 1710*), Point Lolo (*Nicolson 1849, Webster 13382*), Pont Cassé area (*Wilbur 7548, 7736, 8191*), South Chiltern (*Stern & Wasshausen 2515*), Sylvania (*Hodge 512, 1083, 3853*), Syndicate (*Hodge 2705, Whitefoord 3534, 4248*), sine loc. *Krauss s.n.* at E). Flowering February–July, fruiting June–October.

Miconia globuliflora

Miconia globuliflora (L. Richard) Cogniaux in Martius, 1888, 14(4):418.—Howard & Kellogg, 1986:241.
Melastoma globuliflorum L. Richard, 1792:109, "*globuliflora.*"

Miconia vulcanica Naudin, 1851:213.—Domin, 1930b:42.
Cremanium sieberi Grisebach, 1860:262.

Miconia globuliflora var. *dominicae*

Miconia globuliflora var. *dominicae* Howard & Kellogg, 1986:242.

Cré-cré blanc.

Dioecious shrub to 4 m; branchlets and inflorescence with tufts of hair at nodes; leaves 3–5-veined, glabrous, margins denticulate-serrulate, oblong-ovate to lanceolate-elliptic, acuminate, base acute to obtuse, to 11 cm × 7 cm; petiole to 8 cm, reddish; inflorescence paniculate, to 12 cm; pedicel 1.5 cm; hypanthium 1.7 mm; calyx 0.5 mm, lobes triangular; petals 1.5 mm, retuse; fertile anthers 3 mm, yellow or purplish, sterile anthers 2 mm, white or orange; pistil 2.5 mm; fruit 3 mm, purple.

St. Kitts, Nevis, Montserrat; common on Dominica in montane forests, 600–1400 m: Boeri Lake (*Whitefoord 4171*), Boiling Lake (*Nicolson 2021*), Morne Anglais (*Hodge 2307*), Morne Diablotins (*Chambers 2640, Hodge 2814, Nicolson 4082, Whitefoord 4565*), Morne Micotrin area (*Chambers 2553, DeFilipps 142, Eggers 107, Ernst 1094, 2159, Gillis 8212, King 6378, Nicolson 2106, 2108, 4086, 4087, Smith 10254, 10297, Wilbur 7387*), Morne Plat Pays (*Hodge 1676*), Morne Trois Pitons (*Chambers 2589, Ernst 2042, Hodge 500, 1398* (type of var. *dominicae*), *1406, Wilbur 8089*), Trois Pitons River (*Nicolson 1947*), sine loc. (*Imray 215*, E). Apparently flowering and fruiting throughout the year.

Miconia impetiolaris

Miconia impetiolaris (Swartz) D. Don ex A.P. Candolle, 1828, 3:183.—Domin, 1930b:40.—Howard & Kellogg, 1986:244.
Melastoma impetiolare Swartz, 1788:70, "*impetiolaris*."

Shrub to 5 m; branches and inflorescence covered with rusty stellate hairs; leaves 5-veined, glossy above, lightly stellate-pubescent beneath, margins irregularly finely denticulate, long-elliptic, attenuate, base slightly cordate-clasping and ± sessile, to 37 cm × 14 cm; inflorescence paniculate, to 33 cm; flowers 5-merous, glomerulate along tertiary branchlets; hypanthium stellate-pubescent, 2.5 mm; calyx 1 mm; petals 2 mm; stamens 6 mm; style 5 mm; fruit 4 mm, dull red.

Neotropics; at lower elevations on northwestern Dominica: Milton Estate (*Hodge 2536* at GH), Picard Estate (*Nicolson 4227*), Sugar Loaf (*Eggers 747* at GH, *1069*). Fruiting April–June.

Miconia laevigata

Miconia laevigata (Linnaeus) D. Don in Sweet, 1826:159.—Domin, 1930b:41.—Howard & Kellogg, 1986:244.
Melastoma laevigatum Linnaeus, 1759a:1022, "*laevigata*."
Melastoma virescens Vahl, 1807, Eclog., 3:18.
Miconia virescens (Vahl) Triana, 1871:107.

Cré-cré.

Shrub (small tree) to 7.5 m; leaves (3–)5-veined, veins lightly stellate-pubescent beneath, ovate-lanceolate, margin denticulate, slightly ciliate, long-acuminate, base rounded to obtuse, to 15 cm × 6 cm; petiole to 3 cm; inflorescence terminal, pyramidal-paniculate, to 15 cm, rusty-stellate; flowers 5-merous, sessile or pedicel to 2 mm; hypanthium stellate-pubescent, 2 mm; calyx 0.5 mm, spreading; petals 3 mm, white; filaments 2.5 mm, anther 2.5 mm; style 5 mm; fruit blue-black, 3–4 mm.

Neotropics; common weed tree on Dominica at lower elevations (below 600 m): Baiac (*Whitefoord 3828*), Cabrit (*Whitefoord 5281*), Clarke Hall (*Webster 13200*), Dublanc (*Hodge 2529*), Fond Colet (*King 6293*), Grand Savanne (*Stern & Wasshausen 2447*), Layou Valley (*Chambers 2799, Webster 13278*), Lisdara (*Hodge 1491*), Marigot (*Hodge 499*), Mount Joy (*Hodge 1259*), Pointe Baptiste (*Beard 1470*), Ridgefield Estate (*Hodge 2170*), Roseau (*Krauss 1256*), Salybia (*Chambers 2632*), South Chiltern (*Hodge 1491, Nicolson 2166*), Sylvania (*Hodge 501, 1249, 3827*), sine loc. (*Cooper 33*). Flowering December–September, fruiting June–January.

This species recognizable by its secund flowers and fruits that are essentially sessile.

Miconia mirabilis

Miconia mirabilis (Aublet) L.O. Williams, 1963:574.—Howard & Kellogg, 1986:247.
Fothergilla mirabilis Aublet, 1775:441 [in most copies].
[*Tamonea guianensis* Aublet, 1775:441, not accepted by author.]
Diplochita fothergilla A.P. Candolle, 1828, 3:176.
Miconia guianensis Cogniaux, 1886:280, nom. illeg.—Domin, 1930b:39.

Tree to 15 m; leaves 5-veined, tan-pubescent beneath, elliptic to ovate-lanceolate, acuminate, base acute to obtuse, to 21 cm × 8 cm; petiole to 6 cm; cyme paniculate, to 16 cm with flowers few on dichasial branches; pedicels 4 mm; flowers 5-merous, enclosed in 2 white, caducous, obovate bracts; hypanthium to 3 mm, glabrous; calyx to 2 mm, red, persistent; filaments to 8 mm, red to yellow; anthers 4–7 mm, red and yellow; fruit juicy, blue-black, 8 mm.

Neotropics; common on Dominica at low to mid-elevations (200–1000 m): Dleau Gommier (*Ernst 1973*), Dublanc (*Hodge 2545*), Freshwater Lake (*Eggers 103*), La Chaudière (*Hodge 3642*), Layou Park Estate (*Nicolson 1079*), Lisdara (*Hodge 2318*), Milton Estate (*Hodge 2545*), Morne Anglais (*Wilbur 7963*), Morne Couronne (*Bailey 767, Ernst 1164*), Pont Cassé area (*Hodge 1194, Nicolson 2078, 2079, Proctor 17524, Stern & Wasshausen 2545, Wilbur 7751, 8190*), Riversdale (*Proctor 25790*), Salybia (*Hodge 3280*), South Chiltern (*Stern & Wasshausen 2511*), Sylvania (*Cooper 28, 78, Hodge 498, 1082, King 6347, Wasshausen & Ayensu 392*), Syndicate (*Whitefoord 3591*), sine loc. (*Imray 101* at NY). Flowering November–July, fruiting April–August.

Miconia mornicola

Miconia mornicola A.C. Nicolson, 1990:120.

Dense tree to 3 m; young leaves and branches sparsely rusty-scurfy; leaves 5-veined, glabrous, coriaceous, gland-dotted beneath, margins dentate with incurved teeth, broadly elliptic, abruptly bluntly caudate, base obtuse-acute, 3.5–5 cm × 2.5–3 cm; petiole 1–1.5 cm; inflorescence pyramidal-paniculate, to 7 cm; flowers 5-merous, pedicels 1 mm; hypanthium 1.4 mm, rosy-purple, darker within; calyx white, ~1 mm, tube 0.4 mm, sepals triangular, 0.6 mm, persistent; petals white, round, strongly reflexed, fugacious 1.7 mm × 2 mm; stamens 10, 3.5 mm long, broadly spreading at anthesis, filaments 2 mm long, anthers to 1.5 mm, cream, connective with a blunt, basal, bilobed, dorsal tooth to 0.5 mm long and a lobed ventral appendage to 0.2 mm; style exserted before petals open, to 4 mm long, glabrous, stigma scarcely expanded, ovary white, 3-locular, 1/3 inferior; fruits globular, bluish, 3 mm; seeds 15–20, smooth, 1.1 mm × 0.6 mm.

Known only in dwarf forests of Dominican mountain tops: Morne Anglais (*Nicolson 4106*), Morne Diablotins (*Chambers 2643, Lack et al. 1, 2*), Morne Trois Pitons (*Ernst 1116A, 2041, Hodge 1420*). Flowering early December, fruiting late January (*Chambers, Nicolson*).

Miconia racemosa

Miconia racemosa (Aublet) A.P. Candolle, 1828, 3:179.—Howard & Kellogg, 1986:249.
Melastoma racemosum Aublet, 1775:406, "*racemosa.*"

Shrub to 5 m; leaves 5-veined, ± rugose, pubescent along veins above and below, margins crenate, setose, broad-elliptic, acute to short-acuminate, base obtuse, to 19 cm × 11 cm; petiole to 2 cm; inflorescence paniculate, to 12 cm; flowers 5-merous, sessile; hypanthium 1 mm; calyx 0.5 mm; petals 1.5 mm, pinkish; fruit globular, smooth, dark blue, 3 mm.

Neotropics; locally common on Dominica at low to mid-elevations (150–650 m): Clyde River valley (*Ernst 2082*), Freshwater Lake (*Whitefoord 3852*), Hungry Hill Estate (*Whitefoord 4430*), Petit Macoucheri road (*Whitefoord 6134*), Pont Cassé area (*Ernst 1285, King 6344, Webster 13397, Wilbur 7561*), Sylvania (*Hodge 502, Wilbur 7717*). Flowering May–August, fruiting July–August, December, and May.

Miconia striata

Miconia striata (Vahl) Cogniaux in A.L. & A.C. Candolle, 1891, 7:765.—Domin, 1930b:40.—Howard & Kellogg, 1986:251.
Melastoma striatum Vahl, 1807, Eclog., 3:14, "*striata.*"
Melastoma elongatum Vahl, 1807, Eclog., 3:16, "*elongata.*"
Melastoma semicrenatum L. Richard in Humboldt & Bonpland, 1809a:69, "*semicrenata.*"
Tetrazygia semicrenata (L. Richard) Grisebach, 1860:255.

Cré-cré grand bois.

Shrub or small tree to 10 m; leaves 3-veined, glabrous, glossy, margins ± dentate, ovate to ovate-lanceolate, acuminate to attenuate, base obtuse, to 25 cm × 8 cm; petiole to 4 cm; inflorescence paniculate, to 13 cm, diffuse; flowers 5-merous, pedicels >2 mm; hypanthium, glabrous, white or pink, 2 mm; calyx 1 mm, spreading, irregularly 3–5-split, sometimes ± calyptrate; petals 6 mm, white; filaments 6 mm, glandular; anthers 3 mm, white; style 9 mm; fruit 10-ribbed, purplish, 4 mm.

Lesser Antilles; common on Dominica in woodlands to 1100 m: Belle View (*Cooper 173*), Calibishie (*Ernst 1557, Hodge 3155*), Clarke Hall (*Ernst 1261*), Carib Reserve (*Hodge 3210, Stehlé 6389, 6434*), Cochrane (*Skog 1578*), Grand Bay (*Wilbur 7918*), Hatton Gardens (*Hodge 2943, 3032*), La Chaudière (*Hodge 3599*), La Soie (*Eggers 1079*), Laudat (*Gillis 8181, 8183*), L'Imprévue (*Narodny s.n.*), Lisdara (*Cooper 165, Hodge 505*), Marigot (*Hodge 504*), Melville Hall (*Hodge 504*), Mero (*Ernst 1985*), Milton (*Hodge 2574*), Montpelier (*Lloyd 573*), Morne Anglais (*Dupigny s.n., Wilbur 7976*), Portsmouth (*Hodge 503*), Rosalie (*Lloyd 708A*), Salisbury (*Webster 13493*), South Chiltern (*Hodge 1447, 3875*), Sylvania (*Hodge 3967, Webster 13408, Wilbur 7711*), Syndicate (*Whitefoord 4338, 4462*), Vieille Case (*Cowan 1598*), sine loc. (*Fishlock 24*). Flowering February–August, fruiting June, July, January.

The leaf nervation character used by Howard (1989, 5:552) to separate *Miconia cornifolia* (Desrousseaux) Naudin (3-nerved) from *M. striata* (5-nerved) is weak in that most specimens of *M. striata* are as 3-nerved as *M. cornifolia* (see under excluded *Miconia*).

Miconia tetrandra

Miconia tetrandra (Swartz) D. Don in Loudon, 1830:174.—Domin, 1930b:42.—Howard & Kellogg, 1986:251.
Melastoma tetrandrum Swartz, 1788:72, "*tetrandra.*"

Small tree to 4 m; leaves 3-veined, finely white-stellate pubescent beneath, oblong-ovate, acuminate, base rounded or obtuse, to 20 cm × 8 cm; petiole to 6 cm; inflorescence pyramidal, to 13 cm, white-pubescent; flowers 4-merous; hypanthium 1.5 mm; calyx 0.5 mm; petals white, 2.5 mm; stamens 4 mm; style 4 mm; fruit purplish black, 3 mm.

Antilles; at lower elevations on Dominica (to 600 m): Calibishie (*Ernst 1558*), La Chaudière (*Hodge 3522* at GH), La Soie (*Eggers 749* at GH), Laudat (*Eggers 1078*), Pointe Ronde (*Hodge 2671* at GH), Pont Cassé road to Bells (*Whitefoord 5845*). Flowering October, flowering and fruiting June.

Miconia trichotoma

Miconia trichotoma (Desrousseaux) A.P. Candolle, 1828, 3:188.—Domin, 1930b:41.—Howard & Kellogg, 1986:252.
Melastoma trichotomum Desrousseaux in Lamarck, 1797, Encycl., 4:53, "*trichotoma.*"
Miconia rivoeriae Naudin, 1851:170.
Cremanium rivoeriae (Naudin) Grisebach, 1860:262.

Shrub to small tree to 8 m; leaves 3-veined, glabrous,

rugulose, broad-elliptic, acuminate, base rounded to acute, to 21 cm × 10 cm; petiole to 3 cm; inflorescence pyramidal-paniculate, to 15 cm; flower 4-merous; hypanthium and calyx minute, 1 mm; petals 1 mm, white; stamens white, 3 mm; style 2 mm; young fruit pink, turning purple-black, 2 mm.

Lesser Antilles; locally common on Dominica, often in rainforest at 150–900 m: Carholm Estate (*Ernst 1946*), Lisdara (*Cooper 153, Hodge 507*), Morne Micotrin (*Eggers 653, Hodge 1787, King 6385, Wilbur 7451*), Morne Trois Pitons (*Ernst 2056*), Pont Cassé area (*Wilbur 8179*), South Chiltern (*Stern & Wasshausen 2500*), Sylvania (*Hodge 506, 508, 1116*), near Syndicate (*Ernst 1999, Whitefoord 3894, 4260*), sine loc. *Cooper 51, Eggers 1001, Imray 210*). Flowering January–August, fruiting March, July, and December.

Nepsera Naudin

Nepsera aquatica

Nepsera aquatica (Aublet) Naudin, 1850:28.—Domin, 1930b:34.
Melastoma aquaticum Aublet, 1775:430, "*aquatica.*"

Bitter leaf, ti feuille.

Scrambling shrubby herb to 1 m; branchlets 4-angled; leaves 5(–7)-veined, serrulate, ovate, base rounded, to 6 cm × 3.5 cm; petiole to 2 cm; cyme terminal, paniculate, sometimes leafy, to 15 cm; hypanthium 3 mm; sepals 2 mm, acute, persistent; petals 6 mm, white; anthers 2.5 mm, purple; capsule round, 3 mm.

Neotropics; common on Dominica in moist areas 100–700 m: Bataca (*Stehlé 6439*), Dleau Gommier (*Norstog 3375*), La Chaudière (*Hodge 3681*), Laudat (*Hodge 1819, Lloyd 397, Nicolson 2101*), Lisdara (*Hodge 528* at US & GH), Morne Micotrin (*Chambers 2676, Wilbur 7432*), Morne Plat Pays (*Wilbur 7866*), Morne Trois Pitons (*Ernst 1010*), Pont Cassé (*Hodge 1221*), Portsmouth Morne Brulés (*Hodge 529*), Riversdale (*Proctor 25783*), Roseau River hot springs (*Howard 11736*), Soufrière (*Eggers s.n.*), South Chiltern (*Hodge 1589, Stern & Wasshausen 2517*), Sylvania (*Cooper 70, Hodge 1109*), Syndicate (*Chambers 2652, Whitefoord 3507*), Wooten Waven (*Eggers s.n.* at GH), sine loc. (*Bryant 76, Imray 374* at NY). Flowering and fruiting throughout the year.

Pterolepis (A.P. Candolle) Miquel

Pterolepis glomerata

Pterolepis glomerata (Rottbøll) Miquel, 1840:78.—Domin, 1930b:34.
Rhexia glomerata Rottbøll, 1776:8.
Arthostemma glomeratum (Rottbøll) Chamisso, 1835:454.

Balier blanc.

Sometimes shrubby herb to 1 m; branches 4-angled, pubescent; leaves 3-veined, white-strigose above and below, elliptic to ovate, to 3.5 cm × 1.5 cm; petiole 4 mm; flowers short-pedicelled, axillary or terminal, 1–6 in a glomerule subtended by leaf bracts; hypanthium 6 mm, with verticillate-pedicellate hairs; sepals 6 mm, oblong-ovate, ciliate, erect, persistent in fruit; petals white or pink, 1 cm, fringed with minute, dark glandular hairs, quickly deciduous.

Eastern South America and southern Antilles; common weed on Dominica in pastures and wet places at low to mid-elevations: Balata (*Nicolson 2012*), Clarke Hall (*Webster 13194*), La Plaine (*Wilbur 8166*), La Ronde (*King 6368*), Laudat area (*Chambers 2678, Lloyd 934, Nicolson 1830, Wasshausen & Ayensu 326*), L'Imprévue (*Narodny s.n.*), Lisdara (*Hodge 525, 526, 2414, 2415*), Marigot (*Hodge 527*), Morne Trois Pitons (*Ernst 1231*), Portsmouth Morne Brulés (*Hodge 524* at GH, *529 at US*), Sylvania (*Cooper 95A, Hodge 521, 523, 1137, 1138*), Syndicate (*Whitefoord 3504*), Wooten Waven (*Eggers 508*), sine loc. (*Bryant 92, Eggers 817, Fishlock 40*). Flowering and fruiting throughout the year.

Tetrazygia L. Richard ex A.P. Candolle

1. Leaves linear-lanceolate, <2 cm broad; flowers pink . . . . . ***T. angustifolia***
1. Leaves broad-ovate, >5 cm broad; flowers white or yellow . . . . . ***T. discolor***

Tetrazygia angustifolia

Tetrazygia angustifolia (Swartz) A.P. Candolle, 1828, 3:172.—Domin, 1930b:37.
Melastoma angustifolium Swartz, 1788:71, "*angustifolia.*"
Miconia angustifolia (Swartz) Grisebach, 1857:217 [69], non Naudin.

Cré-cré blanc.

Shrub or tree to 7 m, whitish puberulous with tiny stellate hairs; leaves 3-veined, linear-lanceolate, to 5 cm × 1 cm; petiole 0.8 cm; cyme paniculate, to 5 cm; hypanthium 1.5 mm; sepals 0.5 mm, obtuse; petals 2 mm, rose; berry 3 mm, purplish.

Antilles; common on Dominica in dry areas to 400 m: Cabrits (*Nicolson 1890*), Grand Bay (*Wilbur 7910, 8001*), Grand Savanne (*Stern & Wasshausen 2445*), Hampstead (*Lloyd 665*), L'Anse Noire (*Ernst 2100*), Pointe Ronde (*Ernst 1564*), Ridgefield Estate (*Hodge 2144*), Salisbury (*Webster 13492*), Syndicate turnoff (*Whitefoord 4318*), Trois Pitons (*Lloyd 786*). Flowering and fruiting March, June–August, November.

Tetrazygia discolor

Tetrazygia discolor (Linnaeus) A.P. Candolle, 1828, 3:172.—Domin, 1930b:38.
Melastoma discolor Linnaeus, 1759a:1022.
Tetrazygia discolor var. *villosa* Grisebach, 1860:255.
Tetrazygia villosa (Grisebach) Cogniaux in A.L. & A.C. Candolle, 1891, 7:721.—Domin, 1930b:38.

Cré-cré blanc.

Shrub or small tree to 8 m, densely stellate-white-puberulous; leaves 5-veined, ovate, long-attenuate, base

rounded to obtuse, to 18 cm × 10 cm; petiole to 8 cm; cyme corymbose, to 12 cm; hypanthium 1 mm; calyx 1.5 mm, slightly lobed; petals 2 mm, white or yellow; fruit black, to 7 mm.

Lesser Antilles; common on Dominica in woods and roadsides to 600 m: Anse du Me (*Wilbur 8305*), Bibiay River (*Chambers 2724*), Blenheim Estate (*Cooper 130*), Delices (*Whitefoord 3697*), Deux Branches (*Ernst 1668*), Fonde Hunte Estate (*Whitefoord 4438*), Grand Bay (*Ernst 1068*), Hampstead (*Lloyd 659*), La Ronde (*King 6365*), Laudat (*Eggers 106, s.n.*), Layou River (*Ernst 1990, Stern & Wasshausen 2386, Webster 13281*), Morne Aux Diables (*Wilbur 8056*), Petit Soufrière Bay (*Stern & Wasshausen 2468*), Pointe Guignard (*Wilbur 7616*), Pointe Michel (*Gillis 8136*), Rosalie (*King 6374, Lloyd 708*), Salisbury (*Whitefoord 4528*), Salybia (*Chambers 2630, Hodge 3345*), South Chiltern (*Hodge 1560, Stern & Wasshausen 2499*), Sylvania (*Cooper 74*), sine loc. (*Eggers 741, Imray 56* at K, photo at GH). Flowering throughout the year, ripe fruit in June–August and January.

Tibouchina Aublet

Tibouchina ornata

Tibouchina ornata (Swartz) Baillon, 1878:74.—Howard, 1972:399; 1989, 5:579.
Melastoma ornatum Swartz, 1788:69, "*ornata.*"
Rhexia strigosa L. Richard, 1792:108.
Chaetogastra chironioides Grisebach, 1860:267.
Tibouchina strigosa (L. Richard) Cogniaux in A.L. & A.C. Candolle, 1891, 7:266.
Tibouchina chironioides (Grisebach) Cogniaux in A.L. & A.C. Candolle, 1891, 7:267.—Domin, 1930b:35.—Howard, 1972:400; 1989, 5:577.

Shrub to 1 m, sometimes decumbent or matted; branchlets strigose, 4-angled; leaves 1(3)-veined, lanceolate to ovate-lanceolate, with semiadnate dorsal bristles, to 8 mm × 2.5 mm; cyme few-flowered; hypanthium 5 mm, strigose; sepals 5 mm, strigose, lanceolate to ovate-lanceolate, persistent; petals to 1.4 cm, broad-ovate, ciliate, bright magenta; anthers yellow; capsule 7 mm × 4 mm, its netted venation long-persistent.

St. Kitts, Montserrat, Guadeloupe; on Dominica at upper elevations, 600–1400 m: near Freshwater Lake (*Chambers 2569, Eggers 714* at GH, *Ernst 2169, Fosberg 48275, 48276, Hodge 1860* at GH, *Lloyd 304, Wasshausen & Ayensu 329, Whitefoord 3796*), *Wilbur 8244*), Morne Trois Pitons (*Ernst 1220, Hodge 530* and *1384* at GH, *Kimber 973* at GH, *Nicolson 1818*), Valley of Desolation (*Hodge 1936, Whitefoord 5477*), sine loc. (*Fishlock s.n., Haweis 30*). Apparently flowering and fruiting throughout the year but best flowering specimens collected June–August.

The narrowly leaved element called *Tibouchina chironioides* has been regarded as a Dominican endemic by most authors (Cogniaux, Domin, Howard). A key difference used by these authors was expressed by Howard (1989, 5:576) as "leaves clearly acrodromous with 1–2 pairs of basal veins" is effective for distinguishing relatively large-leaved taxa (leaves 1 cm or broader) such as *T. cistoides* of St. Vincent and weedy *T. longifolia*. The microphyllous taxa (leaves 0.5 cm or narrower) are easily distinguished from each other by the remarkable bristly hairs on the upper leaf surface, the almost wholly adnate hairs of *T. chamaecistus* (free only beyond the leaf-margin) vs. the half-adnate hairs of *T. ornata* and *T. chironioides* (free well before the leaf-margin).

The narrowly leaved aspect called *T. chironioides* appears to be a repeatedly collected population growing around Freshwater Lake, historically the most accessible high elevation collecting locality of Dominica. Specimens from other localities (Trois Piton and Valley of Desolation) have a different aspect approaching the "classic" *T. ornata* of other islands, including ovate, triplinerved leaves and spreading, glandular hypanthial hairs (*Nicolson 1818*, pro parte). While the narrowly leaved population found around Freshwater Lake might be worthy of recognition at some infraspecific rank within *T. ornata*, it probably should not be regarded as a separate species without more study and material of the more inaccessible populations of Dominican *Tibouchina*.

The report of *T. ornata* from Antigua (*Gillis 8242* at GH) is almost certainly a labeling error and the specimen probably was actually collected on Dominica, as pointed out by Howard (l.c.) and, specifically, around Freshwater Lake. It is possible that this is the correct label information for *Gillis 8228*, which is cultivated *Clerodendron wallichii* but was said to come from "near Freshwater Lake on top of mountain."

MELIACEAE

Sandoricum koetjape (N. Burman) Merrill (including *Sandoricum indicum* Cavanilles), a native of Asia, is cultivated pantropically and in the Roseau Botanic Gardens (*Hodge 3947*). It has trifoliolate, pubescent leaves and a yellow drupe to 7.5 cm wide.

Swietenia, mahogony, has even-pinnate leaves with unequal leaflets and differs from *Cedrela* in having entirely united staminal filaments and winged seeds 5–9 cm long. *Swietenia macrophylla* G. King, a Central and South American species, is cultivated at Cassada Gardens (*Nicolson 2085*) and on the West Cabrit (*Nicolson 1912*). It has leaflets 7–15 cm × 3–7 cm, not revolute at the base, and capsules 12–15 cm long. *Swietenia mahagoni* (Linnaeus) Jacquin, native to the Antilles, is cultivated in the Roseau Botanic Garden (*Hodge s.n.*) and on the East Cabrit (*Whitefoord 5255*). It has smaller (2–7 cm × 1–4 cm) leaflets, revolute at the base and capsules only 6–10 cm long.

1. Leaves 2–3-pinnate; leaflets serrate . . . . . ***Melia***
1. Leaves 1-pinnate; leaflets entire.
   2. Leaves odd-pinnate . . . . . ***Trichilia***
   2. Leaves even-pinnate.
      3. Leaflets unequal at base; filaments free above; seeds winged . . . . . ***Cedrela***

3. Leaflets equal at base; filaments entirely united.
   4. Leaves without a terminal bud; locules 3-many-ovulate; seeds woody . . . . . ***Carapa***
   4. Leaves with a stalked terminal bud; locules 1-2-ovulate; seeds fleshy . . . . . ***Guarea***

Carapa Aublet

Carapa guianensis

Carapa guianensis Aublet, 1775, 2(Suppl.):32, pl. 387.

Bois carapat, crab wood, l'angelin, wild cashew.

Tree to 50 m; leaflets 6-14, glabrous, to 4.8 dm long; capsule globoid, woody, 4-ridged, septifragal; seeds 7-8, pyramidal, 3 cm × 4 cm; flowering and fruiting in December.

Neotropics; in Dominican forests 60-300 m: Carib Reserve (*Hodge 3332*), Layou Park (*Nicolson 2133*), Melville Hall (*Beard 1476*).

Caribs use the oil from the seeds (Hodge and Taylor, 1957:569).

Cedrela Browne

Cedrela odorata

Cedrela odorata Linnaeus, 1759a:940.—C.E. Smith, 1965:58.
Cedrela mexicana M. Roemer, 1846, 1:137.—Wilson in North Amer. Fl., 1924, 25:293.—Gooding et al., 1965:234.

Acajou.

Tree to 40 m; leaflets 10-32, entire, glabrous; perianth pubescent; stamens 5; ovary glabrous; capsule ellipsoid, 2.4-4.5 cm long; seeds winged, 1.2-2 cm long; flowers and bruised fruit with strong boiled cabbage smell.

Neotropics; on west coast of Dominica at 30 m: Pointe Michel (*Nicolson 4044*). Cultivated?

Guarea Allamand ex Linnaeus, nom. cons.

1. Leaflets with domatia in major vein axils beneath; ovary glabrous . . . . . ***G. glabra***
1. Leaflets without domatia; ovary pilose . . . . . ***G. macrophylla***

Guarea glabra

Guarea glabra Vahl, 1807, Eclog., 3:8.

Tree to 20 m, often shorter; leaflets 4-12, entire; petals elliptic to broadly ovate, 7.5-8.0 mm long, white or pink; capsule fleshy (like *Clusia*), 4-parted with 4 large seeds, each covered with a red aril.

Neotropics; in Dominican rainforests 600-1000 m: En Haut Jean (*Webster 13524, 13530*), Freshwater Lake (*Ernst 1772, Hodge 1842, Nicolson 2111, Smith 10233, Stern & Wasshausen 2574, Whitefoord 5132*), Jean (*Ernst 1818*), Roche d'Or (*Wasshausen & Ayensu 403*), above Syndicate (DHN!).

Guarea macrophylla

Guarea macrophylla Vahl, 1807, Eclog., 3:8.
Guarea perrottetiana Adr. Jussieu, 1830:241, 285.

Bois arab, bois pistolet.

Tree to 20 m; leaflets 6-18, entire; inflorescence racemose, to 25 cm long; petals oblong, 1 cm long, pink.

Lesser Antilles (var. *macrophylla*); in Dominican forests 50-600 m: Clarke Hall (*Stern & Wasshausen 2393*), Syndicate (DHN!, fl. 19 May 1977).

Melia Linnaeus

Melia azedarach

Melia azedarach Linnaeus, 1753:384.

Tree or ± herbaceous shrub to 4 m; leaves 2-3-pinnate; leaflets serrate; flowers lavender; fruits yellowish green.

Asia but pantropically cultivated; escaping in Dominica: Grand Bay (*Ernst 1074*), Hatton Garden (*Hodge 2939*), Roseau Botanic Garden (*Hodge 963*), Salisbury (*Ernst 1429*), *Hodge 3947, Nicolson 2039, Wilbur 8333*).

Trichilia Browne, nom. cons.

1. Leaflets few (1-5); leaf rhachis (incl. petiole) <10 cm long . . . . . ***T. pallida***
1. Leaflets many (7-11); leaf rhachis (incl. petiole) >20 cm long . . . . . ***T. septentrionalis***

Trichilia pallida

Trichilia pallida Swartz, 1788:67.—Pennington, 1981:95.
Hedwigia simplicifolia Sprengel, 1822, 3:24.
Trichilia simplicifolia (Sprengel) Sprengel, 1826, 3:69.
Trichilia diversifolia Adr. Jussieu, 1830:237, 278.
Pholacilia diversifolia (Adr. Jussieu) Grisebach, 1860:130.

Bois massé.

Shrub or tree to 10 m; leaves (1-)3-5-foliolate; leaflets entire, long-acuminate, glabrous or essentially so; perianth and ovary pubescent; capsule to 1.4 cm long; seeds 1-3, black and partially surrounded by a red arillode.

Neotropics; in Dominican rainforest 450-1200 m: Fon Pays (*Hodge 2857*), Freshwater Lake area (*Beard 653, Ernst 2165, Hodge 1980, Stern & Wasshausen 2570*), Jean (*Webster 13517, 13518*), Lisdara (*Hodge 2407*), Morne Diablotins (*Whitefoord 4417*), Sylvania (*Hodge 3841, Nicolson 1878*), Syndicate (*Hodge 2889, Nicolson 4165*), Trois Pitons (*Lloyd 772*).

Trichilia septentrionalis

Trichilia septentrionalis A.C. Candolle in Martius, 1878, 11(1):220.—Pennington, 1981:126.

Cashew montagne.

Tree to 50 m; leaves (5-)7-11-foliolate; fruits pendulous, rusty tomentose, seed bright red.

Northern South America into Panama and Lesser Antilles; rarely collected on Dominica to 2,500 ft [762 m]: Boeri Lake (*Nicolson 1958*), Syndicate (*Whitefoord 4329, 5351, 5864*), sine loc. (*Ramage s.n.* at K, not seen).

Sterile material is confusable with *Ormosia krugii* Urban (Fabaceae).

MENISPERMACEAE

1. Leaves cordate to orbicular, peltate; staminate flowers 4-merous; pistillate flowers monomerous . . . . . ***Cissampelos***
1. Leaves elliptic to ovate, not peltate; staminate and pistillate flowers 6-merous . . . . . ***Hyperbaena***

Cissampelos Linnaeus

Cissampelos pareira

Cissampelos pareira Linnaeus, 1753:1031.—Rhodes, 1975:446.

Dioecious climbing vine; leaves peltate (ours); inflorescences axillary.

Pantropics; in rainforests of Dominica: Bellevue (*Eggers 824, Ernst 8241*), Laudat (*Ramage s.n.*), Syndicate (*Ernst 2009, Whitefoord 4345*), sine loc. (*Imray 207*).

Troupin (1955:140) was the first to show that what Diels (in Engler, 1910, IV.94 (Heft 46):292) called *C. pareira* var. *laevis* Diels is, in fact, the typical element of the species.

Forman (1968:357), under the then current Code, pointed out that the correct name for what Diels (in Engler, 1910, IV.94 (Heft 46):288) called *C. pareira* var. *typica* was *Cissampelos pareira* var. *hirsuta* (A.P. Candolle) Forman. However, Art. 57.3 (Sydney Code) gave an autonym priority over the name of the same date and rank that generated it. Hence, the correct name should be *C. pareira* var. *convolvulacea* (Willdenow) ined., the autonym *Cissampelos convolvulacea* Willdenow (1805, 4:862) var. *convolvulacea* taking precedence over the name, *C. convolvulacea* var. *hirsuta* (A.P. Candolle) Hasskarl, that generated the autonym. I do not accept this taxon or its combination, preferring to follow Rhodes (1975), not recognizing segregates in this variable species.

Dominican material has glabrous leaves and fits *C. pareira* var. *pareira*, although material with pubescent leaves is reported from the French islands.

Dominican specimens at the Harvard Herbaria, *Eggers 824* and *Imray 207*, were annotated as "*C. andromorpha* DC." by Donald Rhodes in 1975. They were erroneously attributed to Costa Rica by Rhodes (1975:441) under *C. andromorpha*, a species otherwise from South America.

Hyperbaena Miers ex Bentham, nom. cons.

Hyperbaena domingensis

Hyperbaena domingensis (A.P. Candolle) Bentham, 1861b:50.—Mathias & Theobald, 1981:89.
Cocculus domingensis A.P. Candolle, 1817, 1:528.

Dioecious climbing shrub; leaves coriaceous; flowers minute, in axillary panicles.

West Indies and South America; in Dominica without locality: *Imray 453* at K. It is remarkable that this species has not been recollected.

MONIMIACEAE

Siparuna glabrescens

Siparuna glabrescens (Presl) A.L. Candolle in A.P. Candolle, 1868, 16:648.
Citriosma glabrescens Presl, 1845:540 [p. 110 in reprint of 1846].
Siparuna urbaniana Perkins, 1901:683.
Siparuna scabra Perkins, 1901:684.

Bois mal estomac, petit bois marbre.

Dioecious, aromatic tree to 12 m; leaves opposite or 3-whorled, minutely punctate, denticulate, the teeth pubescent, blades loosely to densely pubescent with combinations of simple, paired or stellate hairs; flowers axillary, cymose; tepals 5-6, stellate, whitish; berries greenish, ~2 cm across.

Dominica, Martinique, and St. Vincent; common in Dominica in rainforests and elfin woodlands 400-1000 m: Baiac (*Whitefoord 5466*), En Haut Jean (*Webster 13506*), Freshwater Lake area (*Burch 1374, Chambers 2576, 2576a, Eggers 18, Ernst 1087, Gillis 8216, Smith 10241, Webster 13249, Wilbur 7420*), Lisdara (*Cooper 158, Hodge 399, 2321*), Morne Anglais (*Hodge 2251*), Morne Couronne (*Webster 13208*), Morne Plat Pays (*Hodge 1720*), Mount Joy (*Cooper 56, Hodge 1252*), Pont Cassé (*Proctor 25776*), Rosalie Valley (*Lloyd 710*), South Chiltern (*Hodge 1480, Stern & Wasshausen 2516*), Sylvania (*Hodge 1125*), Syndicate (*Hodge 2761, Whitefoord 3493*), "from the mountains" (*Imray 67* at K, type of *S. urbaniana*).

Perkins (1901) recognized three Antillean species with denticulate leaves on the basis of branching of hairs: *S. glabrescens* (Martinique), *S. urbaniana* (Dominica), and *S. scabra* (St. Vincent). Some leaves of *Webster 13208* have rather strongly branched hairs, like *S. scabra*. Other specimens have scarcely branched hairs, like *S. urbaniana*. Different types of branching may be observed on the same specimen.

A fourth species, *S. caloneura* Perkins (St. Vincent) was segregated for its profoundly serrate leaves. This character appears correlated with age, young leaves being more denticulate and older ones more serrate. In the absence of other characters I accept the oldest name.

Howard (1988, 4:245) recognized three species in the Lesser Antilles, two occurring on Dominica: *S. glabrescens* (plants sparsely stellate pubescent with long, persistent, pilose pubescence but becoming glabrate) and *S. scabra* (plants densely and persistently stellate pubescent).

MORACEAE

Berg (1978:39) recognized Cecropiaceae as a separate family.

The nomenclature of the common edible species of *Artocarpus* was clarified by Fosberg (1960).

Artocarpus altilis (Parkinson) Fosberg (1941:95), including *A. incisus* and *A. communis* of authors, the breadfruit, is widely cultivated on Dominica. It is a monoecious tree to 15 m, with pinnately lobed leaves to 5 dm long and a globose, seedless prickly fruit. Seeded forms known as breadnut are also cultivated. Adjanohoun et al. (1985:141, pl. 107) reported medicinal uses.

Artocarpus heterophyllus Lamarck, including *A. integrifolius* sensu auctt.), has entire leaves and an ellipsoid fruit to 6 dm long. It is cultivated pantropically for ornament and for its edible fruit, less palatable than the breadfruit, in Dominica: Roseau Botanic Garden (*Hodge 918* [*912?*]).

Artocarpus lakoocha Roxburgh, with entire leaves >10 cm across and small fruits to 6 cm across, was cultivated in the Roseau Botanic Garden (*Fairchild s.n.*) in 1932.

Cannabis sativa Linnaeus, sometimes placed in Cannabaceae, marijuana, is reported as illegally cultivated in Dominica. No specimens have been located.

1. Leaves palmately lobed, peltate, white-tomentose beneath; all flowers spicate; plants dioecious . . . . . ***Cecropia***
1. Leaves neither lobed, peltate nor white-tomentose beneath; flowers borne inside a fleshy receptacle; plants monoecious . . . . . ***Ficus***

Cecropia Loefling, nom. cons.

Cecropia schreberiana

Cecropia schreberiana Miquel in Martius, 1853, 4(1):150.
Cecropia peltata sensu auctt. quoad Antilles Minores, non Linnaeus.

Bois canon, trumpet tree, trumpet wood.

Dioecious tree to 20 m; leaves peltate, strikingly white beneath; inflorescences digitate.

Lesser Antilles; common weed tree in disturbed areas of Dominica from 100–700 m but rarely collected: Calibishie (*Hodge 3168*), La Chaudière (*Hodge 3663*), Layou Park (*Nicolson 2037*), Morne Colla Anglais (*Hodge 632*), Syndicate (*Whitefoord 3958*), sine loc. (*Taylor 125*).

Used by Caribs for making catamarans and in medicine (Hodge and Taylor, 1957:553).

Ficus Linnaeus

Plants woody, with copious milky sap; leaves alternate; stipules deciduous, encircling stem and leaving a conspicuous scar; flowers unisexual, borne inside an enlarged and deeply invaginated receptacle (synconium, the fig) with an apical pore (ostiole) closed by interlocking scales. Members with single figs are true trees while those with paired figs start life as epiphytes (stranglers) and end as trees (banyans).

Ficus altissima Blume, with coriaceous leaves strongly triplinerved at base, was collected in Roseau Botanic Garden (*Nicolson 4213*).

Ficus aspera J.G. Forster (including *Ficus parcellii* Veitch ex Cogniaux & Marchal) with variegated, shallowly toothed, unequal-based leaves was collected in Roseau Botanic Garden in 1932 (*Fairchild 2665*).

1. Figs solitary, long-stalked (on pedicels 1 cm or longer) . . . . . ***F. insipida***
1. Figs paired, ± sessile (pedicels to 0.5 cm long).
   2. Petioles typically >2 cm long.
      3. Leaf ovate (base rounded to truncate and apex acute to acuminate . . . . . ***F. citrifolia***
      3. Leaf obovate (base obtuse and apex rounded) . . . . . ***F. obtusifolia***
   2. Petioles <2 cm long.
      4. Leaves <4 cm across, acute at apex; ripe fig without raised ring, 3–7 mm thick . . . . . ***F. perforata***
      4. Leaves >4 cm across, blunt or rounded at apex; ripe fig with raised ring around apex, 10–14 mm thick . . . . . ***F. trigonata***

Ficus citrifolia

Ficus citrifolia Miller, 1768.—DeWolf, 1960:158.—Berg & DeWolf, 1975:241.
Ficus laevigata Vahl, 1805, Enum., 2:183.—Little & Wadsworth, 1964:70, pl. 22.
Ficus lentiginosa Vahl, 1805, Enum., 2:183.
Ficus populnea Willdenow, 1806, 4(2):1141.
Ficus populnea var. *lentiginosa* (Vahl) Warburg in Urban, 1903, 3:476.
Ficus populnea subvar. *subcuspidata* Warburg in Urban, 1903, 3:478.
Ficus populoides Warburg in Urban, 1903, 3:479.
Ficus lentiginosa var. *subcuspidata* (Warburg) Domin, 1930c:47.
Ficus lentiginosa var. *imrayana* Domin, 1930c:48.
Ficus laevigata subvar. *subcuspidata* (Warburg) Stehlé in Stehlé et al., 1937, 1:181.

Figue.

Tree to 16 m; leaf base cordate to truncate; branches with many aerial roots; figs paired, short-stalked, usually <1 cm thick, thin-walled, yellowish to reddish when ripe.

Antilles except Trinidad; common in lowland Dominica to 500 ft [152 m]: Baiac (*Whitefoord 3843*), Cabrits swamp (*Hodge 631, Nicolson 4192*), Calibishie (*Hodge 3164*), Delices (*Whitefoord 3710*), Grand Savanna (*Ernst 1890, 1637*), Hatton Garden Estate (*Hodge 3010, 3048*), La Plaine (*Ramage s.n.*), Melville Hall (*Chambers 2775*), Pointe Ronde (*Hodge 2656, 2738*), Portsmouth (*Hodge 3751*).

Ficus insipida

Ficus insipida Willdenow, 1806, 4(2):1143.—DeWolf, 1960:152; 1967:5.—Berg & DeWolf, 1975:232.

Ficus glabrata Kunth, 1817, 2:47.
Ficus krugiana Warburg in Urban, 1903, 3:459.

Medium tree; leaves lightly scabrid with base rounded; figs solitary, long-stalked, >1 cm thick.

Central America to Brazil, Montserrat to St. Vincent; occasional in Dominica from lowlands through rainforest: Belvedere-Delices (*Whitefoord 3764*), Clarke Hall (*Nicolson 2005*), Hatton Gardens (*Hodge 3073*), Layou (*Ramage s.n.* at BM), Morne Plat Pays summit (*Hodge 1692*), Picard Estate (*Nicolson 4220*), Roseau Valley waterfall (*Hodge 2009*).

This species has been misidentified and reported from Dominica as *F. laurifolia* Lamarck, a synonym of *Ficus maxima* Miller. True *F. maxima* apparently does not reach the Lesser Antilles. It lacks the elongate stipules of *F. insipida* and has a distinctive papery petiolar epidermis that cracks and exfoliates. Berg and DeWolf (1975:232) cited *Eggers 6670* (P) from St. Vincent as *F. maxima*, but a duplicate (US) is clearly *F. insipida*.

Ficus caribaea Jacquin (1767, 2:30) is a possible earlier name for *F. insipida*, if one interprets "pedunculis simplicibus" as "figs solitary." This was treated as a name "deserving oblivion" by Warburg (in Urban, 1903, 3:490). The type should be located.

Ficus obtusifolia

Ficus obtusifolia Kunth, 1817, 2:49.—DeWolf, 1960:163.—Little et al., 1974:118, pl. 292.
Urostigma involutum Liebmann, 1851:320.
Ficus involuta (Liebmann) Miquel, 1868:298.
Ficus urbaniana Warburg in Urban, 1903, 3:459.
Ficus involuta var. *urbaniana* (Warburg) Dugand, 1943:275.

Large spreading tree; leaves large, broadly obovate, cuneate ± rounded at base; figs large, paired, sessile, each subtended by several broad involucral bracts.

Neotropics, except Greater Antilles; in Dominica near the coast: Belle View (*Cooper 14*).

This and other large-leaved species of *Ficus* are considered as spirit trees by the Caribs (Hodge and Taylor, 1957:553).

Dugand (1955:229), with reservations, placed *Ficus urbaniana* and his *F. involuta* var. *urbaniana* in synonymy of *F. involuta*. He was under the misapprehension, clarified by DeWolf (1960:163), that *F. obtusifolia*, the name used here, was a later homonym of *F. obtusifolia* Roxburgh. However, Roxburgh's name, a nomen nudum in 1814, was not validly published until 1832.

Howard (1988, 4:63) called this *Ficus nymphaeifolia* Miller. That taxon, with cordate leaf bases, may well include and intergrade with this, but I cannot accept the identification for the Dominican specimen nor Little et al.'s illustration, both with tapering leaf bases.

Ficus perforata

Ficus perforata Linnaeus, 1775:17.—DeWolf, 1960:154.
Ficus americana Aublet, 1775:952.—Rossberg, 1935:580.—Howard, 1988, 4:58.
Ficus pallida sensu Grisebach, 1860:151, non Vahl.
Ficus omphalophora Warburg in Urban, 1903, 3:487.
Ficus sintenisii Warburg in Urban, 1903, 3:464.—Little & Wadsworth, 1964:74, pl. 24.

Small tree to 5 m; leaves obovate to elliptic, small; figs small, paired, shortly pediceled.

West Indies, Guatemala to Colombia; in Dominica at mid-elevations from 200–750 m: Castle Bruce Road (*Ramage s.n.*), Freshwater Lake (*Ernst 1731*), Lisdara (*Cooper 192*), Point Michelle (*Ramage s.n.*), Riversdale (*Beard 241*), Syndicate (*Whitefoord 5886*), Trois Pitons (*Lloyd 770*).

This is the smallest-leaved *Ficus* on Dominica.

The two competing names, *F. perforata* and *F. americana*, include the same Plumier drawing. The Linnaean name was published 23 Jun 1775, Aublet's name was published on or after June 1775, being far into the second volume, probably after the Linnaean name.

Ficus trigonata

Ficus trigonata Linnaeus, 1775:17.—DeWolf, 1960:160.—Little et al., 1974:124, pl. 125.—Berg & DeWolf, 1975:264.

Figue rouge.

Tree; leaves medium, blunt at apex and rounded to ± cordate at base; figs of medium size, ± sessile, often with rim around the apex.

Antilles and continental Caribbean coasts; lower elevations in Dominica: Salybia (*Hodge 3271*), South Chiltern (*Hodge 1567*, sterile, provisionally determined by DeWolf).

Sterile specimens of this may be indistinguishable from *F. obtusifolia*.

MYOPORACEAE

(by R. DeFilipps)

Bontia daphnoides

Bontia daphnoides Linnaeus, 1753:638.

Shrub or tree to 4 m; stems with conspicuous alternate leaf scars; leaves narrowly elliptic, to 10 cm × 2 cm long, glandular-punctuate; flowers solitary, axillary, pedicellate; sepals acuminate, ciliate; corolla yellow, spotted with purple, the lower lip reflexed, densely red-bearded; drupe ovoid, yellow, 1.0–1.5 cm long, beaked.

West Indies and northern South America; in Dominica in scrub woodlands near beach or in swampland: Cabrits and Prince Ruperts Bay (*Hodge 853, 854, 3726, Nicolson 4194, Smith 10338, Wasshausen & Ayensu 380*).

MYRICACEAE

Myrica pubescens var. *caracasana*

Myrica pubescens var. *caracasana* (Kunth) A. Chevalier, 1901:208.

Myrica caracasana Kunth, 1817, 2:18.—Staples in Howard, 1988, 4:38.
Myrica microcarpa sensu auctt., non Bentham.—Urban, 1892:359.

Dioecious shrub to tree to 4.5 m, branches with large, white lenticels; leaves densely glandular-punctate below, toothed along upper margin; male spikes 7–12 mm long; drupe to 3 mm long, with waxy papillae.

West Indies and northern South America; in Dominica in montane rainforest and elfin woodlands, 1000–1400 m: Morne Anglais (*Hodge 2283*), Morne Diablotins second summit (*Nicolson 4174*).

MYRISTICACEAE

Myristica fragrans

Myristica fragrans Houttuyn, 1774:333.

Nutmeg, mace.

Dioecious tree to 20 m; fruits pendant, fragrant; seed (nutmeg) to 4 cm long with a laciniate, red aril (mace).

Native to East Indies, now pantropically cultivated; apparently naturalizing in Dominica: Clarke Hall (*Ernst 1419*), Lisdara (*Hodge 407*), Ridgefield Estate (*Hodge 2210*), sine loc. in 1887 (*Eggers 568*).

Nutmeg contains myristicine, a hallucinogenic drug that is dangerous in large amounts (fewer than three seeds).

MYRSINACEAE

(by A.C. Nicolson)

1. Inflorescences ± sessile, <1 cm long . . . . . ***Myrsine***
1. Inflorescences pedunculate, 2 cm long or longer.
   2. Leaves sessile, clasping at base . . . . . ***Cybianthus parasiticus***
   2. Leaves petiolate.
      3. Leaves caudate at apex; flowers generally 4-merous . . . . . ***Cybianthus***
      3. Leaves not caudate; flowers generally 5-merous.
         4. Inflorescences flat-topped; leaves obovate, acute at base . . . . . ***Ardisia***
         4. Inflorescences cylindric; leaves elliptic to obovate, ± cordate or at least obtuse at base . . . ***Stylogyne***

Ardisia Swartz, nom. cons.

East Asian *Ardisia crenata* Sims, with crenulate leaves unlike the other two, was collected in cultivation at Baiac (*Whitefoord 5464*). It is easily confused with *Ardisia crispa* (Thunberg) A.L. Candolle, reported by Howard (1989, 6:40) with "recent collections from Dominica."

1. Inflorescences racemose but flat-topped, axillary . . . . . ***A. elliptica***
1. Inflorescences corymbose, terminal . . . . . ***A. obovata***

Ardisia elliptica

Ardisia elliptica Thunberg, 1798, Nova, 119.—Walker, 1976:813.

Small tree to 5 m; petiole to 1.5 cm; leaf blade oblanceolate, ~10 cm × 3 cm; inflorescences axillary; calyx lobes to 2 mm; petals pink, to 1 cm long.

Asia but cultivated as hedge; presumed naturalized in Dominica: Baiac road (*Whitefoord 4617*), Bellevue (*Wilbur 7929*), Liberty Estate (*Ernst 1609, 1961*). Flowers in June and November.

J. Pipoly (pers. comm., Jan 1986) said that this should be called *Ardisia solanacea* Roxburgh (incl. *Ardisia humilis* Vahl). *Ardisia solanacea* Roxburgh (1795) is cultivated elsewhere in the Antilles (Jamaica, Gaudeloupe, Martinique) but has larger flowers, free sepals, and lacks the septate anthers of *A. elliptica*. In Mez's monograph (in Engler, 1902, IV.236 (Heft 9):127) *A. elliptica* appears under the name of *A. humilis* Vahl, a misapplied name actually applicable to a different species, fide Merrill (1935:298).

Ardisia obovata

Ardisia obovata Desvaux ex Hamilton, 1825:26.—Little & Wadsworth, 1964:430, pl. 202.
Ardisia guadalupensis Duchassaing ex Grisebach, 1857:237.—Grisebach, 1861:396.—Stehlé, 1962b:433.
Ardisia coriacea sensu Mez in Urban, 1901, 2:397, non Swartz.

Shrub or small tree to 10 m; petiole to 1 cm, leaf blades leathery, obovate, tapering to petiole, 15(–20) cm long to 7 cm wide; inflorescence terminal, to 12 cm broad; corollas greenish, 3–5 mm; ripe fruit a fleshy, purple-black, single-seeded drupe, 6–8 mm broad.

West Indies; in Dominica a sometimes frequent element of coastal vegetation and lowland forest: Baiac road (*Whitefoord 4620*), Cabrits (*Howard 11753*), Calibishie (*Hodge 3153*), L'Anse Noire (*Ernst 1683*), Salybia (*Hodge 3414*), Spanish Mountain below summit (*Whitefoord 5668*), Vieille Case (*Cowan 1599*), Walkers Rest (*Chambers 2625*). Flowers in January, fruits in June.

Cybianthus Martius, non. cons.

Cybianthus antillanus (Mez) Agostini (1980:157), based on *Weigeltia antillana* Mez (in Urban, 1901, 2:423), is a shrub with an ovate, noncaudate leaf, inflorescence an axillary 1–2-branched raceme and 4-merous flowers. It was described from "Dominica: Ramage; St. Lucia: Ramage; Grenada; Broadway...(v.s. in Herb. Kew, Krug & Urban)." There is no Dominica material at Kew and the original Krug and Urban Herbarium (B) has been destroyed. There is no subsequent report of this species north of St. Lucia. I suspect the Dominica record is either a misidentification or the locality is in error.

1. Corolla rotate; anthers wider than long, erect, apically rounded or emarginate; petioles absent . . . . . ***C. parasiticus***

1. Corolla cupuliform; anthers wider than long, distally recurved, apically acute or apiculate; petioles present . . . . . *C. rostratus*

Cybianthus parasiticus

Cybianthus parasiticus (Swartz) Pipoly, 1987:59.
Grammadenia parasitica (Swartz) Grisebach, 1861:393.—Stehlé, 1962b:438.
Ardisia parasitica Swartz, 1788:48.

Epiphytic or free-standing shrub to 3 m; leaves sessile, narrowly oblong-lanceolate, to 6 cm × 1 cm, with many dark, linear glands beneath; inflorescence a simple, axillary raceme to 3 cm long; corolla white with purple markings, to 2 mm long.

Lesser Antilles; in Dominica in mid- to upper elevation forests: Boiling Lake (*Eggers 634*), Breakfast River (*Hodge 1910*), Castle Bruce Road (*Cowan 1602*), En Haut Jean (*Webster 13531*), Laudat (*Eggers s.n.*), Micotrin slopes (*Hodge 1845, Smith 10285, 10286, Wasshausen & Ayensu 330, Wilbur 7496*), Morne Anglais (*Wilbur 7935*), Morne Nicholls (*Nicolson 1955*), Newfoundland (*DeFilipps 159*), Pont Cassé area (*Ernst 1128, Stern & Wasshausen 2554, Webster 13466, Wilbur 7725, 7818*), Rosehill (*Eggers 115*), Sylvania (*Beard 248*).

Cybianthus rostratus

Cybianthus rostratus (Hasskarl) Agostini, 1980:155.
Ardisia rostrata Hasskarl, 1868:26.
Conomorpha peruviana var. *rostrata* (Hasskarl) Mez in Urban, 1901, 2:422.—Stehlé, 1962b:438.
Conomorpha peruviana sensu Grisebach, 1861:393 [as to Antillean material], non A.L. Candolle.

Small tree to 6 m; leaves elliptic, caudate, to 9 cm × 4 cm, ± ferrugineous-lepidote beneath; inflorescence an axillary simple (sometimes 2-branched) raceme to 4 cm long; fruiting pedicels to 3 mm; fruits dark purple, globose, to 5 mm across.

Lesser Antilles; in Dominica in mid-elevation rainforests of western slopes: Hampstead River (*Nicolson 4332*), Jean (*Ernst 1821, Webster 13499*), Laudat *Eggers 91*), Layou River (*Cowan 1627, Nicolson 4186*), Point Lolo (*Ernst 1982*), Pont Cassé (*Stern & Wasshausen 2556*), *Wilbur 8139*), Riversdale (*Beard 1455*), Rosehill (*Eggers 620*), Sylvania (*Stehlé 6313*), sine loc. (*Eggers s.n.*).

Myrsine Linnaeus

1. Leaves with pellucid dots beneath; young shoots pubescent . . . . . *M. coriacea*
1. Leaves with linear glands and dots beneath; young shoots glabrous . . . . . *M. trinitatis*

Myrsine coriacea

Myrsine coriacea (Swartz) R. Brown ex Roemer & Schultes, 1819, 4:511.—Steam, 1969:175.
Samara coriacea Swartz, 1788:32.
Caballeria ferruginea Ruiz & Pavón, 1798a:280.
Rapanea ferruginea (Ruiz & Pavón) Mez in Urban, 1901, 2:429.
Myrsine laeta sensu Grisebach, 1861:392, non A.L. Candolle.

Bois sand, bois gresse, rassade.

Tree to 10 m, perhaps dioecious; young branchlets rusty-tomentose, glabrescent; petiole to 1 cm; leaf blades (1) chartaceous and elliptic to lanceolate with acute base and apex, to 8 cm × 2 cm, to (2) coriaceous and obovate with rounded apex, to 4 cm × 2 cm; inflorescence on short (0.5–2 mm) annual spurs, to 6 flowers each; pedicels 0.5–0.3 mm; sepals 0.5 mm, fused below; petals erect (staminate flowers) or reflexed (pistillate flowers), 1–1.7 mm, fused at base; anthers virtually sessile, on and shorter than petals; stigma (pistillate flowers) sessile, morel-shaped; fruit a globose berry, to 4 mm, glandular-striate, ripening black.

Neotropics; in Dominica in thickets and rainforest from 500 m of western slopes to summits: Bernard Estate (*Wasshausen & Ayensu 376*), Laudat area (*Beard 1468, Chambers 2680, Eggers 569, Hodge 1761, Nicolson 2099, Smith 10285*), Lisdara (*Cooper 184, Hodge 666, 2375, 2431*), Milton Estate (*Hodge 2598*), Micotrin (*Ernst 1097*), Morne Couronne (*Webster 13211*), Morne Diablotins (*Chambers 2644, Nicolson 4175, 4176, Webster 13359*), Morne Trois Pitons (*Chambers 2591*), Salisbury (*Stern & Wasshausen 2578*), Sylvania (*Beard 248, Cooper 29, Hodge 1043, 1166, 3819*), Syndicate (*Whitefoord 5336*), sine loc. (*Eggers s.n.*). Flowers November–March, fruits March–June.

Collections from higher elevations have shorter, obovate, coriaceous leaves (the "*coriacea*" element); those from lower elevations have longer, elliptic, chartaceous leaves (the "*ferruginea*" element), but intermediates form a gradient. One collection (*Gillis 8209*) from "coast south of airfield," then at Melville Hall in northeast, and it, coupled with the collection from Salisbury, suggests that this species may range from sea level on both sides of the island to the summits of its highest mountains, although it is most commonly found in the mid- to higher elevations.

Myrsine trinitatis

Myrsine trinitatis A.L. Candolle, 1834:108.
Rapanea trinitatis (A.L. Candolle) Mez in Urban, 1901, 2:432.—Stehlé, 1962b:440.

Small tree; petiole to 1 cm long, leaf blades coriaceous, elongate-elliptic (to 7 cm × 1.8 cm), base acute, apex acute but with a rounded tip, the upper surface glossy beneath lighter and with glandular lines and dots; inflorescence to 6-flowered, on perennial spurs to 4 mm long.

Lesser Antilles and Trinidad; in montane forest of Dominica ~800 m: Morne Plat Pays (*Hodge 1733*), sine loc. (*Imray s.n.* (as *M. cubana* A. DC.), *Imray 46* at K, *Imray 254* at K).

Stylogyne A.L. Candolle

1. Inflorescences terminal . . . . . ***S. canaliculata***
1. Inflorescences axillary . . . . . ***S. lateriflora***

Stylogyne canaliculata

Stylogyne canaliculata (Loddiges) Mez in Engler, 1902, IV.236 (Heft 9):268.
Ardisia canaliculata Loddiges, 1825.
Stylogyne smithiorum Mez in Urban, 1901, 2:418.
Ardisia clusioides sensu Grisebach, 1861:396 [as to Dominica specimens], non Grisebach [as to Jamaican materials].

Courocoume.

Shrub or small tree to 5 m; leaves elliptic to obovate, base rounded, to 30 cm × 10 cm; inflorescence a loose, terminal panicle to 15 cm long; pedicels 3 (flower) to 9 (fruit) cm long; corolla white, 4 mm long; fruits globular, red, 5–6 mm.

Martinique to Grenada; in lowland forests of Dominica: Carib Trail (*Hodge 3254*), Concord (*Ernst 1672*), Layou River (*Beard 1458*), Morpo (*Chambers 2550*), Newfoundland (*Nicolson 4092*), Riversdale (*Beard 641*), Salybia (*Hodge 3363*).

One specimen label reported that ink is made from the fruits.

Stylogyne lateriflora

Stylogyne lateriflora (Swartz) Mez in Urban, 1901, 2:418.—Stehlé, 1962b:437.
Ardisia lateriflora Swartz, 1788:48.
Ardisia caribaea Miquel in Martius, 1856, 10:289.
Ardisia laurifolia sensu Grisebach, 1861:385, non Jussieu.

Slender tree to 10 m; leaves broadly elliptic, to 20 cm × 10 cm; inflorescence a loose, axillary panicle to 8 cm long; corolla pinkish, 4 mm long; fruiting pedicels to 9 mm long; fruits globular, black-purple, 6–7 mm.

Lesser Antilles; in rainforests of Dominica from lower to upper elevations: Bataca (*Stehlé 6406, 6644*), Clarke Hall (*Nicolson 1824, Stern & Wasshausen 2409*), Dleau Gommier (*Ernst 2084*), En Haut Jean (*Webster 13498*), Hatton Garden Estate (*Hodge 3049*), Laudat (*Whitefoord 3849*), Layou headwaters (*Nicolson 4186*), Morne Anglais (*Hodge 668, Wilbur 7942*), Morne Colla Anglais (*Hodge 667, 1029, 1184*), Morne Diablotins (*Nicolson 1919, Webster 13328, Whitefoord 4418*), Morne Plaisance Estate (*Whitefoord 4690*), Petit Coulibri (*Whitefoord 6005*), South Chiltern (*Hodge 1499*), Sylvania (*Cooper 62*), Syndicate (*Whitefoord 4473*).

MYRTACEAE

The first draft was prepared by Robert DeFilipps. Richard Howard, with the permission of the author, later gave me a copy of Rogers McVaugh's typescript of the family for Howard (1989, 5:463–532). This typescript was used extensively in preparing the treatment of this difficult family.

Eucalyptus is surely grown in Dominica but no collections have been seen. It belongs to a group that have broad, alternate leaves, except for juvenile shoots that may be opposite.

Melaleuca linearifolia Smith, an Australian tree with alternate, linear leaves, spicate inflorescences and connate, fascicled stamens, is grown in the Roseau Botanic Garden (*Hodge 3911*). *Melaleuca quinquenervia* (Cavanilles) S.T. Blake is reported for Dominica by McVaugh (in Howard, 5:465).

Generic Identification Key

1. Flowers few, usually <10 to an inflorescence.
   2. Flowers <1 cm across, fasciculate or solitary . . . . . ***Eugenia***
   2. Flower >1 cm across.
      3. Flowers ± solitary, axillary; young stems 4-angled . . . . . ***Psidium guajava***
      3. Flowers racemose, terminal; stems terete . . . . . ***Syzygium jambos***
1. Flowers many, usually >10 to an inflorescence.
   4. Hairs medifixed; petals absent; calyx calyptrate, circumscissile . . . . . ***Calyptranthes***
   4. Hairs usually simple or absent; petals present; calyx splitting irregularly or sepals free.
      5. Branchlets winged; petals glabrous outside . . . . . ***Pimenta***
      5. Branchlets not winged; petals pubescent outside.
         6. Sepals concrescent in bud, splitting irregularly at anthesis . . . . . ***Blepharocalyx***
         6. Sepals free.
            7. Leaves revolute from midrib (concave); anther locules at different levels on each side . . . . . ***Gomidesia***
            7. Leaves flat; anther locules all at same level . . . . . ***Myrcia***

Generic Classification Key
(from McVaugh, 1968:414–417)

1. Inflorescence 1-few-flowered (rarely >30), if compound then racemose, or determinate at the lowest node and regularly dichotomous with sessile flowers in the forks.
   2. Embryo eugenioid (massive and undivided) . . . . . ***Eugenia***
   2. Embryo pimentoid (elongated with cotyledons small and inconspicuous at one end) . . . . . ***Psidium***
1. Inflorescence myrcioid ("paniculate").
   3. Embryo pimentoid (elongated with cotyledons small and inconspicuous at one end).
      4. Calyx closed in bud, splitting irregularly at anthesis (into 4); ovules 4–6; inflorescence a panicle but each branch a 3(–7)-flowered dichasium . . . . . ***Blepharocalyx***
      4. Calyx lobes 5 (ours) or 4; ovules 1 or few; inflorescence truly paniculate . . . . . ***Pimenta***

3. Embryo myrcioid (cotyledons foliaceous, crumpled and folded about the elongate radicle, filling the large seed).
   5. Anthers with two pairs of pollen-sacs at different levels, the upper seeming to open extrorsely and the lower introrsely . . . . . ***Gomidesia***
   5. Anthers with pollen-sacs all at the same level, opening laterally.
      6. Calyx closed in bud, calyptrate, circumscissile . . . . . ***Calyptranthes***
      6. Calyx lobes normally developed and present in flower and fruit . . . . . ***Myrcia***

Blepharocalyx Berg

Blepharocalyx eggersii

Blepharocalyx eggersii (Kiaerskou) Landrum, 1986:121.
Marlieriopsis eggersii Kiaerskou, 1890:282.
Myrcia splendens sensu Grisebach, 1860:234, as to Imray specimen cited, non (Swartz) A.P. Candolle.
Mitranthes eggersii (Kiaerskou) Niedenzu in Engler & Prantl, 1893, III(7):72.

Caconier (Ramage), radigonde (Imray).

Shrub or tree; leaves lanceolate-elliptic, acuminate, to 4.5 cm × 1.8 cm, venation inconspicuous; inflorescence a dichasial panicle to 5 cm long, terminal on branchlets in Eggers collection at US; calyx irregularly splitting at anthesis into 4 reflexed and deciduous lobes, leaving a short hypanthium; ovary bilocular with 4–6 ovules per locule; fruit ellipsoid, 1-seeded, with cup-like hypanthium. Embryo pimentoid, strongly curved.

Guadeloupe, St. Vincent, Venezuela, and Brazil; apparently now rare (not collected for a century) in west valleys of Dominica: "at Laiou forest high up," i.e., Layou River Valley (*Ramage s.n.* at K), Sugar Loaf (*Eggers 723* at US), sine loc. (*Eggers 1061* at K) and *Imray 100* at K). Flowering April.

Calyptranthes Swartz, nom. cons.

Calyptranthes fasciculata

Calyptranthes fasciculata Berg, 1855:31.
Calyptranthes sericea Grisebach, 1860:233.
Calyptranthes fasciculata var. *genuina* Stehlé in Stehlé et al., 1949, 3:62.

Griave, guepois.

Shrub or tree to 12 m; leaves lanceolate, long-tapered, to 14 cm × 4 cm; inflorescence and leaf undersurfaces rusty-puberulent with 2-branched hairs; panicles short (to 1.5 cm long); petals 0; fruits globose, ~1 cm diameter.

Martinique and Venezuela into Brazil; in Dominican rainforests from 300–925 m: Breakfast River (*Hodge 1882*), Deux Branches (*Hodge 2980* at US), Dleau Gommier (*Ernst 2085*), En Haut Jean (*Webster 13529*), Freshwater Lake (*Chambers 2575, Ernst 1733, Hodge 1834*), Point Lolo (*Ernst 1165, 1953*), Morne Diablotins (*Nicolson 1922, Wasshausen & Ayensu 355, Webster 13344, Whitefoord 4242, 4357*), Morne Trois Pitons (*Wasshausen & Ayensu 387*), sine loc. (*Imray 298*). Flowering March–June, fruiting June–January.

Eugenia Linnaeus

A cultivated species, *Eugenia uniflora* Linnaeus, known as the Surinam cherry, has been collected on Dominica (*Imray 576*). It would key to *E. ligustrina* but differs by its more ovate leaves and its larger, ridged, and bright- to dark-red fruits.

1. Flowers ± sessile in leafy axils or at leafless nodes on older wood.
   2. Leaves acute to acuminate, >6 cm long . . . . . ***E. coffeifolia***
   2. Leaves obtuse to rounded, <6 cm long . . . . . ***E. cordata***
1. Flowers pedicelled.
   3. Flowers in racemes to 3 cm long, the flowers well-separated.
      4. Fruits globose; inflorescence elongate (usually >2 cm) . . . . . ***E. domingensis***
      4. Fruits elongate, often 8-ridged; inflorescence short (usually <2 cm long . . . . . ***E. octopleura***
   3. Flowers solitary or in short racemes (usually much <1 cm) and appearing fasciculate.
      5. Flowers solitary and on pedicels >1 cm long; calyx lobes much longer than wide . . . . . ***E. ligustrina***
      5. Flowers several or, if solitary, pedicels <1 cm; calyx lobes about as long as wide.
         6. Leaves broad (2× longer than broad or less); inflorescence pubescent; flowers large (calyx lobes (2–)3–5 mm long & wide, disk (2–)3–4 mm long and wide); fruit elongate . . . ***E. gregii***
         6. Leaves much narrower; inflorescence glabrous to pubescent; fruit globose.
            7. Leaves markedly whitened beneath and blackened above with drying; young growth silky with bright coppery-red hairs . . . ***E. albicans***
            7. Leaves green on both sides; plants glabrous to pubescent, never coppery-silky.
               8. Flowers small (larger calyx lobes to 1.5 mm long and wide; floral disk 0.9–1.5 mm wide); pedicels 1–5 mm.
                  9. Leaves commonly curved in drying, the midvein grooved on the upper surface and ± depressed; blades mostly 3–8 cm × 2–4 cm; pedicels and hypanthium densely hispidulous . . . . . ***E. hodgei***
                  9. Leaves flat in drying, the midvein flat or slightly elevated; blades mostly 2–5 cm × 1–2 cm wide; branchlets, inflorescence and at least the young leaves puberulent or hispidulous . . . . . ***E. monticola***
               8. Flowers larger (larger calyx lobes 1.5–4 mm

long, disk 2–4 mm wide); pedicels commonly >5 mm long, glabrous.

10. Lateral leaf venation homogeneous (not differentiated into primary and secondary), elliptic-ovate with prolonged tapering tips 1–2 cm long, the blade 3–8 cm long; pedicels 10–18 mm long . . . . . ***E. confusa***

10. Lateral leaf venation heterogeneous (differentiated into primary and secondary), ovate to elliptic or lanceolate, acuminate but often broadly or obtusely so.

11. Pedicels 3–7(–10) mm long; flowers from leafless nodes, often 8 or more . . . . . ***E. lambertiana***

11. Pedicels (7–)15 mm long or more; flowers in axils of leaves of current season, mostly 1–3 . . . . . ***E. pseudopsidium***

Eugenia albicans

Eugenia albicans (Berg) Urban, 1895:617.
Stenocalyx albicans Berg, 1861:698.

Small tree; young growth with coppery hairs; leaves usually <4.5 cm × 9 cm, drying dark above and whitish below; flowers ± fascicled in leaf axils; calyx lobes rounded, large and persistent; fruits red, glossy, a little longer than broad.

Guianas into Lesser Antilles; new record for Dominica in windbreak: Syndicate (*Whitefoord 5589, 5819*). Flowering and fruiting March–April.

Eugenia coffeifolia

Eugenia coffeifolia A.P. Candolle, 1828, 3:272.

Bois piquet.

Glabrous shrub or tree to 10 m; leaves large, to 15 cm × 6 cm, usually acuminate; white flowers in sessile clusters; fruit reddish, globose, ~0.5 cm diameter, on a short pedicel.

Lesser Antilles into NE South America; common to occasional in Dominican rainforest 200–650 m: Freshwater Lake (*Hodge 1966, Nicolson 4145, Read 2009, Wasshausen & Ayensu 319, Wilbur 8222*), Jean (*Webster 13504*), Layou River road (*Cowan 1626*), Point Lolo (*Ernst 1190*), Sylvania (*Hodge 483, 2509, 3850*), sine loc. (*Imray 265* at NY). Flowering February–April, fruiting May–August.

Eugenia confusa

Eugenia confusa A.P. Candolle, 1828, 3:272.—Urban, 1895:643.

Boisiette.

Shrub or small tree; leaves coriaceous, glossy, finely wrinkled above with undifferentiated lateral venation, elliptic-ovate with narrowly prolonged tips 1–2 cm long, to 8 cm × 4 cm, rounded to cuneate at base; racemes 1–5, bearing 1–3 pairs of flowers on slender pedicels 1–1.8 cm long; disk 2.5–3.5 mm wide; fruit globose.

S. Florida and Antilles; known from Dominica only from a sterile collection without locality: *Imray 24* at K.

Eugenia cordata var. *sintenisii*

Eugenia cordata A.P. Candolle var. *sintenisii* (Kiaerskou) Krug & Urban in Urban, 1895:656.
Eugenia sintenisii Kiaerskou, 1890:263.—Little et al., 1974:67, pl. 578.

Glabrous shrub or tree to 5 m; leaves ± sessile, small, to 4 cm × 2 cm, rounded at apex, rounded to obtuse at base; flowers in sessile clusters.

Puerto Rico and Lesser Antilles; in Dominica in dry scrub: W. Cabrit (*Hodge 484*), E. Cabrit (*Nicolson 4202*).

Eugenia domingensis

Eugenia domingensis Berg, 1856:296.
Eugenia aerugenia sensu Grisebach, 1860:237, and Urban, 1895:623, non A.P. Candolle, fide Sandwith, 1934:125.

Branchlets and inflorescence rusty-pubescent with 2-branched hairs; leaves coriaceous, glabrate, oblong-elliptic to ovate, to 12 cm × 5.5 cm, acuminate at apex, rounded and then acute at base; racemes 2–5 cm long with 2–5 pairs of widely spaced flowers with pedicels 2–5(–8) mm long; bracteoles persistent, 1.3–1.8 mm long, obtuse, broadly ovate, united in a cupule beneath the flower; disk 3–4 mm wide; fruits short-ovoid to 1 cm × 1.5 cm (description condensed from McVaugh in Howard, 1989, 5:486).

Mostly Greater Antilles; only known for Dominica from an 1860 collection without locality: *Imray 377* at K, NY, *Imray s.n.* at GH.

Most similar to *E. octopleura*.

Eugenia gregii

Eugenia gregii (Swartz) Poiret in Lamarck, 1813, Encycl., Suppl., 3:126, *"greggii."*
Myrtus gregii Swartz, 1788:78.

Tree to 8 m; glabrous except the inflorescence and lower leaf surface; leaves large, to 11 cm × 5.5 cm, obtusely short-acuminate at apex, rounded to obtuse at base, lower surface paler due to scurfy puberulence; midvein convex above; racemes 3–10 mm long, bearing 1–3 pairs of flowers on pedicels 5–10 mm long, the axis and flowers whitish scurfy; disk ~4 mm wide; fruit elongate, 1.5–2 cm × 1–1.2 cm.

Endemic to Lesser Antilles from Guadeloupe through St. Lucia: known from Dominica only from the original collection in 1777 by John Gregg (Greg). Swartz originally reported it from Antigua but the type (BM) is clearly labeled Dominica. Poiret reported it from Santo Domingo, another error for

Dominica. A report from Barbados could be from an introduction. It was collected in southwest Guadeloupe from near Basse Terre and Vieux Fort.

Eugenia hodgei

Eugenia hodgei McVaugh, 1973:310.

Tree to 7.5 m, 10 cm dbh; leaves coriaceous, elliptic to ± orbicular, rounded to obtuse at apex, obtuse at base; flowering at leafless nodes; pedicels 2.5–6.0 mm long, minutely hispidulous; disk 1.5 mm wide.

Martinique; in Dominica known only from type at 350 m, said to be a dominant tree of dry slopes due east of Roseau: Badineau Estate, Morne Gay House (*Hodge 2230*).

Eugenia lambertiana

Eugenia lambertiana A.P. Candolle, 1828, 3:270.
Eugenia pseudopsidium sensu Grisebach, 1860:238 partim, non Jacquin, fide Urban, 1895:648.

Zeb crab, bois dye.

Shrub or tree to 10 m; leaves elliptic-lanceolate to ovate, to 10 cm × 4.5 cm, acuminate, rounded to acute at base and decurrent; flowers usually in fascicles at leafless nodes; disk 2–3 mm wide; fruit globose, yellow or orange, 1–2.5 cm in diameter with thin flesh over 1 seed.

Guadeloupe to the Amazon basin; rather common in Dominica and roughly separable into two groups:

1. Leaves <10 cm long; calyx lobes large, 2–3 mm long and wide. Interior and west slopes, 300–1000 m: north of Portsmouth (*Wasshausen & Ayensu 370*), Point Lolo (*Ernst 1172*), Freshwater & Boeri Lake area (*Hodge 1831, Nicolson 1960, Whitefoord 5139, Wilbur 8205*), Morne Plat Pays (*Hodge 1690, Wilbur 7889*), Sylvania Estate (*Cooper 54, Hodge 1186*). Flowers July–November, fruits January–June.

2. Leaves >10 cm long; calyx lobes small and narrow: wind-sheared east coast and interior to 450 m: Borne (*Webster 13486*), Carib Reserve (*Hodge 3258*), Castle Bruce trail (*Hodge 3336*), Hatton Garden on Pagua Bay (*Hodge 3056*), La Plaine (*Wilbur 8173*), Rosalie road (*Stern & Wasshausen 2473*). Flowering April–August, fruiting July.

McVaugh (in Howard, 1989, 5:491) found this species "more difficult to delimit satisfactorily than any other member of the Myrtaceae in the Lesser Antilles." He specifically cited two Dominica collections as suggesting *E. pseudopsidium* "by its long slender pedicels and large calyx lobes." One of them, *Lloyd 910* at NY (from Morne Diablotins), is one of the few records for *E. pseudopsidium* (q.v.) on Dominica.

Eugenia ligustrina

Eugenia ligustrina (Swartz) Willdenow, 1799, 2:962.
Myrtus ligustrina Swartz, 1788:78.

Shrub or tree to 7 m; leaves coriaceous, green and shining above, elliptic, to 4.5 cm × 2 cm; flowers solitary; pedicels slender, to 3 cm long; sepals erect in fruit to 5 mm long; fruit red to black, globose, to 8 mm across.

Greater Antilles through eastern South America; in Dominica a dominant in dry scrub thickets to 180 m: Batali River (*Webster 13402*), Cabrits (*Ernst 1926, Hodge 485, Smith 10308, Whitefoord 6129*), Dublanc (*Hodge 2528*), Grand Savanne (*Ernst 1042, Lloyd 842*), Pointe Ronde (*Hodge 2655, 2743*). Flowering March–June, fruiting April–July.

Eugenia monticola

Eugenia monticola (Swartz) A.P. Candolle, 1828, 3:275.
Myrtus monticola Swartz, 1788:78.
Eugenia obtusata Willdenow ex Berg, 1856:32.
Eugenia procera sensu Hodge, 1954:23, non Poiret in Lamarck.

Hispidulous shrub or tree to 10 m; leaves elliptic to ovate, to 5 cm × 2 cm, the apex blunt, acute to caudate-acuminate the base cuneate to acute; midvein flat or convex above; racemes 3–6(–16) mm long, solitary or 2–3 with 3–4 pairs of flowers on pedicels to 5 mm long; disk ~0.9 mm wide; fruit pink, globose, ~5 mm diameter.

Greater Antilles into northeastern South America; in Dominica in dry scrub of northwest to 600 m: Dublanc (*Whitefoord 4298*), west of Syndicate Estate (*Ernst 1897*), W. Cabrit (*Hodge 482*), sine loc. (*Imray 254* at K). Flowering and fruiting in July.

Eugenia octopleura

Eugenia octopleura Krug & Urban in Urban, 1895:653.

Bois montagne.

Shrub or tree to 5 m; branchlets glabrescent; leaves elliptic-ovate to 13 cm × 5.5 cm, acuminate at apex, rounded to acute at base then ± cuneately prolonged; inflorescence yellowish to pale rufous with dense 2-branched hairs, racemes 1–2 cm long with up to 8 flowers on pedicels 3–9 mm long; bracts ovate, acute, 1–1.5 mm long, indurate; bracteoles similar, distinct or slightly connate; disk 2.5–3 mm wide; fruit red, oblong-obovoid, to 2.5 cm × 1.2 cm, weakly 8–11-ribbed.

Guadeloupe to Martinique (perhaps Central America but many differences); in Dominica in rainforest ~650 m: Sylvania (*Beard 648, 1463, Stehlé 6312*), Syndicate (*Whitefoord 4389, 5335*), Trois Pitons (*Lloyd 771*). Fruiting February–April.

Urban (1895:653) cited *Imray 184* p.p. as this species (also under *E. lambertiana*). Most similar to *E. domingensis* and also *E. chrysobalanoides*, which have unbranched hairs.

Eugenia pseudopsidium

Eugenia pseudopsidium Jacquin, 1760:23.

Shrub or tree to 20 m; buds and shoots strigose; leaves ovate-elliptic to 16 cm × 9 cm, acuminate, rounded to acute at base with margins often decurrent; midvein impressed above;

flowers usually in axils of new leaves, 1-3 on slender pedicels to 3 cm long; disk 2-4 mm wide; fruit globose, 1-seeded, red or orange-red, to 2 cm wide. (Compiled from McVaugh in Howard, 1989, 5:496.)

Hispaniola to Martinique, the same or related species in northeast South America; known from Dominica only from Morne Diablotins (*Lloyd 910*) and Petit Coulibri track from Soufrière (*Whitefoord 6004*).

The Lloyd collection was discussed as *E. lambertiana* (q.v.) by McVaugh. The Whitefoord collection was identified by Landrum as "cf. pseudopsidium."

It has pedicels >1 cm long. McVaugh cited (in Howard, 1989, 5:496) *Eugenia megalocarpa* Urban (1908, 5:444) as a synonym, citing an isotype (*Duss 4160*) at NY. An isotype at US does not look anything like *E. pseudopsidium* but is more like *Eugenia grypospermа* Krug & Urban but with ± sessile leaves rounded at base. The fruits are gone but the pedicels are only 4 mm and on old wood.

Gomidesia Berg

Gomidesia lindeniana

Gomidesia lindeniana Berg, 1858:208.

Shrub or small tree, young parts densely covered with coppery pubescence; branchlets flattened; leaves strikingly convex (not flat), elliptic-oblong, acuminate, to 17 cm × 8 cm; panicles coarse and many-flowered; upper and lower pollen sacs overlapping about half their length.

Greater Antilles to southeast Brazil; apparently rare in wet interior of Dominica to 1200 m: Morne Anglais summit slopes (*Ramage s.n., Wilbur 7937*), Roseau valley (*Duss 2726*). Flowering May-July, fruiting in August.

Urban (1895:588) erroneously cited the Duss collection as being from Guadeloupe and misidentified it as *Myrcia deflexa*.

Myrcia A.P. Candolle ex Guillemin

1. Midvein (in dried leaves) convex on upper surface; hypanthium and floral disk glabrous or essentially so; ovary 3-locular . . . . . ***M. citrifolia***
1. Midvein impressed or furrowed on upper surface; ovary 2-locular.
   2. Floral disk (including staminal ring and summit of ovary) glabrous; hypanthium glabrous or thinly pubescent with appressed and partly 2-branched hairs; plants never conspicuously pubescent, usually appearing glabrous to the unaided eye.
      3. Petioles (1.5-)2-3 mm thick, the outer layers soon becoming pale and corky, cracking and peeling; lateral veins ± impressed above; bracts indurate, persisting at least through flowering; floral disk 3-3.5 mm wide . . . . . ***M. antillana***
      3. Petioles usually <1.5 cm thick, without pale exfoliating layers; lateral veins not impressed; bracts falling before buds open; floral disk 1.5-2 mm wide.
         4. Leaves elliptic, usually ± rounded at base and prolonged at apex, 5-15 cm long; inflorescence slender and loosely flowered, peduncles and larger branches to 1.3 mm wide and usually terete . . . . . ***M. leptoclada***
         4. Leaves obovate, usually cuneate to acute at base and obtuse to rounded at apex, 3-6 cm long; inflorescence relatively stout, the flowers corymbosely clustered, peduncles and large branches 1.5-1.5 mm wide, often noticeably flattened . . . . . ***M. platyclada***
   2. Floral disk densely hairy; hypanthium densely pubescent (some persisting in fruit); plants usually appearing pubescent.
      5. Leaves minutely pebbled beneath, the veinlets depressed; inflorescence densely scurfy-pubescent with erect hairs intermingled with minute, pale, inflated hairs; calyx lobes pubescent on both sides . . . . . ***M. deflexa***
      5. Leaves smooth or with a raised reticulum of veinlets; inflorescence not scurfy-pubescent; hairs of hypanthium stiff, pale and appressed.
         6. Branchlets and inflorescence (incl. fruits) densely velvety pubescent with erect hairs; leaves obtuse or short-acuminate at apex; calyx lobes pubescent on both sides; disk 3-4 mm wide . . . . . ***M. ramageana***
         6. Branchlets and inflorescence thinly strigose to silky-pilose; fruits glabrous or sparingly strigose; leaves prominently and often narrowly acuminate; calyx lobes ± glabrous inside; disk 2-2.5 mm wide.
            7. Hairs of young growth grayish white, sparse, closely appressed; midvein glabrous above; petioles 4-7 mm long; leaves mostly acute to cuneate at base; fruit oblong-ellipsoid . . . . . ***M. fallax***
            7. Hairs of young growth yellowish white, usually abundant and conspicuous, some or many loosely spreading; midvein above with a line of upright bristly hairs; petioles 1-3(-4) mm long; leaves mostly rounded to ± cordate at base; fruit subglobose . . . . . ***M. splendens***

Myrcia antillana

Myrcia antillana McVaugh, 1973:311.
Myrcia edulis var. *dominicana* Krug & Urban in Urban, 1895:582.

Tree with dbh to 30 cm; leaves large (ours) to 24 cm × 11 cm, obtusely short-acuminate at apex, obtuse to rounded at base; inflorescence densely puberulous, flowers ± sessile; disk glabrous; fruit globose.

Guadeloupe, St. Lucia, St. Vincent; apparently uncommon in interior rainforests of Dominica at 300–450 m: Brantridge Estate (*Ernst 1199*), Deux Branches (*Hodge 3488*), Layou forests (*Ramage s.n.* at K, lectotype of var. *dominicana*). Flowering May–June.

Myrcia citrifolia

Myrcia citrifolia (Aublet) Urban, 1919c:150.

Couroupoume, kurupum, ianaua, taka-taka (Carib).

1. Leaf mostly elliptic, base rounded to obtuse, glossy-coriaceous and impressed-punctate above; inflorescence usually terminal with common peduncle short or wanting . . . . . ***M. citrifolia*** var. ***citrifolia***
1. Leaf usually obovate, base acute, not glossy; inflorescence axial with common peduncle > half the inflorescence length . . . . . ***M. citrifolia*** var. ***imrayana***

Myrcia citrifolia var. *citrifolia*

Myrtus citrifolia Aublet, 1775, 2(Index):20.
Eugenia paniculata Jacquin, 1789, Coll., 2:108.
Myrtus coriacea Vahl, 1791, 2:59, nom. illeg.
Myrcia coriacea A.P. Candolle, 1828, 3:243, nom. illeg.
Myrcia coriacea var. *swartziana* Grisebach, 1860:234.
Myrcia paniculata (Jacquin) Krug & Urban in Urban, 1895:577.

Shrub or small tree; branchlets scantily pubescent with 2-branched hairs; leaves to 8 cm × 5 cm, broad-elliptic to ± orbicular, base rounded to obtuse, apex rounded to obtuse, sometimes retuse; inflorescences pubescent, at terminal 1–2 nodes, the common peduncle short or lacking; disk glabrous; fruit globose, whitish, becoming red then black in maturity.

Hispaniola, Puerto Rico into South America; common in Dominica, mostly at lower elevations, particularly along the east coast: Bernard Estate at 630 m (*Wasshausen & Ayensu 360*), Cabrit Swamp (*Ernst 1175*), Calibishie (*Hodge 3151, 3158, 3159*), Carib Reserve (*Stehlé 6393, Taylor 10*), Dublanc (*Hodge 2526, Whitefoord 4301*), En Haut Jean at 800 m (*Whitefoord 5420*), La Chaudière (*Hodge 3591*), L'Anse Noire (*Ernst 1682, 1832, 1835, Wilbur 7520*), Layou Valley (*Ernst 1157*). Flowering February–June, fruiting June–August or later.

Myrcia citrifolia var. *imrayana*

Myrcia citrifolia var. *imrayana* (Grisebach) Stehlé in Stehlé et al., 1949, 3:57.
Myrcia coriacea var. *imrayana* Grisebach, 1860:234.

Shrub or small tree; branchlets appressed-pubescent to glabrous; leaves to 7 cm × 3.5 cm, obovate (rarely ± orbicular), base acute to obtuse, apex obtuse to rounded, rarely retuse; inflorescence with common peduncle to 6 cm long, lightly puberulent to glabrous; disk glabrous; mature fruit globose, blackish to reddish.

Puerto Rico to Grenada; in Dominica on mountains and coastal thickets: Anse du Me (*Wilbur 8303*), Boeri Lake (*Whitefoord 4164*), Capuchin (*Wasshausen & Ayensu 385*), Carib Reserve (*Hodge 3324*), Freshwater Lake (*Ernst 2176, Whitefoord 3818*), Grand Bay (*Wilbur 8010*), Morne Diablotins in elfin woodlands (*Whitefoord 4413, 5516*), Morne Nicholls (*Hodge 1949*), Morne Plat Pays (*Webster 13491*), Morne Trois Pitons (*Chambers 2663*), Petit Soufrière Bay (*Stern & Wasshausen 2469*), Roche Marqué (*Webster 13472*), sine loc. (*Imray 143* at K, type of var. *imrayana*), (*Imray 148* at K, syntype of var. *swartziana*). Flowering May–August, fruiting July–March.

The pubescence characters of branchlets and peduncles, traditionally used to separate infraspecific taxa of this species, do not seem to work well on our material. There is a great deal of exceedingly complex variation, which might make more sense in the field than in the herbarium. In any case, one should not be surprised if individual specimens are difficult to place.

Caribs use the fruits and leaves medicinally (Hodge and Taylor, 1957:593).

Myrcia deflexa

Myrcia deflexa (Poiret) A.P. Candolle, 1828, 3:244.
Eugenia deflexa Poiret in Lamarck, 1813, Encycl., Suppl., 3:124.
Myrcia duchassaingiana Berg, 1855:88.
Myrcia ferruginea sensu Grisebach, 1860:235, non (Poiret) A.P. Candolle [= *Marlieria ferruginea*].
Myrcia deflexa var. *dussii* Krug & Urban in Urban, 1895:588.

Bois dubarre.

Tree to 12 m; branchlets pubescent with erect hairs; leaves sometimes rather convex (like *Gomidesia*), elliptic-lanceolate, to 25 cm × 10 cm, acuminate to caudate at apex, rounded to cuneate at base, pubescent beneath particularly on the veins, the veinlets imbedded; inflorescences ± terminal, to 12 cm long, the flowers white, short-pedicelled; calyx lobes pubescent on both sides; disk densely pubescent; mature fruit globose, 1 cm wide and long.

Cuba to Amazonian lowlands; scattered in Dominica from 15–600 m: L'Anse Noire (*Ernst 1829*), Pont Cassé area (*Lloyd 767* at K, *Wilbur 7828*), South Chiltern (*Stern & Wasshausen 2498*), Sylvania (*Hodge 487, 488*), sine loc. (*Imray 71, 106, 261* at K). Flowering July, ripe fruit in July.

Myrcia fallax

Myrcia fallax (L. Richard) A.P. Candolle, 1828, 3:244.
Eugenia fallax L. Richard, 1792:110.
Myrcia berberis A.P. Candolle, 1828, 3:254.
Myrcia divaricata sensu Grisebach, 1860:234, non (Lamarck) A.P. Candolle.

Bois cravier, gin.

Tree to 13 m; petiole (4–)5–8 mm; leaves to 13 cm × 4 cm (usually smaller), acuminate, base acute, midvein with appressed pubescence above and below, impressed above; inflorescences with appressed pubescence; disk pubescent;

fruits reddish and becoming blue-black, ellipsoid to obovoid, often 2× longer than wide.

Puerto Rico, Lesser Antilles, and South America to Peru; interior of Dominica, mostly at mid- to upper elevations: Breakfast River (*Hodge 1894*), Laiou Forest (*Ramage s.n.*), Laudat to Freshwater Lake area (*Chambers 2687, Eggers 1042, Hodge 1833, 1894, Nicolson 4088, Smith 10294, Stern & Wasshausen 2566, Webster 13246, Wilbur 8253*), Pont Cassé (*Lloyd 778*), Rosehill near Morne Anglais (*Eggers 732*), South Chiltern (*Ernst 1856*), Sylvania (*Wilbur 7710*), Wallhouse Valley (*Eggers 453*). Flowering June–August, fruiting January–March.

The specimens from South Chiltern and Sylvania (both in bud) have remarkably large leaves, matched only by specimens from St. Lucia, which have extraordinarily large fruits (to 3 cm × 1 cm) that McVaugh (in Howard, 1989, 5:509) suggests may represent a distinct species.

Myrcia leptoclada

Myrcia leptoclada A.P. Candolle, 1828, 3:244.

Dji-pois, guépois.

Tree to 10 m with bark reddish, papery; leaves elliptic and widest at or slightly below middle, to 14 cm × 4 cm, acuminate at apex, base rounded to obtuse, pubescent along midrib above and below; inflorescence loose and thin-branched; flowers white; disk glabrous; fruits globose.

Central America, Hispaniola, Puerto Rico, Guadeloupe, Martinique, St. Vincent, Grenada, Trinidad; in Dominica, usually in drier areas: Carib Reserve (*Hodge 3265*), Glasham (*Nicolson 2091*), Salisbury (*Stern & Wasshausen 2588*). Flowering August–November.

Myrcia platyclada

Myrcia platyclada A.P. Candolle, 1828, 3:224.
Aulomyrcia dumosa Berg, 1861:656.
Myrcia dumosa (Berg) Krug & Urban in Urban, 1895:580.

Tree; leaves obovate-oblanceolate, widest beyond middle, to 10 cm × 4.5 cm, obtuse at apex, the base cuneate-attenuate; inflorescence stiff and erect; disk glabrous; fruit ± globose.

Guadeloupe to northeastern South America; in Dominican rainforests at 600 m: lower north slope of Trois Pitons (*Ernst 1808*). Flowering June.

Myrcia ramageana

Myrcia ramageana Krug & Urban in Urban 1895:586.

Small tree to 6 m with deep red heartwood; leaves elliptic, short-acuminate, base rounded, glossy above, to 10 cm × 4 cm; panicles ± terminal, densely pubescent, flowers ± sessile; calyx persistent, incurved in fruit, pubescent on both sides; disk densely pubescent; fruit globose, pubescent, ribbed, black in maturity.

St. Lucia; new record for Dominica, known only from Pont Cassé area ~500 m; path to Morne Couronne from Point Lolo (*Ernst 1981, Webster 13233*), road to Castle Bruce and Rosalie (*Stern & Wasshausen 2558*). Flowering June, fruiting late July.

Myrcia splendens

Myrcia splendens (Swartz) A.P. Candolle, 1828, 3:244.—McVaugh, 1958:659.
Myrtus splendens Swartz, 1788:89.
Eugenia divaricata Lamarck, 1789, 3:202.
Myrcia divaricata (Lamarck) A.P. Candolle, 1828, 3:243.

Petite feuille, 'ti feuille.

Tree to 12 m; leaves to 9 cm × 3 cm, lanceolate to ovate, rounded to ± cordate at base and acuminate, often caudate at apex, midvein impressed, usually bearing a line of erect hairs above; inflorescence loose, densely pubescent with spreading hairs, disk densely pubescent; fruits globose, pink but becoming black.

S. Mexico and adjoining countries, Antilles and northern South America to Amazonian Peru; in Dominican rainforests and dry woodlands from 15–525 m: Clarke Hall (*Gates Clark D-1, Ernst 1438, 1986, Stern & Wasshausen 2416*), Fond Hunte Estate (*Whitefoord 4336*), Imperial Road (*Narodny 3*), Milton (*Hodge 2589*), Mt. Joy (*Hodge 489, 1283*), Pont Cassé (*Lloyd 785*), South Chiltern (*Hodge 1497*), Springfield (*Ernst 1842*). Flowering February–August, fruiting April–July.

Pimenta Lindley

Pimenta racemosa

Pimenta racemosa (Miller) J.W. Moore, 1933:33.—Landrum, 1986:105.
Myrtus caryophyllata sensu Jacquin, 1767, 2:1, non Linnaeus.
Caryophyllus racemosus Miller, 1768.
Myrtus acris Swartz, 1788:79, nom. illeg.
Pimenta acris Kosteletzsky, 1835:1526, nom. illeg.
Amomis caryophyllata Krug & Urban in Urban, 1895:573, nom. illeg.

Bay tree, bay rum tree, black cinnamon; bois d'Inde, bois din, asuru, hasuru (Carib = peeled?).

Tree to 13 m; branchlets strongly and acutely angled; leaves aromatic with odor of lemon or citronella ("bay rum"), coriaceous and lustrous, elliptic to obovate, rounded to obtuse at apex, rounded to cuneate at base, to 13.5 cm × 6 cm, midvein impressed above; inflorescences 5–10 cm long, calyx lobes 5, densely pubescent within, disk pubescent; ovules 4–7 in each of 2 locules; fruits obovoid or ellipsoid, ~1 cm long, contracted to a thick neck beneath the flaring calyx.

Cuba?, Puerto Rico into South America (cultivated there and elsewhere); in Dominica often in coastal thickets to 450 m: Clarke Hall (*Ernst 1270*), Grand Bay (*Ernst 1069*), Harford (*Morden 6**), La Plaine (*Nicolson 2052**), Lisdara (*Cooper 187, Hodge 490, 2440**), Marigot (*Hodge 492*), Petite Soufrière Bay (*Stern & Wasshausen 2476*), Salybia (*Hodge 491, 3220*), West Cabrit (*Hodge 493, Smith 10324*), sine loc. (*Imray 268*).

Flowering March–May, fruiting July.

Our material is the typical variety (four other varieties on Hispaniola).

Leaves distilled to make bay rum. Entries marked with an asterisk (*) are reported by their collectors as cultivated. I am reasonably certain that the species is native here. Wood used to make clubs, pestles, and houses; leaves and fruits used to make a tea to cure stomach ache by Caribs (Hodge and Taylor, 1957:592). Adjanohoun et al. (1985:143, pl. 142) reported medicinal uses.

Landrum (l.c.) considered *Myrtus acris* Swartz (1788) to be an illegitimate renaming of *Myrtus caryophyllata* Linnaeus. Swartz, in his later work (to which his 1788 work was a prodromus), stated (1798:910) that he was excluding the Linnaean *M. caryophyllata* of the East Indies. However, he did include *Caryophyllus racemosus* Miller and I consider Swartz's name an illegitimate renaming of the latter.

Psidium Linnaeus

Psidium guajava

Psidium guajava Linnaeus, 1753:470.

Guava, goyave, gouyave, balikasi & kuiabu (white var.), balubui & ualiapa (red var.) (Carib).

Shrub or small tree with quadrangular branchlets; leaves elliptic, to 10 cm × 5 cm, obtuse at apex, rounded to obtuse at base, lateral veins 12–20 on each side of midvein, impressed above, raised below; inflorescence usually 1-flowered, pedicels 1–2 cm long; flowers large, to 2 cm across; fruit ± globose, 2–6 cm across, juicy and sweet or acid, many-seeded; seeds horse-shoe-shaped or reniform, embryo pimentoid (hooked or curved).

Native to New World, now widely cultivated and escaping; in Dominica common in coastal woods and lowlands, occasional at mid-elevations: Belleview (*Taylor 4*), Cabrit Swamp (*Hodge 494*), Carib Reserve (*Hodge 3350*), La Chaudière (*Hodge 3682*), Hatton Gardens (*Hodge 3059*), Laudat (*Lloyd 37*), Marigot (*Hodge 496*), Pointe Ronde (*Hodge 2751*), Pont Cassé (*Webster 7563*), Portsmouth (*Hodge 3746*), Sylvania (*Hodge 495, Wasshausen & Ayensu 394*).

An infusion of bark, root and leaves used by Caribs to treat diarrhea or intestinal chill (Hodge and Taylor, 1957:593). Adjanohoun et al. (1985:143, pl. 110) reported medicinal uses.

Syzygium Browne ex J. Gaertner

Syzygium aromaticum (Linnaeus) Merrill & Perry of the Moluccas, the source of cloves and clove oil, is cultivated near Roseau (*Nicolson 4142*). The hypanthium is cylindric, 1–1.5 cm long, with triangular calyx-lobes to 4 mm long; the leaves are short-acuminate at apex and tapering to base. I am much indebted to Miss Dulcie Powell, who provided me with a copy of Buée's account (1798) of the introduction of cloves on Dominica. He planted three clove trees imported from Cayenne in 1789 on his estate, Montpellier (unknown to me but apparently on the east side), and these produced cloves in 1795. In 1791 he bought 14 trees in Martinique. In 1793 he planted seeds and germinated 1500 seedlings. His experiments indicated that the trees did best in reddish or yellowish clays, where coffee and sugar did poorly. In addition, Mr. Buée reported importing breadfruit, cinnamon, black pepper, and other fruit trees from Mr. Anderson of the St. Vincent Botanic Garden. These represent some of the earliest documented plant introductions to Dominica.

Syzygium malaccense (Linnaeus) Merrill & Perry, the Malay apple, was collected in the Roseau Botanic Garden (*Hodge 3922, 3883*). It is native to SE Asia and has large leaves to 3 dm long, red flowers, and a pyriform fruit to 9 cm long.

Syzygium jambos

Syzygium jambos (Linnaeus) Alston, 1931:115.
Eugenia jambos Linnaeus, 1753:470.

Pomme rose, rose apple.

Tree to 20 m; leaves lanceolate, to 20 cm × 5 cm; inflorescence a terminal raceme to 2.5 cm long with 2–4 large, 4-merous flowers on pedicels to 1.5 cm long; fruit depressed-globose, to 4 cm long.

Native to Indo-Malayan region; used as windbreak and escaping in Dominica in lowlands: Clarke Hall (*Nicolson 1856*), Lisdara (*Hodge 486, 2432*), Mt. Joy (*Hodge 1264*), north of Portsmouth (*Wasshausen & Ayensu 359*), South Chiltern (*Ernst 1541*), Sylvania (*Cooper 37, Hodge 1165*). Apparently flowering and fruiting year around.

NYCTAGINACEAE

Several species of *Bougainvillea* Commerson ex Jussieu, armed and scrambling shrubs with alternate leaves and small flowers subtended by large, colorful bracts are cultivated pantropically, including Dominica, but no specimens have been seen.

Mirabilis jalapa Linnaeus, the four-o'clock, an unarmed herb with opposite leaves and bisexual flowers (opening in the evening) with large, white or magenta, trumpet-like perianths, is cultivated pantropically, including Dominica: Layou River valley near Hillsborough bridge (*Ernst 2181*), seen in Portsmouth (DHN!).

1. Herb; flowers bisexual . . . . . ***Boerhavia***
1. Shrub or tree; flowers unisexual . . . . . ***Pisonia***

Boerhavia Linnaeus

Boerhavia erecta Linnaeus was reported for Dominica by Vélez (1957:106). It has non-glandular fruits, red-punctate leaves and pink flowers. The record needs confirmation for Dominica.

1. Capitula many-flowered (4–20); inflorescences puberulous, sparingly branched, often with leafy bracts; leaf-margins glabrous or with small curved hairs and a few long, multicellular hairs . . . . . ***B. coccinea***
1. Capitula few-flowered (1–5); inflorescences glabrous, much branched, without leafy bracts; leaf-margins ciliate with long, multicellular hairs . . . . . ***B. paniculata***

Boerhavia coccinea

Boerhavia coccinea Miller, 1768.—Adams, 1972:260.
Boerhavia hirsuta Jacquin, 1770, 1:3, pl. 7, nom. illeg.
Boerhavia caribaea Jacquin, 1771, 4:5, nom. illeg.

Prostrate perennials with opposite leaves to 4 cm ×3.5 cm; flowers maroon.

Weed in New World and Africa; along dry west coast of Dominica: Batali (*Ernst 1297, 1408, Hodge 3806*), Morne Daniel in Roseau (*Hodge 3892*), Roseau Valley (*Lloyd 595*). Flowering and fruiting May.

Boerhavia paniculata

Boerhavia paniculata L. Richard, 1792:105.

Prostrate to decumbent perennials with opposite leaves to 7.5 cm × 5 cm; flowers maroon.

Pantropical weed; along dry west coast of Dominica: Batali (*Chambers 2793*), Cabrits (*Whitefoord 4017*), Canefield (*Hodge 468*), Grand Savanna (*Wilbur 7647*), Loubière (*Hodge 3870*), Pointe Ronde (*Hodge 2640*), Morne Bruce in Portsmouth (*Hodge 467*), Roseau (*Nicolson 2084*), Soufrière (*Lloyd 410*). Apparently flowering and fruiting all year.

Recent workers, e.g., Adams (1972:261), treated this as *Boerhavia diffusa* Linnaeus. However, Fosberg (1978:4–5) concluded that *B. diffusa* is endemic to Sri Lanka (possibly also southern India). Fosberg's chosen lectotype has been challenged (see Kellogg in Howard, 1988, 4:177) but not superseded, so the application of the name remains in question.

Adjanohoun et al. (1985:145, pl. 111) reported (as *B. diffusa*) medicinal uses.

Pisonia Linnaeus

1. Stems armed with recurved thorns; fruit stipitate-glandular . . . . . ***P. aculeata***
1. Stems unarmed; fruit eglandular.
   2. Leaves petiolate, thin-coriaceous, oblanceolate (to elliptic), to 12 cm long . . . . . ***P. fragrans***
   2. Leaves ± sessile, thick-coriaceous, orbicular (to oval), to 4 cm long . . . . . ***P. suborbiculata***

Pisonia aculeata

Pisonia aculeata Linnaeus, 1753:1026.

Dioecious, straggling shrub armed with decurved stipular thorns; fruit stipitate-glandular.

Pantropical; locally common in Dominica on dry west coast: Cabrit (*Nicolson 4206, Whitefoord 5764*), Grand Savanna (*Imray 30* at K). The Whitefoord specimen (East Cabrit) was in flower and fruit in April.

Stray fruits noted on *Hodge 3714* of *Pisonia fragrans* from the East Cabrit.

Pisonia fragrans

Pisonia fragrans Dumont de Courset, 1814, 7:114.—Kellogg in Howard, 1988, 4:185.
Pisonia obtusata Swartz, 1806:1069, non Jacquin.
Pisonia inermis Grisebach, 1859:71, partim, non Jacquin.
Torrubia fragrans (Dumont de Courset) Standley, 1916a:100.
Guapira fragrans (Dumont de Courset) Little, 1968:368.

Mapou.

Dioecious unarmed shrub or tree to 14 m; staminate perianth puberulent, to 5 mm long.

Neotropics; sometimes common on dry west or northeast coastal woodlands of Dominica to 200 m; Batali River (*Webster 13173, 13182*), Cabrits (*Hodge 3714, Webster 13312*), Grand Savanna (*Ernst 1038, 1638*), Hatton Garden-Salybia (*Hodge 3046, 3085, 3224*), L'Anse Noire (*Ernst 1833*), Loubière (*Hodge 3794*), Petit Coulibri (*Whitefoord 4664, 6038*), Woodford Hill (*Nicolson 4241*). Flowering April–June, fruiting May–July.

Pisonia suborbiculata

Pisonia suborbiculata Hemsley ex Duss, 1897:62.—Kellogg in Howard, 1988, 4:186.
Torrubia suborbiculata (Duss) Britton, 1904:613.
Guapira suborbiculata (Duss) Lundell, 1968:84.

Dioecious unarmed shrub or tree with small, orbicular leaves.

Martinique and St. Lucia; perhaps rare on Dominica in dry woodlands of west coast: Grand Savanna (*Stern & Wasshausen 2456*). Flowering and fruiting July.

NYMPHAEACEAE

(by R. DeFilipps)

Nymphaea Linnaeus, nom. cons.

Species with nocturnal flowers, *Nymphaea rudgeana* Meyer (with sinuate-dentate leaves) and *N. amazonum* Martius & Zuccarini (with entire leaves), occur on both Guadeloupe and Martinique.

The Asian crimson-red waterlily, *Nymphaea rubra* Roxburgh ex Salisbury, was recently collected at Canefield Estate (*Whitefoord 5509*).

Nymphaea ampla

Nymphaea ampla (Salisbury) A.P. Candolle, 1821, 2:54.
Castalia ampla Salisbury, 1805, 1, notes to pl. 14.

White waterlily.

Aquatic herb; leaves black-mottled below; flowers diurnal.

Neotropics to subtropics; attributed to Dominica by Vélez (1957:106) on the authority of Stehlé. No collections seen.

OCHNACEAE

(by C. Sastre)

1. Shrub or treelet; stipules entire; flowering in terminal panicles; petals yellow; fruit of 1-5 carpel on a torus . . . . . ***Ouratea***
1. Herb; stipules laciniate; flowers (1-3) in axillary bostryches; petals white; fruit a capsule . . . . . ***Sauvagesia***

Ouratea Aublet, nom. cons.

Ouratea guildingii (Planchon) Urban (*"Guildingi"*), with serrate leaves to 10 cm long, has been collected in the Roseau Botanic Garden (*Whitefoord 6122*).

Ouratea ilicifolia (A.P. Candolle) Baillon, with spiny *Ilex*-like leaves, occurs only in the Greater Antilles. The citation for the type locality and other specimens cited by Dwyer (1944:130) as "Dominica" is an error for the Dominican Republic (Hispaniola).

Ouratea longifolia

Ouratea longifolia (Lamarck) Engler in Martius, 1876, 12(2):316.
Ochna longifolia Lamarck, 1798, Encycl., 4:511.
Gomphia longifolia (Lamarck) A.P. Candolle, 1811:417.

Bois perdrix.

Tree to 9 m; leaves entire, elliptic, 20-40 cm long; flower yellow; immature fruits with green carpels and a spherical, red torus, mature fruits with red carpels and black torus.

Guadeloupe; in northern rainforest of Dominica, 100-450 m: Borne (*Webster 13485*), Dleau Gommier (*Nicolson 4059*), Hampstead River (*Hodge 3667*), La Chaudière (*Hodge 3667*), Morne Aux Diables (*Nicolson 1930*), Riversdale (*Howard 11765*). Fruiting May-June.

Sauvagesia Linnaeus

Sauvagesia erecta

Sauvagesia erecta Linnaeus, 1753:203.

Suffrutescent herb to 60 cm; leaves to 6 cm long; stipules conspicuous, laciniate; flowers white.

Tropical America and Africa; on Dominica common in open and wet places along roads and disturbed areas in rainforest, 30-850 m: Castle Bruce Road (*Cowan 1611*), Freshwater Lake-Laudat area (*DeFilipps 145, Lloyd 52, Nicolson 1832, Smith 10217, Wilbur 7453*), La Chaudière (*Hodge 3650*), Lisdara (*Hodge 480*), Mantipo River (*Hodge 479*), Marigot (*Hodge 478*), Morne Plat Pays (*Hodge 1709*), Pont Cassé area (*Chambers 2720, Ernst 1192, Wilbur 7735*), Ridgefield Estate (*Hodge 2211*), Sylvania (*Cooper 3*), Syndicate (*Whitefoord 3509*).

Only the typical subspecies is found on Dominica. The other, *Sauvagesia erecta* subsp. *brownei* (Planchon) Sastre (1971:21), is restricted to Cuba, Jamaica, and Belize. Adjanohoun et al. (1985:145, pl. 112) reported medicinal uses of a decoction.

Bornstein (in Howard, 1989, 5:300) disagreed with me (Sastre, 1971:5, 27) about the typification.

OLACACEAE

(by R. DeFilipps)

1. Thorns usually present; inner petal surface pilose; stamens 8, anthers linear . . . . . ***Ximenia***
1. Thorns absent; inner petal surface glabrous or villous only at base; stamens 4, 5 or 10, anthers ovoid or globose.
   2. Calyx greatly enlarged in fruit; petals free; ovary superior; stamens 10 . . . . . ***Heisteria***
   2. Calyx not enlarged; petals united > half way; ovary half-inferior; stamens 4 or 5 . . . . . ***Schoepfia***

Heisteria Jacquin, nom. cons.

Heisteria coccinea

Heisteria coccinea Jacquin, 1760:20; 1763:126, pl. 81.—Sleumer, 1984:55.

Bois perdrix.

Small tree; flowers in 1-few-flowered fascicles; pedicels glabrous; fruiting calyx red, spreading to 2.5 cm; fruit a drupe.

Guadeloupe, Martinique, and Venezuela; occasional in Dominican rainforests, 340-800 m: Carib Reserve (*Hodge 3249*), Castle Bruce (*Beard 626, Cowan 1603*), Deux Branches (*Ernst 1674*), En Haut Jean (*Nicolson 2162, Webster 13514*), Glasham (*Nicolson 2118*), Layou River Road (*Cowan 1629*), Mosquito Mountain (*Webster 13567*), Newfoundland (*DeFilipps 187*), Point Lolo (*Chambers 2515, Webster 13378*), Sylvania (*Hodge 648, 1040*).

Schoepfia Schreber

Schoepfia schreberi

Schoepfia schreberi Gmelin, 1791:376.—Sleumer, 1984:29.
Codonium arborescens Vahl in Rohr & Vahl, 1792:207.
Schoepfia americana Willdenow, 1798, 1(2):996, nom. illeg.
Schoepfia arborescens (Vahl) Schultes in Roemer & Schultes, 1819, 5:160.—Grisebach, 1860:310.

Shrub or small tree; flowers in 1-4-flowered fascicles; corolla lobes villous at point of insertion of sessile anthers; fruit a drupe.

Northern neotropics; dry west coast of Dominica: Cabrits (*Whitefoord 5252*), Dublanc (*Whitefoord 5027*). Fruiting in January.

Ximenia Linnaeus

Ximenia americana

Ximenia americana Linnaeus, 1753:1193.—Sleumer, 1984:89.

Usually thorny shrub or small tree; flowers in simple or compound fascicles of 1-many flowers; petal hairs white when fresh, orange when dry; ovary superior; fruit an edible drupe.

Tropics and subtropics; new record for Dominica, infrequent on dry west coast: Colihaut (*Wilbur 8276*). Fruiting in August.

Our specimen is of the typical variety.

OLEACEAE

Noronhia emarginata (Lamarck) Du Petit-Thouars, French kenip, was cultivated in the Roseau Botanic Garden (*Hodge 3948*).

1. Calyx inconspicuous, ~2 mm long; petals united only at base, lobes linear . . . . . ***Chionanthus***
1. Calyx conspicuous, with linear lobes ~1 cm long; petals united half their length, lobes 6–9, broad . . . ***Jasminum***

Chionanthus Linnaeus

Dominican specimens are often misdetermined as *Chionanthus (Linociera) domingensis*, which has a glabrous and 1/2–3/4 united calyx.

With reluctance I disagree with Dr. Stearn (1977) and restore the original feminine gender of this generic name.

1. Petals margins inrolled, 0.3 mm wide; stamens tipped with an elongate apiculum . . . . . ***C. compacta***
1. Petals flat, 1.5 mm wide; stamens tipped with a globular gland . . . . . ***C. dussii***

Chionanthus compacta

Chionanthus compacta Swartz, 1788:13.—Stearn, 1977:356.
Chionanthus caribaea Jacquin, 1789, Coll., 2:110, pl. 6: fig. 1.
Linociera compacta (Swartz) R. Brown ex G. Don, 1837, 4:52.
Mayepea caribaea (Jacquin) Kuntze, 1891, 1:411.
Linociera caribaea (Jacquin) Knoblauch, 1895:87.—Little et al., 1974:820, pl. 661.

Bois fer blanc.

Shrub or tree to 6 m (dbh to 6 cm); leaves ovate-lanceolate, attenuate; flowers white, mildly aromatic; fruits black, 1.5 cm × 1 cm.

Guatemala, Hispaniola, Puerto Rico through the Lesser Antilles into northern S. America; in Dominica on slopes above coasts: Fond Hunte Estate (*Whitefoord 4444*), Grand Savanne (*Stern & Wasshausen 2452*), Grand Bay (*Ernst 1067*), Petit Soufrière Bay (*Stern & Wasshausen 2478*), Wallhouse (*Eggers 863*). Flowering April (south coast), July (east coast), October (Fond Hunte), December (Wallhouse) and fruiting July (Grand Savanne).

Chionanthus dussii

Chionanthus dussii (Krug & Urban) Stearn, 1977:357.
Mayepea dussii Krug & Urban in Urban, 1892:347.
Linociera dussii (Krug & Urban) Knoblauch, 1895:87.—Camp & Monachino, 1939:223.

Similar to preceding species except in key characters.

Martinique; in Dominica (new record) without locality): *Fishlock 15*. The specimen flowered in 1915 but no month is mentioned. Fruiting material, such as cited under the preceding species, cannot yet be placed with certainty without flowers.

Jasminum Linnaeus

Jasminum fluminense Vellozo and *Jasminum sambac* (Linnaeus) Aiton are reported as cultivated on Dominica by Howard (1989, 6:81–83).

Jasminum multiflorum

Jasminum multiflorum (N. Burman) Andrews, 1807.
Nyctanthes multiflora N. Burman, 1768:5, pl. 3: fig. 1.
Nyctanthes pubescens Retzius, 1788, 5:9.
Jasminum pubescens (Retzius) Willdenow, 1797, 1:37.

Trailing shrub; stems pubescent; leaves simple, ~5 cm × 3 cm; flowers white, showy; calyx lobes pubescent.

Introduced from Asia; cultivated and occasionally escaping(?) in Dominica: Carib Reserve (*Hodge 3315*), Massacre (*Whitefoord 4636*), Point Baptiste (*Hodge 3134*), Sylvania (*Howard 11776*), cult. Roseau (DHN!).

ONAGRACEAE

Ludwigia Linnaeus

1. Sepals 5; seeds in single rows (uniseriate) in each locule and embedded in endocarp . . . . . ***L. leptocarpa***
1. Sepals 4, rarely 5; seeds of at least upper 1/4 of capsule irregularly massed (multiseriate) in each locule and not embedded in endocarp.
   2. Seeds of upper capsule multiseriate and not embedded, those of lower portion uniseriate and embedded; pollen in single grains . . . . . ***L. hyssopifolia***
   2. Seeds all multiseriate and not embedded in endocarp; pollen in tetrads.
      3. Capsule 4-angled, <2 cm long; raphe of seed linear, 1/5 or less the seed diameter . . . . . ***L. erecta***
      3. Capsule terete, 1.7–4.5 cm long; raphe of seed inflated, finely transversely ridged, equaling the seed diameter . . . . . ***L. octovalvis***

Ludwigia erecta

Ludwigia erecta (Linnaeus) Hara, 1953:292.—Ramamoorthy & Zardini, 1987:96.
Jussiaea erecta Linnaeus, 1753:388.

Suffruticose herb to 3 m; petals yellow, 3.5–5 mm long.

Neotropical weed, introduced elsewhere; Dominica in wet places: Cabrit swamp (*Whitefoord 4061*), Canefield (*Ernst 1900*).

Ludwigia hyssopifolia

Ludwigia hyssopifolia (G. Don) Exell in Fernandez & Fernandez, 1957:471.
Jussiaea hyssopifolia G. Don, 1832, 2:693.

Herb to 1 m; petals yellow, 2–3 mm long.

Pantropical weed; common in Dominica along wet roadsides to 550 m: Layou River mouth (*Ernst 2155*), Pont Cassé (*Ernst 1237*), Ravine Deux Dleau (*Ernst 1902*).

Ludwigia leptocarpa

Ludwigia leptocarpa (Nuttall) Hara, 1953:292.
Jussiaea leptocarpa Nuttall, 1818, 1:279, "*Jussieua.*"

Suffruticose herb with petals yellow, 5–11 mm long.

Pantropical weed; only once collected in Dominica, reported as common in wet meadow: Londonderry Estate (*Chambers 2694*).

Ludwigia octovalvis

Ludwigia octovalvis (Jacquin) Raven, 1962:476.
Jussiaea suffruticosa Linnaeus, 1753:388, non *Ludwigia suffruticosa* T. Walter.
Oenothera octovalvis Jacquin, 1760:19.
Jussiaea angustifolia Lamarck, 1789, 3:332.
Jussiaea ligustrifolia Kunth, 1823, 6:100.
Jussiaea suffruticosa var. *ligustrifolia* (Kunth) Grisebach, 1860a:187.

Suffruticose herb to 4 m; petals yellow, 3–17 mm long.

Pantropical weed; common in Dominica in wet, disturbed areas to 780 m: Balata (*Nicolson 2013***), Breakfast River (*Hodge 1899*), Cabrit swamp (*Hodge 461**, *Whitefoord 4063**), Canefield (*Whitefoord 6095*), Clarke Hall (*Ernst 1882***, *Webster 13195***), Deux Branches (*Hodge 3468***), Dleau Gommier (*Clarke D-10***), Gommier (*Ernst 1992**), Hungry Hill Estate (*Whitefoord 4478**), La Chaudière (*Hodge 3631*), Laudat (*Hodge 1767, Lloyd 220*), Layou River mouth (*Ernst 1937**), L'Imprévue (*Narodny s.n.**), Londonderry (*Chambers 2693***), Pont Cassé (*Ernst 1238***, *Wilbur 7560**), Syndicate (*Hodge 2714, Whitefoord 3587**), Sylvania (*Cooper 68**, *Hodge 462, 463**).

Two subspecies on Dominica were differentiated by Raven (1964:357): plants with erect hairs and (often) subovate leaves are *Ludwigia octovalvis* subsp. *sessiliflora* (Micheli) Raven (1962:476); plants with hairs absent or appressed and leaves lanceolate-linear are subsp. *octovalvis*. In Dominican material the variation in pubescence can be seen but nothing approaching subovate leaves. Collections (US) marked with "*" are regarded as subsp. *sessiliflora* and those with "**" as subsp. *octovalvis*.

OXALIDACEAE

Averrhoa carambola Linnaeus, the star fruit, a tree with sour, five-ridged fruits has been collected in the Roseau Botanic Garden (*Hodge 970*).

Oxalis Linnaeus

Oxalis insipida St. Hilaire (*Hodge 3940*, distributed as *O. dispar* N.E. Brown) was cultivated in the Roseau Botanic Gardens, a shrub with leaflets ~6 cm long. Lourteig (pers. comm.) regards this as a subspecies of *O. psoraleoides*.

1. Leaves pinnately 3-foliolate; leaflets with apex entire to slightly emarginate.
   2. Cyme 2-forked, each fork elongating; stem without prominent leaf-scars; petals white to pink (sometimes yellow?) . . . . . ***O. barrelieri***
   2. Cymes fasciculate (± umbellate); stem with prominent leaf-scars; petals yellow . . . . . ***O. frutescens***
1. Leaves palmately 3-foliolate; leaflets distinctly bilobed at apex.
   3. Plants caulescent; flowers yellow; sepals without apical glands . . . . . ***O. corniculata***
   3. Plants acaulescent from underground bulbs; flowers pink; each sepal with 2 apical glands (calluses) . . . . . ***O. debilis***

Oxalis barrelieri

Oxalis barrelieri Linnaeus, 1762:624.—Lourteig, 1975:456.
Lotoxalis barrelieri (Linnaeus) Small in North Amer. Fl., 1907, 25(1):49.

Erect herb; leaflets to 4.5 cm long; petal limbs white to pink, throat yellow.

Neotropical but now widely scattered; a common weed on Dominica to 500 m: Cabrits (*Nicolson 1905, Smith 10331*), Canefield (*Hodge 455*), Clarke Hall ridge (*Webster 13191*), La Chaudière (*Hodge 3613*), Laudat (*Hodge 2056*), Lisdara (*Hodge 2331*), Roseau (*Hodge 454*), South Chiltern (*Ernst 1123, Hodge 1469*), Sylvania (*Hodge 1110, 1136*), Syndicate (*Whitefoord 3511, 4464*), Wallhouse (*Eggers 572*).

Oxalis sepium St. Hilaire was reported from Dominica by Grisebach (1860:133), based on an Imray specimen (non vidi). Lloyd field notes (NY) indicate that he collected this from Roseau (*Lloyd 928*) and Soufrière (*Lloyd 423, 430, 456*) but the specimens could not be located (NY). This species should be very similar to *O. barrelieri;* indeed Veldkamp (in Steenis, 1971, 7:155) makes it a synonym. However, it is supposed to have yellow flowers and *O. barrelieri* is supposed to have pink flowers with a yellow center. We have one collection from Dominica described with "petals orange-yellow" (*Smith 10331*). From Lourteig annotations (US) I judge that *O. sepium* has fallen into synonymy of *O. barrelieri* and that *O. barrelieri* also has yellow flowers but remain uncertain.

Oxalis corniculata

Oxalis corniculata Linnaeus, 1753:435.—Eiten, 1955:99.—Lourteig, 1979:98.
Oxalis repens Thunberg, 1781:6, 16, pl. 1.
Xanthoxalis corniculata (Linnaeus) Small, 1903:667.

Spreading and creeping herb; petals yellow.

Cosmopolitan weed; along roads and in gardens of Dominica: Ridgefield Estate (*Hodge 2158*), Roseau (*Ernst 2147, Hodge 458*).

The Ernst specimen, with a diminutive and reddish aspect, was annotated by Lourteig as "*Oxalis corniculata* L. var. *atropurpurea* Planchon attacked by fungus."

Oxalis debilis var. *corymbosa*

Oxalis debilis Kunth var. *corymbosa* (A.P. Candolle) Lourteig, 1980:840.
Oxalis corymbosa A.P. Candolle, 1824, 1:696.—Denton, 1973:580.
Oxalis martiana Zuccarini, 1825:144.
Ionoxalis martiana (Zuccarini) Small, 1903:665.

Herb from small, scaly bulbs; leaflets obcordate; sepals with 2 orange, apical glands (calluses); petals pink.

Neotropical but widely cultivated and escaping; in Dominica in shade at mid-elevations: Fond Baron Estate (*Ernst 1614*), Lisdara (*Hodge 2465*), Ridgefield Estate (*Hodge 2207*), Roseau Valley (*Lloyd 813*), Sylvania (*Cooper 21, Hodge 453*).

Oxalis frutescens

Oxalis frutescens Linnaeus, 1753:435.—Lourteig, 1975:461.
Lotoxalis frutescens (Linnaeus) Small in North Amer. Fl., 1907, 25(1):47.

Woody subshrub to 7.5 dm; stem branched near top, with prominent leaf-scars; flowers yellow.

Neotropics; in dry scrub along central western coast of Dominica: Fonde Hunte Estate (*Whitefoord 4453*), Gabriel (*Wilbur 8231*), Grand Savanne (*Stern & Wasshausen 2450*), Mero (*Chambers 2777*), Picard Estate (*Kimber 902*), Tarou Cliffs (*Ernst 1705, Webster 13275*).

PAPAVERACEAE

1. Plant spiny; petals present, yellow; seeds numerous . . . . . ***Argemone***
1. Plant unarmed; petals absent; seed 1 . . . . . ***Bocconia***

Argemone Linnaeus

Argemone mexicana

Argemone mexicana Linnaeus, 1753:508.

Spiny herb to 1 m; sap yellow, leaves mottled, major veins whitish; inflorescences few-flowered; petals yellow.

Cosmopolitan weed; in Dominica in dry scrub woodland along west coast to 180 m: Coulibistri (*Ernst 1403, 1657*), West Cabrit (*Hodge 3707, Whitefoord 3981*).

Bocconia Linnaeus

Bocconia frutescens

Bocconia frutescens Linnaeus, 1753:505.

Glaucous herbaceous shrub to 10 m; sap reddish; inflorescences many-flowered; petals none.

Neotropics; in disturbed places of southwest Dominica: Grand Bay (*Eggers 615*), Laudat (*Lloyd 354*), Morne Acouma (*Nicolson 1999*), near Soufrière village (*Ernst 1346*), South Chiltern (*Hodge 1644*).

PASSIFLORACEAE

Passiflora multiflora Linnaeus, of Costa Rica and Greater Antilles, was cited for Dominica by Grisebach (1860:291), based on Linnaeus' citation of the type locality as "Dominica." The type locality is surely the Dominican Republic in Hispaniola, as concluded by Killip (1938:77).

Passiflora vitifolia Kunth, with large, scarlet flowers and 3-lobed leaves, was cultivated at Lisdara Estate (*Hodge 2418*).

Passiflora Linnaeus

1. Petioles glandular.
   2. Leaves unlobed.
      3. Stems terete; stipules small, setaceous . . . . . ***P. laurifolia***
      3. Stems quadrangular, winged; stipules large . . . . . ***P. quadrangularis***
   2. Leaves lobed (individual leaves sometimes unlobed).
      4. Leaves 5-7-lobed . . . . . ***P. serratodigitata***
      4. Leaves 3-lobed.
         5. Leaf margins serrate; bracts and petals present . . . . . ***P. edulis***
         5. Leaf margins entire; bracts and petals absent . . . . . ***P. suberosa***
1. Petioles eglandular.
   6. Stipules and floral bracts pinnatisect . . . . . ***P. foetida***
   6. Stipules setaceous; floral bracts setaceous or absent.
      7. Plants pubescent.
         8. Leaves with glands beneath, apex shallowly 3-lobed, base truncate to obtuse; seeds with rugulose transverse ridges . . . . . ***P. rotundifolia***
         8. Leaves without glands beneath, apex 2-lobed, base cordate; seeds with smooth transverse ridges . . . . . ***P. rubra***
      7. Plants glabrous.
         9. Sepals 1-2 cm long; corona with 2 series of filaments . . . . . ***P. andersonii***
         9. Sepals 2.5-3.7 cm long; corona with 1 series of filaments . . . . . ***P. stenosepala***

Passiflora andersonii

Passiflora andersonii A.P. Candolle, 1828, 3:326.—Bornstein in Howard, 1989, 5:372.
Passiflora biflora sensu Grisebach, 1860:293, non Lamarck.

Trois quarts.

Plants glabrous; petiole glandless; leaves shallowly 3-lobed; peduncle 2-5 cm long, articulate near the flower; ovary glabrous to pubescent.

Lesser Antilles; in Dominica in coastal thickets and disturbed rainforest to 650 m: Bernard Estate (*Wasshausen & Ayensu 372*), Carib Reserve (*Hodge 3348, Stehlé 6415*), Delices (*Whitefoord 3771*), L'Anse Noire (*Ernst 2078*), Morne Plaisance (*Whitefoord 5899*), Point Lolo (*Webster 13379*), Salisbury (*Whitefoord 4517*), sine loc. (*Imray s.n.*).

A decoction of this is used by Caribs to induce lactation (Hodge and Taylor, 1957:590).

Passiflora edulis

Passiflora edulis Sims, 1818.

Passion fruit.

Plants glabrous; petiole biglandular at apex; leaves 3-lobed to middle or below, serrate, membranous; ovary glabrous or pubescent; fruit to 5 cm long.

Neotropics; probably introduced in Dominica for ornament or fruits and naturalizing: Clarke Hall (*Wasshausen & Ayensu 309*), Mt. Joy (*Hodge 911*), seen in fruit 5 Jun 1977 at Fort Shirley (DHN!).

Adjanohoun et al. (1985:155, pl. 121) reported fruit juice used against hypertension.

Passiflora foetida var. *hispida*

Passiflora foetida var. *hispida* (Triana & Planchon) Killip in Gleason, 1931:408.—Killip, 1938:494.
Passiflora hispida A.P. Candolle ex Triana & Planchon in A.P. Candolle, 1873, 17:172.

Mariguja, marie goucha, merekuia, le meku ("monkey's genitals," Carib).

Stems hispid; petioles glandless; leaves appressed hispid-hirsute, 3(-5)-lobed, margins ± entire or remotely denticulate, ciliate with glandular hairs; ovary glabrous.

West Indies, South America, Old World tropics; in Dominica in disturbed areas 400-700 m: Morne Trois Pitons (*Ernst 1234*), Ridgefield (*Hodge 2125*), Roseau Valley (*Lloyd 549*), Salybia (*Hodge 3193*).

The fruit is eaten by Caribs, the leaves are used to make a tea for colds and to bathe the sick (Hodge and Taylor, 1957:589).

Killip (1938:474-512) recognized 37 varieties in this species, of which three occur in the Lesser Antilles, this one with glabrous ovaries, while vars. *foetida* and *gossypiifolia* have pubescent ovaries.

Passiflora laurifolia

Passiflora laurifolia Linnaeus, 1753:956.—Killip, 1938:365.

Water lemon, pomme de liane, merekuia (Carib, cf. Tupi marakuya).

Plants glabrous; petiole biglandular at apex; leaves ovate-oblong, to 12 cm long, entire, coriaceous; ovary pubescent; fruit to 8 cm long.

Cultivated in neotropics for fruit and flowers; probably native in Dominica on eastern and northern coastal bluffs: Anse du Me (*Hodge 3736*), Calibishie (*Hodge 3162*), Hampstead River (*Nicolson 4235*), Hatton Garden (*Hodge 2945*), Petite Soufrière Bay (*Stern & Wasshausen 2481*), Roseau Botanic Garden (*Fairchild s.n.*), Walkers Rest (*Chambers 2776*), Woodford Hill (*Ernst 1551*).

Caribs eat fruits and peel the stems for basketry (Hodge and Taylor, 1957:589).

Passiflora quadrangularis

Passiflora quadrangularis Linnaeus, 1759a:1248.

Barbadine, granadilla.

Plants glabrous; stems 4-angled, the angles winged; stipules foliaceous, persistent; petioles 6-glandular at apex, the glands in pairs; leaves unlobed, broadly oblong, to 15 cm × 20 cm; fruit to 30 cm long.

Neotropics; cultivated and escaping in Dominica: Milton Estate (*Hodge 2772*), waterfall below Laudat (*Hodge 2002*), Ridgefield Estate (*Hodge 2165*).

Adjanohoun et al. (1985:155, pl. 122) reported external medical use of the leaves.

Passiflora rotundifolia

Passiflora rotundifolia Linnaeus, 1753:957.

Plants puberulent; petioles glandless; leaves ± orbicular, obtuse below, repand or emarginate above, entire; corona with 2 series of filaments; ovary pubescent.

Lesser Antilles; in interior forests of Dominica to 850 m: Morne Micotrin (*Ernst 1091*), without locality (*Imray s.n.* at GH).

This is part of the complex including *P. andersonii* and *P. stenosepala*.

Passiflora rubra

Passiflora rubra Linnaeus, 1753:956.—Killip, 1938:217.

Passion flower, pomme de liane zombie, trois quarts.

Plants puberulent; petioles glandless; leaves without glands beneath, bilobed, entire, the middle lobe usually suppressed, the base cordate.

West Indies and northern South America; in Dominica in moist or dry forest to 550 m: Bataka (*Stehlé 6371*), Carholm

Estate (*Ernst 1938*), Layou Village (*Ernst 1987*), Roseau Valley (*Lloyd 553*), Salybia (*Hodge 3284*), South Chiltern (*Stern & Wasshausen 2526*), Sylvania (*Hodge s.n., Nicolson 1870*), without locality (*Taylor 127*).

A decoction is used by Caribs to induce lactation (Hodge and Taylor, 1957:590).

Passiflora serratodigitata

Passiflora serratodigitata Linnaeus, 1753:960.—Killip, 1938:341.
Passiflora serrata Linnaeus, 1759a:1248.

Feuille carapate.

Plants glabrous; petioles 4-glandular; leaves 5–7-lobed below the middle, the margins serrulate.

West Indies, South America; in Dominican lowland forests: Layou (*Ramage s.n.* at BM), Hatton Garden (*Hodge 2946*), without locality (*Imray 96* at K).

Passiflora stenosepala

Passiflora stenosepala Killip, 1938:145.

Plants glabrous; petioles glandless; leaves truncate to shallowly 3-lobed, rounded to truncate at base; coronal filaments in 1 series.

St. Lucia and Dominica; in Dominican lowlands: La Chaudière (*Hodge 3589*), without locality (*Imray 270*, photo from K).

Closely related to *P. andersonii*, as noted by Bornstein (in Howard, 1989, 5:385).

Passiflora suberosa

Passiflora suberosa Linnaeus, 1753:958.—Killip, 1938:88.
Passiflora minima Linnaeus, 1753:959.
Passiflora angustifolia Swartz, 1788:97.
Passiflora hederacea Cavanilles, 1790, 10:448.
Passiflora lineariloba J. Hooker, 1851:222.
Passiflora villosa Macfadyen [1837, 2:151, nom. invalid. (printed but not distributed)] ex Grisebach, 1860:291.
Passiflora suberosa var. *minima* (Linnaeus) Masters, 1871:630.
Passiflora suberosa var. *angustifolia* (Swartz) Masters, 1871:630.
Passiflora suberosa var. *hederacea* (Cavanilles) Masters, 1871:630.
Passiflora suberosa var. *lineariloba* (J. Hooker) Masters in Martius, 1872, 13(1):579.

Passion flower, wild water-lemon.

Petiolar glands 2, stipitate; leaves ciliate or not, shape extremely variable, from entire to deeply 3-lobed, margins entire; floral bracts and petals absent; ovary glabrous.

Neotropics; in Dominica in moist to dry woodlands to 300 m: Cabrit (*Nicolson 1889, Smith 10323*), Clarke Hall (*Ernst 1265*), Deux Granges (*Nicolson 2095*), Hatton Garden (*Hodge 3082*), Salybia (*Hodge 3082, Stehlé 6411*).

PHYTOLACCACEAE

1. Ovary of 9–16 united carpels, ribbed when dry . . . . . ***Phytolacca***
1. Ovary of 1 carpel with 1 seed.
   2. Flowers sessile or ± sessile (pedicel to 1.5 mm); fruit dry, with hooked awns or tubercles.
      3. Inflorescence short, ~4 cm; fruit globoid, tuberculate, spreading from inflorescence axis . . . . . ***Microtea***
      3. Spikes elongate, to 40 cm; fruit linear, with hooked awns, appressed to inflorescence axis . . . ***Petiveria***
   2. Flowers on pedicels >3 mm long; fruit fleshy, smooth.
      4. Annual shrub; stamens 4; tepals erect in fruit . . . . . ***Rivina***
      4. Woody vine; stamens 8–12; tepals deflexed in fruit . . . . . ***Trichostigma***

Microtea Swartz

Microtea debilis

Microtea debilis Swartz, 1788:53.

Demoiselle.

Herb to 5 cm; fruits to 1.5 mm long, tuberculate.

Neotropics; in Dominica a roadside weed in moist areas to 600 m: Carib Reserve (*Hodge 3376*), Grand Bay (*Ernst 1072*), Grand Savanna (*Ernst 2122*), Petit Coulibri (*Whitefoord 4678*), Pont Cassé (*Webster 13457a*), Portsmouth garden weed (DHN!), South Chiltern (*Hodge 1624*), Soufrière (*Lloyd 402*), sine loc. (*Eggers 563*).

Reported as used to make a medicinal tea by Caribs (Hodge and Taylor, 1957:556) but misidentified (*Hodge 3376*) as *Rivina humilis*. Adjanohoun et al. (1985:157, pl. 123) reported similar medical uses.

Petiveria Linnaeus

Petiveria alliacea

Petiveria alliacea Linnaeus, 1753:342.

Kudjuruk or cojorok (patois), emeruaiuma, lemuru (Carib).

Perennial herb to 1.5 m with garlic odor; achenes armed with 4 deflexed awns, appressed to axis.

Neotropics; in Dominica a weed in disturbed lowlands: Clarke Hall (*Chambers 2708, Ernst 1690, Stern & Wasshausen 2392*), Colihaut (*Wilbur 8120*), Petit Coulibri (*Whitefoord 4660*), Salybia (*Hodge 3194*).

Used by Caribs as a charm and medicine (Hodge and Taylor, 1957:556). Adjanohoun et al. (1985:157, pl. 124) reported similar uses.

Phytolacca Linnaeus

Phytolacca rivinoides

Phytolacca rivinoides Kunth & Bouché in Link, Kunth & Bouché, 1849:15.

Pokeweed, z'oreilles mulatre, tarikai (Carib).

Herb with loose racemes; carpels 10–16; tepals deciduous; fruits becoming dark purple.

Neotropics; in Dominica a weed to 550 m: Bellevue (*Taylor 26*), Deux Branches (*Hodge 2988*), Fond Figues River (*Ernst 1456*), La Chaudière (*Hodge 3581*), Lisdara Estate (*Cooper 147, Hodge 2458*), Morne Jaune (*Nicolson 2048*), Sylvania (*Hodge 1160*), Pont Cassé (*Long & Norstog 3374*), Syndicate (*Whitefoord 3660*), Trois Pitons (*Lloyd 779*), sine loc. (*Fishlock 37, Imray 98* at GH, *214* at K).

Caribs boil young leaves as an edible green, said to be good for "dropsy" (Hodge and Taylor, 1957:556).

What, in the past (incl. Grisebach, Urban), was called *P. icosandra* is now called *P. rivinoides* and what was called *P. octandra* is now called *P. icosandra*. Two Dominican specimens (*Ramage s.n.* 17 May 1889 (BM) from Morne Barby and *Eggers 663* (GOET) from Rosalie) have been annotated as *P. icosandra* but the note "short racemes of *icosandra* but tepals deciduous" suggest a need for restudy. *Phytolacca icosandra* (alias *P. octandra*), with a distinctly spike-like and densely flowered raceme with persistent tepals, probably is not native in the Lesser Antilles.

Rivina Linnaeus

Rivina humilis

Rivina humilis Linnaeus, 1753:121.

Shrub to 1 m; berry red, with erect tepals.

Pantropical; in Dominica in disturbed areas on dry west coast to 200 m: Cabrits (*Ernst 2094, Smith 10325, Wilbur 8264*), Soufrière (*Lloyd 436*).

Trichostigma A. Richard

Trichostigma octandrum

Trichostigma octandrum (Linnaeus) H. Walter in Engler, 1909, IV.83 (Heft 39):109.
Rivina octandra Linnaeus, 1756:9.
Villamilla octandra (Linnaeus) J. Hooker in Bentham & J. Hooker, 1880, 3:81.

Shrub or liana to 10 m; fruits brown with deflexed tepals.

Neotropics; in dry grassland and woodlands of west coast to 180 m: Cabrits (*Hodge 3716, Smith 10336*), Colihaut (*Ernst 1147*), Macoucherie (*Hodge 3765*), Salisbury (*Ernst 1762*).

PIPERACEAE

1. Spikes several on a common peduncle; leaves peltate, 15 cm or more broad . . . . . ***Lepianthes***
1. Spikes solitary; leaves not peltate or, if so, only to 5 cm broad.
   2. Herbs; floral bracts punctate, not fimbriate; stigma 1 . . . . . ***Peperomia***
   2. Vines or shrubs; floral bracts epunctate, fimbriate; stigmas 2–5.
      3. Spikes opposite the leaves; leaves acute to rounded . . . . . ***Piper***
      3. Spikes axillary; leaves cordate to rounded . . . . . ***Sarcorhachis***

Lepianthes Rafinesque

Lepianthes peltata

Lepianthes peltata (Linnaeus) Rafinesque, 1838:85.—Howard, 1973a:381.
Piper peltatum Linnaeus, 1753:30, *"pelatum."*
Pothomorphe peltata (Linnaeus) Miquel, 1840:37.
Pothomorphe dussii Trelease in Stehlé, 1940:61.—Stehlé, 1957:615.

Mal l'estomac, mal tête, monkey's hand.

Herbaceous shrub to 2 m; leaves broadly ovate, peltate, to 35 cm broad; spikes umbellate on a common peduncle.

Neotropics; in Dominica in disturbed areas to 350 m: Bataka (*Hodge 3192, Stehlé 6098, Taylor 144*), Clarke Hall (*Ernst 1001*), Hatton Garden (*Hodge 2942*), La Chaudière (*Hodge 3679*), Holmwood (*Webster 13282*), Marigot (*Hodge 427, Nicolson 2010*), Melville Hall (*Hodge 427*), Morne Negres Marrons (*Hodge 1076*), Rosalie Valley (*Lloyd 692*).

Caribs heat the leaves and apply to the head for headaches (Hodge and Taylor, 1957:553).

There is a controversy about the correct generic name, essentially a question on the lectotypification of *Lepianthes*. Howard (1973a:381) cited *Piper umbellatum* as type but did not make it absolutely clear whether it was of his accepted name (*Lepianthes*), of his synonym (*Pothomorphe*), or of both. Wilbur (1985:288) lectotypified *Lepianthes* on *Lepianthes granulata* (Linnaeus) Rafinesque, making it a synonym of *Piper* and accepted *Pothomorphe* for this species. Jones and Lamboy (1986:153) objected, supporting Howard's choice as effective and first. Wilbur (1987:113) reinforced his earlier position. I prefer *Pothomorphe*, being the historically more familiar name, and I agree with Wilbur that Howard's designation was unclear. However, I accept *Lepianthes* to concord with the *Flora of the Lesser Antilles*.

Peperomia Ruiz & Pavón

1. Leaves peltate . . . . . ***P. hernandiifolia***
1. Leaves not peltate.
   2. Leaves typically in whorls of 3, sometimes opposite . . . . . ***P. trifolia***
   2. Leaves alternate.
      3. Venation distinctly pinnate.
         4. Beak of fruit 0.2 mm long, brown, bent or straight but not hooked, granular . . . . ***P. magnoliifolia***
         4. Beak of fruit 0.5 mm long, white, straight and hooked at apex, not granular . . . ***P. obtusifolia***
      3. Venation distinctly palmate or indistinct.
         5. Plants repent; leaves to 1.5 cm across; venation indistinct.

6. Leaves elliptic, etc. but not rotund . . . . . ***P. tenella***
6. Leaves rotund or very nearly so.
   7. Stem glabrous, leaves often emarginate, to 0.5 cm across; fruit on stipe 0.8 mm long . . . . . ***P. emarginella***
   7. Stem puberulent; leaves not emarginate, to 1 cm across; fruit not stipitate . . . . . ***P. rotundifolia***
5. Plants erect; leaves 2 cm wide or more; venation distinctly palmate.
   8. Leaves thin, pellucid (translucent), glabrous; leaf-bases cordate to ± cordate . . . . . ***P. pellucida***
   8. Leaves opaque, glabrous or pubescent; leaf-bases cuneate to rounded.
      9. Stems and petioles pubescent . . . . . ***P. hirtella***
      9. Stems and petioles glabrous.
         10. Leaf apex obtuse to acute; plant inconspicuously black-punctate, erect and not rooting at nodes . . . . . ***P. myrtifolia***
         10. Leaf-apex acute to acuminate; plants conspicuously black-punctate (when dry), typically rooting at nodes . . . . . ***P. nigropunctata***

Peperomia emarginella

Peperomia emarginella (Wikström) A.C. Candolle in A.P. Candolle, 1869, 16:437.—Howard, 1973a:382.
Piper emarginellum Swartz ex Wikström, 1828:56.

Delicate repent herb, often epiphytic; stem glabrous; leaves rotund, to 0.5 cm wide, glabrous to sparsely villous.

Neotropics; common in Dominica in wet forests 325–1000 m: Deux Branches (*Hodge 3000, 3576, 3492*), Hatton Garden (*Hodge 409*), Laudat (*Hodge 1810, Lloyd 212*), La Chaudière (*Hodge 3576*), Morne Plat Pays (*Hodge 1659*), Morne Trois Pitons (*Hodge 1189, Wilbur 7811*), Pont Cassé (*Chambers 2542*), Ravine Deux Dleau (*Ernst 1902*), Salybia River (*Hodge 3242*), Trafalgar Falls (*Hodge 2013*).

Peperomia hernandiifolia

Peperomia hernandiifolia (Vahl) Dietrich, 1831, 1:157.—Howard, 1973a:384.
Piper hernandiifolium Vahl, 1804, Enum., 1:344, *"hernandifolium."*

Repent, puberulent, sometimes epiphytic herb; leaves peltate.

Neotropics; common in Dominica in rainforest 500–1050 m: Brantridge (*Ernst 1195*), Freshwater Lake (*Whitefoord 4187*), Laudat (*Eggers s.n., Hodge 1843*), Morne Anglais (*Fennah 18, Hodge 410, 2310*), Morne Micotrin (*Wilbur 7464*), Morne Negres Marrons (*Hodge 1058*), Morne Nicholls summit (*Hodge 1944*), Morne Plat Pays (*Hodge 1687, 1705*), Mosquito Mountain (*Webster 13533*), Pont Cassé (*Hodge 1192, Wilbur 7800, 8149*), Sylvania (*Hodge 1100*), Trois Pitons River (*Nicolson 1948*), sine loc. *Dudley s.n.*

Peperomia hirtella

Peperomia hirtella Miquel, 1845:414.—Howard, 1973a:384.
Peperomia herminieri A.C. Candolle, 1882:316.
Peperomia dissitiflora A.C. Candolle, 1898:279.

Epiphytic and puberulent herb; leaves black-punctate, elliptic to ovate, palmately veined.

Lesser Antilles; common in Dominica in upland and mossy forests: Central Forest Reserve (*Ernst 1182*), Freshwater Lake area (*Ernst 1788, Hodge 1861, Nicolson 1835, Smith 10240, 10257, Webster 13252, Wilbur 7400*), Morne Anglais or Couliaboune (*Hodge 416, 420, 2262, Imray 244, Lloyd 212, Wilbur 7965*), Morne Diablotins (*Hodge 2789, 2820, Nicolson 1917, Webster 13345*), Morne Micotrin (*Fosberg 48290*, Morne Negres Marrons (*Hodge 1068*), Morne Nicholls (*Hodge 1922*), Morne Plat Pays (*Hodge 1686*), Morne Trois Pitons (*Hodge 419, 1379*), Mosquito Mountain (*Webster 13542*).

Peperomia magnoliifolia

Peperomia magnoliifolia (Jacquin) Dietrich, 1831, 1:153.—Howard, 1973a:386.
Piper magnoliifolium Jacquin, 1789, Coll., 3:210, *"magnoliaefolium."*
Peperomia conulifera Trelease in Stehlé et al., 1948, 2:44.—Stehlé, 1957:618.

Glabrous herb; leaves elliptic to obovate; fruit beak straight or bent but not hooked.

West Indies, northern S. America; in Dominica from 65–600 m: Badineau Estate (*Hodge 2237*), Clarke Hall (*Ernst 1708, Webster 13197*), Grand Bay (*Wilbur 7917*), Hatton Garden (*Hodge 3035*), La Plaine (*Ernst 1908*), Lisdara (*Cooper 178*), Montpelier (*Lloyd 583*), Morne Colla Anglais (*Webster 13433*), Petit Coulibri (*Whitefoord 6026*), Petite Soufrière Bay (*Stern & Wasshausen 2480*), Roseau (*Stehlé 6318*), Salybia (*Hodge 417, 3314*), South Chiltern (*Hodge 1507, 1550, 1558*).

Peperomia myrtifolia

Peperomia myrtifolia (Vahl) Dietrich, 1831, 1:147.—Howard, 1973a:387.
Piper myrtifolium Vahl, 1804, Enum., 1:341.
Peperomia rupertiana A.C. Candolle in A.P. Candolle, 1869, 16:413.
Peperomia broadwayi A.C. Candolle in Urban, 1902, 3:240.

Succulent often with reddish stems; leaves palmately veined broadly elliptic-ovate, obtuse to acute at apex.

Lesser Antilles; in Dominica in dry areas 10–150 m: Cabrits (*Nicolson 1896, 4204, Webster 13302, Whitefoord 3996*), Clarke Hall (*Stern & Wasshausen 2388*).

A specimen from Fon Pays (1000 m in rainforest), *Hodge 2846*, has been annotated by R.A. Howard (in 1972) as this species. The habitat seems wrong. The specimen is poor and does not well match any other species.

Peperomia nigropunctata

Peperomia nigropunctata Miquel, 1843:188.—Howard, 1973a:389.
Peperomia acuminata sensu Grisebach, 1860:165, non Ruiz & Pavón, nor (Linnaeus) A.C. Candolle in Urban.
Peperomia nemorosa A.C. Candolle in A.P. Candolle, 1869, 16:415.

Plants glabrous, conspicuously black-punctate; leaves mostly acuminate, venation palmate; the inflorescence regularly 2-branched, one larger and one smaller.

West Indies; common in Dominica in rainforests, 100–1140 m: Deux Branches (*Hodge 3104, 3426*), Freshwater Lake area (*Gillis 8317, Hodge 1769, Lloyd 42, 931, Wasshausen & Ayensu 340, Wilbur 7382*), Hampstead (*Lloyd 630*), Jean (*Ernst 1823*), La Chaudière (*Hodge 3512*), Lisdara (*Hodge 422, 423*), Morne Anglais (*Hodge 418, 2242*), Morne Plat Pays (*Wilbur 7892*), Pont Cassé (*Wilbur 8197*), Roche d'Or (*Wasshausen & Ayensu 398*), South Chiltern (*Stern & Wasshausen 2503*), Springfield (*Wilbur 7685*), Sylvania (*Hodge 421*), Syndicate (*Webster 13319, Whitefoord 3555, 3611*), Warner Estate (*Ernst 1207*).

This species may be regarded as *P. myrtifolia*. The materials could be part of variable populations rather than truly distinct species. Similar *P. glabella*, with pubescent stems and petioles, has not yet been collected on Dominica.

Peperomia obtusifolia

Peperomia obtusifolia (Linnaeus) Dietrich, 1831, 1:154.—Howard, 1973a:392.
Piper obtusifolium Linnaeus, 1753:30.

Glabrous herbs, except for the usually hirtellous peduncles; leaves elliptic to obovate, the fruit beak hooked.

Neotropics; in Dominica 500–600 m: Brush (*Nicolson 2158*), South Chiltern (*Hodge 1558*).

Peperomia pellucida

Peperomia pellucida (Linnaeus) Kunth, 1816, 1:64.—Howard, 1973a:392.
Piper pellucidum Linnaeus, 1753:30.

Z'herbe couresse.

Erect, pellucid herb; leaves broadly ovate to deltoid.

Pantropical weed; in Dominica in disturbed areas to 550 m: Cabrits (*Whitefoord 3574*), Clarke Hall (*Ernst 1716*), Delices (*Whitefoord 3689*), Hatton Garden (*Hodge 3068*), Marigot (*Hodge 412*), Point Carib (*Wilbur 8005*), Portsmouth (*Hodge 411*), Roseau (*Ernst 2061, Hodge 394*), Soufrière (*Lloyd 416*), South Chiltern (*Hodge 1526*), Sylvania (*Hodge 1129*).

Adjanohoun et al. (1985:159, pl. 125) reported medical uses.

Peperomia rotundifolia

Peperomia rotundifolia (Linnaeus) Kunth, 1816, 1:65.—Howard, 1973a:394.
Piper rotundifolium Linnaeus, 1753:30.

Chaud flé.

Neotropics (and Africa teste Adams); in Dominica 15–725 m: Bataka (*Stehlé 6898*), Carholm (*Ernst 1939*), Cote d'Or (*Nicolson 2056*), Deux Branches (*Hodge 2974, 3464*), Fond Figues River (*Ernst 1015*), Hampstead (*Lloyd 626*), Holmwood (*Webster 13280*), La Chaudière (*Hodge 3526*), Milton (*Hodge 2868*), Morne Colla Anglais (*Hodge 414, 1189*), Rosalie (*Wilbur 7831*), Soufrière (*Lloyd 469*), Syndicate (*Wasshausen & Ayensu 347, Whitefoord 3612*), Trafalgar Falls (*Burch 1392, Gillis 8225, Hodge 2005*).

The plant is boiled to make tea for colds (Honychurch, 1980:68). Adjanohoun et al. (1985:159, pl. 126) reported similar medical uses.

According to Howard (1973a:383), *Imray 311* is *P. rotundifolia* but was misdetermined and reported by Grisebach (1860:164) as *P. cordifolia*, now regarded as endemic to Jamaica.

Peperomia tenella

Peperomia tenella (Swartz) Dietrich, 1831, 1:153.—Howard, 1973a:395.
Piper tenellum Swartz, 1788:16.

Epiphytic herb; leaves to 8 mm wide, ciliate.

West Indies and northern South America; in Dominica in rainforest to mossy forest 550–1400 m: Morne Anglais (*Hodge 2284*), Morne Diablotins (*Webster 13374*), Morne Nicholls (*Hodge 1930*).

Peperomia trifolia

Peperomia trifolia (Linnaeus) Dietrich, 1831, 1:173.—Howard, 1973a:395.
Piper trifolium Linnaeus, 1753:30.
Peperomia ovalifolia W. Hooker, 1825, 3, pl. 165.—Urban, 1920, 8:161.

Scandent, villous herb; leaves in whorls of 3 or opposite, to 2 cm long, ciliate.

Lesser Antilles; in rainforest 15–1000 m: Clarke Hall (*Ernst 4715*), Fond Pays (*Hodge 2849*), Springfield (*Ernst 1841*), Sylvania (*Hodge 415, 1178, Webster 13420, Wilbur 7716*), Syndicate (*Ernst 1997*), Trois Pitons (*Lloyd 783*).

Piper Linnaeus

Piper nigrum Linnaeus, the black pepper of commerce, has been collected in the Roseau Botanic Gardens (*Hodge 916, Proctor 17525*).

Piper sanctum (Miquel) Schlechter ex A.C. Candolle (as *Piper papantlense* A.C. Candolle), a Central American species, was sent to Kew by Imray in 1877 (see Howard, 1973a:407). This introduced species has not been recollected in Dominica.

Hodge and Taylor (1957:552) noted that all species of *Piper* are called doctor bush, including the three most common species, *P. aequale*, *P. dilatatum*, and *P. dussii*. The Caribs consider the plants as charms and the leaves are rubbed on bodies or used in ritual baths.

1. Leaves palmately veined.
   2. Leaves <15 cm long . . . . . ***P. amalago***
   2. Leaves well over 15 cm long . . . . . ***P. reticulatum***
1. Leaves pinnately veined.
   3. Leaf base essentially equal.
      4. Leaves glabrous beneath; stamens 3 . . . ***P. aequale***
      4. Leaves crisped-puberulent on veins beneath; stamens 4 . . . . . ***P. glabrescens***
   3. Leaf base distinctly unequal.
      5. Inflorescence curved; petiole <0.5 cm long; leaves normally scabrous . . . . . ***P. aduncum***
      5. Inflorescence straight; petiole 1–2 cm long; leaves glabrous (sometimes hirtellous on veins).
         6. Fruit round to triangular . . . . . ***P. dilatatum***
         6. Fruit rectangular . . . . . ***P. dussii***

Piper aduncum

Piper aduncum Linnaeus, 1753:29.—Howard, 1973a:397.

Shrub or small tree to 6 m; petiole 3–7 mm long; inflorescence curved.

Neotropics; in Dominica in rainforest around 1000 m: Fon Pays (*Hodge 2843*).

The above specimen is not scabrous on the upper surface but has the distinctive short petioles and strongly curved spikes. The species is common around Syndicate (DHN!) with hirtellous rather than scabrous leaves.

Piper aequale

Piper aequale Vahl, 1797, Eclog., 1:4, pl. 3.—Stehlé, 1957:617.—Howard, 1973a:398.
Artanthe aequalis (Vahl) Miquel, 1844:511.
Piper dominicanum A.C. Candolle in Urban, 1902, 3:205.

Doctor bush, malbruk, mal estomac grand bois, la feuille chassé.

Shrub to 3 m; leaves 3.5–11 cm wide; spikes to 5 cm long; stamens 3.

Neotropics; in Dominica frequent in rainforest 100–1000 m: Bellevue (*Taylor 27*), Brush (*Nicolson 2159*), Deux Branches (*Ernst 1802, Hodge 2985*), Fon Pays (*Hodge 2844*), Hampstead River (*Nicolson 4236*), La Chaudière (*Hodge 3600*), Layou River Road (*Beard 1457, Cowan 1630*), Lisdara (*Hodge 2330*), Magua (*Stehlé 6339*), Morne Anglais (*Hodge 424*), Morne Plat Pays (*Hodge 1699*), Petite Macoucherie (*Webster 13556*), Pont Cassé (*Chambers 2539, Wilbur 7536*), Providence Valley (*Hodge 2062*), Riversdale (*Proctor 25791*), Salybia (*Hodge 3252*), South Chiltern (*Ernst 1870, Hodge 1446*), Sylvania (*Cooper 65, Hodge 3844*), Syndicate (*Hodge 2728, 2759, Whitefoord 3877*), sine loc. (*Bryant 130*).

Piper amalago

Piper amalago Linnaeus, 1753:29.—Howard, 1973a:399.
Enckea sieberi Miquel, 1844:358.

Shrub to 4 m; leaf-blades palmately veined, glabrous, to 14 cm long.

Neotropics; in Dominica in dry woodlands ~100 m: Clarke Hall (*Ernst 1263*).

This appears to be a new record for Dominica.

Piper dilatatum

Piper dilatatum L. Richard, 1792:105.
Piper bredemeyeri J. Jacquin, 1815, 1:125, pl. 84.
Artanthe bredemeyeri (J. Jacquin) Miquel, 1844:429.

Doctor bush, feuille mal l'estomac.

Shrub or small tree to 3 m; stipules immediately deciduous, <2 cm long; leaf-blades to 25 cm long, pubescent on veins below and sometimes above; spikes to 12 cm long; fruit becoming triangular, giving the floral arrangement an increasingly spiralled appearance.

Neotropics; common in Dominica in open areas of secondary forest 30–1000 m: Bellevue (*Wilbur 7932*), Clarke Hall (*Ernst 1003, Nicolson 1825, Webster 13185, Wilbur 7372*), Delices (*Whitefoord 3751*), Indian River mouth (*Hodge 3747*), Hatton Garden (*Hodge 2950*), Lisdara (*Hodge 426*), Morne Aux Diables (*Wilbur 8058*), Morne Brulés (*Hodge 425*), Pointe Michel (*Gillis 8143*), Ridgefield (*Fennah 25*), Salisbury (*Whitefoord 4529*), Soufrière (*Burch 1342*), Springfield (*Gillis 8157, Wilbur 7676*), Stewart River mouth (*Wilbur 8025*), Syndicate (*Whitefoord 3541, 4243*).

Easily confusable with *Piper dussii* in young stages.

Piper dussii

Piper dussii A.C. Candolle in Urban, 1902, 3:190.—Howard, 1973a:402.
Piper broadwayi A.C. Candolle in Urban, 1902, 3:191.

Shrub or small tree; stipules eventually deliquescing, >2 cm long; leaf-blades to 25 cm; pubescent on veins below; spikes to 15 cm long; fruit becoming elongately rectangular, giving the floral arrangement a whorled appearance.

Lesser Antilles; large common weed in Dominica in interior forests 200–1000 m: Carib Reserve (*Hodge 3257*), SW of Castle Bruce (*Wilbur 8320*), Deux Branches (*Chambers 2505, Hodge 3125*), En Haut Jean (*Webster 13528*), Fon Pays (*Hodge 2845*), Laudat area (*Hodge 1812, Lloyd 236, Smith 10235*), La Chaudière (*Hodge 3556*), Milton (*Hodge 2567*), Mt. Joy (*Hodge 1293*), South Chiltern (*Hodge 1492*), Sylvania (*Hodge 1102, 1311, 1361*), Syndicate (*Whitefoord 5160*), Trois Pitons (*Hodge 1193*), sine loc. (*Cooper 34*).

The Syndicate specimen was annotated as *Piper hispidum* Swartz by M.C. Tebbs in 1986.

Piper glabrescens

Piper glabrescens (Miquel) A.C. Candolle in A.P. Candolle, 1869, 16:271.—Howard, 1973a:402.
Piper macrophyllum Kunth, 1815, 1:46, non Swartz.—A.C. Candolle in Urban, 1902, 3:9.

Artanthe glabrescens Miquel, 1845:461.

Leaf-base equal, rounded; leaf-blade puberulent below on veins; spike short; stamens 4.

Antilles and NE South America; in Dominica to 800 m: Deux Branches (*Hodge 3119*), Morne Diablotins (*Hodge 2788*).

Adjanohoun et al. (1985:161, pl. 127) reported several medical uses under this binomial but the illustration and description indicate unequal leaf bases and this may be a misidentification of *P. dilatatum*, a much commoner species.

Piper reticulatum

Piper reticulatum Linnaeus, 1753:29.—Howard, 1973a:406.
Discipiper reticulatum (Linnaeus) Trelease & Stehlé in Stehlé, 1946b:283; 1957:616.

Doctor bush, malbruk.

Shrub with palmately veined leaves to 25 cm × 15 cm.

Neotropics; apparently on the east side of Dominica: Bataca (*Stehlé 6089, 6397*), Carib Reserve (*Hodge 3226*), Petit Coulibri (*Whitefoord 4675*), sine loc. (*Taylor 110*).

Sarcorhachis Trelease

Sarcorhachis incurva

Sarcorhachis incurva (Schultes) Trelease, 1927:17.—Stehlé, 1957:617.—Howard, 1973a:408.
Piper incurvum Sieber ex Schultes, 1822, 1:238.

Wild black pepper.

Rather succulent epiphyte or climbing vine; leaves ovate, cordate or rounded at base; spikes solitary (in ours), axillary.

Guadeloupe to St. Vincent (St. Lucia?); not uncommon in Dominica 300–750 m in forests: En Haut Jean (*Webster 13507*), Freshwater Lake (*Ernst 1485, 1774, Wasshausen & Ayensu 338, Whitefoord 3853*), Point Lolo (*Nicolson 1852*).

PLANTAGINACEAE

Plantago major

Plantago major Linnaeus, 1753:112.

Plantain.

Perennial acaulescent herb; leaves long-petiolate, ovate, entire or coarsely dentate; spikes equalling leaves; capsule circumscissile at middle.

Cosmopolitan weed; in Dominica in disturbed areas: Carib Reserve (*Hodge 3366*), Lisdara Estate (*Hodge 2463*), Milton Estate (*Hodge 2913*), Ridgefield Estate (*Hodge 2139*), Sylvania (*Hodge 784*), sine loc. (*Taylor 124*).

An infusion of the plant is used as eye medicine by Caribs (Hodge and Taylor, 1957:609). Adjanohoun et al. (1985:161, pl. 128) confirmed this and added other medicinal uses.

PLUMBAGINACEAE

Larger-flowered *Plumbago auriculata* Lamarck (including *Plumbago capensis* Thunberg) is cultivated as a low hedge in the Roseau Botanic Garden (DHN!). Howard (1989, 6:54) cited it with an exclamation mark.

Plumbago scandens

Plumbago scandens Linnaeus, 1762:215.

Glabrous, scrambling shrub to 3 m; flowers short-pedicellate, racemose; calyx ribs with long-stipitate glands; corolla salverform, white.

Neotropics; in Dominica in low, dry scrubland on west coast: Colihaut (*Ernst 1133*), Loubière (*Hodge 3874*), South Chiltern (*Hodge 1625*).

POLYGALACEAE

1. Herb; stems with short-stipitate glands; leaves linear; fruit a capsule; seeds pubescent . . . . . ***Polygala***
1. Woody climber; stems pubescent but eglandular; leaves ovate-oblong; fruit a samara; seeds glabrous . . . . . ***Securidaca***

Polygala Linnaeus

Polygala hecatantha Urban was reported for Dominica by Vélez (1957:111), a perennial with dense racemes, but no materials from Dominica have been found.

Polygala planellasi Molinet & Gomez de la Maza was reported to have medicinal uses in Dominica by Adjanohoun et al. (1985:163, pl. 130). This is either a new record of a species apparently only known on Guadeloupe or an undocumented extrapolation.

Polygala paniculata

Polygala paniculata Linnaeus, 1759a:1154.—Stehlé, 1962a:327.

Esta fragile, lampoule, zetan grand chemin, titain (thyme), sweet broom.

Annual; leaves linear or linear-spatulate; racemes with flowers not overlapping; petals white to pink or purplish.

Neotropics; in Dominica a common roadside weed in moist forests from 65–750 m: Bellevue (*Taylor 35*), Breakfast River (*Nicolson 2024*), Carib Reserve (*Hodge 3385*), Clyde River (*Ernst 1033*), Corona (*Bailey 792*), Holmwood (*Webster 13284*), Laudat (*Burch 1352, Eggers s.n., Gillis 8165, Lloyd 46*), Lisdara (*Hodge 333*), Marigot (*Hodge 433*), Milton Estate (*Hodge 2602*), Morne Micotrin (*Chambers 2672, Wasshausen & Ayensu 315*), Morne Plat Pays (*Gillis 8117*), Pont Cassé (*Skog 1573, Wilbur 7738, 8184*), South Chiltern (*Hodge 1475*), Springfield (*Steyskal s.n., Wilbur 7684*), Sylvania (*Cooper 1, Hodge 434*), Syndicate (*Whitefoord 3505*).

The fresh root has a menthol odor. Plants are used for a medicinal tea for respiratory infections by Dominicans (*Steyskal s.n.*) and a ritual tea by Caribs (Hodge and Taylor, 1957:571). Adjanohoun et al. (1985:163, pl. 129) confirmed this and added other uses.

Securidaca Linnaeus, nom. cons.

Securidaca diversifolia

Securidaca diversifolia (Linnaeus) Blake in Standley, 1923:594.
Polygala diversifolia Linnaeus, 1753:703.

Heavy climber; stems and leaves pubescent; petals pink to purplish; fruits maple-like.

Lesser Antilles and South America; occasional in Dominica to 350 m: Bataka (*Stehlé 6634*), Milton (*Hodge 2521*), Roseau Botanic Garden (*Hodge 3934*), Syndicate (*Nicolson 4167*). Flowering in April–May.

POLYGONACEAE

Antigonum leptopus W. Hooker & Arnott, a Mexican climbing vine with tendrils, sagittate leaves, and showy pink tepals, was collected in an overgrown lime orchard between Coulibistri and Colihaut (*Wilbur 8119*) and along the Baiac road from Roseau (*Whitefoord 4681*), presumably an escape.

1. Tree, shrub or woody climber; flowers unisexual . . . . . *Coccoloba*
1. Herb; flowers bisexual . . . . . *Polygonum*

Coccoloba Browne, nom. cons.

1. Climber . . . . . *C. ascendens*
1. Tree or shrub.
   2. Leaves orbicular to reniform, never longer than broad.
      3. Leaves rugose, pubescent; fruits <1 cm long . . . . . *C. pubescens*
      3. Leaves smooth, glabrous; fruits >1 cm long . . . . . *C. uvifera*
   2. Leaves elliptic to ovate, longer than broad.
      4. Leaves coriaceous, usually broadest below middle; flowers sessile . . . . . *C. swartzii*
      4. Leaves thin, usually broadest above middle; flowers shortly pedicelled . . . . . *C. venosa*

Coccoloba ascendens

Coccoloba ascendens Duss ex Lindau, 1890:156.—Howard, 1959a:71.

Liane barril, cercle barril.

Liana to 15 m; leaves broadly elliptic to ovate.

Lesser Antilles to Trinidad; in Dominica occasional in treetops of rainforest and woodlands to 350 m: Bataka (*Stehlé 6092*), Bornes (*Nicolson 4238*), Castle Bruce road (*Cowan 1619*), Glasham (*Nicolson 2088*), La Plaine (*Ernst 1361*), Newfoundland (*Nicolson 4124*), Pointe Ronde (*Hodge 2669*), Riversdale (*Howard 11758*), Salybia (*Hodge 3334*).

Caribs use the stems in basket-making (Hodge and Taylor, 1957:554).

Another climbing species, *C. dussii* Lindau with older stems flattened, is expected in Dominica.

Coccoloba pubescens

Coccoloba pubescens Linnaeus, 1759a:1007.—Howard, 1959a:87.

Raisinier.

Tree to 13 m; leaves chartaceous, 40–80 cm across, pubescent and rugose, apparently deciduous before flowering. The immature aspect with wand-like stems and very large leaves is most commonly seen.

Hispaniola to Barbados; not uncommon on Dominica in or near dry woodlands to 350 m: Anse du Me (*Wilbur 8298*), Cabrit (*Nicolson 1891*), Calibishie (*Hodge 3142*), Dublanc (*Whitefoord 4303*), L'Anse Noire (*Ernst 2099*), Mero (*Read 2029*), Pointe Baptiste (*Hodge 3499*), Pointe Ronde (*Hodge 2668*). Flowering in April–May, fruiting in August.

Coccoloba swartzii

Coccoloba swartzii Meisner in A.P. Candolle, 1856, 14:159.—Howard, 1959a:90.
Coccoloba diversifolia sensu auctt., non Jacquin.

Tree to 20 m; leaves coriaceous, usually broadest below middle; flowers and fruits ± sessile.

Jamaica to Barbados; in Dominica in coastal woodland to 500 m: En Haut Jean (*Whitefoord 5443*), Hampstead (*Wilbur 8306*), L'Anse Noire (*Ernst 2062, Wilbur 7513*), Marigot (*Howard 11754*), Pointe Carib (*Wilbur 8002*), Salisbury (*Stern & Wasshausen 2591*), Salybia (*Hodge 3404, Nicolson 4139*), South Chiltern (*Hodge 1583*), below Syndicate (*Whitefoord 4307*). Apparently flowering in July–August, fruits gone by February.

Coccoloba uvifera

Coccoloba uvifera (Linnaeus) Linnaeus, 1759a:1007.—Howard, 1959a:91.
Polygonum uviferum Linnaeus, 1753:365.

Sea grape, raisin bord-de-mer.

Tree to 17 m; leaves coriaceous, glabrous, broader than long.

Neotropical strand tree; dominant on Dominica along beaches: Cabrits (*Howard 11750*), Canefield (*Nicolson 1871*), Hatton Garden Estate (*Hodge 2957*), Layou estuary (*Whitefoord 3749*), Petit Coulibri (*Whitefoord 6059*), Pointe Ronde (*Hodge 2686*), Rosalie Bay (*Wilbur 8019*), Salybia (*Hodge 3316*), Scotts Head (*Ernst 1330, Hodge 1605, Kimber 891, Lloyd 515, Wilbur 7593*).

Products from this species have been used by Caribs in a number of ways (Hodge and Taylor, 1957:555).

Coccoloba venosa

Coccoloba venosa Linnaeus, 1759a:1007.—Howard, 1959a:92.

Tree to 15 m; leaves membranous, usually broadest above middle; flowers and fruits distinctly pedicelled.

Hispaniola to Trinidad; apparently uncommon on Dominica on west coast: between Roseau and Canefield (*Hodge 443*). Flowering in August.

Polygonum Linnaeus

1. Ochreae (petiolar sheaths) without long bristles at apex . . . . . ***P. densiflorum***
1. Ochreae bearing long bristles at apex.
   2. Racemes continuous; tepals epunctate; styles 2; achenes lenticular . . . . . ***P. acuminatum***
   2. Racemes interrupted; tepals glandular-punctate; styles 3; achenes triquetrous . . . . . ***P. punctatum***

Polygonum acuminatum

Polygonum acuminatum Kunth, 1817, 2:178.
Persicaria acuminata (Kunth) Gomez de la Maza, 1896:278.

Perennial, pubescent herb to 2 m; ochreae ciliate; leaves strigose; styles 2; achenes lenticular.

Neotropics; cited for Dominica by Vélez (1957:111) and known from Guadeloupe and Martinique but no specimens seen from Dominica.

Polygonum densiflorum

Polygonum densiflorum Meisner in Martius, 1855, 5(1):13.—Weatherby, 1923:20.
Polygonum glabrum sensu Grisebach, 1860:161, 709, non Willdenow.
Polygonum portoricense Bertero ex Small, 1895:46.
Persicaria portoricensis (Small) Small, 1903:377.

Perennial, glabrous herb to 1.5 m; ochreae not ciliate; styles 2(-3?); achenes lenticular (or triquetrous?).

Pantropical but very uncommon in the Lesser Antilles; only once collected in Dominica: sine loc. (*Imray 407* at K).

Polygonum punctatum

Polygonum punctatum Elliott, 1817, 1:454.
Polygonum acre Kunth, 1817, 2:179.
Persicaria punctata (Elliott) Small, 1903:379.

Annual or perennial, glabrous herb with decumbent stems to 2 m; ochreae ciliate; leaves ciliolate, glandular-punctate; styles 3; achenes triquetrous.

Neotropics; in Dominica on wet ground in disturbed areas: Bells (*Whitefoord 6148*), Clarke Hall Estate (*Chambers 2798, Ernst 1695, Stern & Wasshausen 2438*), Prince Ruperts Head marsh, i.e., Cabrits swamp (*Finlay s.n.*, 30 May 1792 at K).

PORTULACACEAE

1. Leaves with tuft-like axillary hairs; flowers solitary or clustered, sessile; style branches 3–12, free; capsule circumscissile . . . . . ***Portulaca***
1. Leaves without tufts; flowers panicled, pedicellate; style branches 3, united; capsule 3-valved . . . . . ***Talinum***

Portulaca Linnaeus

Portulaca grandiflora W. Hooker was reported to have medicinal uses on Dominica by Adjanohoun et al. (1985:165, pl. 131).

Portulaca quadrifida Linnaeus was attributed to Dominica by Vélez (1957:111) but no specimens have been seen. It has the flattened leaves of *P. oleracea* (much smaller) but is conspicuously pubescent, has opposite leaves and pedicelled, tetramerous flowers.

Portulaca teretifolia Kunth was attributed to Dominica by Howard (1988, 4:205) with an exclamation mark. It seems to differ from *P. pilosa* by having much less conspicuous axillary (nodal) hairs and gray seeds.

1. Leaves flat, not linear; plants ± glabrous . . . ***P. oleracea***
1. Leaves ± cylindrical, linear; plants usually conspicuously pubescent with tufts of hairs in axils.
   2. Flowers yellow to yellowish; capsule circumscissile below middle; leaves usually <1 cm long . . . . . ***P. halimoides***
   2. Flowers reddish; capsule circumscissile at middle; leaves usually >1 cm long . . . . . ***P. pilosa***

Portulaca oleracea

Portulaca oleracea Linnaeus, 1753:445.

Purslane, coupié, pourpier.

Plants succulent; axillary tufts of hairs inconspicuous; leaves obovate to spatulate; flowers yellowish; capsule circumscissile near middle; seeds black, finely granulate.

Pantropical weed; in Dominica near sea level on west coast: Colihaut (*Kimber 1071, Lloyd 861*), Loubière (*Hodge 3866*), Rodneys Rock (*DeFilipps 170*), Roseau (*Ernst 2151*).

Used by Caribs as a green vegetable and as a poultice for back pains (Hodge and Taylor, 1957:557). Adjanohoun et al. (1985:165, pl. 132) reported more medicinal uses.

The Roseau collection (*Ernst 2151*), found in paving stones and rock walls, needs further study. It is succulent and subglabrous like *P. oleracea* but has distinctly opposite leaves like *P. quadrifida*. It could be an aspect of *P. oleracea*.

Portulaca halimoides

Portulaca halimoides Linnaeus, 1762:639.—Legrand, 1962:99.
Portulaca martinicensis Urban, 1907, 5:342.

Plants with conspicuous axillary tufts of hairs; leaves linear; flowers yellowish; capsule circumscissile well below middle; seeds black, granular.

Neotropics; only once collected in Dominica on dry west coast: Colihaut (*Lloyd 855*).

Portulaca pilosa

Portulaca pilosa Linnaeus, 1753:445.—Legrand, 1962:80.

Plants with conspicuous axillary tufts of hairs; leaves linear; flowers reddish; seeds black, tuberculate.

Widespread weed; in Dominica, usually along dry west coast: Carib Reserve (*Stehlé 6647*), Colihaut (*DeFilipps 183, Lloyd 861*), Grand Savanna (*Hodge 3788, Lloyd 838, Wilbur 7670, 7671*), Portsmouth (*Hodge 441*), Scotts Head (*Hodge 1622, Lloyd 513*).

The second Wilbur collection from the Grand Savanna (*7671*) has remarkably large petals (~1.5 cm long) but otherwise was noted to be like the rest of the population represented by *Wilbur 7670*. At one point it was thought that this was *P. grandiflora* W. Hooker, an occasionally introduced and cultivated species, but it does not have the steely gray seeds with stalked tubercles of that species. Adams (1972:267) noted that *P. pilosa* has petals only 4–6 mm long.

Talinum Adanson

Talinum paniculatum

Talinum paniculatum (Jacquin) Gaertner, 1791, 2:219.
Portulaca paniculata Jacquin, 1760:22.
Talinum patens Willdenow, 1800, 2:863.

Glabrous herb to 1.2 m; leaves succulent; inflorescence much branched; petals pink.

Neotropics; in Dominica along dry west coast: Colihaut (*Ernst 1142, Lloyd 854*), Loubière (*Hodge 3871*), Massacre (*Whitefoord 4637*), Portsmouth (*Hodge 442*), Rodneys Rock (*Nicolson 4052*), Salisbury (*Wilbur 8108*).

Adjanohoun et al. (1985:167, pl. 133) reported medicinal uses of the leaf juice.

RANUNCULACEAE

Clematis dioica

Clematis dioica Linnaeus, 1759:1084.
Clematis dominicana Lamarck, 1786, 2:45.
Clematis dioica var. *dominicana* (Lamarck) Kuntze, 1885:102.

Dioecious or polygamous vine with twining petioles; leaves opposite, 3–5-foliolate; sepals petaloid, 4; achenes with long, plumose style.

Neotropics; apparently rare in interior rainforest of Dominica 600–750 m: Baiac (*Whitefoord 3832*), Morne Colla Anglais (*Hodge 408*), Sylvania (*Hodge 807* of *Ipomoea tiliacea* includes a few leaves of this species), sine loc. (*Imray 117* at K). *Hodge 408* was flowering (staminate) in August.

Some Imray collections (K) have been annotated by Lourteig as "*C. dioica* var. *brasiliana* (DC.) Eichl.," indicating that they should be 4–5-foliolate (teste Lourteig, 1956:36–37). Among the duplicates of *Imray 117* (K), there are 1-, 3-, and 5-foliolate branches. I cannot accept the var. *brasiliana*, as the key character appears to vary within the same collection. *Clematis dominicana* was described as having 3-foliolate leaves.

RHAMNACEAE

(by R. DeFilipps)

A sterile specimen of *Zizyphus* sp., *Fairchild 2781*, was collected in the Roseau Botanic Gardens in 1932 as "*Z. oeoplia* Mill. aff." The leaves seem to have tawny pubescence beneath.

Asian *Zizyphus mauritiana* Lamarck (incl. *Zizyphus jujuba* (Linnaeus) Lamarck, non Miller), with stipular thorns and leaves white-tomentose below, may be cultivated in Dominica.

1. Climber with tendrils; leaves alternate; ovary inferior; fruit a 3-winged capsule . . . . . ***Gouania***
1. Tree or shrub; leaves ± opposite; ovary superior; fruit a drupe . . . . . ***Krugiodendron***

Gouania Jacquin

Gouania lupuloides

Gouania lupuloides (Linnaeus) Urban, 1910, 4:378.—Whitefoord, 1989:144.
Banisteria lupuloides Linnaeus, 1753:427.
Gouania domingensis Linnaeus, 1763:1663.—Grisebach, 1860:101.

Climbing or trailing shrub; leaves serrate, apex acute; petals 5, hooded.

Central America and Antilles; apparently rare on Dominica: Dublanc (*Whitefoord 5202*), Petit Coulibri on south coast (*Whitefoord 4666*), sine loc. (*Imray 45* at K). Flowering in November, fruiting in January.

Krugiodendron Urban

Krugiodendron ferreum

Krugiodendron ferreum (Vahl) Urban, 1902, 3:314.
Rhamnus ferreus Vahl, 1794, 3:41.
Condalia ferrea (Vahl) Grisebach, 1860:100.

Tree or shrub; leaves entire, apex emarginate; petals absent.

Central America and Antilles to Venezuela; apparently rare in Dominica on dry west coast near sea level: Prince Ruperts Head [Cabrits] (*Finlay? s.n.* at K).

RHIZOPHORACEAE

The mangrove, *Rhizophora mangle* Linnaeus, a small tree of tidal mudflats, has not yet been collected on Dominica. As

Hodge (1964:31) noted, "the common genera of mangrove (*Rhizophora, Avicennia, Laguncularia,* and *Conocarpus*) are absent from Dominica, a fact easily accounted for by the lack of sufficient lowland sites on an island where the coastline is very precipitous." Actually, *Laguncularia racemosa* (Combretaceae) now has been collected in the Cabrit swamp.

Cassipourea guinanensis

Cassipourea guinanensis Aublet, 1775, 1:529.—L.O. Williams, 1961:369.
Legnotis elliptica Swartz, 1788:84.
Cassipourea elliptica (Swartz) Poiret in Lamarck, 1811, Encycl., Suppl., 2:131.
Cassipourea alba Grisebach, 1857:223(75).
Cassipourea elliptica var. *alba* (Grisebach) Grisebach, 1860:274.
Cassipourea elliptica var. *pauciserrata* Grisebach, 1860:274.

Bois agouti, pois die, goyavier.

Shrub or tree to 11 m, without stilt roots; leaves opposite, ± entire; flowers pedicellate, fascicled in leaf axils; petals white, feathery-villous; style persistent, pubescent.

Central America, northern South America, and Antilles; in Dominica occasional in dry thickets to rainforest 20–750 m: Calibishie (*Hodge 138*), Dublanc (*Hodge 2547*), Grand Bay (*Wilbur 7916*), Hungry Hill Estate (*Whitefoord 4428*), La Fanchette (*Chambers 2730*), La Plaine (*Ernst 1366, Whitefoord 5369, Wilbur 8164*), Laudat (*Eggers 616, Hodge 2092*), Lisdara (*Cooper 160*), Morne Anglais (*Nicolson 4108*), Morne Colla Anglais (*Hodge 1176*), Pagua Bay (*Chambers 2626*), Petite Soufrière Bay (*Stern & Wasshausen 2479*), Pointe Baptiste (*Beard 1469*), Pointe Carib (*Wilbur 7916*), Pointe Ronde (*Hodge 2675*), Ridgefield (*Hodge 2123*), Roche d'Or (*Stern & Wasshausen 2576*), Salisbury (*Webster 13494*), South Chiltern (*Hodge 1565*), Syndicate (*Ernst 1994*). Flowering January–April, fruiting May–July, new shoots in August.

ROSACEAE

See also Chrysobalanaceae. Howard (1988, 4:319) reported cultivated loquat, *Eriobotrya japonica* (Thunberg) Lindley, from Dominica with an exclamation mark, indicating he has seen a voucher specimen.

Potentilla angelica Leichard, an unarmed herb with radiately 5-foliolate leaves, was once found at Ridgefield Estate (*Hodge 2157*) growing in a rose bed as a weed from "moss used for packing a shipment of roses from England." As Howard (1964:281) pointed out, the species does not seem to persist.

1. Stems unarmed; leaves simple, entire; fruit a drupe . . . . . ***Prunus***
1. Stems armed with prickles; leaves pinnately compound, leaflets serrate; fruit an aggregate of drupelets . . . . . ***Rubus***

Prunus Linnaeus

Prunus pleuradenia

Prunus pleuradenia Grisebach, 1860:231.—Howard, 1988, 4:322.

Tree to 15 m; leaves ~10 cm × 5 cm, basal glands of lower leaf surface usually closer to margin than midrib and a little above the base; flowers white, in unbranched racemes.

Lesser Antilles; apparently rare in Dominica in montane forests at 700 m: Laudat (*Chambers 2688*).

Rubus Linnaeus

Rubus rosifolius

Rubus rosifolius J.E. Smith, 1791, 3, pl. 60, *"rosaefolius"*.—Howard, 1988, 4:325.

Fraise, wild raspberry.

Sprawling, armed ± herbaceous shrub; leaves pinnately compound; petals white; fruit red.

Native of Southeast Asia, naturalized in West Indies and elsewhere; common in Dominica at midelevations: Laudat (*Ernst 1476, Lloyd 48, Nicolson 1973, Smith 10252*), L'Imprévue (*Narodny s.n.*), Lisdara (*Hodge 581*), Massacre River waterfalls (*Hodge 1346*), Morne Gombo (*Eggers s.n.*), Roseau River canyon (*Fairchild s.n.*), South Chiltern (*Hodge 1488*), Trois Pitons (*Hodge 580*), Wallhouse (*Eggers s.n.*), Syndicate (DHN!).

Fruits reported to be used to make jam. Said to have been imported from Guadeloupe. Apparently the Eggers collections (1880, 1881) are the first from Dominica. Adjanohoun et al. (1985:167, pl. 134) reported leaf infusion use against tachycardia.

Howard (l.c., 324) attributed double-flowered *Rubus coronarius* (Sims) Sweet to Dominica without an asterisk. All specimens at hand seem to single-flowered.

RUBIACEAE

This family is easily recognized by opposite (even whorled), entire and stipulate leaves and inferior ovary. The following key is artificial, avoiding the important but difficult character of the number of ovules per locule, the aim being to aid identification.

Lyman B. Smith prepared the initial draft for this family and Joseph Kirkbride, Jr., reviewed a later draft.

Coffee is much cultivated in Dominica.

Coffea arabica Linnaeus tends to have smaller leaves (<20 cm long) than the others, a calyculus with small leafy appendages, acute stipules, and leaves that are cuneate at the base and acuminate at the apex: Lisdara (*Cooper 156*), South Chiltern (*Ernst 1315*), Sylvania (*Cooper 69, Hodge 2500*).

Coffea canephora var. *robusta* (Linden ex De Wildeman) Chevalier tends to have leaves >20 cm long, calyculus with large, leafy appendages, acute stipules and leaves rounded to

obtuse at the base and blunt at the apex (incl. bluntly acuminate): Clarke Hall (*Ernst 1418*), Syndicate road (*Whitefoord 5676, 5677*).

Coffea liberica Bull ex Hiern has leaves >20 cm long, calyculus without leafy appendages, obtuse stipules, and leaves cuneate at base and blunt at apex: Clarke Hall (*Ernst 1420*), Peineville (*Kimber 851*), Syndicate (*Whitefoord 3887*), and is reported as escaping at Clarke Hall (*Stern & Wasshausen 2441*) and Lisdara (*Cooper 155*).

Pentas lanceolata (Forsskål) Deflers, an African subshrub with showy, terminal, red to lilac inflorescences, was collected in the Roseau Botanic Garden (*Hodge 783*[?]) and at Baiac (*Whitefoord 5451*).

Posqueria latifolia (Rudge) Roemer & Schultes, a South American tree with pendulous white corollas >10 cm long, was collected in the Roseau Botanic Gardens (*Hodge 3925*).

Sipanea pratensis Aublet, a South American subshrub with pink corollas and linear calyx lobes, was reported for Dominica (Standley in North Amer. Fl., 1921, 32:93).

Vangueria madagascariensis Gmelin has been identified from material (*Ernst 1415*) "presumed cultivated at Springfield Estate.... Said to be called tamarind," and (*Whitefoord 3747*) "Roadside above Canefield airport, trunk 60 cm diameter." Whitefoord (1989:147) reported that it is cultivated for the fruits, marketed as "tamarins des Indes."

Excluded Rubiaceae

Ernodea littoralis Swartz was attributed to Dominica by Howard (1964, mss.). This species apparently does not occur south of Guadeloupe and seems characteristic of coralline limestone substrate, absent from Dominica.

Hamelia patens Jacquin was reported from Dominica by Grisebach (1861:320), based on an Imray collection that could not be located. Elias (1976:106) said the southernmost Antillean occurrence is Martinique, where it is cultivated. I believe the Dominica record to be based on a misidentification (or, possibly, from cultivation); for example, I have seen a few specimens of *Palicourea crocea*, a very common species of Dominica, misidentified as *H. patens*.

1. Flowers sessile, in clusters or pedunculate heads.
   2. Inflorescence a pedunculate head of sessile flowers.
      3. Heads axillary, without subtending involucre; ovaries fused in fruit . . . . . ***Morinda***
      3. Heads terminal, involucrate; ovaries free in fruit.
         4. Involucral bracts free; fruit blue; leaves thin . . . . ***Psychotria urbaniana***
         4. Involucral bracts united; fruit white; leaves thick . . . . . ***Schradera***
   2. Inflorescence a cluster of sessile flowers.
      5. Stipules 2-lobed; leaves >3 cm wide . . . . . ***Psychotria aubletiana***
      5. Stipules many-toothed; leaves <2 cm wide.
         6. Fruit circumscissile . . . . . ***Mitracarpus***
         6. Fruit separating into 2 cocci, not circumscissile.
            7. Cocci separating, indehiscent or opening at bottom; terminal flower clusters usually smaller than axillary clusters . . . . . ***Diodia***
            7. Cocci partially separating, at least 1 opening at top; terminal clusters of flowers usually larger than axillary clusters . . . . . ***Spermacoce***
1. Flowers pedicellate or, if sessile, in branching inflorescences.
   8. Plants small herbs; leaves <3 cm long.
      9. Leaves 4-whorled . . . . . ***Relbunium***
      9. Leaves paired.
         10. Leaves cordate; berries partially united . . . . . ***Geophila***
         10. Leaves linear or, if cordate, <0.5 mm × 0.5 mm . . . . . ***Hedyotis***
   8. Plants not as above.
      11. Flower solitary.
         12. Flower terminal . . . . . ***Hillia***
         12. Flower axillary.
            13. Leaves several cm across . . . . . ***Exostema caribaeum***
            13. Leaves several mm across . . . . . ***Hedyotis callitrichoides***
      11. Flowers several in a branched inflorescence.
         14. Inflorescence secund (flowers facing to one side).
            15. Inflorescence elongate, with minor branches; flower and fruits on pedicels to 0.5 cm long . . . . . ***Gonzalugunia***

15. Inflorescences rather broad, with 2 or 4 main branches; flowers and fruits sessile.
16. Inflorescence pubescent . . . . . ***Guettarda***
16. Inflorescence glabrous.
17. Stipules free; inflorescence branches equaling the peduncle . . . . . ***Antirhea***
17. Stipules united in a tube; inflorescence branches much shorter than the peduncle . . . . . ***Neolaugeria***
14. Inflorescence not secund.
18. Inflorescence ± sessile (peduncle to 1 cm), tightly or not branched.
19. Plants twining vines; calyx foliose, conspicuous . . . . . ***Manettia***
19. Plants shrubs or small trees; calyx truncate, inconspicuous.
20. Leaves <3 cm long, rounded; plants often armed with stipular spines . . . . . ***Randia***
20. Leaves >10 cm long, acute; plants unarmed.
21. Flowers white, at leafy nodes; stipules persistent . . . . . ***Coffea***
21. Flowers yellow or red, at leafless nodes; stipules deciduous . . . . . ***Ixora***
18. Inflorescence long-pedunculate or, if short, then loosely branched.
22. Inflorescences strictly terminal.
23. Flowers >2 cm long; peduncle branched at or near base.
24. Calyx toothed; fruit an elongate capsule . . . . . ***Exostema***
24. Calyx truncate; fruit a spherical to ellipsoid berry.
25. Flowers white, 4-merous; stamens included; ovary and fruit <1 cm long . . . . . ***Faramea***
25. Flowers yellow, 5-merous; stamens exserted, reflexed; ovary and fruit >1 cm long . . . . . ***Genipa***
23. Flowers <2 cm long; peduncle unbranched.
26. Peduncle red; flowers yellow; inflorescence ± corymbose . . . . . ***Palicourea***
26. Peduncle green; flowers white or pink; inflorescence pyramidal.
27. Inflorescence short (<6 cm); stipules fimbriate . . . . ***Rudgea***
27. Inflorescence longer than 6 cm; stipules not fimbriate.
28. Ovule/seed apical and pendulous . . . . . ***Chione***
28. Ovule/seed basal and ascending . . . . . ***Psychotria***
22. Inflorescences axillary.
29. Calyx deeply toothed, persistent.
30. Plants glabrous; fruit a berry; sprawling shrubs or vines . . . . . ***Chiococca***
30. Plants pubescent; fruit a capsule; trees . . . . . ***Rondeletia***
29. Calyx shallowly toothed to truncate.
31. Plants succulent herbs; flowers sessile . . . . . ***Psychotria***
31. Plants woody; flowers pedicellate.
32. Tree; fruit capsular; leaves 15 cm or longer; stipules large, deciduous . . . . . ***Chimarrhis***
32. Shrubs or pendant epiphytes; fruit berries; leaves <15 cm long; stipules small, persistent.
33. Leaves rounded; shrubs near seacoast . . . . . ***Erithalis***
33. Leaves acute; pendant epiphytes in interior . . . . . ***Psychotria guadalupensis***

Antirhea Commerson ex Jussieu

Antirhea coriacea

Antirhea coriacea (Vahl) Urban, 1899, 1:436.—Standley in North Amer. Fl., 1934, 32:272.
Laugeria coriacea Vahl, 1797, Eclog., 1:26.

Acouquoi, aukakua (Carib).

Small tree to 5 m; leaves glabrous, ovate-elliptic; cymes helicoid with many fragrant, white to pink flowers; calyx 4-lobed.

Jamaica through Lesser Antilles; in Dominica an understory tree of rainforest, 300–800 m: Carib Reserve? (*Taylor 100*),

Glasham (*Nicolson 2009*), Lisdara (*Cooper 186*), Morne Plat Pays ridge (*Hodge 1732*), Warner to Pointe Lolo road (*Ernst 1955*), Syndicate (*Whitefoord 3892*).

Hodge and Taylor (1957:610) reported the wood is used for posts, the fruits are eaten by birds, and the bark may be used for washing sores.

Chimarrhis Jacquin

Chimarrhis cymosa

Chimarrhis cymosa Jacquin, 1763:61.—Standley in North Amer. Fl., 1918, 32:5.—Steyermark, 1965:184.

Bois rivière.

Medium to large tree to 10 m; stipules to 3 cm, soon deciduous and leaving a circular scar; leaves obovate, to 40 cm long, with white tufts at juncture of lateral veins and midrib; inflorescence large, with fragrant, white flowers; fruits capsular.

Typical subspecies from Guadeloupe to St. Vincent (other subspecies in Jamaica and Cuba, teste Steyermark); common in mid-elevations of Dominica from lowlands to 800 m: Bataca (*Stehlé 6365*), Clyde River (*Ernst 1028*), Delices (*Whitefoord 3709*), Deux Branches (*Hodge 2986*), Freshwater Lake (*Nicolson 1839*), Indian River (*Hodge 3749*), La Chaudière (*Hodge 3624*), Lisdara (*Hodge 2476*), Milton (*Hodge 2576*), Morne Colla Anglais (*Hodge 695, 891*), Pont Cassé (*Webster 13478, Wilbur 8137*), Portsmouth (*Hodge 3749*), Providence Valley (*Hodge 2065*), Roche d'Or (*Stern & Wasshausen 2582*), Roseau Valley Waterfalls (*Hodge 2007*), Syndicate(*Whitefoord 3595*), sine loc. (*Cooper 38, Fishlock 10*).

The wood is yellow, used for boards (Hodge and Taylor, 1957:610).

Chiococca Browne

Chiococca alba

Chiococca alba (Linnaeus) Hitchcock, 1893:94.—Standley in North Amer. Fl., 1934, 32:287.—Steyermark, 1972:380.—Howard, 1989, 6:398.

Weak shrub or vine with yellowish flowers and striking white berries.

1. Inflorescence >3.5 cm long, peduncle 1.2–3.0 cm long; flowers usually 9–27; leaves acute, 5–11 cm × 2.0–4.5 cm . . . . . subsp. ***alba***
1. Inflorescence usually <3.5 cm long, peduncle 0.4–1.5 cm long; flowers usually 5–8; leaves obtuse, 2–6 cm × 1–3 cm . . . . . subsp. ***parvifolia***

Chiococca alba subsp. *alba*

Lonicera alba Linnaeus, 1753:175.
Chiococca racemosa Linnaeus, 1759a:917.

Widely distributed in neotropics but apparently rare in Lesser Antilles; in Dominica only in one ravine: Grand Savanne near Salisbury (*Wilbur 8346*).

Chiococca alba subsp. *parvifolia*

Chiococca alba subsp. *parvifolia* (Grisebach) Steyermark, 1971:138; 1972:381.
Chiococca parvifolia Wullschlaegel ex Grisebach, 1861:337.—Standley in North Amer. Fl., 1934, 32:288.—Howard, 1989, 6:399.

Agouti vine, ti buanda, buenda, branda.

Antilles; common in Dominica in lowlands and along coasts: L'Anse Noire (*Ernst 1685, Wilbur 7516*), Anse du Me (*Ernst 1556*), Cabrit Swamp (*Nicolson 1895, Smith 10312*), Carib Reserve (*Hodge 3283, Stehlé 6390*), Castle Bruce (*Ramage s.n.*), Fern Villa (*Hodge 2129*), Grand Bay (*Ernst 1076, Wilbur 7902*), Grand Savanne (*Stern & Wasshausen 2451*), Hampstead (*Lloyd 672, 639*), La Plaine (*Wilbur 8163*), Marigot (*Hodge 683*), Roche Marqué (*Webster 13474*), below Syndicate (*Whitefoord 4308*), Woodford Hill Bay (*Wilbur 8311*), sine loc. (*Fishlock 55*).

Flowers are mixed with those of *Petraea kohautiana* to brew a tea used by Caribs as an abortive (Hodge and Taylor, 1957:611).

Chione A.P. Candolle

Chione venosa

Chione venosa (Swartz) Urban, 1911, 4:594.—Standley in North Amer. Fl., 1934, 32:292.
Jacquinia venosa Swartz, 1788:47.
Psychotria megalosperma Vahl, 1807, Eclog., 3:3, pl. 21, nom. illeg. incl. *Jacquinia venosa* Swartz, 1788.
Chione glabra A.P. Candolle, 1830, 4:461.

Bois anda.

Tree to 10 m; stipules deltoid, deciduous; inflorescence paniculate, loose; pedicels ~1 cm long; calyx a ± truncate rim; corolla white, with short, rounded lobes; anthers basally attached to elongate filaments; fruit a ridged berry >1 cm long.

Scattered from Jamaica to Trinidad; apparently rare and to be sought in Dominica: Layou Flats (*Ramage s.n.*), sine loc. (*Imray 326* at K, *Imray s.n.* at GH).

In Guadeloupe from seaside to 800 m, a useful timber in Grenada. Confusable with *Erithalis*, but leaves not obovate, and *Psychotria*, but flowers rather longer-stalked and ovule position different.

Diodia Linnaeus

Diodia apiculata (Willdenow ex Roemer & Schultes) Schumann was attributed to Dominica by Vélez (1957:112), as *Diodia rigida* Chamisso & Schlechtendal. The species has extremely narrowly linear leaves and the awns of the stipules are glabrous. No collection from Dominica has been seen and its presence is unlikely.

Diodia ocymifolia

Diodia ocymifolia (Willdenow) Bremekamp, 1934:305, *"ocimifolia".*—Steyermark, 1972:791.
Spermacoce ocymifolia Willdenow in Roemer & Schultes, 1818, 3:530.
Hemidiodia ocymifolia (Willdenow) Schumann in Martius, 1888, 6(6):30, pl. 72, *"ocimifolia".*—Adams, 1972:732.

Wild spinach.

Herbaceous perennial with stipular awns ciliate to apex; stem terete with 2 lines of pubescence; axillary inflorescences sessile; fruit of 2 cocci, each with a basal ventral opening.

Neotropical but spreading weed; common in Dominica in disturbed areas along roads or river beds: Carib Reserve (*Hodge 4008*), Deux Branches (*Chambers 2771, Hodge 3491*), Fond Figues bridge (*Ernst 1022*), Freshwater Lake (*Fosberg 48272, Hodge 1866*), Grand Bay (*Wilbur 8029*), Hampstead (*Lloyd 608*), Layou River mouth (*Fosberg 48303*), Milton Estate (*Hodge 2590*), Montpellier (*Lloyd 591*), Pont Cassé (*Wilbur 7730*), Sylvania (*Hodge 3984*).

Erithalis Browne

Erithalis fruticosa

Erithalis fruticosa Linnaeus, 1759a:930.—Standley in North Amer. Fl., 1934, 32:280.—Adams, 1972:715.
Erithalis odorifera Jacquin, 1763:72, pl. 173: fig. 23.—S. Moore & Rendle in Fawcett & Rendle, 1936, 7:67.
Erithalis fruticosa var. *odorifera* (Jacquin) Grisebach, 1861:336.
Erithalis fruticosa subsp. *odorifera* (Jacquin) Steyermark, 1973:248; 1974:870.

Bois chandelle, bois flambeau, black torch, tuli (= torch in Carib).

Small tree with obovate to elliptic leaves; stipules persistent, usually with a medial apiculum; inflorescence cymose and loose, long-pedunculate, borne in outer second to third leaf axils; petals white to cream, with elongate lobes and a short tube; calyx ± truncate; berries longitudinally ridged.

Essentially Caribbean; common in Dominica at low elevations, particularly in windswept vegetation along east coast: East Coast (*Chambers 2610, Ernst 1921, Hodge 684, 3063, Nicolson 1991, Stehlé 6648, Webster 13471, Wilbur 7528, 8328*), North Coast (*Cooper 129, Ernst 1553, Lloyd 607, Wasshausen & Ayensu 381, Wilbur 7517, 8304*), South Coast (*Ernst 1073, Webster 13450, Wilbur 8020*), West Coast (*Ernst 1432, Gillis 8132, Stern & Wasshausen 2399, Whitefoord 4021, 4300*).

Hodge and Taylor (1957:611) noted that the wood is hard and useful for posts. The wood is split and bound in torches 3–4 ft [1 m] long and 3–4 in [7–10 cm] thick and burn for about two hours.

Steyermark (1974:870), Gillis (1976:81), Correll and Correll (1982:1388), and Howard (1989, 6:406) recognized a taxonomic distinction between *Erithalis fruticosa* and *E. odorifera*. Steyermark treated them as subspecies, Gillis as species, the Corrells as varieties, and Howard as species. Steyermark emphasized contrasts in flowers, Gillis emphasized characters in leaves and flowers, the Corrells emphasized floral and stipular characters, and Howard emphasized floral characters. Materials from the northern Caribbean seem to be smaller-flowered and -leaved (*E. fruticosa*, type locality: Jamaica) and materials from the Lesser Antilles appear to be generally larger-flowered and -leaved (*E. odorifera*, type locality: Martinique). Surprisingly, the most southerly materials, Curaçao and Venezuela, approach the northerly materials. I am inclined to agree with Little et al. (1974:930): "This is a variable species with races differing in leaves, flowers and fruits." For purposes of this work I recognize only one taxon. Most Dominican materials are intermediate with a few representatives of each extreme but Howard (l.c.) only attributed *E. odorifera* to Dominica.

Exostema (Persoon) L.C. Richard ex Humboldt & Bonpland

Flowers >5 cm long; fruit a many-seeded capsule.

1. Flowers solitary in axils, white; leaves <10 cm long . . . . . ***E. caribaeum***
1. Flowers in terminal cymes, pink to purple; leaves >10 cm long . . . . . ***E. sanctae-luciae***

Exostema caribaeum

Exostema caribaeum (Jacquin) Schultes in Roemer & Schultes, 1819, 5:18.—Standley in North Amer. Fl., 1921, 32:120.
Cinchona caribaea Jacquin, 1760:16.

Shrub or small tree to 5 m; stipules persistent, acute; flowering June–August with a vanilla fragrance.

Caribbean; occasional in Dominica in scrublands along west coast: Cabrits (*Ernst 1927, Whitefoord 4042*), Gabriel (*Wilbur 8240*), Grand Savanne (*Lloyd 828*), *Stern & Wasshausen 2457*), Pointe Ronde (*Ernst 1561, Hodge 2745*). Collected in fruit without leaves in April.

Exostema sancta-luciae

Exostema sanctae-luciae (Kentish) Britten, 1915:138, *"Exostemma."*
Cinchona sanctae-luciae Kentish, 1784:52.
Cinchona floribunda Swartz, 1788:41.
Exostema floribundum (Swartz) Schultes in Roemer & Schultes, 1819, 5:19.—Standley in North Amer. Fl., 1921, 32:122.

Quina, chinna rouge, bois amer, utauaho (Carib).

Tree to 12 m; leaves elliptic ~15 cm × 7 cm; stipules tubular, obtuse.

Guadeloupe(?) to St. Vincent; occasional in Dominica in wet, open woodlands from 100–1000 m: Carib Reserve (*Taylor 147*), La Chaudière (*Hodge 3609*), Concorde (*Nicolson 4063*), Freshwater Lake (*Eggers 542*), Hatton Garden (*Hodge 3018*), Lisdara (*Cooper 52, 164*), Providence Valley (*Hodge 2047*), South Chiltern (*Ernst 1110, Stern & Wasshausen 2490*), Syndicate (*Hodge 2909, Whitefoord 3656*), sine loc. (*Imray*

s.n., *Cooper 54, 54A, Ramage s.n.*). Flowers December-March.

Howard (1989, 6:412) said that Greater Antillean materials previously identified with this species are best assigned to *Exostema ellipticum* Grisebach.

A decoction is used as an emetic and purgative by Caribs and the wood for paddles (Hodge and Taylor, 1957:611).

Faramea Aublet

Faramea occidentalis

Faramea occidentalis (Linnaeus) A. Richard, 1829:96; 1834:176.—Steyermark, 1967:384.
Ixora occidentalis Linnaeus, 1759a:893.

Line rod, café marron.

Small tree to 8 m; stipule with awn longer than tube; inflorescence terminal, often several from the same node; corollas elongate, purple in bud, pinkish white and fragrant at anthesis, promptly deciduous; berries spherical, dark purple to black.

Neotropics; occasional to common in Dominica in wet interior, 100-700 m: La Chaudière (*Hodge 3594*), La Plaine area (*Ernst 1363, Nicolson 4125*), Pont Cassé area (*Ernst 1801, Howard 11759, Lloyd 755, Wilbur 8286, 8319*), east of Salisbury (*Stern & Wasshausen 2585, Webster 13555*), Sylvania (*Hodge 688, 689, 690, 1153*), Syndicate (*Hodge 2616, Wasshausen & Ayensu 350, Whitefoord 3539, 3549*), sine loc. (*Imray 247*).

Genipa Linnaeus

Genipa americana

Genipa americana Linnaeus, 1759a:931.—Standley in North Amer. Fl., 1921, 32:156.—Little & Wadsworth, 1964:512, pl. 243.

Genip, alasibikai (by Carib men), saua (by Carib women).

Medium tree; leaves obovate-oblanceolate, glossy, clustered on branch ends; stipules acute, deciduous; corolla pale yellow, 5-lobed, ~2 cm long and 3 cm across; style exserted; fruits ~6 cm long, brown, thick-walled, many-seeded.

Neotropics; only plants known to me in Dominica are just south of Portsmouth: by highway 3 miles [5 km] south of Portsmouth (*Nicolson 4190*), bottom of road to Hungry Hill (*Whitefoord 5910*).

Said not to occur on Dominica by Beard (1944:65). Not known to foresters, perhaps introduced by Caribs. Hodge and Taylor (1957:611) discussed at length how the Caribs use it as source of blue skin stain and an ingredient in treating yaws.

Geophila D. Don, nom. cons.

Geophila repens

Geophila repens (Linnaeus) Johnston, 1949a:281.—Steyermark, 1972:395.
Rondeletia repens Linnaeus, 1759a:928.
Psychotria herbacea Jacquin, 1760:16.
Geophila herbacea (Jacquin) Schumann in Engler & Prantl, 1891, IV(4):119.

Petit caapi tourtelle.

Creeping herb with cordate leaves, white flowers, and red berries.

Neotropics; occasional ground cover or weed of damp, disturbed areas in lowlands of Dominica: Carib Reserve (*Stehlé 6423*), Clarke Hall (*Ernst 1581, Nicolson 2003, Stern & Wasshausen 2404*).

A ritual bath is made from this by Caribs (Hodge and Taylor, 1957:612).

An Asiatic element, illustrated by Rheede (1690:10, pl. 21), was cited in the original protologues of both *Rondeletia repens* Linnaeus and *Psychotria herbacea* Jacquin, both apparently typified on neotropical elements. See Nicolson et al. (1988:221) for synonymy and a summary. Howard (1989, 6:416) expressed reservations.

Gonzalagunia Ruiz & Pavón, nom. cons.

Gonzalagunia hirsuta

Gonzalagunia hirsuta (Jacquin) Schumann in Martius, 1889, 6(6):291.—Howard, 1973b:456.
Justicia hirsuta Jacquin, 1760:11.
Lygistum spicatum Lamarck, 1792, Tabl., 1:286.
Gonzalagunia spicata (Lamarck) Gomez de la Maza, 1894:289.—Steyermark, 1972:313.
Duggena spicata (Lamarck) Standley, 1916b:126; in North Amer. Fl., 1921, 32:135.

Bois cabrit.

Herbaceous shrub to 4 m; stipules lanceolate to linear; inflorescence terminal, arching, secund; calyx lobes 4(15), linear; corolla white; fruits white, turning purple, dicoccous.

Hispaniola to northern South America; a common weed in Dominica in disturbed and wet areas: Clarke Hall (*Ernst 1975, Stern & Wasshausen 2407, Wilbur 7363*), Freshwater Lake area (*Chambers 2670, Lloyd 195, Ernst 1722, Smith 10249*), Grand Bay (*Wilbur 8023*), Lisdara (*Hodge 681, 2341*), Londonderry (*Chambers 2517*), Melville Hall (*Hodge 682*), Pont Cassé area (*Ernst 1018*), *Nicolson 1848, Skog 1572, Webster 13383, Wilbur 7535, 7544*), Portsmouth (*Ernst 1055*), Sylvania (*Cooper 25*), Syndicate (*Whitefoord 3529*), sine loc. (*Imray 244, Cooley 8711*).

On 20 May 1977 (Syndicate Estate) I noted flowering specimens at 580 m to be of two kinds, with style exserted and stamens in throat or vice versa.

Guettarda Linnaeus

Flowers sessile and secund.

1. Leaves oblong-obovate, to 3 cm long; inflorescence 3-6-flowered . . . . . ***G. odorata***

1. Leaves ovate-elliptic, >5 cm long; inflorescence many-flowered.
   2. Leaves >15 cm long, glabrous above, pubescent below only on veins; stipules broad, >1 cm long . . . . . ***G. crispiflora***
   2. Leaves to 10 cm long, scabrous above, tomentose below; stipules narrow, <1 cm long . . . . . ***G. scabra***

Guettarda crispiflora

Guettarda crispiflora Vahl, 1797, Eclog., 1:36, pl. 6.—Standley in North Amer. Fl., 1934, 32:233.—Steyermark 1972:367.

Small tree to 12 m (noted 5 cm dbh at 1100 m on Diablotins); peduncles once-forked with elongate branches; corollas fringed, white to pink; fruits turgid, becoming 4-angled when dry.

Montserrat to Grenada (other subspecies in South America); occasional in Dominica in interior, 600–1000 m: Morne Micotrin area (*Chambers 2737, Ernst 1089, 2174, Wasshausen & Ayensu 333, Webster 13258, Wilbur 8198*), Morne Diablotins (*Hodge 2798, Whitefoord 4561*), Rosalie (*Eggers 636*), sine loc. (*Imray s.n.*).

Guettarda odorata

Guettarda odorata (Jacquin) Lamarck [1792, Tabl., 1, pl. 154: fig. 4, sine nom.], 1819, Tabl., 2:219.—Standley in North Amer. Fl., 1934, 32:259.—Steyermark, 1972:360.
Laugieria odorata Jacquin, 1760:16.
Guettarda parviflora Vahl, 1798, Eclog., 2:26.—Standley in North Amer. Fl., 1934, 32:257.
Guettarda parvifolia Swartz, 1806:1958.

Shrub to 4 m with few-flowered cymes to 2 cm long; corollas white, margins entire; fruits turgid, not ridged when dry.

West Indies (not Jamaica) to Isla Marguerita; occasional to abundant in Dominica north of the Grand Savanne: south slopes of Batali River (*Ernst 1643*), Gabriel slopes (*Wilbur 8241, 8273*), sine loc. (*Imray s.n.*). Flowering June–August, fruiting in August.

Steyermark (1972:360) re-lectotypified *Laugieria odorata* Jacquin on Cuban material, rather than on Colombian material (= *G. divaricata*) as previously done by Standley.

Guettarda scabra

Guettarda scabra (Linnaeus) Ventenat, 1803:1, pl. 1.—Lamarck [1792, Tabl., 1, pl. 154: fig. 3, sine nom.], 1819, Tabl., 2:218.—Standley in North Amer. Fl., 1934, 32:239.—Steyermark, 1972:365.
Matthiola scabra Linnaeus, 1753:1192.
Guettarda rugosa Swartz, 1788:59.

Pasture wattle, bois savanne.

Shrub or tree to 10 m; inflorescence 4-branched; flowers crowded, petals white to pink, entire; fruits spherical.

Neotropical into Venezuela; common to occasional in Dominica near coasts to 200 m: East coast (*Ernst 1369, Hodge 3186, Stehlé 6381, 6419*), North coast (*Ernst 1686, 1830, Hodge 698, 3139, Lloyd 663, Wilbur 7519, 8300*), West coast from Capuchin to Grand Savanne (*Ernst 1391, Hodge 3497, 3787, Lloyd 726, Nicolson 1913, Stern & Wasshausen 2448, 2540, Wasshausen & Ayensu 383, Webster 13405, Whitefoord 4488, Wilbur 7650*), South coast (*Wilbur 7904*).

Used for living fences.

Hedyotis Linnaeus

Small herbs with capsular, bilocular, loculicidal fruits.

1. Leaves tiny (2–3 mm long), rotund; flowers solitary . . . . . ***H. callitrichoides***
1. Leaves 1–2 cm long, lanceolate-linear; flowers paired or in cymes.
   2. Flowers usually paired in leaf axils, pedicels >1 cm long . . . . . ***H. commutata***
   2. Flowers several, in peduncled cymes, pedicels <1 cm long . . . . . ***H. corymbosa***

Hedyotis callitrichoides

Hedyotis callitrichoides (Grisebach) W.H. Lewis, 1961:222.—Whitefoord, 1989:146.
Oldenlandia callitrichoides Grisebach, 1862a:506.—Standley in North Amer. Fl., 1918, 32:11.
Oldenlandiopsis callitrichoides (Grisebach) Terrell & W.H. Lewis, 1990:185.

Scattered in northern neotropics; an easily overlooked herb, often in cracks of terraces or stairs: La Plaine (*Whitefoord 5374*), South Chiltern Estate (*Ernst 1873*).

Hedyotis commutata

Hedyotis commutata J.H. & J.A. Schultes in Roemer & Schultes, 1827 [Jul], 3(Mant.):134.—Whitefoord, 1989:146.
Hedyotis lancifolia Schumacher, 1827 [month?]:72.—Howard, 1989, 6:424.
Oldenlandia lancifolia (Schumacher) A.P. Candolle, 1830, 4:425.—Steyermark, 1972:309.—Verdcourt in Milne-Redhead & Polhill, 1976, Rub., 292.

Widespread weed; new record for Dominica: Trafalgar Falls road (*Whitefoord 4589*).

It is assumed that *Hedyotis commutata* was published before *H. lancifolia*.

Hedyotis corymbosa

Hedyotis corymbosa (Linnaeus) Lamarck, 1792, Tabl., 1:272.
Oldenlandia corymbosa Linnaeus, 1753:119.—Steyermark, 1972:309.

Pantropical weed; occasional in Dominica in exposed or disturbed places: Baiac road (*Whitefoord 4361*), Cabrits (*Whitefoord 4037*), Clarke Hall (*Ernst 1503*), Goodwill (*Ernst 1279*), Roseau streets (*Ernst 2148*, in a diminutive and dense aspect), Scotts Head (*Ernst 1333, Wilbur 7600*), Soufrière (*Lloyd 406*, not seen), Tarou cliffs (*Nicolson 1966*), Wallhouse (*Eggers 571*).

Adjanohoun et al. (1985:169, pl. 136) reported medicinal use (as *Oldenlandia corymbosa* L.) as a decoction syrup to treat grippe.

Hillia Jacquin

Hillia parasitica

Hillia parasitica Jacquin, 1760:18.—Standley in North Amer. Fl., 1921, 32:116.—Steyermark, 1972:291.
Hillia longiflora Swartz, 1788:58, nom. illeg.

Sprawling shrub or liana with solitary, terminal, (4–)6-lobed flowers ~10 cm long; leaves acuminate, leathery; stipules 3 cm × 1 cm, soon deciduous; fruit an elongate (to 6 cm) capsule with hairy seeds.

Northern neotropics; common to occasional in Dominica in interior forests, 450–1150 m: Bellevue (*Taylor 33*), Boiling Lake (*Hodge 1939*), Carib Reserve (*Hodge 3237*), Concorde Valley (*Hodge 3110*), Pointe Lolo (*Webster 13386*), Laudat-Freshwater Lake area (*Chambers 2690, Ernst 1098, Gillis 8161, Hodge 1802, 1839, Lloyd 164, Nicolson 1840, Smith 10256, Webster 13239, Wilbur 7389*), Pont Cassé area (*Ernst 1012, Stern & Wasshausen 2557, Webster 13469, Wilbur 7816, 7845*), Syndicate (*Hodge 2587*).

Ixora Linnaeus

Ixora macrothyrsa (Teijsmann & Binnendijk) T. Moore has been collected in the Roseau Botanic Garden (*Hodge 974, 3952*). This may be a misidentification of *Ixora casei* Hance or *Ixora duffii* T. Moore, true *I. macrothyrsa* being apparently unknown in cultivation.

1. Leaves sessile; inflorescence terminal; flowers to 5 cm long . . . . . ***I. coccinea***
1. Leaves shortly but clearly petiolate; inflorescence axillary (on old wood); flowers to 1 cm long . . . . . ***I. ferrea***

Ixora coccinea

Ixora coccinea Linnaeus, 1753:110.—Fosberg & Sachet, 1989:487.

Petit z'icaque.

Shrub with rounded to ± amplexicaul leaf-bases; color forms from yellow to red.

Asiatic species now widely cultivated; cultivated in Dominica but collected once on windswept east coast: Castle Bruce trail between Salybia and Gaulettre River (*Hodge 3333*), cult. in Roseau Bot. Garden as *I. lutea* (*Fairchild 2668*) and *I. chinensis* (*Fairchild s.n.*).

Ixora ferrea

Ixora ferrea (Jacquin) Bentham, 1850:447.—Standley in North Amer. Fl., 1934, 32:299.—Steyermark, 1967:352.
Sideroxyloides ferreum Jacquin, 1763:19, pl. 175: fig. 9.

Bois pichette, bois crapaud.

Small tree to 12 m; flowers axillary in 1-3-flowered cymes, pink to orange-red outside and white within.

West Indies and Venezuela; infrequent in Dominica but pervasive in eastern subcoastal woodlands and interior to 750 m: Brush (*Nicolson 2157, Wasshausen & Ayensu 405*), Castle Bruce (*Ramage s.n.*), La Plaine area (*Chambers 2727, Ernst 1913*), Laudat-Freshwater Lake area (*Chambers 2681*), Morne au Diable (*Nicolson 1931, Wasshausen & Ayensu 371*), Lisdara (*Cooper 159, 159A, Hodge 2391, 2473*), Morne Plat Pays (*Wilbur 7870*), Pointe Lolo (*Ernst 1172, 1548*), Red Gully (*Hodge 2510*), Sylvania (*Hodge 1035*), Syndicate (*Whitefoord 4359*).

Manettia Mutis ex Linnaeus, nom. cons.

Manettia dominicensis

Manettia dominicensis Wernham, 1918:37.—Standley in North Amer. Fl., 1921, 32:98.
Manettia calycosa sensu Grisebach, 1861:330, as to Dominican specimen cited.

Twining vine; calyx 4-lobed, the lobes ~2.5 mm broad at base, tapering, persistent, ~6 mm long; corolla white, ~1 cm long, tubular.

Guadeloupe to St. Vincent (St. Lucia?); occasional in Dominica but only in one area: Freshwater Lake vicinity (*Chambers 2745, Eggers 53, Ernst 1092, 2172, Fosberg 48274, Ramage s.n., Wasshausen & Ayensu 324, Webster 13257, Wilbur 7392*), sine loc. (*Imray 65, 216*).

Chung (1967:277) designated material in an envelope attached to *Imray 65* (GOET) as lectotype of *Manettia calycosa* Grisebach, a distinctive species with red flowers and broad calyx lobes known only from Hispaniola, Colombia, and Venezuela. Chung explained the type as "the corolla and two capsules in the envelope should be the type. The branch with leaves and capsules is *M. dominicensis* Wernh." This lectotypification perhaps is superseded because its provenance is unknown and is surely from one or two other specimens that have been recognized as taxonomically different.

Grisebach's protologue for *M. calycosa* is a mixture of characters and specimens that can be attributed to *M. calycosa* or *M. dominicensis*. Usage is established and I see no reason to change the historic application of the names. Grisebach said "HAB. Dominica!, *Imr.*, in the mountains: a form with ovate-lanceolate calyx lobes; [Haiti!, Venezuela!, *Fendl. 588*]." What he meant was simply that this taxon (called "form") has ovate to lanceolate calyx-lobes and was collected by Imray in Dominica (included in the coverage of his flora) and occurs outside the coverage of the flora (cited in square brackets) in Haiti (actually a Schomburgk collection at Kew) and Venezuela (*Fendler 588*). It is reasonably evident from his description and the syntypes that Grisebach placed more weight on the flowering specimens (from Haiti and Venezuela) than on the fruiting specimen (from Dominica). Hence, I have no

problem following all subsequent workers in excluding the Dominican material from lectotypification of *M. calycosa* Grisebach. The apparent emphasis in Grisebach's habitat discussion on Dominica is merely an artifact of the *Flora* he was writing, his species concept was of the non-Dominican materials.

Having gone this far, I also note that Steyermark (1972:238), identified *Fendler 588* as *Manettia calycosa* var. *karstenianum* Schumann. This implies that the Haitian material cited by Grisebach should be recognized as the lectotype of *M. calycosa* Grisebach. This proves to be a Schomburgk collection (K). The flowering and fruiting material in the envelope on the Imray specimen retained by Grisebach at Goettingen, designated as lectotype by Chung, may be a mixture taken from the Haitian (Schomburgk) and Venezuelan (Fendler) collections. In view of the confusion and mixtures involved, I accept the Schomburgk specimen at Kew as the superseding lectotype of *M. calycosa* Grisebach. Howard (1989, 6:433) reached the same position.

Mitracarpus Zuccarini

Mitracarpus hirtus

Mitracarpus hirtus (Linnaeus) A.P. Candolle, 1830, 4:572.—Nicolson, 1977a:573.
Spermacoce hirta Linnaeus, 1762:148.
Spermacoce villosa Swartz, 1788:29.
Mitracarpus villosus (Swartz) Chamisso & Schlechtendal ex A.P. Candolle, 1830, 4:52.—Steyermark, 1972:782.—Verdcourt, 1975:322.—Ward, 1976:679.

Annual herb with lanceolate ovate or elliptic, ± sessile leaves and dense, axillary, sessile flowers; calyx persistent, of 2 longer and 2 shorter teeth; capsule circumscissile; seed with a ventral cross.

Northern neotropics into Florida; common but often overlooked weed in Dominica in dry, disturbed areas: Delices (*Whitefoord 3672*), Dublanc (*Whitefoord 4292*), Fond Hunte Estate (*Whitefoord 4456*), Grand Savanne (*Nicolson 1946*, mixed with *Spermacoce eryngioides* var. *questelii*), Layou Valley (*Ernst 1524*), Montpelier (*Lloyd 586*).

Mitracarpus hirtus is similar to *Spermacoce* but may be distinguished by its circumscissile capsule and cross-bearing seed.

There has been controversy regarding whether the correct name for this species is *M. hirtus* or *M. villosus*. The fundamental question is whether A.P. Candolle included the type of *Spermacoce hirta* Linnaeus (1762) in his *Mitracarpus hirtus* (where he indirectly referred to it) or excluded it by placing it in his *M. villosus* when he stated under the latter, *"Sp. hirta* Jacq. ic. rar. t. 308 et forte Linn." A proposal to revise the Code to define exclusion "by explicit inclusion of the type in another taxon" passed. De Candolle's suggestion that *"S. hirta* ... Linn." perhaps belongs in *M. villosus* does not constitute explicit exclusion of the type of *S. hirta* Linnaeus from *Mitracarpus hirtus*.

Morinda Linnaeus

Morinda citrifolia

Morinda citrifolia Linnaeus, 1753:176.—Adams, 1972:700.

Feuille froide.

Succulent shrub or tree to 5 m; stipules ovate, rounded; inflorescence axillary, a head with united ovaries; flowers white; fruit fleshy, becoming whitish with age.

Native of tropical Asia, widely naturalized in neotropics; common in Dominica near beaches: Botanic Garden (*Hodge 900*), Cabrit swamp (*Hodge 710*), Canefield (*Nicolson 2074*), East coast (*Chambers 2548, Ernst 1469, Gillis 8151, Hodge 2954, 3319, Whitefoord 3763, Wilbur 7986*), Pointe Ronde (*Hodge 2690*), Scotts Head (*Hodge 1647, Kimber 889, Webster 13444*).

Used for wrapping rheumatic joints (Hodge and Taylor, 1957:612.

Neolaugeria Nicolson

Neolaugeria resinosa

Neolaugeria resinosa (Vahl) Nicolson, 1979:121.
Laugeria resinosa Vahl, 1797, Eclog., 1:27.—Standley in North Amer. Fl., 1934, 32:277.
Stenostomum resinosum (Vahl) Grisebach, 1861:334.
Terebraria resinosa (Vahl) Sprague, 1932:349.—Little & Wadsworth, 1964:524, pl. 525.

Small tree or shrub to 5 m; leaves glossy and viscid; venation paxillate (with strikingly elongate areoles) and brochidodromous (loop-veined near margin); stipules ± persistent, tubular, ~2 mm long, ciliate, resinous; inflorescences pedunculate, borne in upper axils, bifurcate with secund, greenish white flowers; fruits greenish.

Hispaniola, Puerto Rico, Guadeloupe, Martinique, and St. Vincent; occasional in Dominica to 500 m: Hungry Hill Estate (*Whitefoord 4427*), Pointe Carib (*Wilbur 8008*), Soufrière Bay (*Stern & Wasshausen 2482*), South Chiltern (*Ernst 1866*), Sylvania (*Webster 13410*).

Palicourea Aublet

Palicourea alpina (Swartz) A.P. Candolle was attributed to Dominica by Grisebach (1861:345), based on Imray collections. This is believed to be a misidentification because *P. alpina* seems to be restricted to the Greater Antilles and, possibly, Central America. *Palicourea alpina* has more curved lateral veins to 1 cm apart and stipules with a tube 2–3 mm long, while *P. crocea* has straighter lateral veins >1 cm apart and stipules with tubes to 1 mm long.

Some Antillean specimens have been determined as *Palicourea riparia* Bentham but are indistinguishable from *P. crocea*. Adams (1972:729) synonymized the species but Steyermark (1972:738) recognized *Palicourea crocea* var. *riparia* (Bentham) Grisebach as restricted to northern South America.

Palicourea crocea

Palicourea crocea (Swartz) Schultes in Roemer & Schultes, 1819, 5:193.—Steyermark, 1972:737.
Psychotria crocea Swartz, 1788:44.

Shrub or tree to 6 m; leaves lanceolate, acute at both ends; stipule with tube ~1 mm long and 4 teeth 1–3.5 mm long (in ours); inflorescence terminal, thyrsoid, axis and pedicels usually red, occasionally yellow or orange.

The typical variety is Antillean, others extend to Bolivia; one of the most common (and most frequently collected) plants in Dominica in lower to middle elevations, 50–600 m, occasionally to 1300 m: Northeast and East coast (*Chambers 2611, Ernst 1904, Hodge 687, 3406, 3562, Lloyd 667, Nicolson 4072, Stehlé 6415, Whitefoord 3760, Wilbur 7525*), Diablotins area (*Hodge 2585, 2601, 2818, Lloyd 906, Webster 13333, 13544, Whitefoord 3494*), Pont Cassé to Sylvania area (*Cooper 6, Ernst 2050, Fosberg 48301, Hodge 686, 1188, 1298, Nicolson 1846, Wilbur 7545, 7712, 7758, 8315*), Freshwater Lake area (*Chambers 2671, Gillis 8160, Hodge 1870, 1929, Smith 10301, Wilbur 7433*, Southern end (*Ernst 1316, Gillis 8119, Hodge 699, 1660, 1498, 2384, Howard 11737, Lloyd 10, Stern & Wasshausen 2408, 2497, Webster 13201*), sine loc. (*Cooley 8785*).

There is a correlation between leaf size and altitude; specimens from higher elevations have smaller leaves than those from middle and lower elevations.

Psychotria Linnaeus, nom. cons.

Psychotria nervosa Swartz (as *Psychotria lanceolata* Nuttall) was attributed to Dominica by Grisebach (1861:342) based on an Imray collection. The species is distinguishable by a tubular but deciduous stipule, shortly petiolate leaves, and a subsessile inflorescence. The Imray specimen has not been checked but no collections attributable to *P. nervosa* have been seen.

1. Flowers sessile, in axillary clusters or terminal bracteate heads.
   2. Flowers in axillary clusters . . . . . ***P. aubletiana***
   2. Flowers in terminal, pedunculate heads surrounded by broad bracts . . . . . ***P. urbaniana***
1. Flowers pedicellate or, if sessile, in branching inflorescences.
   3. Herbs with thick, succulent stems; leaves >10 cm broad, rounded or shortly acuminate at apex; inflorescences strictly axillary.
      4. Inflorescences shorter than petioles; fruit white . . . . . ***P. discolor***
      4. Inflorescences longer than petioles; fruit red . . . . . ***P. uliginosa***
   3. Plants with woody or herbaceous stems, but not succulent; leaves <10 cm broad; inflorescences terminal but irregularly axillary.
      5. Plants epiphytic; leaves fleshy . . . . . ***P. guadalupensis***
      5. Plants terrestrial; leaves membranous or leathery.
         6. Calyx clearly lobed, the teeth as long or longer than broad; stipules with 2 teeth as long as tube of stipules, persistent . . . . . ***P. berteriana***
         6. Calyx essentially a truncated rim, the teeth only tiny points; stipules not toothed or with teeth shorter than stipule-tube.
            7. Stipules persistent, only 2 mm long; vein-axils with white, pubescent domatia where lateral veins join the midrib . . . . . ***P. microdon***
            7. Stipules soon deciduous, 5 mm long; vein axils often with glabrous pocket-domatia.
               8. Calyx essentially truncate; stipules blunt; inflorescence peduncle elongate . . . . . ***P. mapourioides***
               8. Calyx shortly but conspicuously toothed; stipules lanceolate, often bifid; inflorescence peduncle short . . . . . ***P. tenuifolia***

Psychotria aubletiana

Psychotria aubletiana Steyermark, 1972:694.
Cephaelis axillaris Swartz, 1788:45, non *Psychotria axillaris* Willdenow, nor Vellozo.

Shrub to 1.5 m with sessile, axillary heads of white flowers and blue fruits.

Lesser Antilles; common in Dominica on forest floors above 1000 m (replacing *P. urbaniana* of lower elevations): Morne Anglais (*Hodge 700, 2272, Wilbur 7943*), Morne Diablotins (*Webster 13324, Whitefoord 4436*), Laudat (*Lloyd 124*), Morne Trois Pitons (*Chambers 2481, Ernst 2026, Hodge 701, 1390, Wasshausen & Ayensu 388, Wilbur 8094*), Morne Nicholls (*Hodge 1934, Nicolson 2019*), Mosquito Mountain (*Webster 13552*), sine loc. (*Imray s.n., 278*).

Psychotria berteriana

Psychotria berteriana A.P. Candolle, 1830, 4:515.—Steyermark, 1972:534.
Psychotria platyphylla A.P. Candolle, 1830, 4:517.

Shrub or small tree to 10 m; stipules persistent, ~2 mm long but with 2 broad, lateral teeth ~2 mm long; inflorescences terminal, long-pedunculate, loosely branching, pubescent; calyx teeth as long as hypanthium; corolla white; fruits turning black, spheroid, longitudinally ridged, capped with persistent calyx teeth and subtended by 1 or more bracts.

Northern neotropics; occasional to common in Dominica in interior rainforest, 100–1000 m: Boeri Lake (*Whitefoord 4155*), Fon Pays (*Hodge 2838*), La Chaudière (*Hodge 3606, 3630*), Pont Cassé area (Sylvania to Deux Branches), (*Chambers 2519, Ernst 1286, 1941, Hodge 711, 2968, 3114, 3120, 3489, 3970, Nicolson 2119, 4039, Proctor 25784, Wilbur 7550, 7551, 8192*), Syndicate (*Whitefoord 3594, 4351*).

Psychotria discolor

Psychotria discolor (Grisebach) Rolfe, 1893:258.—Adams, 1972:723.
Psychotria uliginosa var. *discolor* Smith ex Grisebach, 1861:340.
Psychotria caribaea Urban, 1913, 7:437.

Succulent herb to 2 m; stipules broad, rounded, and deciduous; leaves large, obovate, attenuate below, rounded above; inflorescence short, axillary, puberulent; flowers and fruits white.

Jamaica, Guadeloupe, Martinique; known in Dominica only from the vicinity of Freshwater and Boeri Lakes in dense shade, ~800 m: (*Chambers 2586, Ernst 1721, 1856, 2168, Wilbur 8201*).

Remarkably similar to *P. uliginosa* in habit but the inflorescence is totally different.

I find no useful distinction between Jamaican *P. discolor* and Lesser Antillean *P. caribaea* and have synonymized the latter. Joseph Kirkbride, a specialist in Rubiaceae, pointed out (pers. comm.) that this species is, as Urban said in describing *P. caribaea*, very similar to *Psychotria macrophylla* Ruiz & Pavón of Central and South America. Perhaps this taxon is, at best, only an Antillean subspecies of *P. macrophylla* with a subsessile inflorescence.

Psychotria guadalupensis

Psychotria guadalupensis (A.P. Candolle) Howard, 1966:139.—Steyermark, 1972:569.
Viscoides pendulum Jacquin, 1763:73, pl. 51: fig. 1.
Psychotria parasitica Swartz, 1788:44, nom. superfl.
Loranthus guadalupensis A.P. Candolle, 1830, 4:294.
Loranthus portoricensis A.P. Candolle, 1830, 4:293.
Mapouria parasitica Schumann in Engler & Prantl, 1891, IV(4):112.
Psychotria pendula (Jacquin) Urban, 1900, 1:445, non J. Hooker.

Pendant and often succulent epiphyte; stipules papery, tubular-truncate, 1–2 mm long, eventually lost; inflorescences usually terminal, loose, often red; flowers white; fruits red, turning black.

Antilles into South America; frequent in Dominica from 100–1300 m, particularly fleshy on ridges and summits: La Chaudière (*Hodge 3640*), Morne Diablotins (*Fishlock s.n., Hodge 2615, 2905, Webster 13350, Whitefoord 4235, 5746*), Pont Cassé area from Sylvania to Deux Branches and to summit of Trois Pitons (*Chambers 2593, 2607, Cooper 91, 195, Ernst 1211, Haweis 29, Hodge 714, 717, 1044, 1409, 1737, 3103, Lloyd 38* (and/or *41*?), *Nicolson 1808, 2126, Skog 1574, Wilbur 7722, 7806, 8102*), Freshwater Lake area (*Burch 1467, Eggers 52, 670, Hodge 1792, Smith 10299, Wasshausen & Ayensu 341*), Boiling Lake area (*Hodge 1927*), Southern area (*Beard 251, Hodge 715, 716, 1456, 2286, Stern & Wasshausen 2504, Wilbur 7926*), sine loc. (*Imray 134*).

Steyermark (1972:569) cited both *P. guadalupensis* subsp. *guadalupensis* (corolla 6–7 mm long) and *Psychotria guadalupensis* subsp. *grosourdyana* (Baillon) Steyermark (corolla 2.5–4 mm) for Dominica. All corollas measured on Dominican specimens appeared to be 5–6 mm long, except for *Wilbur 7722* (fruiting) on which the only open corolla found was 4.5 mm (a duplicate at NY was annotated by Steyermark as subsp. *grosourdyana*). Howard (1989, 6:446) pointed out that corolla length may be associated with heterostyly.

Psychotria mapourioides

Psychotria mapourioides A.P. Candolle, 1830, 4:509.—Steyermark, 1972:457.—Howard, 1989, 6:446.
Mapouria guianensis Aublet, 1775:175, pl. 67, not *Psychotria guianensis* (Aublet) Rusby, based on *Palicourea guianensis* Aublet.
Psychotria nitida Willdenow, 1798, 1:963, nom. superfl.
Psychotria mapuria Schultes in Roemer & Schultes, 1819, 5:187, nom. superfl.
Psychotria floribunda sensu Grisebach, 1861:340, non Kunth, fide Steyermark, 1972:457.

Shrub or tree to 9 m; stipules deciduous, >1 cm long, blunt or rounded; inflorescence terminal, typically long-pedunculate; calyx truncate, rim ciliate with tiny teeth much shorter than hypanthium; fruit turning red.

Antilles into northern South America; occasional in Dominica from near sea level to 750 m: East coast from Salybia to Rosalie (*Chambers 2631, Ernst 1677, Hodge 3313, Nicolson 4133, Stehlé 6642, Stern & Wasshausen 2483*), Morne aux Diables area (*Wasshausen & Ayensu 377, Wilbur 8065*), Syndicate (*Ernst 2003, Wasshausen & Ayensu 344, Whitefoord 3537, 5622*), Jean (*Webster 13496*), Sylvania (*Hodge 712*), Freshwater Lake area (*Gillis 8168, Lloyd 210, 217, 260*), Southwest area from Roseau to Morne Plat Pays (*Cooper 175, Lloyd 689, Nicolson 2098, Stern & Wasshausen 2492, Webster 13490*), sine loc. (*Imray s.n.*).

This treatment is provisional because neither the taxonomy nor the nomenclature is settled. Steyermark does not quite dispose of the oldest name, *Psychotria floribunda* Kunth, and it is not clear that *P. mapourioides* sensu Steyermark reaches the Lesser Antilles.

Psychotria microdon

Psychotria microdon (A.P. Candolle) Urban, 1928, 9:539.—Steyermark, 1972:446.
Rondeletia microdon A.P. Candolle, 1830, 4:408.
Psychotria pinnularis Sessé & Moçiño, 1892:57.

Shrub to 2 m; stipules persistent, 1–2 mm long, ciliate; inflorescence terminal, loose; calyx ± truncate; flowers white.

Antilles into South America and Costa Rica; apparently a new record for Dominica where it is occasional in dry woodlands along west coast: northern Grand Savanna (*Ernst 1639*), lower Layou Valley (*Ernst 1509, 2179*).

Psychotria tenuifolia

Psychotria tenuifolia Swartz, 1788:43.—Britton & Wilson, 1925, 6:247.

Shrub or small tree; stipules deciduous, acute, and often bifurcate; inflorescences short-peduncled; calyx with deltoid lobes.

Antilles; occasional in Dominica, 500–700 m (or lower?): Freshwater Lake area (*Eggers 1103, Hodge 1813*), Morne Colla Anglais (*Webster 13423*), Soufrière (*Lloyd 475*), South Chiltern (*Hodge 1465*), sine loc. (*Imray s.n.* at NY).

Similar to and easily confused with *P. mapourioides* A.P. Candolle because (1) its distinctive calyx lobes are not available on fruiting specimens, (2) its distinctive stipules are often all lost, and (3) the character of long- vs. short-peduncle may not be consistent. The Imray specimen here was misidentified by Grisebach, as *P. floribunda*, and by Urban, as *P. nitida*.

Psychotria uliginosa

Psychotria uliginosa Swartz, 1788:43.—Steyermark, 1972:558.

Succulent shrub ~1 m tall; stipules persistent, broad, and rounded; inflorescences long-peduncled, axillary; flowers white; fruits red, becoming black.

Neotropical; occasional to common in interior of Dominica, 450–900 m: Syndicate to Diablotins area (*Nicolson 4085, Wasshausen & Ayensu 346, Webster 13334, Whitefoord 4247*), central area from Jean through Glasham and NW Trois Pitons to Sylvania (*Cooper 30, Ernst 2051, Hodge 1170*, Southwest area from Laudat to South Chiltern (*Cooper 150, Hodge 685, 691, 1443, 2066, 2260, Stern & Wasshausen 2520*), sine loc. *Imray 173*.

Remarkably similar to *P. discolor* but differing in inflorescence and fruit color.

Psychotria urbaniana

Psychotria urbaniana Steyermark, 1972:671.
Cephaelis swartzii A.P. Candolle, 1830, 4:534, not *Psychotria swartzii* Urban [= *P. glabrata* Swartz, endemic to Jamaica].

Shrub to 3 m, woody at base; stipule teeth equal; midrib of leaves glabrous below; inflorescence terminal, long-peduncled; bracts blue to purple; flowers white, fruits blue.

Montserrat, Guadeloupe, Martinique; extremely common herbaceous shrub in interior of Dominica, 300–1000 m: Northwest area (*Hodge 2621, 2821, 2842, 3601, Whitefoord 3604*), East side (*Hodge 8246*), Pont Cassé area (*Chambers 2516, Cowan 1632, Ernst 1287, Fosberg 48294, Hodge 678, 679, 1071, 1383, 2990, 3973, Nicolson 1806, Skog 1565, Webster 13224, Wilbur 7543, 7772, 8182*), Freshwater Lake area (*Beard 1425, 1456, Eggers 525, Fosberg 48291, Hodge 1921, Lloyd 43, Smith 10219, Wilbur 7405*), Southwest area (*Beard 1456, Cooper 44, Hodge 677, 680, 1665, 2400, Stern & Wasshausen 2513*).

A mid-elevation species that is replaced at higher elevations by *Psychotria aubletiana*.

Very similar to *P. muscosa* (Jacquin) Steyermark from Guadeloupe into northern South America, which is expected in Dominica. This species has short-peduncled inflorescences, 2 stipule teeth larger than the others, and the midrib puberulent below along the midrib.

Randia Linnaeus

Two cultivated species, each with showy corollas 6–10 cm long have been recorded from Dominica: (1) *Randia formosa* (Jacquin) Schumann, presently called *Rosenbergiodendron formosum* (Jacquin) Fagerlind, has elongate, needle-like calyx teeth (Roseau Botanic Garden: *Fairchild 2664, Hodge 913*); (2) *Randia maculata* A.P. Candolle, presently called *Rothmannia longiflora* Salisbury, with a subtruncate calyx was mentioned by Howard (1964, mss.) but no voucher has been seen.

Randia aculeata

Randia aculeata Linnaeus, 1753:1192.—Standley in North Amer. Fl., 1934, 32:174.—Steyermark, 1972:339.
Randia mitis Linnaeus, 1753:1192.—Britton & Wilson, 1925, 6:231.
Randia aculeata var. *mitis* (Linnaeus) Grisebach, 1861:381.

Shrub or tree to 6 m, typically with 2 stipular spines at each node; flowers terminal on lateral spurs; calyx ± truncate with tiny teeth; corolla white, densely pubescent in the throat.

Neotropics into northern South America; common in Dominica along dry west coast, occasional in wetter areas: Carib Reserve (*Hodge 3296*), Blenheim (*Cooper 131*), Cabrits (*Nicolson 1892, Whitefoord 4041*), Grand Savanna from Gabriel to Mero (*Chambers 2507, Ernst 1888, Stern & Wasshausen 2446, Webster 13177, Wilbur 8242*), Hampstead (*Lloyd 669*), Hatton Garden (*Hodge 3062*), South Chiltern (*Hodge 1632*), Grand Bay (*Ernst 1065*), Rosalie Valley (*Lloyd 718*).

Most of our material has rather medium-sized leaves and fits *R. aculeata* f. *aculeata* as defined by Steyermark (1972:341). Plants from the driest localities have smaller leaves (*R. aculeata* f. *minor*) and those from the wettest localities have larger leaves (*R. aculeata* f. *mitis*).

Relbunium (Endlicher) J. Hooker

Relbunium guadalupense

Relbunium guadalupense (Sprengel) Urban, 1912, 7:416.—Ehrendorfer, 1955:538.
Rubia guadalupensis Sprengel, 1825, 1:397.
Galium hypocarpium sensu Grisebach, 1861:351, as to material from Dominica, non Endlicher.

Low scrambling herb; leaves 1 cm × 0.3 cm, 4-whorled; fruits dicoccous, reddish orange, subtended by 4 free bracts.

Scattered in Lesser Antilles to British Guayana (teste Ehrendorfer); on mountain summits of Dominica: Morne Diablotins (*Nicolson 4164*).

Rondeletia Linnaeus

Rondeletia odorata. Jacquin, with subcordate, subsessile

leaves and a bright red, corymbose inflorescence, was collected in the Roseau Botanic Garden (*Hodge 934*).

Rondeletia parviflora

Rondeletia parviflora Poiret in Lamarck, 1804, Encycl., 6:252.
Rondeletia arborescens Grisebach, 1861:327.—Standley in North Amer. Fl., 1918, 32:73.
Rondeletia stereocarpa Grisebach, 1861:327.—Standley in North Amer. Fl., 1918, 32:73.

Quina, chinna blanc.

Shrubby tree to 7 m; stipules ± persistent, 0.5–0.75 mm long, ± acute-obtuse; leaves obovate-oblanceolate, petiole 1–3 cm long; flowers ± glabrous to densely pubescent, yellowish to reddish.

Several Lesser Antilles from Guadeloupe south; occasional to common understory tree, 400–1200 m: Boiling Lake (*Beard 252**), Freshwater Lake area (*Ernst 1100**, *1730**, *Nicolson 1974**, *2105**, *Stern & Wasshausen 2567**, *Whitefoord 3816**, *3868**, *Wilbur 7449**, *8221**), Morne Anglais (*Hodge 2313**), Pont Cassé area (*Ernst 1796, 1812, Hodge 696, 1113, 1122, 3839, Lloyd 769, Nicolson 1853, Webster 13380, 13463, Wilbur 7785, 8283*), Providence Valley below Laudat (*Hodge 2070*), Trois Pitons (*Ernst 2029**), Rosehill (*Eggers 678*), Southwest area (*Cooper 46, 168, Ernst 1109, Hodge 2358, Stern & Wasshausen 2496, Wilbur 7887*, Syndicate (*Hodge 2712, 2902, Whitefoord 3623, 3901*), sine loc. (*Imray 80** at GH, *174**, *176* at NY).

There are two extremes in Dominica that have traditionally been treated as distinct species. The asterisk (*) is used above to denote the upland aspect (*R. parviflora*). The other is the midland aspect (*R. stereocarpa*). These may be distinguished by the following key.

1. Leaf-blades 6–13 cm long, obovate; petiole ~1 cm long; flowers reddish; inflorescence broad, <5 cm long . . . . . ***R. parviflora***
1. Leaf-blades 13–22 cm long, oblanceolate; petiole 2–3 cm long; flowers yellowish; inflorescence elongate, >5 cm long . . . . . ***R. stereocarpa***

The midland aspect occurs in Dominica from 400–700 m and the upland aspect above 700 m. However, there is not a discontinuity in the variation and at 700±100 m the characters break down. Although the extremes are quite different, it is my opinion that these are incipient species, not yet sufficiently distinct to warrant taxonomic recognition.

Rondeletia martinicensis Krug & Urban from Martinique appears to be a more pilose aspect, represented on Dominica by *Whitefoord 3868* (upland) and *Wilbur 8283* (lowland).

Rudgea Salisbury

Rudgea citrifolia

Rudgea citrifolia (Swartz) Schumann in Engler & Prantl, 1891, IV(4):116.
Psychotria citrifolia Swartz, 1788:43.
Rudgea caribaea Bentham, 1850:460.

Bois peti, bois patat, bois pichette.

Shrub or medium tree to 8 m; sheathing portion of stipules ± persistent, ~2 mm long, the lateral clusters of 4–6 awns soon deciduous; inflorescence terminal, short-peduncled; calyx shallowly toothed; corolla white, long- pubescent inside; fruits becoming orange, finally brick-red, 1.2 cm × 0.6 cm; seeds 2, longitudinally ridged.

Several Lesser Antilles from Guadeloupe south; common in interior from 100 m (east side) to 1000 m (west side): Northwest area (*Ernst 1993, Hodge 2664, 2907, 3516, 3665, Nicolson 1928, Wasshausen & Ayensu 351, Whitefoord 3558, 4232, Wilbur 8061*), Jean (*Stern & Wasshausen 2577, Webster 13511*), Pont Cassé area (*Ernst 1168, Hodge 693, 2979, 3822, Webster 13231, Wilbur 7789, 7843, 8181*), East side (*Cowan 1606, Ernst 1372, Hodge 3259, Webster 13484, Wilbur 8312*), Laudat (*Eggers 1015, Lloyd 209*), South area (*Cooper 163, 179, Eggers 780, Hodge 694, 2381, 2382, Stern & Wasshausen 2495, 2523*), sine loc. (*Imray s.n.* at NY).

Schradera Vahl, nom. cons.

Schradera exotica

Schradera exotica (Gmelin) Standley, 1929:286.—Nicolson, 1977b:447.
Urceolaria exotica Gmelin, 1791:390.—Standley in North Amer. Fl., 1921, 32:132.
Schradera capitata sensu Vahl, 1797, Eclog., 1:35, pl. 5 [as to Montserrat material, not as to synonym, *Fuchsia involucrata* Swartz].
Schradera capitata Vahl ex Willdenow, 1799, 2:238, non Vahl.
Urceolaria capitata Fritsch, 1894:288, nom. superfl.
Schradera vahlii Steyermark, 1964:277, nom. superfl.
Schradera vahlii var. *acutifolia* Steyermark, 1964:277.

Succulent liana or shrubby tree to 7 m; stipules membranous, >1 cm long, rounded, deciduous, lower half united; inflorescence terminal, a pedunculate head subtended by a peltate involucral bract; flowers white; berries white and fleshy.

Hispaniola to Grenada; in frequent to common in Dominica on slopes and summits 400–1140 m: Morne aux Diables (*Nicolson 1935*), En Haut Jean (*Webster 13513*), Pont Cassé area from Deux Branches to Castle Bruce turnoff (*Ernst 1671, Stern & Wasshausen 2546, Wilbur 7749*), Laudat to Freshwater Lake area (*Gillis 9220, Lloyd 185, Smith 10289, Whitefoord 4166, Wilbur 7394*), Breakfast River (*Hodge 1892*), Morne Nicholls (*Hodge 1933*), Morne Anglais (*Hodge 697, 719, 2268*), South Chiltern (*Hodge 1459*), lower slopes of Morne Plat Pays (*Wilbur 7855*), Syndicate (*Whitefoord 3524, 4266*).

Spermacoce Linnaeus

The generic concept used here includes *Borreria*, following Verdcourt (1975:302) and Fosberg and Powell (in prep. as of Aug 1990). I am indebted to Dr. Fosberg, who annotated the Dominica specimens of this difficult genus.

1. Leaves usually 1 or more cm wide.
   2. Stipules sheathing; inflorescences becoming >1 cm across; seeds transversely grooved; septum between cocci persistent, finally free-standing . . . . . *S. assurgens*
   2. Stipules not sheathing; inflorescences <1 cm across; seeds longitudinally pitted; septum splitting or dissolving . . . . . *S. ernstii*
1. Leaves rarely >0.5 cm wide.
   3. Leaves with conspicuous scabrosities on midrib below . . . . . *S. eryngioides*
   3. Leaves not as above.
      4. Leaves verticillate, linear, <2 mm wide.
         5. Low, spreading or cushion-forming woody shrubs; leaves to 6 mm long, ± sessile, flat, rounded at base . . . . . *S. berteroana*
         5. Erect herbs with woody base; leaves lanceolate to linear, 2–6 cm long, membranous . . . . . *S. verticillata*
      4. Leaves 2–4 at node, lanceolate, >2 mm wide.
         6. Calyx lobes 2 . . . . . *S. mauritiana*
         6. Calyx lobes 4.
            7. Leaves 5× longer than broad; cocci unequal, 1 with 3 calyx lobes and closed, the other with 1 calyx lobe and open . . . . . *S. confusa*
            7. Leaves 3× longer than broad; cocci equal and open . . . . . *S. prostrata*

Spermacoce assurgens

Spermacoce assurgens Ruiz & Pavón, 1798, 1:60, pl. 92.—Verdcourt, 1983:547.
Spermacoce suffrutescens Jacquin, 1801, 3:40, pl. 322.
Borreria laevis sensu auctt., not as to basionym.—Steyermark, 1972:818.

Leaves paired, scabrid; inflorescences many-flowered; corolla longer than calyx, pilose on inner surface; stamens included; capsule hirtellous above; cocci attached, equal, both opening at top with partial septum becoming free-standing; seeds dark brown, with striking transverse grooves.

Neotropical; a common weed along roads and in disturbed soil on Dominica to 800 m: Clarke Hall (*Ernst 1517, 1528*), Coulibistri (*Wilbur 8334*), Freshwater Lake (*Fosberg 48277, Wilbur 7422, Whitefoord 3851*), Laudat (*Hodge 1804, Lloyd 41, Vélez 3594*), Lisdara (*Hodge 708*), Melville Hall (*Hodge 707*), Milton (*Hodge 2591*), Morne Aux Diables (*Wilbur 8043B*), Mt. Joy (*Hodge 1275*), Ridgefield (*Hodge 2154*), Roseau (*Hodge 704, Lloyd 930*), South Chiltern (*Hodge 1466*), Sylvania (*Hodge 709*), Syndicate (*Ernst 1570*).

Seen at Syndicate in shady places, *Diodia* being in open places.

Fosberg and Powell (in prep.) report that the basionym of the usual name for this species, *Borreria laevis*, does not apply. They provide an ample description from Lamarck's type of *Spermacoce laevis* (from Santo Domingo). Lamarck's species has been identified with *Spermacoce tenuior* Linnaeus by Verdcourt (1983:545).

Spermacoce berteroana

Spermacoce berteroana Howard, 1988:287.

Woody herb, stems spreading, 4-angled; leaves sessile, ovate, small (to 6 mm × 3 mm); flowers ± capitate at branch ends, subtended by 4 leaves; calyx lobes 3; corolla to 2.5 mm long; capsule 1.5 mm; seeds ellipsoidal, black, foveolate, 1.2 mm long.

Endemic to northern Lesser Antilles; near northeast coast of Dominica: "moors near Woodford Hill" (*Hodge 3501*).

My effort to recollect this around Woodford Hill failed. I did not find any habitat I would call "moors." The specimen looks like something to be found near the sea, rather fleshy, etc.

Spermacoce confusa

Spermacoce confusa Rendle, 1936 [Jan]:12.—Fawcett & Rendle, 1936 [Jul], 7:120.—Gillis, 1974a:185.—Nicolson, 1977b:446.
Spermacoce tenuior sensu auctt. plur., non Linnaeus.—Gaertner, 1788, 1:122, pl. 25: fig. 9.—Bacigalupo, 1972:344, fig. 1.

Leaves paired, rough above; inflorescences few-flowered; calyx lobes equal; stamens included; capsules crustaceous, hirtellous, the cocci attached, unequal, one with 3 calyx lobes and closed, the other with one calyx lobe and open; seeds glossy, brown, finely reticulate.

Neotropics; roadside weed in Dominica: Pointe Ronde (*Hodge 2639*).

Spermacoce ernstii

Spermacoce ernstii Fosberg & Powell in Fosberg & Sachet, 1980a:29.

Z'herb acouette.

Leaves opposite; inflorescences small, rather few-flowered; calyx lobes ± equal, blunt; corolla equaling calyx lobes; stamens included; capsule with a few hairs; cocci attached, equal, both finally opening by splitting of the septum; seeds glossy, brown, minutely and shallowly pitted (rather than reticulate), >1 mm long.

Neotropics, introduced and spreading in the Pacific; roadside weed in Dominica: Carib Reserve (*Hodge 3372*), Grand Bay road (*Ernst 1717*), road between Soufrière village and Pointe Michel (*Ernst 1341*, mixed with *S. assurgens* that it superficially resembles), South Chiltern (*Hodge 1513*).

Spermacoce eryngioides

Spermacoce eryngioides (Chamisso & Schlechtendal) Kuntze, 1898, 3(2):123.
Borreria eryngioides Chamisso & Schlechtendal, 1828:316.
Borreria ocymoides sensu auctt., pro parte minore, not as to type.

Leaves whorled but two distinctly larger at each node, linear-lanceolate, revolute; inflorescence small but many-

flowered; calyx lobes unequal, those opposite the septum larger and more persistent than those at the septum; corolla equaling calyx lobes; stamens included; capsule with a few hairs; cocci attached, equal, both finally opening by splitting of the septum; seeds glossy, dark brown, finely reticulate.

Neotropics; common to occasional weed in disturbed places of Dominica, to 450 m: Canefield (*Whitefoord 5507, 6091*), Clarke Hall (*Ernst 1548A*), Grand Savanne (*Nicolson 1946*), Pont Cassé (*Ernst 1243*), Sylvania (*Cooper 12*).

Our material is *Spermacoce eryngioides* var. *questelii* Fosberg & Powell (in prep.), recognizable by the striking scabrosities on the lower surface of the midrib, the corolla not exceeding the calyx, and the strictly erect habit of the plant. Specimens are commonly misdetermined as *Borreria ocymoides* (see *Spermacoce prostrata*) from which it differs by the revolute leaf margins and erect habit and, sometimes, as *B. verticillata* from which it differs by its shorter and broader leaves. In Dominica the species can be recognized by the scabrosities on the midrib below.

Spermacoce mauritiana

Spermacoce mauritiana Gideon in Verdcourt, 1983:547.
Borreria repens A.P. Candolle, 1830, 4:544.
Spermacoce repens (A.P. Candolle) Fosberg & Sachet, 1980a:30, non Chamisso & Schlechtendal.
Spermacoce ocymoides sensu auctt., non N. Burman.
Borreria ocymoides sensu auctt., not as to type of basionym.

Weak annual; stems with crisped hairs on wing-like angles; leaves elliptic, ~2× longer than broad, with marginal hairs; calyx lobes 2, equal; capsule 2-valved; seeds chestnut brown, strongly reticulate with raised ribs, the fovea wider than long.

Pantropical; new record for Dominica: near Freshwater Lake (*Whitefoord 4172* at BM).

Spermacoce prostrata

Spermacoce prostrata Aublet, 1775:58, pl. 20: fig. 3.—Fosberg & Powell (in prep.).
Borreria ocymoides sensu most American authors, as Steyermark, 1972:815, "*ocimoides*," not as to basionym.
Spermacoce ocymoides N. Burman, 1768:34, pl. 13: fig. 1.

Leaves small and usually paired; inflorescence few-flowered; stamens included; calyx lobes unequal, acuminate; capsule glabrous; cocci attached, equal, both opening by splitting of the septum; seeds dark brown and minutely foveolate.

Apparently pantropical; common weed in Dominica along roads to 450 m: Hampstead (*Ernst 1555*), Hatton Garden Estate (*Hodge 3071*), Morne Aux Diables (*Wilbur 8071*), Morne Plaisance (*Whitefoord 4505*), near beach at north end of Portsmouth (DHN!), road to Syndicate (DHN!, with rust fungi).

Fosberg and Powell (in prep.) have determined that the basionym of the usual name for this species does not apply and pertains to an apparently endemic Malesian species. *Spermacoce prostrata* seems to be the earliest name applicable to *Borreria ocymoides* in its usual but misapplied sense.

Spermacoce verticillata

Spermacoce verticillata Linnaeus, 1753:102.
Borreria verticillata (Linnaeus) Meyer, 1818:83.

Suffrutescent herb; leaves whorled, 2 commonly longer than others, linear; inflorescence many-flowered; calyx lobes unequal, deciduous; stamens exserted; capsule glabrous; cocci attached, equal, each with a large dorsal calyx lobe, both opening by splitting of the septum; seeds dark brown, reticulate.

Neotropics and Africa; occasional to common in xerophytic scrub along west coast of Dominica and a roadside weed on the north side: Bornes (*Nicolson 4221*), Grand Savanne (*Ernst 1389, Hodge 3795, Lloyd 834, Wilbur 7625*), Mero (*Webster 13274*).

This could be the medicinal plant called *Borreria densiflora* DC. by Adjanohoun et al. (1985:169, pl. 135).

RUTACEAE

Punctate dots on leaves are distinctive in this family.

Barrett and Rhodes (1976) published an excellent paper on the relationships of many cultivated citrus.

Citrus aurantiifolia (Christman & Panzer) Swingle, the lime, is the basis of lime industry, initiated in Dominica by Dr. John Imray and is the basis of the nickname "limey" for British sailors (given limes to prevent scurvy): orchards around Roseau (*Morden 10*). Adjanohoun et al. (1985:171, pl. 137) reported medicinal usages.

Citrus maxima (J. Burman) Merrill (including *Citrus grandis* Osbeck), the pomelo or shaddock, is the main crop cultivated at Syndicate Estate (DHN!, *Whitefoord 4136, 5879*). For a nomenclatural discussion see Scora and Nicolson (1986).

Citrus × *paradisi* Macfadyen, the grapefruit, was reported by Howard (1964, mss.).

Citrus × *sinensis* (Linnaeus) Osbeck, the sweet orange, was collected in Dominica (1932) in a variegated aspect: (*Fairchild 2714*).

Other citrus are undoubtedly grown on Dominica, such as the lemon, the citron, and the tangerine. I have probably eaten them or seen them for sale; however, I dare not trust my memory and can only say they are not yet documented for Dominica.

Murraya exotica Linnaeus, the orange jessamine, was cited for Dominica with an exclamation mark by Howard (1988, 4:560).

Triphasia trifoliata (N. Burman) Wilson, the lime-berry, has been collected in the Roseau Botanic Garden (*Hodge 3916* (misidentified as *Carissa grandiflora*), *Whitefoord 5656*).

1. Leaves opposite, compound; flowers bisexual; fruit a drupe

. . . . . ***Amyris***

1. Leaves alternate, usually compound; flowers unisexual; fruit of dry, dehiscent follicles . . . . . ***Zanthoxylum***

Amyris Browne

Amyris elemifera

Amyris elemifera Linnaeus, 1759a:1000.

Shrub or small tree to 8 m; leaves opposite, leaflets 3 or 5, glabrous; petals glandular.

West Indies and Central America; in Dominica along the dry west coast: Badineau Estate (*Hodge 2232*), Cabrits (*Ernst 2097, Whitefoord 3994*), Grand Savanne (*Stern & Wasshausen 2454, 2458*), Pointe Ronde (*Hodge 2654*).

Zanthoxylum Linnaeus

Zanthoxylum spinosum (Swartz) Swartz was attributed to Dominica by Grisebach (1860:137) as *Tobinia spinosa* (Linnaeus) Desvaux ex Hamilton. As suggested by Howard (1988, 4:567), the Dominican material collected by Imray is probably misidentified.

1. Leaflets pubescent, at least below.
   2. Hairs simple; carpels 5 . . . . . ***Z. martinicense***
   2. Hairs stellate; carpels 2 or 3 . . . . . ***Z. microcarpum***
1. Leaflets glabrous.
   3. Leaves simple . . . . . ***Z. monophyllum***
   3. Leaves compound.
      4. Leaf-rhachis winged; leaflets <2 cm long . . . . . ***Z. spinifex***
      4. Leaf-rhachis not winged; leaflets >2 cm long.
         5. Leaflets 6–16; flowers 5-merous . . . . . ***Z. caribaeum***
         5. Leaflets 2–7, commonly 3; flowers 3-merous . . . . . ***Z. punctatum***

Zanthoxylum caribaeum

Zanthoxylum caribaeum Lamarck, 1786, 2:39.
Fagara caribaea (Lamarck) Krug & Urban in Urban, 1896:562.

L'epiné.

Medium tree to 10 m with stout spines; follicles 5, on stipes 1–3 mm long.

Neotropics; in interior of Dominica and along west: Clarke Hall (*Ernst 1974, Nicolson 2001, Stern & Wasshausen 2417*), Laudat (*Hodge 2034*), Petit Coulibri (*Whitefoord 6008*, seen at Syndicate and near Woodford Hill, DHN!). Flowering April, fruiting in July.

Zanthoxylum martinicense

Zanthoxylum martinicense (Lamarck) A.P. Candolle, 1824, 1:726.
Fagara martinicensis Lamarck, 1792, Tabl., 1:334, no. 1635.—Poiret in Lamarck, 1812, Encycl., Suppl., 2:627.

Large tree with stout spines; follicles connate below or to middle, with prominent glands.

Neotropics; in lowlands of Dominica: Cabrit Swamp (*Ernst 1181*), Clarke Hall (*Stern & Wasshausen 2439*). Flowering in April, fruiting in July.

Zanthoxylum microcarpum

Zanthoxylum microcarpum Grisebach, 1860:138.
Fagara microcarpa (Grisebach) Krug & Urban in Urban, 1896:570.

L'epineux, l'epineux blanc.

Shrub or tree to 10 m with stout spines; follicles solitary or paired, with prominent glands.

Neotropics; in lowlands of Dominica to 500 m: Badineau Estate (*Hodge 2224*), Carib Reserve (*Hodge 3370*), Fond Hunte Estate (*Whitefoord 4309*), Layou River mouth (*Stern & Wasshausen 2486*), South Chiltern (*Ernst 1875*), Woodford Hill Bay (*Wilbur 8308*). Flowering at 500 m in July, fruiting near sea level in July–August.

Originally described from Dominica. Doubtfully distinct from *Zanthoxylum rhoifolium* Lamarck (teste Wilson in North Amer. Fl., 1911, 25(3):196).

Zanthoxylum monophyllum

Zanthoxylum monophyllum (Lamarck) Wilson, 1910:86.
Fagara monophylla Lamarck, 1792, Tabl., 1:334.
Zanthoxylum ochroxylum A.P. Candolle, 1824, 1:725.

Shrubby tree to 6 m; the only unifoliolate *Zanthoxylum* in the flora.

West Indies and northern South America; in Dominica in dry west coastal woods and scrub: Badineau Estate (*Hodge 2225*), Canefield (*Whitefoord 6098*), Gabriel (*Wilbur 8234*), Grand Savanne (*Wilbur 7655*), Hillsborough Estate (*Webster 13288*), Macoucherie Estate (*Nicolson 2044*), Mero (*Ernst 1144A, 1428*), Salisbury (*Whitefoord 4530*). Flowering April–June, fruiting July–October.

Zanthoxylum punctatum

Zanthoxylum punctatum Vahl in West, 1793:310.
Fagara trifoliata Swartz, 1788:33.
Zanthoxylum ternatum Swartz, 1797:570.
Zanthoxylum trifoliatum (Swartz) Wright, 1828:240, non Linnaeus.
Tobinia ternata (Swartz) Hamilton, 1825:56.
Tobinia punctata (Vahl) Grisebach, 1860:137.

Shrubby tree; leaflets 2–7, often 3; carpels 2.

West Indies; occasional in Dominica in dry scrub of west coast: Cabrits (*Hodge 652, 3702, 3704, Whitefoord 3998, 4019, 5990*), St. Joseph (*Webster 13272*). Flowering May–June, fruiting July–October.

Zanthoxylum spinifex

Zanthoxylum spinifex (Jacquin) A.P. Candolle, 1824, 1:728.
Fagara spinifex Jacquin, 1801, Fragm., 10, pl. 6: fig. 2.
Fagara microphylla Desfontaines ex Hamilton, 1825:21.

Spiny shrub to 4 m; leaf-rhachis winged, leaflets small, with two callose gland beneath at the base.

West Indies and South America; common in Dominica in dry scrub of west coast: Gabriel (*Wilbur 8233*), Pointe Ronde (*Hodge 2747*). Flowering in April (apparently with few leaves), fruiting in August.

SABIACEAE

(by R. DeFilipps)

Meliosma herbertii

Meliosma herbertii Rolfe, 1893:244.—Little & Wadsworth, 1964:314, pl. 144.

Sept ans.

Buttressed tree to 20 m; leaves alternate, entire or toothed (juvenile), acuminate or caudate; inflorescence a panicle of small (2 mm wide) flowers; sepals ciliate; stamens 5, 3 sterile.

West Indies and northern South America; in rainforests of Dominica, 300–550 m: Aux Delices (*Nicolson 2138*), Sylvania (*Hodge 3845*), Syndicate (*Whitefoord 5585*), sine loc. (*Taylor 132*). Flowering in May, shiny black fruits in March.

Caribs use the wood chiefly for posts (Hodge and Taylor, 1957:579) but the wood is said to be suitable for cabinetry.

SAPINDACEAE

Blighia sapida Koenig was cultivated in the Roseau Botanic Gardens (*Hodge 980*).

Melicoccus bijugatus Jacquin, called kenip, was growing along the driveway to Daniel Greene's house, Canefield Estate (*Nicolson 4219, Whitefoord 6115*), fruiting in June 1977, flowering April 1988. Adjanohoun et al. (1985:173, pl. 139) reported use of leaf tea against fever.

1. Vines, usually with tendrils.
   2. Leaves ternately decompound; inflorescence a corymb; fruit thin-walled, inflated . . . . . ***Cardiospermum***
   2. Leaves once-compound; inflorescence a raceme; fruit thick-walled, not inflated . . . . . ***Paullinia***
1. Trees or shrubs, tendrils absent.
   3. Leaves simple; capsule 3-winged . . . . . ***Dodonaea***
   3. Leaves compound; capsule not winged.
      4. Leaflets 3 . . . . . ***Allophyllus***
      4. Leaflets 4–12.
         5. Leaflets alternate, the apices acute to rounded; fruit dehiscent, 3-angled, tomentose . . . . . ***Cupania***
         5. Leaflets tending to be paired, the apices acuminate; fruit indehiscent, globoid, glabrous . . . ***Sapindus***

Allophyllus Linnaeus

Allophyllus racemosus

Allophyllus racemosus Swartz, 1788:62.—Whitefoord, 1989:144.
Schmidelia occidentalis Swartz, 1798:665, non *Schmidelia racemosa* Linnaeus.
Ornitrophe occidentalis (Swartz) Willdenow, 1799, 2(1):323.
Allophyllus occidentalis (Swartz) Radlkofer, 1890:230.

Shrub to small tree; leaflets 3, puberulent and irregularly, shallowly toothed; inflorescences ± racemose; fruits globoid, ~1 cm across.

Antilles; roadside on Dominica: Fonde Hunte Estate (*Whitefoord 4400*).

Leenhouts (1967) regarded *Allophyllus* as comprising a single, variable species (*Allophyllus cobbe* (Linnaeus) Raeuschel), with locally recognizable "races." He noted (1967:343) that this Antillean element is similar to several neotropical "species."

Both *Ornitrophe occidentalis* (Swartz) Willdenow and *Allophyllus occidentalis* (Swartz) Radlkofer are nomenclaturally superfluous (based on the same type as *Allophyllus racemosus* Swartz, 1788) but, being based on a legitimate basionym, *Schmidelia occidentalis* Swartz, 1798, are legitimate under Art. 63.3 (*ICBN*).

Cardiospermum Linnaeus

Cardiospermum microcarpum

Cardiospermum microcarpum Kunth, 1821, 5:104.
Cardiospermum halicacabum sensu auctt. not Linnaeus.
Cardiospermum halicacabum var. *microcarpum* (Kunth) Blume, 1849, 3:183.

Bâtard persil.

Low-climbing vine; leaflets serrate to deeply lobed; fruit inflated, with membranous wings, pubescent.

Pantropical; in coastal thickets of Dominica to 250 m: Portsmouth (*Hodge 654*), Roseau Valley (*Lloyd 557, Whitefoord 4616*), Salybia (*Hodge 3289*), Soufrière village (*Ernst 1338*), Springfield (*Krauss 1260*).

Caribs crush leaves in water to make a refreshing drink (Hodge and Taylor, 1957:578). Adjanohoun et al. (1985:171, pl. 138) reported similar medicinal usages.

True *C. halicacabum* Linnaeus has larger capsules, 3–4 cm across instead of 1–2 cm, and may occur on Dominica.

Cupania Linnaeus

1. Capsule ± globose, lobes rounded . . . . . ***C. americana***
1. Capsule triangular, lobes acutely angled . . . ***C. triquetra***

Cupania americana

Cupania americana Linnaeus, 1753:200.

Tree to 15 m; leaflets 4–8, 20–25 cm long; fruit tomentose, 3-lobed.

West Indies and northern South America; in Dominica in margins of rainforests, 15–50 m: Clarke Hall (*Beard 658, Ernst 1439*). Fruiting in May.

Cupania triquetra

Cupania triquetra A. Richard in Sagra, 1845, 10:119.

Leaflets 5–15 cm long; fruits sharply 3-angled.

Greater and some Lesser Antilles; reported for Dominica by Howard (1989, 5:141).

Dodonaea Miller

Dodonaea viscosa

Dodonaea viscosa (Linnaeus) Jacquin, 1760:19.
Ptelea viscosa Linnaeus, 1753:118.

Shrubby tree to 5 m; fruit ± orbicular, with two membranous wings.

Pantropical; mentioned for Dominica for pioneer zone on beaches beyond limit of storm wave action by Hodge (1954:22) and expected, even in dry scrub, but no specimens seen.

Paullinia Linnaeus

1. Leaf rhachis winged; fruit with 3–4 erect apical lobes . . . . . ***P. pinnata***
1. Leaf rhachis unwinged; fruit with 3 spreading apical wings . . . . . ***P. vespertilio***

Paullinia pinnata

Paullinia pinnata Linnaeus, 1753:366.

High-climbing vine; leaf rhachis winged; leaflets 5, toothed; fruits clavate, turning red, with 3–4 erect apical lobes to 1 cm long; seeds black with white aril.

Pantropical; in Dominica only in NW corner: Portsmouth (*Krauss 1678, Whitefoord 5297*), Prince Ruperts Bay (*Hodge 655*), Swamp Gutter near Cabrits (*Ernst 2098, Whitefoord 4036, Wilbur 8259*). Flowering June–August, fruiting August–January.

Paullinia vespertilio

Paullinia vespertilio Swartz, 1788:64.—Howard, 1989, 5:150.
Paullinia sphaerocarpa sensu Grisebach, 1860:124, as to Imray specimen, non L. Richard ex Jussieu.
Paullinia microsepala Radlkofer, 1895:253.

High-climbing vine; leaf rhachis unwinged; leaflets 5, toothed; fruits red, clavate with 3 wings spreading ~1 cm from apex, said to represent the devil with 2 horns and a goatee; seed solitary, black with a white aril.

Lesser Antilles; probably common in Dominica in rainforests ~450 m but hard to collect from tree tops unless trees are felled: Dleau Gommier (*Nicolson 4094*), sine loc. (*Eggers 1043* at K, *Imray s.n.* at K).

Sapindus Linnaeus

Sapindus saponaria

Sapindus saponaria Linnaeus, 1753:367.

Soapberry, soap tree, bois savonette, túlsi (by Carib men), lúluru (by Carib women).

Tree to 12 m; leaflets 6–12, tending to be paired, entire, oblong-lanceolate, rounded to acuminate, pubescent below, glabrous above; fruit with globoid cocci, often only 1–2 cocci maturing.

Neotropics; in Dominica on dry west coast (possibly also on east coast): Macoucherie (*Chambers 2512*). Flowering January.

Caribs use the bark and fruits for soap, a decoction of bark is used against dysentery, and the fruits are strung for necklaces (Hodge and Taylor, 1957:578).

I wonder if this species is native to Dominica. Macoucherie is also the sole locality of introduced *Cananga*. The specimen corresponds to *Sapindus saponaria* f. *inaequalis* (A.P. Candolle) Radlkofer (in Millspaugh, 1898:402), with unwinged petioles and rhachis and unequal leaflets.

SAPOTACEAE

(by A.C. Nicolson)

Members of this family commonly have milky sap. This family of large trees is somewhat intractable due to the few collections that associate flowers, fruits, and leaves.

Mimusops elengi Linnaeus of the East Indies has been collected in the Roseau Botanic Gardens (*Hodge 905*). It has broadly oblong leaves 5–12 cm long, 1–4 axillary flowers on pedicels to 1 cm long, a biseriate calyx (4+4 lobes), corolla lobes with evident paired petalloid appendages, and seeds with a short, subbasal scar.

Vitellaria paradoxa Gaertner (including *Butyrospermum parkii* Kotschy) is an African species with petioles to 10 cm long, large, obovate leaves to 30 cm long with prominent secondary venation, pedicels to 2 cm long, a biseriate calyx (4+4 lobes), petals without appendages and a long seed scar, cultivated in the Roseau Botanic Garden (*Hodge 3888*).

Excluded Sapotaceae

Bumelia retusa Swartz of the Greater Antilles and Yucatan, reported from Dominica by Grisebach (1861:401), is based on a misidentification of an Imray collection (GH, K) of *Sideroxylon foetidissimum.*

Fertile Material

1. Sepals 6, biseriate (3+3); seed scar long, lateral and <5 mm wide . . . . . ***Manilkara***

1. Sepals 4–12, usually 5, not biseriate or, if so then 2+2 (some *Pouteria*); seed scar short or, if long and lateral then at least 5 mm wide.
   2. Staminodes absent; endosperm present; seed scar long . . . . . ***Chrysophyllum***
   2. Staminodes present or if absent then endosperm absent.
      3. Seed scar short, basilateral . . . . . ***Sideroxylon***
      3. Seed scar long, lateral.
         4. Endosperm present . . . . . ***Micropholis***
         4. Endosperm absent . . . . . ***Pouteria***

Vegetative Material

1. Leaves broadest above the middle (obovate).
   2. Leaves large, >10 cm long, not leathery; secondary venation prominent (raised) . . . . . ***Pouteria***
   2. Leaves mostly <10 cm long, coriaceous; venation inconspicuous.
      3. Petioles 1.5–2.5 cm long; pedicels glabrous, to 2 cm long . . . . . ***Manilkara bidentata***
      3. Petioles <1.5 cm long; pedicels puberulent.
         4. Branchlets slender (1–2 mm thick); leaves scattered; pedicels to 1 cm long . . . . . ***Micropholis***
         4. Branchlets stout (2–5 mm thick); leaves tending to be clustered at branchlet ends; pedicels 1–1.5 cm long . . . . . ***Pouteria pallida***
1. Leaves widest at or below middle.
   5. Petioles >1.5 cm long.
      6. Petioles thicker (>1 mm), < half the blade length . . . . . ***Manilkara zapota***
      6. Petioles very slender (to 1 mm thick), usually > half the blade length . . . . . ***Sideroxylon foetidissimum***
   5. Petioles <1.5 cm long.
      7. Leaves narrowly ovate, ~3× longer than wide, bases attenuate; pedicels <0.5 cm long; flowers 4–8, clustered at nodes, mostly below leaves . . . . . ***Sideroxylon salicifolium***
      7. Leaves broad-ovate, to 1.5× longer than wide, bases acute to obtuse; pedicels >0.5 cm long; flowers mostly in leaf axils.
         8. Secondary venation conspicuous on lower leaf surfaces; corolla ~twice the calyx length . . . . . ***Chrysophyllum***
         8. Secondary venation generally inconspicuous on lower leaf surfaces; corolla equaling the calyx . . . . . ***Micropholis***

Chrysophyllum Linnaeus

Chrysophyllum cainito Linnaeus, the star apple, is cultivated on Dominica. It has leaves heavily rusty pubescent below, flowers 8–16 in axillary fascicles and subglobose fruits to 8 cm thick: Lisdara (*Hodge 665, 2499*), Springfield Estate (*Nicolson 2115*). Flowering in August, fruiting in November and March.

Chrysophyllum oliviforme Linnaeus was reported as cultivated on Dominica by Howard (1989, 6:59).

Chrysophyllum argenteum

Chrysophyllum argenteum Jacquin, 1760:15.—Little & Wadsworth, 1964:436, pl. 205.
Chrysophyllum glabrum Jacquin, 1760:15.
Cynodendron argenteum (Jacquin) Baehni, 1965:143.

Bois camite, bouis.

Tree to 20 m with milky sap; petioles ~1 cm long; leaves silvery-pubescent beneath, elliptic-oblong, ± chartaceous, base cuneate-rounded, apex acuminate, 5–15 cm long; flowers 1–8 in axillary fascicles; fruits glabrous, ovoid, to 2 cm long.

West Indies, northern South America; common in Dominica in secondary forests below 700 m: Boetica (*Ernst 1914*), Bornes (*Nicolson 4243*), Carib Reserve (*Hodge 3368*), Castle Bruce (*Ramage s.n.*), Delices (*Whitefoord 4112*), Green Hill Estate (*Wilbur 8285*), Laudat (*Hodge 1955*), Layou River (*Stern & Wasshausen 2389*), Lisdara Estate (*Cooper 181*), Melville Hall (*Hodge 649*), Petit Coulibri (*Whitefoord 4668*), Stonefield (*Ernst 1676*), Syndicate (*Nicolson 4073*), sine loc. (*Hodge 923* at GH). Flowering June–July.

Wood used for canoe paddles by Caribs (Hodge and Taylor, 1957:595).

Manilkara Adanson, nom. cons.

1. Leaves broadly ovate, length <2× the width, apex rounded or slightly apiculate to retuse; corolla lobes each with 2 narrow lateral appendages . . . . . ***M. bidentata***
1. Leaves oblong-ovate, length >2× the width, apex broadly acute; corolla lobes without appendages . . . . ***M. zapota***

Manilkara bidentata

Manilkara bidentata (A.L. Candolle) Chevalier, 1932:270.—Cronquist, 1945a:553.—Little & Wadsworth, 1964:444, pl. 209.
Mimusops bidentata A.L. Candolle in A.P. Candolle, 1844, 8:204.
Achras nitida Sessé & Moçiño, 1894:85.
Mimusops riedeliana Pierre in Duss, 1897:387.
Manilkara nitida (Sessé & Moçiño) Dubard, 1915:18.

Bullet weed, balata.

Tree to 15 m with sympodial branching and stout twigs with rounded leaf-scars; leaves clustered at ends of twigs, 6–15 cm long; petioles 1.5–3.0 cm long; flowers 1–8 in axillary clusters; pedicels 1–2 cm long, glabrous; sepals 6, acute; fruit globose, glabrous, usually 1-seeded; seeds dark, sharp-pointed, with an elongate, narrow seed scar ~half the seed length.

Puerto Rico and Hispaniola through the Lesser Antilles (into South America?); in windswept northern coastal woodlands of Dominica: Calibishie (*Hodge 3181*), Capucin (*Whitefoord 5803*), Roseau Botanic Gardens (*Hodge 909*), sine loc. (*Taylor 104, 152* sterile with very long and acute leaves). Seeds picked up at Syndicate appear to be this species (DHN!).

Fruits and timber used by Caribs (Hodge and Taylor, 1957:595).

Manilkara zapota

Manilkara zapota (Linnaeus) van Royen, 1953:410.—Little & Wadsworth, 1964:446, pl. 210.—Moore & Steam, 1967:383 [extensive discussion of nomenclature].
Achras zapota Linnaeus, 1753:1190, as to type.
Achras mammosa Linnaeus, 1762:469, nom. illeg.
Calocarpum mammosum Pierre in Urban, 1904, 5:98.

Sapodilla.

Tree to 15 m; petioles 0.5–3.0 cm long; leaves tufted at ends of stout, sympodial branches, 6–13 cm long; pedicels equaling petioles; fruit globose, large, 5–6-seeded, tasting of cinnamon; seeds dark, flat, seed scar narrow, ~2/3 the seed length.

Central America but now widely cultivated in tropics; planted in Dominica and (escaping?) on west coast: Dublanc (*Nicolson 4113*), Roseau Botanic Garden (*Hodge 914*), sine loc. (*Imray 4* at K).

Micropholis (Grisebach) Pierre

Micropholis guyanensis

Micropholis guyanensis (A.L. Candolle) Pierre, 1891:40.—Howard, 1989, 6:61.
Sideroxylon guyanense A.L. Candolle in A.P. Candolle, 1844, 8:182.
Chrysophyllum microphyllum sensu Grisebach, 1861:398, as to Dominica specimen cited, non Jacquin.
Micropholis chrysophylloides Pierre, 1891:38.—Cronquist, 1946b:254.—Little & Wadsworth, 1964:448, pl. 211.
Micropholis imrayana Pierre, 1891:39.
Micropholis dominicensis Pierre in Urban, 1904, 5:122.

Caimite.

Leaves blunt-apiculate, ovate-obovate, rusty or silvery pubescent beneath; fruits ovoid, to 1 cm long, style persistent.

Northern South America into Central America and Lesser Antilles to Puerto Rico; occasional in forests of Dominica: Morne Diablotins (*Lloyd 912, Whitefoord 4400*), Newfoundland (*Nicolson 4126*), Sylvania (*Hodge 1316*), Trois Pitons (*Lloyd 759, 762*), sine loc. (*Imray 181* at GH).

Pouteria Aublet

Pouteria sapota (Jacquin) Moore & Stearn (1967:383; Little et al., 1974:792, pl. 647), the mammee sapote or sapote á creme, has been collected in the Roseau Botanic Gardens (*Hodge 993*). It has subsessile flowers, like *P. semecarpifolia*, but the leaf-base is cuneate and the tertiary veins are inconspicuous. It also has 8–12 sepals, unlike the other species of the genus in Dominica. See Moore and Stearn (l.c.) for an extensive discussion of the nomenclature.

1. Sepals 5 . . . . . ***P. pallida***
1. Sepals 4.
2. Flowers long-pedicellate (pedicels 1–1.5 cm) . . . . . ***P. multiflora***
2. Flowers ± sessile (pedicels <0.5 cm) . . . . . ***P. semecarpifolia***

Pouteria multiflora

Pouteria multiflora (A.L. Candolle) Eyma, 1936:164.—Cronquist, 1946b:279.—Little & Wadsworth, 1964:452, pl. 213.
Lucuma multiflora A.L. Candolle in A.P. Candolle, 1844, 8:168.
Radlkoferella multiflora (A.L. Candolle) Pierre, 1890:21.—Aubréville, 1961:185.

Pain d'epice, penny-piece.

Tall tree; petioles short (1–2.5 cm); leaves large (10–20 cm long), obovate, apex obtuse-rounded, base acute-apiculate, secondary lateral veins parallel, distant; flowers 1–8 in axillary clusters; pedicels ~1 cm long; sepals 4, persistent, ca 5 mm long; corolla ~1 cm long; fruit green to yellowish, smooth, hard, spheroidal, ~5 cm thick, 1-seeded (ours); seed brown, smooth, 3 cm × 2 cm; seed scar broad (2 cm across), rough.

West Indies; occasional dominant tree in rainforests of Dominica: Layou (*Ramage s.n.*), Syndicate Estate (*Nicolson 4172*). Fruiting at end of May.

Pouteria pallida

Pouteria pallida (C. Gaertner) Baehni, 1942:352.—Cronquist, 1946b:269.—Howard, 1989, 6:64.
Lucuma pallida C. Gaertner, 1807:130.
Oxythece fabrilis Pierre in Urban, 1904, 5:160.
Oxythece pallida (C. Gaertner) Cronquist, 1946a:467.
Neoxythece pallida (C. Gaertner) Aubréville, 1961:183.
Planchonella pallida (C. Gaertner) Baehni, 1965:67.

Balate, ballata, bullet.

Large tree with milky sap; petioles ~1 cm long; leaves leathery, to 15 cm long; flowers in clusters of 2–10, pedicels 1–1.5 cm long; sepals 5; fruits ellipsoid, 4–7 cm × 2 cm; seeds 1(-2), light-colored, blunt, 2.5–4.0 cm × 1.3–1.5 cm, seed scar broad (1 cm across), ~as long as seed.

Guadeloupe to St. Lucia; occasional at midelevations of Dominica: Brantridge Estate (*DeFilipps 1890*), Carib Reserve (*Hodge 3273*), Governor Estate (*Nicolson 4188*), lower Hampstead River (DHN!, fruits eaten), Pont Cassé (*Ernst 1798, Lloyd 760*), sine loc. (*Fishlock 29, 54, Imray s.n.* at GH, *Imray 103* at K, *Taylor 105*).

Timber and fruits valued by Caribs (Hodge and Taylor, 1957:595).

Pouteria semecarpifolia

Pouteria semecarpifolia (Pierre) Pierre in Urban, 1904, 5:108.—Cronquist, 1946b:284.
Guapeba? semecarpifolia Pierre, 1891:43.

Contrevent.

Tree to 15 m, sympodially branching; petioles to 2 cm long;

leaves large, (to 30 cm long), obovate, apex acute-apiculate, base obtuse to ± truncate, secondary lateral veins light-colored, prominent, with perpendicular network of light-colored tertiary veins (also notable in dried material, above and below); pedicels 1-2 mm; calyx and corolla ~5 mm long.

Dominica to St. Vincent; occasional canopy tree in rainforests of Dominica at midelevations: Aux Delices (*Nicolson 2137*), Castle Bruce (*Beard 655, Ramage s.n.* at BM).

Sideroxylon Linnaeus

1. Venation eucamptodromous, tertiary veins horizontal or reticulate; corolla lobes entire . . . . . ***S. foetidissimum***
1. Venation brochidodromous, tertiary veins parallel to secondaries and descending from margin; corolla lobes with larger medial segment and 2 lateral segments . . . . . ***S. salicifolium***

Sideroxylon foetidissimum

Sideroxylon foetidissimum Jacquin, 1760:15.—Little & Wadsworth, 1964:455, pl. 214.—Howard, 1989, 6:68.
Mastichodendron foetidissimum (Jacquin) H.J. Lam, 1939:521.

Acomat St. Christophe, aukuma (Carib).

Tree to 20 m with scaly bark; leaf-blades ovate-elliptic, cuneate-rounded at the slightly emarginate base, apex rounded-acuminate, 5-15 cm long; pedicels to 1 cm long; fruit ovoid, yellow, to 2.5 cm long.

West Indies; in Dominica as a timber tree at lower elevations (Hodge and Taylor, 1957:595): sine loc. (*Imray 3, Jones s.n.* both at K), the latter specimen is likely from the Roseau Botanic Garden where Jones was Director.

Two arguments have been put forward that Lam's generic name, *Mastichodendron*, was invalidly published. Cronquist (1946b:246) said that it lacked a Latin description. However, the taxon is not new but a transfer of *Sideroxylon* sect. *Mastichodendron* Engler (1890, IV(1):144) by indirect reference (through citation of Dubard, 1912:81). Van Royen (1960:123) suggested that Lam regarded the name as provisional but this does not seem to be true under the Code's definition (Art. 34.1(b)).

Sideroxylon salicifolium

Sideroxylon salicifolium (Linnaeus) Lamarck, 1794, Tabl., 2:42.—Howard, 1989, 6:69.
Achras salicifolia Linnaeus, 1762:470.
Bumelia salicifolia (Linnaeus) Swartz, 1788:50.—Steam, 1968:285.
Bumelia pentagona Swartz, 1788:50.
Sideroxylon pentagonum (Swartz) A.L. Candolle in A.P. Candolle, 1844, 8:185.
Dipholis salicifolia (Linnaeus) A.L. Candolle in A.P. Candolle, 1844, 8:188.—Little & Wadsworth, 1964:441, pl. 208.—Fournet, 1978:1447.

Acomat bâtard.

Slender tree, 3-20 m; leaves narrowly ovate-lanceolate, acuminate, 3-12 cm long; flowers cream, fragrant; ripe fruits greenish purplish to black, ~6 mm thick.

West Indies and Central America; in Dominica on dry west coast: Grand Savanne (*Beard 664*).

SCROPHULARIACEAE

Angelonia angustifolia Bentham, locally called "Mauve" or "orchid," is presumed to be only in cultivation and was collected in Bataka (*Hodge 3382*) and Portsmouth (*Nicolson 4197*). It is an erect herb with linear leaves 7-8 cm long and showy, purple flowers.

Torenia fournieri Linden ex Fournier was collected (*Hodge 813*) as a "weed in gravelly drain, probably escape" at Sylvania.

1. Plants erect, of dry habitats.
   2. Leaves alternate; sepals linear . . . . . ***Capraria***
   2. Leaves opposite or ternately whorled; sepals ovate.
      3. Leaves ternate; floral pedicels much longer than calyces . . . . . ***Scoparia***
      3. Leaves opposite; floral pedicels much shorter than calyces.
         4. Leaves coarsely toothed, broadest at base; bracts leafy, much longer than calyces . . . . . ***Alectra***
         4. Leaves entire, broadest near the middle; bracts tiny, much shorter than calyces . . . . . ***Buchnera***
1. Plants creeping or trailing, of wet habitats.
   5. Sepals very unequal.
      6. Flowers whitish; bracteoles 2, at the top of the pedicel; leaves oblanceolate . . . . . ***Bacopa***
      6. Flowers yellow; bracteoles 2, at the base of the pedicel; leaves elliptic . . . . . ***Mecardonia***
   5. Sepals ± equal.
      7. Calyx lobes linear (hair-like) . . . . . ***Stemodia***
      7. Calyx lobes broad.
         8. Stamens 4 or 2 + 2 staminodes; leaves serrate or if entire then with pedicel distinctly longer than calyx . . . . . ***Lindernia***
         8. Stamens 2; leaves entire and pedicel shorter than calyx . . . . . ***Micranthemum***

Alectra Thunberg

Alectra aspera

Alectra aspera (Chamisso & Schlechtendal) L.O. Williams, 1972:118.
Pedicularis melampyroides L. Richard, 1792:111.
Glossostylis aspera Chamisso & Schlechtendal, 1828:23.
Scrophularia fluminensis Vellozo, 1829:263; 1831:6, pl. 87.
Alectra brasiliensis Bentham in A.P. Candolle, 1846, 10:339, nom. illeg.
Alectra melampyroides (L. Richard) Kuntze, 1891, 2:458, non Bentham.
Melasma melampyroides (L. Richard) Pennell ex Britton & Wilson, 1925, 6:188.
Alectra fluminensis (Vellozo) Steam, 1971:635.—Howard, 1989, 6:300.

An erect, hispid herb to 1 m; leaves coarsely toothed, broadest at base; flowers ± sessile; calyx lobes broad; corolla yellow.

Neotropics; a roadside weed in interior of Dominica: Baiac (*Whitefoord 5463*), between Pont Cassé and Deux Branches (*Ernst 1665, Nicolson 2130*), Freshwater Lake (*Eggers 601*), Ridgefield (*Hodge 2164*), Syndicate (*Whitefoord 4460, 5868*), sine loc. (*Eggers 985*).

Bacopa Aublet, nom. cons.

Bacopa monnieri

Bacopa monnieri (Linnaeus) Pennell, 1946:94.—Philcox, 1979:679.
Lysimachia monnieri Linnaeus, 1756:9.
Gratiola monnieri (Linnaeus) Linnaeus, 1759a [Jun]:851; 1759 [Nov], Amoen., 4:306, "*monnieria.*"
Bramia monnieri (Linnaeus) Drake, 1893:142, "*monniera.*"

Stamens 4; bracteoles 2, below calyx; corolla white to lilac; leaves sessile, spatulate.

Neotropics, now pantropical; reported for Dominica by Vélez (1957:113) based on his own recognizance. The species is expected, although not yet confirmed, on Dominica.

Buchnera Linnaeus

Buchnera floridana

Buchnera floridana Gandoger, 1919:217.—Philcox, 1965:304.—Adams, 1972:667.

Erect herb (drying black); leaves hispid, linear-lanceolate, 3-veined; flowers in a loose, terminal spike; calyx pubescent, shorter than capsule.

Southeastern U.S. to Jamaica, scattered in Central America and West Indies; new record for Dominica: "rainforest area about 2 miles [3 km] south of Pagua Bay" (*Long & Norstog s.n.*, 28 Sep 1971 at US).

The locality would be along the main road from the airport (then at Melville Hall) to Roseau at less than 100 m. The species is presumably adventive.

Capraria Linnaeus

Capraria biflora

Capraria biflora Linnaeus, 1753:628.—Grisebach, 1862:427.

Goatweed, du thé pays.

Leaves all alternate, oblanceolate, narrowly tapered and upper half coarsely toothed; calyx lobes deeply divided, narrow, commonly ciliate; corolla (flowers) white.

Neotropical weed; in western Dominica near seacoast in disturbed places: Cabrits (*Hodge 3706, Whitefoord 4076*), Colihaut (*Ernst 2119*), Scotts Head (*Hodge 1612, Webster 13451*, Tarou cliffs (*Nicolson 2007*).

Caribs make a tea of this against diarrhea (Hodge and Taylor, 1957:605). Adjanohoun et al. (1985) reported other medicinal uses.

Plants from the beach (*Hodge 1612, Nicolson 2007*) are much more pubescent than those from higher elevations.

Lindernia Allioni

1. Leaves sessile; calyx divided > halfway to base; 2 innermost stamens fertile, outer 2 staminodes clavate . . . . . ***L. rotundifolia***
1. Leaves at least shortly petiolate; calyx divided about to middle; all 4 stamens fertile, outer 2 ± smaller.
   2. Pedicel much longer than calyx; calyx 2.5–4.0 mm long, equaling the ovoid capsule . . . . . ***L. crustacea***
   2. Pedicel shorter than calyx; calyx 6–10 mm long, shorter than the elongate capsule . . . . . ***L. diffusa***

Lindernia crustacea

Lindernia crustacea (Linnaeus) F. Mueller, 1882, 1:97.—Philcox, 1968:17.
Capraria crustacea Linnaeus, 1767b:87.

Leaves petiolate, ovate, serrate, often reddish beneath; pedicels ~1 cm long; flowers blue; capsule equaling the calyx (enclosed).

Introduced weed from Old World, now widely distributed; in Dominica a weed in fields or along roads: Aivoici (*Stehlé 6436* in part), Baiac road (*Whitefoord 4630*), Castle Bruce (*Wilbur 7979*), Clarke Hall (*Ernst 1520, Webster 13409* in part), Delices (*Whitefoord 3681*), Grand Bay road (*Hodge 814*), La Chaudière (*Hodge 3648*), Lisdara (*Hodge 2459*), Portsmouth (*Hodge 816*), road to Rosalie from Castle Bruce junction (*Ernst 1903*), Sylvania (*Hodge 815*, mixed with *Stemodia verticillata*).

Lindernia diffusa

Lindernia diffusa (Linnaeus) Wettstein in Engler & Prantl, 1891, IV(3b):79.—Adams, 1972:665.
Vandellia diffusa Linnaeus, 1767b:89.—Grisebach, 1862:430.

More or less prostrate herb; leaves ovate, serrate, petiolate, often red beneath; flowers ± sessile, white; capsule becoming longer than calyx.

Neotropical weed; in Dominica on rocks in streams or in wet places: Bataka (*Stehlé 6093*), Deux Branches (*Hodge 3470*), La Chaudière (*Hodge 3523*), Layou River mouth (*Ernst 1519*), Laudat (*Eggers 697*), north slope of Trois Pitons by road (*Ernst 1241A*), Salybia (*Stehlé 6383*).

Lindernia rotundifolia

Lindernia rotundifolia (Linnaeus) Alston, 1931:214.—Adams, 1972:665.
Gratiola rotundifolia Linnaeus, 1771:174.
Lindernia microcalyx Pennell & Stehlé in Stehlé et al., 1937, 1:217.—Howard, 1989, 6:308.

Leaves sessile, ovate to rotund, entire to occasionally toothed; pedicels elongate; calyx deeply lobed; corolla with bluish tube and lobes white with blue spots; stamens 2, staminodes clavate.

Widely distributed in the Neotropics, according to Howard (l.c.): in wet and disturbed places of Dominica: Cabrit swamp (*Ernst 1174, Hodge 819, Whitefoord 4051*), Clarke Hall in river bed (*Webster 13407*), Freshwater Lake (*Whitefoord 3865*), Goodwill waterfront (*Ernst 1849*), Pont Cassé roadside (*DeFilipps 186*), Sylvania (*Hodge 818, 1329*).

During a visit (9 August 1990), Ms. D.Q. Lewis (Ames, Iowa) dissected Sri Lankan material called *L. rotundifolia* and concluded that its characters, especially that the staminodes lack the distal segment, were identical with the New World material called *L. microcalyx*.

Mecardonia Ruiz & Pavón

Mecardonia procumbens

Mecardonia procumbens (Miller) Small, 1903:1065, 1338.—D'Arcy, 1979:240.
Erinus procumbens Miller, 1768.
Lindernia dianthera Swartz, 1788:92, nom. illeg.
Bacopa procumbens (Miller) Greenman, 1907:261.—Edwin, 1971:481.
Mecardonia dianthera Pennell, 1946:87.

Leaves ovate, serrate near apex, cuneate-obtuse at base; pedicel base with bracteoles; calyx 5-parted, the outer 3 larger than inner 2; corolla yellow.

Widespread weed; in wet areas of Dominica: Cabrit swamp (*Ernst 1928*), Canefield (*Ernst 1901, Whitefoord 4086*).

Micranthemum Michaux, nom. cons.

Micranthemum umbrosum

Micranthemum umbrosum (Gmelin) Blake, 1915:131.—D'Arcy, 1979:242.—Stehlé, 1962c:24.
[*Anonymos umbrosa* Walter, 1788:63, "*umbros*[.]," nom. inval.]
Globifera umbrosa Gmelin, 1791:32, "*Umbros*."

Diminutive creeping herbs; leaves tiny, entire; pedicels short; calyx deeply 4-parted; corolla 4-lobed; stamens 2; fruit ± globose, exceeding the calyx.

Eastern North America to Argentina; in wet places of Dominica: Soufrière (*Lloyd 404*).

Scoparia Linnaeus

Scoparia dulcis

Scoparia dulcis Linnaeus, 1753:116.

Balier doux (sweet broom).

Leaves opposite to ternate, oblanceolate, cuneate, and entire at base, coarsely serrate near apex; calyx deeply 4-parted; flowers white.

Pantropical to subtropical; a common weed in Dominica: Cabrit Swamp (*Ernst 1176*), Carib Reserve (*Hodge 3325*), Clarke Hall (*Ernst 1513*), Grand Savanne (*Wilbur 7660*), Hatton Gardens (*Hodge 2938*), Magua (*Taylor 140*), Marigot (*Hodge 820*), Mt. Joy (*Hodge 1262*), Soufrière (*Lloyd 412, 427*), Sylvania (*Hodge 821*).

Plant used medicinally by the Caribs (Hodge and Taylor, 1957:606). Adjanohoun et al. (1985:175, pl. 141) reported several medicinal uses.

Stemodia Linnaeus, nom. cons.

Stemodia durantifolia (Linnaeus) Swartz was attributed to Dominica by Britton, according to Vélez (1957:113). Britton (in Britton and Wilson, 1925, 6:184) cited "Antigua to Trinidad." No Dominican specimens of this taxon have been seen. It is superficially similar to *Capraria* or *Scoparia* but the leaves are auriculate and clasping at the base.

Stemodia verticillata

Stemodia verticillata (Miller) Hassler, 1909:110.—Stehlé, 1962c:25.—D'Arcy, 1979:260.—Whitefoord 1989:148.
Erinus verticillatus Miller, 1768.
Capraria humilis Aiton, 1789, 2:354.
Stemodia parviflora W.T. Aiton, 1812, 4:52, nom. illeg.
Stemodiacra verticillata (Miller) Kuntze, 1891, 2:466.
Lendneria humilis (Aiton) Minod, 1918:240.
Lendneria verticillata (Miller) Britton in Britton & Wilson, 1925, 6:184.—Adams, 1972:663.

Prostrate herb; leaves serrate; flowers blue, axillary, shortly pedicelled; calyx deeply 5-lobed, longer than rotund capsules; stamens 4 (2 as long as style, 2 longer).

Neotropical weed; found on Dominica in wet, disturbed places near houses: Sylvania (*Hodge 815*, mixed with *Lindernia crustacea*), Syndicate hut (*Whitefoord 5573*).

SIMAROUBACEAE

Suriana maritima Linnaeus (sometimes placed in the Surianaceae), a shrub with simple, linear leaves, was mentioned by Hodge (1954:22) for Dominica as typical of upper beaches. This is true on other islands, including Guadeloupe and Martinique, but no collections have been seen from Dominica.

1. Leaflets opposite; carpels free but styles connate . . . . . ***Picrasma***
1. Leaflets usually alternate; carpels fused or completely free.
   2. Inflorescences and leaf rhachises pubescent; leaflets usually 9 or less, attenuate at apex; stamens 5; ovary unlobed, 2–3-locular . . . . . ***Picramnia***
   2. Inflorescences and leaf rhachises glabrous; leaflets usually 10 or more, obtuse at apex; stamens 10; ovary of 5 free carpels . . . . . ***Simarouba***

Picramnia Swartz, nom. cons.

Picramnia pentandra

Picramnia pentandra Swartz, 1797:220.

Tan, bois tan, bitterbush.

Shrubby, dioecious tree to 10 m; inflorescence branching, ± racemose; perianth 5-merous; petals linear; carpels 2–3, united; stigma 2–3-cleft.

South America to Florida; in rainforests of Dominica 250–1000 m: Bataka (*Hodge 3191, Taylor 11*), Fon Pays on Morne Diablotins (*Hodge 2861*), South Chiltern (*Hodge 1506, 1566, 1568*), Wooten Waven (*Eggers 577*). Flowering March, fruiting September.

The Caribs mash the leaves in water to obtain a mauve dye used in coloring baskets (Hodge and Taylor, 1957:566). The Eggers collection was distributed under the misidentification of *Picramnia antidesma* Swartz, a more western species with 3 stamens not reaching the Lesser Antilles.

Picrasma Blume

Picrasma excelsa

Picrasma excelsa (Swartz) Planchon, 1846:574.—Howard, 1988, 4:572.
Quassia excelsa Swartz, 1788:67.
Rhus antillana Eggers, 1879:41.
Picrasma antillana (Eggers) Urban, 1908, 5:378.
Aeschrion antillana (Eggers) Small in North Amer. Fl., 1911, 25(3):233.
Picraena antillana (Eggers) Fawcett & Rendle, 1920, 4:201.

Bitter ash, simaruba.

Tree to 10 m; leaflets opposite, rounded at base.

Lesser Antilles; southern Dominica: Petit Coulibri (*Whitefoord 4674*), Wallhouse (*Eggers 85* at K), sine loc. (*Jones s.n.* at K, *Taylor 103*). Flowering in February.

The Caribs soak the wood to obtain the bitter principle for medicinal purposes (Hodge and Taylor, 1957:567).

Simarouba Aublet, nom. cons.

Simarouba amara

Simarouba amara Aublet, 1775:860, pl. 331–332.—Howard, 1988, 4:574.

Bois blanc.

Large and dioecious tree to 30 m with silvery bark and white wood (hence, bois blanc); petals broad; styles free, spreading.

Neotropics; common in Dominica in disturbed areas and in forests 70–700 m: Bibiay (*Nicolson 4130*), Laudat (*Beard 1466, Hodge 1957, 2055*), Lisdara (*Cooper 161, Hodge 2430*), Rosalie (*Ernst 1370*), Sylvania (*Hodge 3849, Wasshausen & Ayensu 391*), Trois Pitons (*Hodge 1195*), sine loc. (*Fishlock 38*). Flowering January–March, fruiting May–June.

An important tree used for timber and charcoal (Hodge and Taylor, 1957:567). Occasionally misidentified as *Simarouba glauca* Swartz of Central America and northern Antilles.

SOLANACEAE

(by W.G. D'Arcy)

Lycopersicon esculentum Miller, nom. cons., the tomato, is cultivated on Dominica and it is likely that it escapes, although no collections have been made. Adjanohoun et al. (1985:179, pl. 145) reported medicinal uses.

Nicotiana tabacum Linnaeus, tobacco, is cultivated on Dominica (*Taylor 151*) and its use by the Caribs was discussed by Hodge and Taylor (1957:604). It is a viscid herb with large, sessile leaves, panicles of cup-like flowers, and dry capsules. It may naturalize at Syndicate (*Whitefoord 5178*). Adjanohoun et al. (1985:179, pl. 146) reported the leaf infusion is drunk to treat several things.

1. Flowers >3 cm long, longer than broad.
   2. Stamens 4; corolla tube <1.5 cm wide at mouth; calyx less than 2 cm long . . . . . ***Brunfelsia***
   2. Stamens 5; corolla tube >1.5 cm wide at mouth; calyx more than 3 cm long.
      3. Corolla whitish or yellow with conspicuous green or brown lines outside, the limb bowl-shaped (urceolate); high climbing vine . . . . . ***Solandra***
      3. Corolla white or purple without contrasting lines, the limb spreading; herb or shrub.
         4. Shrub; not fruiting . . . . . ***Brugmansia***
         4. Herb; commonly with spiny or bumpy fruit . . . . . ***Datura***
1. Flowers <3 cm long, mostly broader than long.
   5. Corolla salverform; stamens 4; fruit a capsule . . . . . ***Browallia***
   5. Corolla rotate or tubular; stamens 5; fruit a berry.
      6. Floral tube > half the flower length; shrubs or trees.
         7. Flowers broadly tubular, <1.2 cm long, the mouth spreading; stamens and style exserted . . . . . ***Acnistus***
         7. Flowers narrowly tubular, >1.5 cm long, the mouth tightly closed; stamens and style included . . . . . ***Cestrum***
      6. Floral tube < half the flower length; herbs, shrubs, or vines.
         8. Flowers yellow; herbs . . . . . ***Physalis***
         8. Flowers white, blue, or purple; herbs, shrubs, or vines.
            9. Calyx with 10 teeth arising just below truncate apex; unarmed, pubescent, woody vines . . . . . ***Lycianthes***
            9. Calyx with 5 teeth arising from apex or none; herbs, shrubs or, if vines, then either glabrous or spiny.
               10. Anthers blue, purplish, or yellow, opening by longitudinal slits . . . . . ***Capsicum***
               10. Anthers yellow, opening by terminal pores, sometimes also by short, longitudinal slits . . . . . ***Solanum***

Acnistus Schott

Acnistus arborescens

Acnistus arborescens (Linnaeus) Schlechtendal, 1832:67.—Hunziker, 1960:236.—Little et al., 1974:866, pl. 686.—Hunziker, 1982:85.
Atropa arborescens Linnaeus, 1756:10; 1759, Amoen., 4:307.
Dunalia arborescens (Linnaeus) Sleumer, 1950:124.

Bâtard sirio, siyou.

Large shrubs, twigs often tomentose; leaves ovate or elliptical, entire; flowers clustered on stems; pedicels slender, 1–2 cm long; flowers whitish, 9–14 mm long; berry orange, ~8 mm across.

Widespread but sporadic in neotropics; midlands of Dominica at edges of woods and forming roadside thickets, 150–750 m: Colla Anglais (*Hodge 1148, Webster 13430*), Delices (*Whitefoord 3770*), Freshwater Lake area (*Chambers 2685, Eggers 803, Ernst 1086, Hodge 1791, 2030, Lloyd 126, Smith 10288, Wasshausen & Ayensu 318, Wilbur 7447*), Soufrière road (*Burch 1339*), South Chiltern (*Hodge 1531*), Syndicate (*Ernst 2010*), sine loc. (*Cooper 42*).

Browallia Linnaeus

Browallia americana

Browallia americana Linnaeus, 1753:631.—D'Arcy, 1973:576.
Browallia demissa Linnaeus, 1759a:1118.

Herbs; leaves ovate or elliptic, entire; flowers solitary, pedicels 2–6 mm long; flowers blue or violet, rarely white, salverform, the limb 1–2 cm across; capsule ~9 mm long, enclosed by the ribbed calyx.

Neotropical weed; common in Dominica on roadsides and in fields: Bellevue (*Hodge 2351*), between Fern Villa and Morne Gay (*Hodge 2209*), between Fond Baron Estate and Pichelin (*Ernst 1587*), Laudat (*Lloyd 239*), Layou River (*Chambers 2797, Ernst 2180*), Lisdara Estate (*Hodge 796, 797*), Montpelier (*Lloyd 588*), Morne Colla Anglais (*Hodge 1028*), Soufrière (*Lloyd 476*), Sylvania (*Cooper 83*), Syndicate (*Ernst 1998, Whitefoord 4463*), Wallhouse (*Eggers s.n.* in 1880), sine loc. (*Eggers 507*).

Brugmansia Persoon

Brugmansia suaveolens

Brugmansia suaveolens (Willdenow) Berchtold & Presl, 1823, 1:45.—Lockwood, 1973:281.
Datura suaveolens Humboldt & Bonpland ex Willdenow, 1809, Enum., 227.—Bristol, 1966:240.

Shrubs; leaves ovate, entire; pedicels solitary, stout; flowers pendulous, large and showy; calyx tubular, 5-pointed; corolla to 30 cm long, broadly tubular, white or pink.

Native of South America, widely cultivated as an ornamental, sometimes escaping; known in Dominica as an escape: Wallhouse (*Eggers 622*), "along banks of a river, 2000 ft" (*Jones 12* at K).

Separation of the woody *Brugmansia* from herbaceous *Datura* was justified by Lockwood (1973) on the basis of fruits and seed coat. Plants from cultivated stocks are not known to set fruit.

Adjanohoun et al. (1985:177, pl. 144) reported (as *Datura suaveolens*) that the dried flowers, smoked in cigarettes, are hallucinogenic.

Brunfelsia Linnaeus

Brunfelsia americana

Brunfelsia americana Linnaeus, 1753:191.—Little et al., 1974:868, pl. 687.—Plowman in Hawkes et al., 1979:479.
Brunfelsia fallax Duchassaing ex Grisebach, 1857:242.

Rain tree, empoisonneur, peep zombie.

Glabrate shrub or small tree; leaves thick, entire, blunt or round-tipped; petioles short; pedicels solitary, short and stout; calyx 5–9 mm long, blunt-toothed; corolla showy, white but fading yellow, fragrant, salverform, the tube 3–7 cm long, the limb 2–5 cm across; berry round, 1–2 cm across, yellow, thick-skinned.

Hispaniola to Trinidad; in Dominica mostly at lower elevations on windward coast: Carib Reserve area (*Hodge 3298, Stehlé 6375, 6382, 6643, 6710*), between Capucin and Bellevue (*Wasshausen & Ayensu 384*), Cabrits (*Hodge 3720* at US), Hatton Garden (*Hodge 3183, 3209*), road to Laudat (*Burch 1344A*), Melville Hall (*Ernst 1679*), Pagua Bay (*Burch 1401, Wilbur 7532*), Roseau Botanic Gardens (*Hodge 1001*), Sophia Bay and Walkers Rest (*Chambers 2623*), Vieille Case (*Beard 663*).

Hodge and Taylor (1957:603) reported the ripe berries were used by the Caribs as a poison. The name *Brunfelsia americana* has been misapplied to several different horticultural species that have longer corolla tubes, shorter corolla limbs, and different calyces. Some may be cultivated on Dominica.

Capsicum Linnaeus

Capsicum annuum

Capsicum annuum Linnaeus, 1753:188.—D'Arcy & Eshbaugh, 1974:98.
Capsicum frutescens Linnaeus, 1753:189.
Capsicum annuum var. *frutescens* (Linnaeus) Kuntze, 1891, 2:449.
Capsicum baccatum sensu Grisebach, 1862:436, non Linnaeus.

Red pepper, piment, bird pepper.

Slender, erect or sprawling herb or weak shrub; leaves ovate, entire, sparingly pubescent; pedicels mostly solitary, stiff; calyx truncate or with minute (<0.5 mm) teeth; corolla white, greenish white or bluish white, divided about halfway; anthers blue to purple; fruit globose, conical or cylindrical, red orange or purple, erect or deflexed, edible but often pungent, large in cultivated plants.

Neotropical weed often widely cultivated as a vegetable;

collected in Dominica in woodlands: Layou River valley (*Ernst 1264*), Soufrière (*Lloyd 435*), South Chiltern (*Hodge 1556*); seen around houses but not collected.

Cultivated by Caribs for relish, seasoning, and medicinal purposes (Hodge and Taylor, 1957:603). Adjanohoun et al. (1985:175-177, pl. 142-143) reported medicinal uses for both *Capsicum annuum* and *C. frutescens*.

Plasticity and selection have largely obscured relationships in cultivated peppers. Characters of fruits, long used to separate species, have proven unreliable. Recent workers (as Howard, 1989, 6:271) have separated *Capsicum annuum* (bell pepper) from *C. frutescens* (shrubby chili pepper), and their wild counterparts, including *Capsicum annuum* var. *aviculare* (Dierbach) D'Arcy & Eshbaugh. More recently, workers have found the wild progenitors of the two cultivated peppers to be largely inseparable and recognize only one species, *C. annuum*. The Dominican collections seen, all wild, correspond to *C. annuum* var. *frutescens* (Linnaeus) Kuntze. Two other peppers are probably cultivated in Dominica: *Capsicum annuum* var. *annuum*, the common garden bell pepper, and *Capsicum chinense* Jacquin, a pepper with thick-walled, often pink fruits.

Cestrum Linnaeus

The following species, both with showy inflorescences to 10 cm long, are presumed to be only cultivated: *Cestrum diurnum* Linnaeus (Little et al., 1974:876, pl. 691), with clustered flowers and corolla <2 cm long, was cultivated in the Roseau Botanic Gardens (*Hodge 965*). *Cestrum nocturnum* Linnaeus, with scattered flowers and corollas 2 cm long or longer, was cited for Dominica from an Imray collection by Grisebach (1862:444).

1. Leaves drying leathery, lateral veins plane and inconspicuous beneath; corolla glabrous within; stamens bent or with teeth at point of insertion . . . . . ***C. laurifolium***
1. Leaves drying membranaceous, lateral veins elevated and conspicuous beneath; corolla mostly pubescent within; stamens straight, lacking teeth.
   2. Mature leaves mostly <10 cm long; staminal filaments 0.5 mm free . . . . . ***C. alternifolium***
   2. Mature leaves mostly >10 cm long; staminal filaments 1.5-5.0 mm free.
      3. Mature leaves puberulent beneath; young growth copiously finely pubescent . . . . . ***C. latifolium***
      3. Mature leaves glabrous beneath; young growth sparingly pubescent or glabrate . . . . . ***C. megalophyllum***

Cestrum alternifolium

Cestrum alternifolium (Jacquin) O. Schulz in Urban, 1907, 6:270.—Francey, 1935:211.

Ixora alternifolia Jacquin, 1760:12.

Cestrum vespertinum Linnaeus, 1771:206.

Shrub or tree to 6 m; mature leaves sparingly puberulent beneath, to 5 cm long, elliptic; peduncle short, pubescent; flowers greenish, ± sessile; calyx to 3 mm long, pubescent outside; corolla tubular, ~2 cm long, narrow with a small, but distinct apical bulb, pubescent within, tomentose at base; filaments glabrous, unappendaged, 0.5 mm; berry to 1.5 cm long, obovoid, black.

Widespread in Caribbean area from Mexico to Panama and from Venezuela, north to Puerto Rico; in interior of Dominica: Morne Rouge (*Whitefoord 6044*), Mt. Couliaboune [Morne Anglais] (*Eggers 526*), Pointe Michel (*Ramage s.n.* in 1888), sine loc. (*Eggers 815, Imray 352*).

Cestrum latifolium

Cestrum latifolium Lamarck, 1794, Tabl., 2:5.—Francey, 1935:289.

Shrub or tree to 12 m; twigs tomentulose; leaves broadly elliptic, pubescent on veins and lamina beneath, to 25 cm long; peduncle short, pubescent; flowers numerous, loosely clustered; pedicels to 1.5 mm; calyx campanulate or urceolate, 1-2 mm long, pubescent; corolla tube yellowish-white, to 2.2 cm long, slender but broadening apically, pubescent inside at base and sometimes upwards; filaments 1.0-2.5 mm, barbellate at point of insertion; berry obovoid, juicy, 5-9 mm long, shiny black.

Neotropics from Mexico to Brazil; in Dominica near coast: Milton (*Hodge 2554*), Syndicate road near Middletown (*Whitefoord 5674*).

Cestrum laurifolium

Cestrum laurifolium L'Hériter, 1788:69, pl. 34.—O. Schulz in Urban, 1909, 6:256.—Francey, 1935:334.

Shrub to 4 m; leaves soon glabrescent, ± coriaceous, oblong, elliptic or wider above middle, to 17 cm long, the midrib prominent, lateral veins 9-12 on each side, nearly straight, branching and loop-connected near margin, inconspicuous beneath; peduncles <10 mm long; flowers congested, short-pedicellate; calyx tubular, ~3 mm long; corolla tube white, 0.7-1.6 mm long, the lobes yellowish, 0.6 mm long; berry dark purplish.

Widespread in Antilles; in north of Dominica: Cabrit swamp (*Whitefoord 5284*), Manicou River (*Ernst 1058*), Vieille Case (*H. Nichols 8*), Portsmouth (*Krause 56*, teste O. Schulz et Francey).

Ed. Note: L'Hériter's species name is legitimate, although he cited two earlier synonyms. The first is *Cestrum venenatum* N. Burman (6 Apr 1768a:5), known today as *Acokanthera venenata* (N. Burman) G. Don of the Apocynaceae. However, L'Héritier specifically excluded it, "Synonymon Burmanni excludatur." Burman cited no synonymy. The other synonym, *Cestrum venenatum* Miller (16 Apr 1768), is an illegitimate later homonym of Burman's name.

Cestrum megalophyllum

Cestrum megalophyllum Dunal in A.P. Candolle, 1852, 13(1):638.—O. Schulz in Urban, 1909, 6:274.—Francey, 1935:312.
Cestrum macrophyllum sensu Grisebach, 1862:443, in part, non Ventenat.

Café marron, bois cabrit.

Shrub or tree to 8 m, soon glabrescent; leaves elliptic or obovate, to 30 cm long, veins elevated beneath, 5–10 on each side, arching upwards; peduncle short, mostly unbranched, to 1.5 cm long; corolla tubular, 1.0–1.5 cm long, greenish white, tomentose basally within; stamens tomentose at point of insertion and at base; berry obovoid, ~8 mm long, black.

Guatemala to Ecuador, Venezuela into the Lesser Antilles; common in Dominica in interior forests, especially along streams: Castle Bruce road (*Cowan 1623, Ramage s.n.* in 1889), Deux Branches (*Chambers 2764, Hodge 3121, 3457*), Grand Bay (*Eggers 617*), Freshwater Lake area (*Eggers 875, Hodge 1766, 1965, 1981, 2019, Lloyd 216, Nicolson 2107, Ramage s.n.* in 1888), Layou River (*Chambers 2517, Ernst 1005, Nicolson 4184*), Lisdara (*Cooper 154, 180, Hodge 2334, 2367, 2404*), South Chiltern (*Hodge 1546*), Sylvania (*Cooper 96, Hodge 1362*), Syndicate (*Hodge 2762, Wasshausen & Ayensu 352, Whitefoord 3580, 5171*), sine loc. (*Bryant 115, Imray 197*).

Datura Linnaeus

Datura inoxia

Datura inoxia Miller, 1768.—Safford, 1921:179.—Barclay, 1959:254.
Datura metel sensu Grisebach, 1862:434, et auctt., non Linnaeus.

Erect, finely soft and glandular pubescent herb; leaves ovate, sinuate; pedicels solitary, stout; calyx tubular, pubescent; corolla white, tubular, to 20 cm long, opening at night; capsule pendulous, globose, with soft spines, 2.5–4.5 cm across.

Neotropics, now a widespread weed; in Dominica on the west coast (between Batali River and Coulibistri (*Ernst 1396*).

Ed. Note: Miller's original spelling of the Latin adjective for what he translated as "harmless" was "inoxia," implying not (in-) acid (oxy), rather than not (in-) harmful (noxia). My instinct would be to correct the orthographic error but the author objected.

Other species may occur in Dominica. *Datura stramonium* Linnaeus is a common weed in the Antilles and has glabrate leaves with pointed lobes and an erect fruit. *Datura metel* Linnaeus (incl. *Datura fastuosa* Linnaeus, 1759) is an Old World species sometimes cultivated and escaping (attributed to Dominica by Vélez, 1957:114) and has violet flowers and dull, stout bumps on the indehiscent fruit.

Species of *Datura* contain highly poisonous alkaloids used in medicine.

Lycianthes (Dunal) Hassler

Lycianthes pauciflora

Lycianthes pauciflora (Vahl) Bitter, 1919:341.
Solanum pauciflorum Vahl, 1797, Eclog., 1:20.—O. Schulz in Urban, 1909, 6:190.
Solanum neglectum Dunal, 1813:177.
Solanum speciosum Dunal, 1813:179.

Shrub or woody vine; twigs reddish stellate-tomentose to glabrescent; leaves entire, ovate; pedicels slender, fasciculate; calyx 10-ribbed and 10-dentate, the teeth reflexed in fruit; corolla greenish, rotate, 1.0–1.3 cm long; berry globose, orange, 1.0–1.4 cm across.

Guadeloupe to Trinidad; in interior of Dominica: Carholm Estate (*Ernst 1942*), Lisdara (*Hodge 806*), near Prince Rupert [Cabrits?] (*Eggers 896*), Syndicate (*Ernst 2002, Whitefoord 3531, 3634*), sine loc. (*Cooper 53*).

Physalis Linnaeus

All species of *Physalis* have edible berries and some are grown elsewhere for jams and sauces. The leaves and *unripe* fruits are poisonous!

1. Fruiting calyx weakly 5–10-angled; flowering calyx with deltoid teeth; pedicels mostly longer than the flowering calyx . . . . . ***P. angulata***
1. Fruiting calyx strongly 5-angled; flowering calyx with narrow teeth; pedicels about as long as the flowering calyx.
   2. Plants glabrate; fruiting calyx glabrous . . . ***P. cordata***
   2. Plants pubescent; fruiting calyx pubescent . . . . . ***P. pubescens***

Physalis angulata

Physalis angulata Linnaeus, 1753:183.—Waterfall, 1967:216.
?Physalis linkiana sensu Grisebach, 1862:436, an Nees?

Glabrate herb with angled stems; leaves ovate, margins sinuate or toothed; pedicels solitary, nodding, longer than the flowering calyx; calyx short-cylindric, deltoidly lobed; corolla rotate, yellow with a dark eye; anthers bluish; fruiting calyx weakly 5–10-angled, glabrate, loosely enclosing berry.

Neotropics, now a widespread weed; in Dominica on roadsides and in fields: Anse Noire (*Shillingford & Ernst 288*), Massacre (*Whitefoord 4633*), Melville Hall (*Burch 1332*).

It is not certain whether Grisebach was referring to this species or the following in reporting *P. linkiana*. The bladder with obsolete keels would seem to indicate *P. angulata* but the lanceolate-acuminate calyx lobes are more appropriate to *P. cordata*. While others treat *Physalis linkiana* Nees in the synonymy of *P. angulata*, Waterfall argued that the name should be abandoned.

Physalis cordata

Physalis cordata Miller, 1768.—Waterfall, 1967:235.
Physalis turbinata Medikus, 1780:189, pl. 4.—Howard, 1989, 6:285.
?Physalis linkiana sensu Grisebach, 1862:436, an Nees?

Pock.

Glabrate herb; leaves ovate to elliptic, shallowly toothed; pedicels solitary, nodding, about as long as flowering calyx; calyx conical, the teeth soon becoming narrow; corolla rotate, yellow with a dark eye; anther bluish; fruiting calyx strongly 5-angled, glabrous, loosely enclosing the berry.

Neotropical weed; in fields of Dominica: Canefield (*Nicolson 2148*).

Physalis pubescens

Physalis pubescens Linnaeus, 1753:183.

Herb with stems long-pilose below, villous upwards; leaves ovate to elliptic, toothed or sinuate, pubescent overall; pedicels solitary, nodding, equaling the flowering calyx; corolla yellow with a dark eye; anthers blue; fruiting calyx strongly 5-angled, pubescent at least on the ribs.

Neotropical weed, now widespread; in Dominica in disturbed places: between Fond Baron Estate and Pichelin on road to Grand Bay (*Ernst 1593*), Soufrière (*Lloyd 471*), sine loc. (*Bryant 66*).

Solandra Swartz

Solandra longiflora Tussac, with corolla tube 1.5×–2.5× as long as the calyx, included stamens, and a globose berry, was collected in a garden in Roseau (*Nicolson 4208*).

Solandra grandiflora

Solandra grandiflora Swartz, 1787b:300.—Bernardello & Hunziker, 1987:648.
Solandra minor Grisebach, 1862:433.
Swartsia grandiflora (Swartz) Gmelin, 1791:360.
Solandra macrantha Dunal in A.P. Candolle, 1852, 13(1):533.

Glabrous woody vine, sometimes high climbing; leaves obovate, elliptic or rotund, mucronulate; pedicels solitary, stout, short; calyx tubular, sometimes angled, 5–9 cm long, 3–5-parted halfway or more; corolla funnelform, the tube narrow 0.7×–1.5× as long as calyx, the limb campanulate, with 5 round, entire to erose, spreading lobes, whitish or yellowish, outside with 5 greenish ribs; stamens ± exserted; berry conical, apiculate.

Antilles, cultivated elsewhere; in interior of Dominica: Brush, above Jean (*Nicolson 2165*), South Chiltern (*Hodge 1646*), sine loc. (*Imray 141*), Syndicate towards Milton (*Whitefoord 5975*).

This species is widely cultivated and sometimes blooms when only 30 cm tall. Leaves and flowers of some species of *Solandra* are poisonous but the fruits of some are edible.

Solanum Linnaeus

Solanum melongena Linnaeus, eggplant or belogène, is cultivated by Caribs for fruits chiefly eaten after boiling (Hodge and Taylor, 1957:604). This herb has copious stellate pubescence, ovate leaves, bluish flowers and large fruits.

1. Inflorescence branched once or more.
   2. Vines; flowers blue or purple (rarely white); fruits red . . . . . ***S. seaforthianum***
   2. Shrubs; flowers white; fruits yellow.
      3. Leaves glabrous . . . . . ***S. triste***
      3. Leaves conspicuously stellate-pubescent.
         4. Plants unarmed; inflorescence many-branched near apex; leaves entire; fruits held above the leaves . . . . . ***S. rugosum***
         4. Plants armed; inflorescence 1–more-branched near base into racemes; leaves sinuate or toothed; fruits held at side of the stem . . . . . ***S. torvum***
1. Inflorescence unbranched, racemose or ± umbellate.
   5. Leaves pubescent with stellate hairs.
      6. Woody vines with hooked spines; leaves entire or the lobes pointed . . . . . ***S. lancifolium***
      6. Herbs or shrubs, unarmed or with straight spines; leaves entire or the lobes rounded . . . . . ***S. racemosum***
   5. Leaves glabrate or with straight hairs.
      7. Plants without spines (a few hooks sometimes present on stem angles); leaves glabrate, when present the hairs fine . . . . . ***S. americanum***
      7. Plants with straight spines; leaves pubescent with coarse hairs, at least on the margins.
         8. Leaves pubescent on the margins, glabrate elsewhere; flowers white; fruit red, the pericarp <4 mm thick; seeds broadly winged . . . . ***S. capsicoides***
         8. Leaves copiously pubescent all over; flowers mauve; fruit yellow, the pericarp >4 mm thick; seeds unwinged . . . . . ***S. mammosum***

Solanum americanum

Solanum americanum Miller, 1768.—Edmonds, 1972:103.—D'Arcy, 1973:735; 1974:834.—Symon, 1981:37.
Solanum nigrum sensu auctt. mult., non Linnaeus.
Solanum nodiflorum Jacquin, 1788, Coll., 1:100.
Solanum caribaeum Dunal in A.P. Candolle, 1852, 13(1):48.
Solanum nigrum var. *nodiflorum* (Jacquin) Gray, 1878:228.
Solanum nigrum var. *americanum* (Miller) O. Schulz in Urban, 1909, 6:160.
Solanum americanum var. *nodiflorum* (Jacquin) Edmonds in Stearn, 1971:634.

Common nightshade, herbe amere, zeb amere.

Glabrate or pubescent unarmed herb; stems sometimes angled; leaves ovate, entire or shallowly toothed; contracted

raceme lateral to stem; flowers small, to 1 cm across; corolla white with 5 deltoid lobes; anthers stout; berry shiny black, held upright, the calyx reflexed.

A nearly cosmopolitan weed; common in Dominica on roadsides, in fields and disturbed lands: Fern Villa (*Hodge 2169*), Layou (*Hodge 801*), Lisdara (*Hodge 2453*), Morne Anglais (*Hodge 800*), Morne Plat Pays (*Wilbur 7888*), Pont Cassé (*DeFilipps 164*), Salybia (*Hodge 3086, 3221*), South Chiltern (*Ernst 1320*), Sylvania (*Hodge 798, 799, 1088, 1365*), Trafalgar (*Shillingford 209*), windward coast (*Bryant 124*).

Sold in local markets as a culinary green (Hodge and Taylor, 1957:605). The unripe fruits are toxic! Adjanohoun et al. (1985:181, pl. 147) reported several medicinal uses.

Ed. Note: There are taxonomic and nomenclatural problems involved with *Solanum americanum* Miller and *Solanum nodiflorum* Jacquin, both names being widely used in recent floras. Most specialists agree that these diploid elements are specifically distinct from hexaploid *Solanum nigrum* Linnaeus.

Solanum capsicoides

Solanum capsicoides Allioni, 1773:12.—Symon, 1981:101.
Solanum aculeatissimum sensu O. Schulz in Urban, 1909, 6:206, et auctt., non Jacquin.
Solanum ciliatum Lamarck, 1794, Tabl., 2:21.—D'Arcy, 1974:842.

Bâtard balagien.

Herb to 80 cm with copious straight spines; stems green or purplish; leaves ovate to orbicular, sinuate to pinnatifid, ciliate with simple hairs; racemes short, lateral to stem; pedicels glandular-hispid; calyx lobed 2/3, the lobes narrow; corolla white, deeply lobed, 1.4–2.0 cm across; anthers narrow, 6 mm long; berry red, globose, 1.5–5.0 cm across, with a fleshy skin.

Native in eastern Argentina or Brazil, now widespread; in Dominica a weed of roadsides and disturbed areas: Delices (*Whitefoord 3691*), Fern Villa (*Hodge 2219*), between Fond Baron & Pichelin (*Ernst 1586*), La Plaine (*Nicolson 2068*), Lisdara (*Hodge 2369*), Petit Savanne (*Whitefoord 6072*).

Fruits of this species and *S. mammosum* are used in some countries to poison cockroaches.

Solanum lancifolium

Solanum lancifolium Jacquin, 1788, Coll., 2:286, *"lanceaefolium."*
Solanum scabrum Vahl, 1797, Eclog., 1:22, non Miller.
Solanum houstonii Dunal, 1813:243.

Herbaceous or woody vine, armed with hooked spines; leaves lanceolate-elliptic, entire or sinuate-dentate, glabrate to stellate-tomentose, armed on the midrib; raceme short, lateral to stem; calyx 1–2 mm long; corolla white or purplish with deep, narrow lobes 7–12 mm long; anthers slender; berry shiny red or range, juicy, 6–12 mm across.

Sporadic in neotropics north of Andes, becoming a noxious weed; in interior forests of Dominica: Bataca (*Stehlé 6106, 6401*), En Haut Jean (*Nicolson 2163, Webster 13512*), Laudat (*Eggers 684*), Morne Colla Anglais (*Hodge 1171*), sine loc. (*Imray 585*).

Solanum mammosum

Solanum mammosum Linnaeus, 1753:187.—Symon, 1981:103.

Pilose herb armed with flat, straight spines; leaves broadly ovate, sharply toothed or lobed; raceme short, few-flowered, lateral to stem; calyx narrowly lobed to near the base; corolla violet with deep, narrow lobes 3–4 cm across; anthers slender; berry yellow, ovoid or pyriform, often with 1-more nipple-like protrusions from the base.

Neotropics but widely cultivated as a curiosity; in Dominica on roadsides, perhaps also cultivated: Bellevue (*Eggers 685*).

Solanum racemosum

Solanum racemosum Jacquin, 1760:15.—O. Schulz in Urban, 1909, 6:223.—D'Arcy, 1974:857.
Solanum igneum Linnaeus, 1762:270.
Solanum racemosum var. *igneum* (Linnaeus) O. Schulz ex Boldingh, 1909 [Jul]:178.—O. Schultz in Urban, 1909 [Dec], 6:225.

Slender shrub to 2 m, sometimes armed with straight spines; leaves lanceolate to ovate, to 20 cm long; raceme slender, lateral to stem, to 8 cm long; corolla white with deep, narrow lobes to 1 cm long; stamens tightly coherent in a slender tube to 8 mm long; berry red, juicy, 6–8 mm across.

Windward Islands and adventive northward; common in Dominica near the coast, especially in dry areas: Batali River (*Webster 13172*), Cabrit (*Nicolson 1887, Hodge 802, 3728, Smith 10327, Whitefoord 3986*), Carib Reserve (*Stehlé 6391*), Castaways Hotel (*Stern & Wasshausen 2429*), Grand Savanne (*Wilbur 7669*), Loubière (*Hodge 3859, 3865*), Mero (*Nicolson 4046*), Pointe des Fous (*Ernst 1792*), Pointe Ronde (*Ernst 1566, Hodge 2699, 2744, 2748*), Roseau Valley (*Lloyd 559, 811*), Salisbury (*Chambers 2813, Ernst 1381*), South Chiltern and Scotts Head (*Hodge 1609, Stern & Wasshausen 2536, Wilbur 7588*), sine loc. (*Imray 356*).

The name *Solanum igneum* referred to coastal plants with smaller leaves and formidable spines. Such are not considered taxonomically distinct from unarmed, inland plants. *Solanum racemosum* is closely related to *S. bahamense* and several other species of the northern Antilles, which differ in flower color and leaf venation. Fruits of these species are sometimes eaten.

Solanum rugosum

Solanum rugosum Dunal in A.P. Candolle, 1852, 13(1):108.—O. Schulz in Urban, 1909, 6:179.—Little & Wadsworth, 1964:488, pl. 231.—Roe, 1967:369.
Solanum asperum sensu Grisebach, 1862:438, non L. Richard.
Solanum verbascifolium sensu auctt., non Linnaeus.

Unarmed shrub to 5 m; leaves ovate, to 25 cm long, scabrous above, stellate-pubescent beneath; inflorescence many-

flowered, held above the foliage; calyx deeply lobed, pubescent; corolla white, 1.5 cm across, obtusely lobed about halfway; fruits globose, yellow, 9–11 mm across, mostly pubescent but ultimately glabrous.

Antilles and Belize to Brazil; in Dominica at forest edges and disturbed areas in the interior: Grand Bay (*Eggers 787*), Lisdara (*Hodge 2421*), Morne Diablotins (*Hodge 2773*), Pont Cassé (*Nicolson 2129*), Syndicate (*Nicolson 4189, Webster 13321*).

Solanum seaforthianum

Solanum seaforthianum Andrews, 1808.—Symon, 1981:67.

Slender, glabrous, unarmed vines; leaves both entire and pinnatisect or compound, the lobes ovate, the terminal the largest; panicle terminal, many-flowered, showy, pendant, to 20 cm long; corolla blue or violet (white), 2–5 cm across, the lobes deep and lanceolate; anthers stout; berry globose, red, juicy, 3–5 mm across.

Widespread in Caribbean area, sometimes cultivated; in Dominica on the north coast, also cultivated: between Wesley and Woodford Hill (*Ernst 2091*), Roseau Botanic Gardens (*Hodge 3913*, cult.).

Solanum torvum

Solanum torvum Swartz, 1788:47.—O. Schulz in Urban, 1909, 6:233.—Hepper in Dassanayake, 1988, 6:376.
Solanum ficifolium Ortega, 1800:116.

Bâtarde mèlogene, bâtard belagien, balengène, wild eggplant.

Sparingly armed shrub or tree to 5 m; leaves ovate, to 25 cm long, sinuate to pinnatifid with rounded sinuses, stellate-tomentose; inflorescence lateral to stem, branched into 2 several-flowered cymes; pedicels slender, dark, glandular; calyx with straight glandular hairs; corolla white, 1.5–2.5 cm across, lobed 1/3 way; anthers slender; berry globose, 1.0–1.5 cm across, yellow, mucilaginous, glabrous.

Neotropics but now widespread; common in Dominica on roadsides and other disturbed areas: Bellevue (*Taylor 30, Hodge 805*), Cabrits (*Hodge 803*), Castle Bruce (*Wilbur 7982*), between Fond Figues and Raymondstone Rivers (*Ernst 1453*), Laudat area (*Hodge 1799, Lloyd 206*), Layou River valley (*Hodge 804*), *Wilbur 7368*), L'Imprévue (*Narodny s.n.* in 1949), Pointe Guignard (*Wilbur 7617*), between Salybia and Gaulettre River (*Hodge 3349*), South Chiltern (*Hodge 1461*), Soufrière (*Beard 1159*), Sylvania (*Cooper 81, Hodge 1164, Nicolson 1868*), Syndicate (*Whitefoord 3519*), sine loc. (*Imray 110*).

Roots are used in preparing a tea to treat venereal disease by Caribs (Hodge and Taylor, 1957:605). Adjanohoun et al. (1985:181, pl. 148) reported about the same for use of leaves and flowers.

Solanum triste

Solanum triste Jacquin, 1760:15.—Fournet, 1978:1291.—Whitefoord, 1989:148.

Glabrate shrub to 3 m; leaves elliptic-lanceolate, entire, to 28 cm long; inflorescences short, almost opposite leaves; corolla white; anthers to 4 mm long; berry yellow.

Venezuela, Martinique; new record in SE Dominica to 250 m: Delices (*Whitefoord 3769* at BM).

STAPHYLEACEAE

Turpinia occidentalis

Turpinia occidentalis (Swartz) G. Don, 1832, 2:3.
Staphylea occidentalis Swartz, 1788:55.

Sureau marron, bois sureau marron.

Tree to 25 m; leaves opposite, pinnately compound, leaflets 5–11, elliptic-lanceolate to ovate, shallowly serrate, glabrous; inflorescence a terminal panicle; petals white, often erose; fruit with 3 persistent styles, green but becoming black or dark purple, indehiscent.

Central America, Jamaica, and Lesser Antilles; occasional in rainforests of Dominica 400–1050 m: Laudat (*Eggers 696*), Morne Diablotins at 1050 m (DHN!), Rosalie Valley (*Beard 237*), South Chiltern (*Stern & Wasshausen 2493*), Sylvania (*Beard 1462*), Syndicate at 350 m (DHN!). Flowers in March, fruits in July.

STERCULIACEAE

(R. DeFilipps)

Cola nitida (Ventenat) Schott & Endlicher, the cola nut from Africa, is cultivated at Clarke Hall (*Ernst 1414, Nicolson 1827*). It is apetalous like *Sterculia* but has only a short androphore. *Cola acuminata* (Palisot de Beauvois) Schott & Endlicher, also a source of cola, with each cotyledon divided in two, has not been confirmed on Dominica, although it is commonly cultivated elsewhere and sterile *Hodge 998* could be it. We follow Keay (1958:329) in separating these easily confused species. Bornstein (in Howard, 1989, 5:279) doubted the determination of *Ernst 1414*.

Kleinhovia hospita Linnaeus, a shrubby red-flowered species with entire leaves from Asia and cultivated for its unusual bladdery fruits, has been collected in the Roseau Botanic Garden (*Hodge 904, Honychurch 231*).

Theobroma cacao Linnaeus, cacao or kábu (Carib), a small, cauliflorous tree of continental neotropics with 5-petaled flowers and entire leaves, is cultivated in Dominica for its seeds, the source of chocolate: Clarke Hall (*Ernst 1421*). Hodge and Taylor (1957:583) commented on the Caribs' usages.

1. Leaves or leaflets entire (sometimes deeply lobed); petals none . . . . . ***Sterculia***
1. Leaves serrate; petals 5.

2. Tree to 20 m; petals each with a 2-cleft apical appendage; fruit woody, indehiscent, warty . . . . . *Guazuma*
2. Herb or shrub to 4 m; petals not appendaged; fruit dehiscent, not warty.
   3. Petals pink-purple; ovary 5-locular; capsule 5-coccoid . . . . . *Melochia*
   3. Petals yellow-orange; ovary 1-locular; capsule 2-valved . . . . . *Waltheria*

Guazuma Adanson

Guazuma ulmifolia

Guazuma ulmifolia Lamarck, 1789, 3:52.—Little & Wadsworth, 1964:338, pl. 156.

Tree to 20 m; branches horizontally spreading; leaves 6–10 cm long; inflorescences erect; petals yellow.

Neotropics; occasional in Dominica in disturbed areas of lowlands to 650 m: above Colihaut (*Ernst 1898*), Delices (*Whitefoord 3711*), Hungry Hill (*Whitefoord 4482, 4483, 5909*), upper Rosalie Road (*Wilbur 8148*), Walkers Rest (*Chambers 2774*), La Plaine road (*Ernst 1923*), Salybia (*Nicolson 4137*), Syndicate (DHN!). Flowering July–October, fruiting February–July.

Melochia Linnaeus

Vélez (1957:115) reported collecting *Melochia hirsuta* Cavanilles on Dominica. This species, a synonym of *Melochia villosa* (Miller) Fawcett & Rendle, is not reported from the Lesser Antilles, according to Goldberg (1967:285). The correct name is *Melochia spicata* (Linnaeus) Fryxell (based on *Malva spicata* Linnaeus), according to Fryxell (1988:457).

1. Leaves densely tomentose, whitish below; common . . . . . *M. tomentosa*
1. Leaves sparsely pubescent, green below; apparently rare on Dominica.
   2. Inflorescence ± sessile, axillary; capsule not winged . . . . . *M. nodiflora*
   2. Inflorescence pedunculate, leaf-opposed; capsule winged . . . . . *M. pyramidata*

Melochia nodiflora

Melochia nodiflora Swartz, 1788:97.—Goldberg, 1967:271.

Shrub to 4 m; leaves 3.5–7.5 cm long.

Neotropics, including Guadeloupe and Martinique; apparently only once collected in Dominica: sine loc. (*Imray 123* at K).

Melochia pyramidata

Melochia pyramidata Linnaeus, 1753:674.—Goldberg, 1967:337.

Herb or shrub to 2 m; leaves 2–6 cm long; distinctive inflated fruits.

Neotropics; apparently rare on Dominica or rarely collected: Wallhouse (*Eggers 652*), sine loc. (*Imray 100* at GH).

Melochia tomentosa

Melochia tomentosa Linnaeus, 1759a:1140.—Goldberg, 1967:327.

Shrub to 3 m; leaves 1–6 cm long.

Neotropics; frequent in Dominica along dry west coast: Batali River mouth (*Chambers 2787*), Colihaut (*Ernst 1140*), Coulibistri (*Wilbur 8338*), Gabriel (*Wilbur 8271*), Grand Savanne (*Ernst 2125, Lloyd 833*), *Webster 13406*).

Sterculia Linnaeus

Sterculia foetida Linnaeus, the Indian almond with radiately compound leaves, has been collected in the Roseau Botanic Garden (*Nicolson 4211*).

Nicolson's notes indicate that large trees of *Sterculia alata* Roxburgh have been observed in the Roseau Botanic Garden.

Sterculia caribaea

Sterculia caribaea R. Brown in Bennett, Horsfield & R. Brown, 1844:228.

Mahaut cochon, mahaut doux.

Major tree (dbh to 3 m); leaves to 3 dm long, glabrate below; flower with united petaloid sepals (no petals), cream with reddish center.

Lesser Antilles; common in Dominica in forests 100–1000 m: Cabrits (*Howard 11756*), Cassada Gardens (*Nicolson 2086*), Deux Branches (*Hodge 2966, 3462*), Freshwater Lake (*Eggers 686, Ernst 1492, Nicolson 1845, Wasshausen & Ayensu 310, Webster 13266*), Grand Bay (*Eggers 997*), Lisdara (*Hodge 2354*), Melville Hall (*Hodge 541*), Morne Cola Anglais (*Hodge 542*), Pont Cassé (*Wilbur 7832*), west of Rosalie (*Ernst 1350*), Sylvania (*Hodge 1144*), Syndicate (*Whitefoord 3496*). Flowering September–June, fruits young in July, mature in October.

Hodge and Taylor (1957:583) reported the Caribs use split (not sawn) planks in making dugouts (gommier, *Dacryodes excelsa*, used for better canoes). Rope is made from bark fibers or, when mixed with the gomme of gommier and boiled in shark oil, used in caulking dugouts.

Juvenile shoots have deeply 3–5-lobed leaves, reminiscent of *Sterculia apetala* (Jacquin) Karsten of the Greater Antilles, which are consistently 5-lobed and tomentose below.

Waltheria Linnaeus

Waltheria indica

Waltheria indica Linnaeus, 1753:673.—Fosberg & Sachet, 1975a:19.
Waltheria americana Linnaeus, 1753:673.

Herb or shrub to 2 m; leaves densely pubescent; flowers

yellow, densely compacted.

Neotropical weed; in Dominica along west and northeast coasts: Dublanc (*Whitefoord 4282*), Grand Savanne (*Ernst 1390, 2131, Hodge 3780, Wilbur 7653*), Imperial Road near coast (*Lloyd 784*), Pointe Baptiste (*Hodge 3741*), Pointe Guignard (*Wilbur 8122*), Pointe Ronde (*Chambers 2657*).

We follow Fosberg and Sachet (1975a:19) in treating the neotropical densely velutinous aspect as a variety, *Waltheria indica* var. *americana* (Linnaeus) R. Brown ex Hosaka, rather than as a species distinct from the more thinly pubescent aspect of the Old World.

STYRACACEAE

Styrax glaber

Styrax glaber Swartz, 1788:74, "*glabrum*".—Gonsoulin, 1974:233.—Howard, 1974:334.—Stehlé, 1962b:443.—Nicolson & Steyskal, 1976.
Morisonia imrayi Grisebach, 1859:19, fide Urban, 1892:338.

Bois doré.

Lepidote tree to 6 m; leaves elliptic-obovate, glabrous above, densely lepidote and paler beneath; calyx truncate and 5-denticulate; petals 5, white, lepidote on outer surface, tomentose on inner; stamens 10, anthers linear; fruit ellipsoid, 2 cm long, beaked.

Lesser Antilles; apparently rare in interior forests of Dominica at 600 m: Morne Couronne (*Webster 13203*), sine loc. (*Imray 295* at GOET).

SYMPLOCACEAE

Symplocos Jacquin

1. Leaves to 2 cm broad, attenuate at base; inflorescence 4–7 cm long; stamens free, adnate to corolla base; ovary 3-locular . . . . . ***S. guadeloupensis***
1. Leaves 3–6 cm wide, usually obtuse at base; inflorescence to 1.5 cm long; stamens united, attached at top of corolla tube; ovary 4–5-locular . . . . . ***S. martinicensis***

Symplocos guadeloupensis

Symplocos guadeloupensis Krug & Urban in Urban, 1892:337.—Brand in Engler, 1901, IV.242 (Heft 6):30.—Stehlé, 1962b:442.—Mai, 1986:9.

Tree to 3 m; leaves oblanceolate, yellowish when dry; flowers white.

Previously known only from Guadeloupe and Grenada; locally common in Dominica near top of Morne Diablotins at 1350 m: (*Chambers 2645, Webster 13362,* DHN!). Flowering in January, fruiting in June.

Symplocos martinicensis

Symplocos martinicensis Jacquin, 1760:24.—Brand in Engler, 1901, IV.242 (Heft 6):85.—Stehlé, 1962b:441.—Mai, 1986:15.

Symplocos apiculata Brand in Engler, 1901, IV.242 (Heft 6):85.—Stehlé, 1962b:442.

Graines bleues, cacarat.

Medium tree to 12 m (dbh 50 cm); leaves elliptic-ovate; flowers white, fragrant; fruits blue.

Honduras, Jamaica, Puerto Rico to Brazil; frequent in midlands of Dominica (60–)450–800 m: Baiac (*Whitefoord 4608*), Bornes (DHN!), Breakfast River (*Hodge 1884*), Dublanc (*Hodge 2553*), La Plaine (*Whitefoord 5408, 5417*), Laudat-Freshwater Lake area (*Chambers 2691, Hodge 1959, Nicolson 1963, Smith 10274, Webster 13247*), Lisdara (*Cooper 143, Hodge 2426, 2433*), Londonderry (*Chambers 2612*), Morne Anglais (*Hodge 2253*), Riversdale (*Beard 242*), Salybia (*Hodge 3096*), South Chiltern (*Hodge 1586, Stern & Wasshausen 2510*), Sylvania (*Cooper 32, Hodge 1111*), Syndicate (*Nicolson 4075, Whitefoord 3907, 4576*). Flowering October–June, fruiting January–July.

The wood is used for timbers, posts, boards and shingles.

Study of type (*Duss 2236*) and topotype material (*Questel 2283*) of *S. apiculata* Brand indicates that the stamens are 3-seriate and fall within *S. martinicensis*. Study of type material (*Duss 4202*) of *Symplocos urbaniana* Brand from Guadeloupe indicates that its leaves are broad, thick-coriaceous, and unlike anything hitherto found on Dominica.

THEACEAE

1. Leaves distichous, serrate or crenate, ovate or lanceolate; flowers functionally unisexual (plants dioecious), fasciculate; sepals entire, ciliate . . . . . ***Freziera***
1. Leaves spiralled, entire, obovate; flowers bisexual, solitary; sepals glandular-denticulate, eciliate . . . . . ***Ternstroemia***

Freziera Willdenow, nom. cons.

1. Leaves broadly ovate, base cordate, pubescent below . . . . . ***F. cordata***
1. Leaves narrowly lanceolate, base cuneate, glabrous below . . . . . ***F. undulata***

Freziera cordata

Freziera cordata Tulasne, 1847:334.—Kobuski, 1941:462.

Tree to 3 m; leaves broadly ovate and ± amplexicaul, to 13 cm × 7 cm; flowers white, tinged with red.

Guadeloupe and Martinique; rare (endangered species?) on mountain tops in Dominica: Morne Anglais (*Wilbur 7939*), Trois Pitons (*Hodge 2274*). Flowering March–July.

Kobuski (l.c.) thought the species was destroyed on Mt. Pelée (Martinique) by the 1902 eruption but it was recollected in 1960 (*Proctor 21752*). The top of Morne Anglais was cleared for aerial survey purposes around 1964, presumably after Wilbur's collection, perhaps destroying it there.

Freziera undulata

Freziera undulata (Swartz) Willdenow, 1799, 2:1179.—Swartz, 1800:974.—Kobuski, 1941:464.
Eroteum undulatum Swartz, 1788:85.
Freziera elegans Tulasne, 1847:336.
Freziera undulata var. *elegans* (Tulasne) Krug & Urban in Urban, 1896:543.—Kobuski, 1941:465.

Shrub or tree to 10 m; leaves narrowly lanceolate and tapering at base, to 17 cm × 4 cm; flowers white or pinkish.

Endemic to Lesser Antilles; locally common in Dominica on summits and occasional at lower elevations: Boeri Lake (*Wilbur 8195*), Freshwater Lake-Laudat area (*Eggers 632, Nicolson 1290*), Morne Diablotins (*Wasshausen & Ayensu 408*), Morne Micotrin (*Nicolson 1983*), Pont Cassé (*Ernst 1290, Wilbur 8177*), Morne Trois Pitons (*Chambers 2592, Ernst 1212, Hodge 1392, Lloyd 732, Wilbur 8081*). Flowering November-August (all year?), fruiting August-December (only *Eggers 632* and *Wilbur 8195*).

There are two aspects of this species, treated by Kobuski (l.c.) as varieties: (1) var. *elegans*, the summit aspect with strongly zig-zagged twigs, leaves tufted near ends of twigs, and smaller leaves (to 8 cm × 2 cm) often subequal at base; (2) var. *undulata*, the midland aspect with straighter twigs, leaves not tufted, and larger leaves (to 17 cm × 4 cm) often unequal at base. However, there are intermediates and I suspect the differences are ecologically rather than genetically determined.

Ternstroemia Mutis ex Linnaeus f., nom. cons.

1. Peduncles to 2 cm long; locules 3, 2-ovulate; stigma 3-parted, evolute . . . . . *T. elliptica*
1. Peduncles 2-8 cm long; locules 2, 5-20-ovulate; stigma simple . . . . . *T. peduncularis*

Ternstroemia elliptica

Ternstroemia elliptica Swartz, 1788:81.—Kobuski, 1943:63.

See key characters.

St. Kitts, Guadeloupe and Dominica; reported only once for Dominica: sine loc. (*Imray 280* at GH, *380* at K).

Ternstroemia peduncularis

Ternstroemia peduncularis A.P. Candolle, 1822b:409.—Kobuski, 1943:73.
Ternstroemia obovalis A. Richard in Sagra, 1845, 10:221.
Ternstroemia peduncularis var. *stenophylla* Krug & Urban in Urban, 1896:526.

Shrub or tree to 5 m; leaves oblanceolate-obovate; flowers solitary, axillary, strongly aromatic, sepals pink, petals orange.

Antilles; occasional in Dominica on open slopes to 300 m: Grand Bay (*Ernst 1070*), Grand Savanne (*Stern & Wasshausen 2459, 2541*), sine loc. (*Imray 469*). Flowering April-July.

THEOPHRASTACEAE

Clavija longifolia (Jacquin) Mez of northern South America, with long serrate leaves, red-orange flowers and glandular staminodia, has been collected in the Roseau Botanic Garden (*Hodge 3945*).

Jacquinia armillaris

Jacquinia armillaris Jacquin, 1760:15.—Mez in Urban, 1901, 2:442.—Howard, 1973b:455.
Jacquinia arborea Vahl, 1797, Eclog., 1:26.—Gooding et al., 1965:320.—Adams, 1972:563.—Little et al., 1974:762, pl. 628.
Jacquinia armillaris var. *arborea* (Vahl) Grisebach, 1861:397.
Jacquinia barbasco Mez in Engler, 1903, IV.236a (Heft 15):32, nom. illeg.—Stehlé, 1962b:440.

Mal bois chandelle.

Shrub or tree to 3 m; leaves ± verticillate near branch-tips, spatulate or obovate, pellucid-punctate; inflorescence racemose; flowers white, aromatic; sepals eciliate; stamens 5, anther apices narrowly but deeply lobed; staminodia 5, petalloid; berry green, becoming orange (or red?).

West Indies (except Bahamas and Trinidad); in Dominica in wind-sheared woodlands on east coast: L'Anse Noire (*Ernst 2080*), Salybia (*Chambers 2634*), La Plaine (*Ramage s.n.* at GH). Flowering January, fruiting August.

Mez (in Engler, l.c.) adopted *J. barbasco* "(Loefling)" Mez, believing that *Chrysophyllum barbasco* Loefling (1758) provided the earliest available epithet. However, as Howard (1973b:455) pointed out, Loefling only cited "Barbasco" as a vernacular name, not as part of a binomial ("Chrysophyllum. Barbasco" (p. 204) and "Chrysophyllo fructu adfinis...; vulgo Barbasco" (p. 277)). In publishing more extensively on his *J. armillaris*, Jacquin later (1763:53) included a reference to Loefling.

Setting aside *J. berteri* Sprengel, a species with smaller leaves and shorter inflorescence with reflexed pedicels, it is generally considered that there are two other species in the West Indies, one with ciliate sepals (called *Jacquinia armillaris* Jacquin by Mez (1901), and one with eciliate sepals (called *Jacquinia revoluta* Jacquin by Mez (1901, 1903). The first question is whether Mez was correct in treating *J. armillaris* as having eciliate sepals and the second question is whether Mez was correct in treating *J. arborea* Vahl (1797, Eclog., 26) as its synonym. If the (lecto?)type of either name actually has ciliate sepals, *J. revoluta* Jacquin will fall into its synonymy.

Without having seen the types, I am following Mez (1901) and assuming that his dispositions are correct. In any case, all cited (three) Dominican specimens have eciliate sepals.

THYMELAEACEAE

Daphnopsis americana subsp. *caribaea*

Daphnopsis americana subsp. *caribaea* (Grisebach) Nevling, 1959:315.
Daphnopsis caribaea Grisebach, 1860:278.

Mahaut, bitter mahoe, maho pimente.

Dioecious shrubs or trees to 15 m with a bitter inner bark; leaves ternate, lanceolate to elliptic, ± coriaceous; inflorescence and calyx tube pubescent, ± umbellate at tips of a branching axis; flowers white, 4-merous, female without petals, male with tubular flowers and 8 stamens; fruit a drupe.

Northern South America through Lesser Antilles into Puerto Rico and into southern Central America; common in Dominica in thickets and forests, 50–700 m: Baiac (*Whitefoord 4609*), Bornes (DHN!), Carib Reserve (*Hodge 466, 3274, Stehlé 394, Taylor 21,* Chattanooga (*Hodge 885*), Hampstead (*Lloyd 666*), Laudat (*Lloyd 353, Nicolson 120*), Londonderry (*Chambers 2622*), Point Lolo (*Ernst 1958*), Rosalie (*Stern & Wasshausen 2467*), South Chiltern (*Ernst 1871, Hodge 1534*), Sylvania (*Hodge 464, 465, Webster 13409, Wilbur 7709*), Woodford Hill Estate (*Ernst 1549*). Flowering April–August, fruiting July–October; most specimens are male.

The bark is used for rope and a tea is used ritually by Caribs (Hodge and Taylor, 1957:591).

Other subspecies of *D. americana* (Miller) J. Johnston occur in the Greater Antilles, South and Central America.

TILIACEAE

Dr. W. Meijer and Mr. Manuel Martinez (University of Kentucky) generously shared their as yet unpublished expertise.

Berrya cubensis (Grisebach) Gomez de la Maza (as *Carpodiptera floribunda* Urban) was collected in the Roseau Botanic Garden (*Hodge 954*).

1. Fruits linear-oblong, unarmed, dehiscent; leaves unlobed . . . . . ***Corchorus***
1. Fruits ± globose, bristly, indehiscent; leaves often lobed . . . . . ***Triumfetta***

Corchorus Linnaeus

Corchorus olitorius Linnaeus, the East Indian source of jute, a species with basal teeth of leaves prolonged into hairs, was collected in Dominica in 1929: [Cocoa?] Centre (*Anonymous s.n.* at K, from University of Birmingham). It is known to escape but not confirmed in Dominica.

Excluded *Corchorus*

Corchorus aestuans Linnaeus, another species with prolonged basal teeth (like *C. olitorius*), was reported for Dominica by Vélez (1957:115) but Martinez (1981:49) reported it in the main Lesser Antilles only from Montserrat, St. Vincent, Grenada, and Barbados.

Corchorus hirsutus Linnaeus, a densely stellately pubescent species, was attributed to Dominica by Vélez (1957:115 but, according to Martinez (1981:22, fig. 2c), it has not been collected south of St. Barthélemy, except in Aruba, Curaçao, and Bonaire.

Corchorus hirtus Linnaeus, a very hirsute species but with simple hairs, was reported for Dominica by Vélez (1957:115) but Martinez (1981:103) reported it in the main Lesser Antilles only from Guadeloupe and Martinique (Duss collections).

Corchorus orinocensis Kunth, a glabrate species with 2–3 locules, was attributed to Dominica by Urban (1910, 4:382) but Martinez (1981:64) reported it in the main Lesser Antilles only from Martinique and Guadeloupe (where it has not been recently recollected). Bornstein (in Howard, 1989, 5:191) treated this as a synonym of *Corchorus hirtus* Linnaeus.

Corchorus siliquosus

Corchorus siliquosus Linnaeus, 1753:529.

Shrub to 2 m; leaves glabrous, often small; corolla yellow; capsule blunt (with seeds to apex), 2-locular, locules not partitioned between seeds.

Neotropics; in Dominica a weed at low elevations: Cabrits (*Ernst 2093, Whitefoord 5267, 5292*), above Clarke Hall (*Ernst 1529*), sine loc. (*Imray s.n.* at GH). Flowering in August, fruiting in January–May.

Triumfetta Linnaeus

Triumfetta lappula Linnaeus, with no petals and 10 stamens, was reported for Dominica by Vélez (1957:115) but there is no confirmation.

1. Flower buds cucullate, apical parts swollen above a constriction; stamens 10–15; fruit bodies 3–4 mm broad and densely tomentose, spines glabrescent . . . . . ***T. rhomboidea***
1. Flower buds rounded at apex; stamens (10)15–30; fruit bodies (3)5–6 mm broad and glabrous.
   2. Flower buds 14–18 mm long; petals (12)15–20(30) mm long; stamens 25–30; fruit spines glabrescent . . . . . ***T. grandiflora***
   2. Flower buds 5–9 mm long; petals 6–10 mm long; stamens (10)15–20(30); fruit spines retrorsely pilosulose . . . . . ***T. semitriloba***

Triumfetta grandiflora

Triumfetta grandiflora Vahl, 1798, Eclog., 2:34.—Grisebach, 1859:96.—Lay, 1950:363.

Small tree to 4 m; remarkable for its large flowers and fruits.

Neotropics; in Dominica at midelevations: Syndicate (*Ernst 2103, Whitefoord 3953*), sine loc. (*Imray 55, 362* at K).

Triumfetta rhomboidea

Triumfetta rhomboidea Jacquin, 1760:22.—Adams, 1972:455.—Bornstein in Howard, 1989, 5:197.

Bartramia indica Linnaeus, 1753:389, non *Triumfetta indica* Lamarck.
Triumfetta bartramia Linnaeus, 1759a:1044, nom. illeg.—Lay, 1950:382.

Shrub to 2 m; a distinctive species with cucullate buds and a small, densely tomentose fruit body.

Neotropics but now a pantropical weed; in Dominica at low elevations: La Plaine (*Nicolson 2066*), Portsmouth (DHN!), Roseau (*Krauss 1251*).

The above synonymy is traditional but *Bartramia indica* Linnaeus is not yet firmly lectotypified. At least one Linnaean specimen (620.3 LINN from Surat) is almost certainly *Triumfetta glabra* Rottler (in Sprengel, 1825, 2:450, type from Batticaloa in Ceylon) not *T. rhomboidea*. Bornstein (in Howard, l.c.) cites a Hermann specimen (BM) as type but does not mention who, when, and where it was so designated.

Triumfetta semitriloba

Triumfetta semitriloba Jacquin, 1760:22.—Lay, 1950:373.
Triumfetta althaeoides sensu Grisebach, 1859:96, and Lay, 1950:371, as to Imray material from Dominica, non Lamarck.

Small shrubby herb to 1 m, a rather unremarkable species.

Pantropical; common in Dominica to 550 m: Cabrits (*Hodge 540, Whitefoord 4078*), Dublanc (*Whitefoord 5199*), Londonderry (*Chambers 2616*), Mero (*Chambers 2781*), Mt. Joy (*Hodge 1289*), Pointe Ronde (*Hodge 2734*), Portsmouth (*Whitefoord 5191*), Ridgefield (*Hodge 2151*), South Chiltern (*Hodge 1579*), Sylvania (*Cooper 75*), sine loc. (*Imray 157, 221* at GH as "Imary").

TURNERACEAE

Turnera ulmifolia Linnaeus, distinguished by 2 basal leaf-glands and flowers 4 cm across, was attributed to Dominica by Vélez (1957:115). I exclude this as yet unconfirmed record.

Piriqueta cistoides

Piriqueta cistoides (Linnaeus) Grisebach, 1860:298.—Ornduff, 1970:494.
Turnera cistoides Linnaeus, 1762:387.

Stellately villous, often sprawling herb to 1 m; leaves eglandular, <1 cm across; flowers yellow-orange, <1 cm across.

West Indies and South America; common but scattered weed in open areas of Dominica near the west and north coasts: Grand Savanne (*Ernst 1051, 1388, 2141, Hodge 3797, Wilbur 8354*), L'Anse Noire (*Ernst 2076*), Roseau (*Lloyd 736*), Rosehill (*Eggers 695*), St. Aromant (*Lloyd 566*), Sugar Loaf (*Eggers 949*).

Urban (1883:73) credited publication of this name to Meyer ex Steudel (1841, 2:724, see also 344). However, Steudel's "*Piriqueta cistoides* Meyer" is based on *Turnera cistoides* Hort., non Linnaeus, and must be regarded as a nomen nudum.

ULMACEAE

1. Plants usually armed with stipular thorns; leaves serrate above the middle, not scabrous; pistillate flowers solitary or in few-flowered fascicles; stigmas 2-cleft; drupe 8–12 mm long . . . . . ***Celtis***
1. Plants unarmed; leaves completely serrulate, scabrous; pistillate flowers in cymes; stigmas uncleft; drupe 3 mm long . . . . . ***Trema***

Celtis Linnaeus

Celtis iguanaea

Celtis iguanaea (Jacquin) Sargent, 1895, 5:64, "*iguanaeus.*"
Rhamnus iguanaeus Jacquin, 1760:16.
Celtis aculeata Swartz, 1788:53, nom. illeg.—Grisebach, 1860:149.

A ± scandent shrub to 12 m; branches flexuous, each node armed with short, decurved stipular thorns; staminate flowers borne in racemose cymes.

Neotropics; occasional but forming thickets in exposed places of western Dominica: Cabrits (*Nicolson 4200*), Loubière (*Hodge 3863*), Morne Daniel, north of Goodwill (*Ernst 1840, Hodge 3889*). Flowering May-July.

Trema Loureiro

Although Loureiro used feminine gender, Greek *trema*, cited by Loureiro, is neuter.

Trema domingensis Urban was attributed, with doubt, to Dominica and Martinique by Urban (1920, 8:164). The doubt seems justified, this entire-leaved species apparently being endemic to Hispaniola.

1. Leaf-blades usually <6 cm long, reticulate venation prominent beneath, the apex acute-acuminate . . . . . ***T. lamarckianum***
1. Leaf-blades usually >7 cm long, the reticulate venation not prominent beneath, the apex acuminate-attenuate . . . . . ***T. micranthum***

Trema lamarckianum

Trema lamarckianum (Roemer & Schultes) Blume, 1856, 2:58.—Grisebach, 1860:150.
Celtis lamarckiana Roemer & Schultes, 1820, 6:311.
Sponia lamarckiana (Roemer & Schultes) Decaisne, 1834:498.

Shrub or small tree to 2.5 m; leaves rather small, ± equal at base.

West Indies; locally common on Dominica on dry slopes: Pointe Guignard (*Wilbur 8134*), Rosalie Valley [?] (*Lloyd 722*), Soufrière Village (*Ernst 1965*), sine loc. (*Imray 414* at K). Flowering July.

Trema micranthum

Trema micranthum (Linnaeus) Blume, 1856, 2:58.—Grisebach, 1860:150.
Rhamnus micranthus Linnaeus, 1759a:937.
Celtis mollis Humboldt & Bonpland ex Willdenow, 1806, 4:996.
Sponia mollis (Willdenow) Decaisne, 1834:498.
Sponia micrantha (Linnaeus) Decaisne, 1834:498.
Trema molle (Willdenow) Blume, 1856, 2:58.—Grisebach, 1860:150.

Shrub or tree to 3 m; leaves rather large, unequal at base; fruits turning orange.

Neotropics; occasional in Dominica in dry areas: ridge north of Clarke Hall (*Ernst 1530*), ridge south of Clarke Hall (*Stern & Wasshausen 2423*), Hungry Hill (*Whitefoord 4426*), "inner Cabrite of Prince Ruperts Head. Dominica. 25 June 1792" ([*Finlay*] *s.n.* at K), Trafalgar road (*Whitefoord 4646*), sine loc. (*Imray 467* at K). Flowering May-July, fruiting in November.

URTICACEAE

1. Leaves opposite . . . . . ***Pilea***
1. Leaves alternate.
   2. Inflorescences elongate or branching.
      3. Herbs with glabrous stems; style hooked in fruit . . . . . ***Laportea***
      3. Shrubs with pubescent stems; style none or not hooked.
         4. Cystoliths radiate on upper leaf surfaces; stinging hairs none; flowers sessile and clustered along branched spikes; pistillate calyx 0 (ours) but pistil subtended by 2 tiny bracts . . . . . ***Gyrotaenia***
         4. Cystoliths scattered on upper leaf surface; stinging hairs often present; flowers shortly stipitate and clustered at apices of dichotomously branched panicles; pistillate calyx equaling pistil, 4-lobed, accrescent and fleshy in fruit . . . . . ***Urera***
   2. Inflorescence in axillary glomerules.
      5. Shrubs; leaves markedly unequal in size at alternate nodes . . . . . ***Boehmeria***
      5. Herbs; leaves ± equal at alternate nodes.
         6. Leaves entire, ovate to rotund . . . . . ***Rousselia***
         6. Leaves serrate, lanceolate . . . . . ***Phenax***

Boehmeria Jacquin

Boehmeria ramiflora

Boehmeria ramiflora Jacquin, 1760:31.—Grisebach, 1860:160.

Dioecious or monoecious non-stinging shrub or tree to 6 m; leaves alternate, serrate, acuminate-attenuate, markedly unequal at alternate nodes, the smaller leaves shortly petioled; flowers in compact axillary clusters.

Circumcaribbean; common in Dominica in moist, disturbed areas 65–1000 m: Clarke Hall (*Ernst 1004*), Deux Branches (*Hodge 3115*), Fon Pays (*Hodge 2851*), La Chaudière (*Hodge 3578*), Laudat (*Gillis 8194*), Lisdara (*Cooper 166, Hodge 645, 2408*), Milton (*Hodge 2883*), Morne Aux Diables (*Wilbur 8067*), Morne Micotrin (*Chambers 2686, Wilbur 8250*), Morne Plat Pays (*Wilbur 7847*), Pointe Guignard (*Wilbur 7613*), Pont Cassé (*Lloyd 787, Webster 13457*), Rosehill (*Eggers 515*), South Chiltern (*Hodge 1548, Nicolson 2174*), Springfield (*Wilbur 7674*), Sylvania (*Hodge 644*), Syndicate (*Whitefoord 3498*), Trafalgar road (*Whitefoord 4641*).

Gyrotaenia Grisebach

Gyrotaenia crassifolia

Gyrotaenia crassifolia (Weddell) Urban, 1918a:159.—Kellogg in Howard, 1988, 4:74.
Urera crassifolia Weddell, 1852:18; 1856:161.—Grisebach, 1860:155.—Stehlé et al., 1937, 1:185.

Large, dioecious, suffrutescent, and non-stinging herb to 6 m; stipules 2-3 cm long, united into a bicarinate ligule, soon deciduous; leaves alternate, ovate, to 30 cm × 20 cm, serrate; male plants with inflorescences near apex, female plants with inflorescences remote from apex; male calyces with 4 broad, imbricate, and ciliate sepals; female calyx 0 with 2 tiny glandular-ciliate bracts clasping the edges of the flattened pistil; stigma capitate-penicillate; achenes imbedded in swollen fruiting rhachis.

Guadeloupe and Martinique; rare in ravines of interior forests of Dominica: Boeri Lake (*Whitefoord 4139* (♂ and ♀)), upper Picard River north of Syndicate Estate buildings (*Nicolson 4169* (♂), *4170* (♀)), *Whitefoord 3968*), sine loc. (*Imray 206* at K, *271* at GOET).

This species is so rare and poorly known that it warrants special comment. Female flowers of this species were unknown to Urban (1918a:159). They are to be found on *Stehlé 1980* (US) from Guadeloupe and the above collections. These confirm that this species belongs to West Indian *Gyrotaenia*, not to mainland *Myriocarpa*. These genera are surely closely related (both having 0 calyx but a pair of bracts subtending the female flowers), the principal differences being that *Myriocarpa* has shortly stipitate female flowers, with a distinctly elongated style and an oblique, rather elongated stigma (often slightly 2-forked), while *Gyrotaenia* has sessile female flowers and a subsessile stigma that is capitate.

Leaves of *Gyrotaenia crassifolia* have striking 1 sq cm areoles with radiately oriented cystoliths around each (aborted) hair on the upper leaf-surface. It shares this character with *Myriocarpa cordifolia* and *M. longipes*. Leaves of *G. crassifolia* look very much like *Urera caracasana* but the latter has scattered or, rarely, weakly radiately oriented cystoliths. The inflorescences of *Urera* (dichotomously many-branched and with terminal, solitary female flowers or clusters of male flowers) are very different in *G. crassifolia* (few-branching spikes with lateral clusters of flowers).

Duss 2861 from Guadeloupe was cited by Urban (1918a:159) as *Gyrotaenia crassifolia* but was mixed with

Duss 2185 in distribution. A specimen at US has both collection numbers, a single leaf of *G. crassifolia* and a female specimen of *Urera caracasana*.

Laportea Gaudichaud, nom. cons.

Laportea aestuans

Laportea aestuans (Linnaeus) Chew, 1965:200.
Urtica aestuans Linnaeus, 1763:1397.
Fleurya aestuans (Linnaeus) Gaudichaud, 1830:497.

Nettle, z'ortie.

Monoecious, annual, stinging herb; leaves alternate, dentate, ovate; inflorescence paniculate.

Pantropics; a common weed in Dominica in moist places to 650 m: Bataka (*Stehlé 6367*), Cabrits (*Whitefoord 3977*), Clarke Hall (*Ernst 1696*), Côte d'Or (*Nicolson 2063*), Laudat (*Gillis 8182*), Layou River Valley (*Ernst 2182*), Milton (*Hodge 2930*), Rosehill (*Eggers 630*), Soufrière (*Lloyd 477*), South Chiltern (*Hodge 1528*), Sylvania (*Hodge 643*), Trafalgar Road (*Whitefoord 4647*).

Adjanohoun et al. (1985:183, pl. 149) reported medicinal uses.

Phenax Weddell

Phenax sonneratii

Phenax sonneratii (Poiret) Weddell in A.P. Candolle, 1869, 16:235[37].
Parietaria sonneratii Poiret in Lamarck, 1804, Encycl., 5:15, "*sonnerati.*"
Phenax vulgaris Weddell, 1854:192.

Monoecious, non-stinging herb or small shrub to 1.2 m; leaves alternate, serrate on upper 2/3, acuminate, to 6 cm long; flowers in axillary clusters.

Asiatic introduction; a common weed in Dominica in moist places to 650 m: La Chaudière (*Hodge 3638*), Melville Hall (*Hodge 633*), Milton (*Hodge 2560*), Morne Brulés (*Hodge 634*), Ridgefield (*Hodge 2183*), Soufrière (*Lloyd 401*), South Chiltern (*Ernst 1319*), Springfield (*Wilbur 7682*), Stewart River mouth (*Wilbur 8033*), Sugar Loaf (*Eggers 882*), Sylvania (*Cooper 16, Hodge 635*), Syndicate (*Ernst 2011, Whitefoord 3586, 3954*).

Pilea Lindley, nom. cons.

Pilea lanceolata Weddell was incorrectly attributed to Dominica by Fawcett and Rendle (1914, 3(1):64), as Urban (1917:111) pointed out. Kellogg (in Howard, 1988, 4:90) indicated that the misidentified Dominican specimen is *P. forsythiana*.

1. Leaves entire, usually glabrous above.
   2. Leaves to 0.8 cm long, of different sizes on adjacent nodes, blades 1-nerved; inflorescences shorter than petioles . . . . . ***P. microphylla***
   2. Leaves usually over 2 cm long, ± equal on adjacent nodes, blades 3-nerved; inflorescences longer than petioles.
      3. Leaves lanceolate (>4× longer than broad) . . . . . ***P. forsythiana***
      3. Leaves ovate (<3× longer than broad) . . . . . ***P. parietaria***
1. Leaves toothed, pubescent (except *P. semidentata*).
   5. Vegetative parts glabrous, very succulent . . . . . ***P. semidentata***
   5. Vegetative parts (at least stems) pubescent, never succulent.
      6. Plants erect, not rooting at nodes; leaves elliptic-ovate, bases cuneate-rounded, to 8 cm long, pubescent or glabrous above . . . . . ***P. inaequalis***
      6. Plants creeping and rooting at nodes; leaves rotund or broadly ovate-elliptic, bases rounded, to 2 cm long, pubescent above . . . . . ***P. nummulariifolia***

Pilea forsythiana

Pilea forsythiana Weddell in A.P. Candolle, 1869, 16:111.—Urban, 1907, 5:300.
Pilea mornicola Urban, 1907, 5:305.

Glabrous, erect herbs; leaves entire, lanceolate.

Guadeloupe to Martinique; occasional in Dominica in interior ravines or clearings 500–1000 m: Brantridge (*Ernst 1196*), Castle Bruce track (*Hodge 1235*), Laudat (*Lloyd 222*), upper Layou (*Stehlé 6311*), Massacre River waterfalls (*Hodge 1025, 1027*), Pont Cassé (*Proctor 25775*), Sylvania (*Cooper 119*), Trafalgar Falls (*Ernst 1082*), sine loc. (*Vélez 3549*).

Dominican specimens with smallest and narrowest leaves could be treated as *P. mornicola* Urban, such as *Cooper 119, Ernst 1196* ("on wet rocks"), *Hodge 1235* ("on boulders"), *Proctor 25775* ("on boulders"), *Stehlé 6311* ("humus") and *Vélez 3549*. It has not been studied in the field but it appears that the small and narrow-leaved aspect may involve epiphytic or epilithic specimens with minimal nutrients.

It would also be interesting to compare closely related *P. forsythiana* (lanceolate leaves) and *P. parietaria* (ovate leaves) in the field.

Pilea inaequalis

Pilea inaequalis (Poiret) Weddell, 1852:229.—Kellogg in Howard, 1988, 4:82.
Urtica inaequalis Jussieu ex Poiret in Lamarck, 1816, Encycl., Suppl., 4:222.
Pilea pubescens sensu Grisebach, 1860:159, non Liebmann.

Erect, pubescent, epiphytic or terrestrial herb to 4 dm; leaves serrate, base cuneate to rounded, sometimes quite purple in same population with green-leaved specimens.

Neotropics; common in Dominica in moist rainforest and gullies 20–1000 m: Boeri Lake (*Whitefoord 4142*), Brantridge (*Ernst 1197*), La Chaudière (*Hodge 3530*), Clarke Hall (*Webster 13399*), Deux Branches (*Hodge 3118*), Dleau

Gommier (*Ernst 2086*), Freshwater Lake (*Smith 10260*), Jean (*Ernst 1817*), Laudat (*Lloyd 50*), Lisdara (*Hodge 641, 2406, 2411, 2464*), Massacre Falls (*Hodge 1024*), Morne Anglais (*Hodge 640*), Morne Bruce in Roseau (*Hodge 642*), Morne Diablotins (*Nicolson 1915, 1916, Webster 13337*), Morne Micotrin (*Ernst 1775, Wilbur 7452*), Mosquito Mountain (*Webster 13535, 13536*), Point Lolo (*Ernst 1206*), Pont Cassé (*Long & Norstog 3403, Wilbur 7815*), Salybia (*Hodge 3239*), South Chiltern (*Ernst 1313, Hodge 1547*), Syndicate (*Ernst 2018, Hodge 2888, 2894, Whitefoord 3617, 3618*), Trafalgar Falls (*Hodge 1996*).

After surveying US materials of the *Pilea pubescens-P. caribaea-P. obtusata-P. inaequalis* complex, I concluded: (1) *P. pubescens* Liebmann (type from Brazil) occurs from South through Central America reaching Cuba and the southern Lesser Antilles (where it is called *P. caribaea* Urban). This species tends to have rotund to subcordate leaf-bases. (2) Specimens with more obtuse to cuneate leaf-bases tend to be annotated as *P. inaequalis* if they are smallish and as *P. obtusata* Liebmann if they are larger.

Pilea microphylla

Pilea microphylla (Linnaeus) Liebmann, 1851:296.
Parietaria microphylla Linnaeus, 1759a:1308.
Urtica trianthemoides Swartz, 1787a:68.
Pilea microphylla var. *trianthemoides* (Swartz) Grisebach, 1860:155.

Glabrous, spreading to erect, monoecious or dioecious herbs to 3 dm; leaves elliptic to obovate.

Neotropics: in Dominica in moist, disturbed areas (including masonry) to 550 m: Baiac (*Whitefoord 5460*), Clarke Hall (*Ernst 1697*), Delices (*Whitefoord 3674*), Grand Bay (*Whitefoord 6080*), Hatton Garden (*Hodge 3013*), Laudat (*Lloyd 230*), Lisdara (*Hodge 637*), Loubière (*Hodge 3873*), Mt. Joy (*Hodge 1296*), Ridgefield (*Hodge 2171*), South Chiltern (*Hodge 1537*), Sylvania (*Hodge 638*).

Adjanohoun et al. (1985:183, pl. 150) reported use of tea against colic.

Larger specimens (*Hodge 1537, 3013, 3873*) are sometimes identified as *P. microphylla* var. *trianthemoides* and smaller ones (*Hodge 1296, 2171*) as var. *microphylla*. The difference may be habitat rather than genetic.

Pilea nummulariifolia

Pilea nummulariifolia (Swartz) Weddell, 1852:255, "*nummulariaefolia*."
Urtica nummulariifolia Swartz, 1787a:63, pl. 1, "*nummularifolia*."

Repent, dioecious herb with stems rooting at nodes; leaves rotund, serrate but with rounded teeth.

Neotropics; in Dominica in disturbed areas to 500 m: Grand Bay (*Wilbur 7922*), South Chiltern (*Hodge 3880, 1591*), Trafalgar Falls (*Ernst 1085*).

Pilea parietaria

Pilea parietaria (Linnaeus) Blume, 1856, 2:48.
Urtica parietaria Linnaeus, 1753:985.
Urtica ciliaris Linnaeus, 1759a:1266.
Pilea ciliaris (Linnaeus) Weddell, 1852:209.—Grisebach, 1860:156.

Erect, monoecious herbs to 6 dm; leaves elliptic, lance-ovate, or ovate; male inflorescence capitate, female branching.

Neotropics; common in Dominica in moist, shady areas from midlands to elfin woodland, 400–1400 m: Bellevue (*King 6307*), Castle Bruce (*Cowan 1607*), Freshwater Lake-Laudat area (*Chambers 2673, Eggers 841, Ernst 1771, 2166*), *Hodge 1772, 1781, 1862, 1878, Lloyd 163, Nicolson 2103, Smith 10233, Whitefoord 3858, Wilbur 7436*), Massacre River waterfalls (*Hodge 1023*), Morne Anglais (*Hodge 2267, 2271, 2304, Nicolson 4103*), Morne Diablotins (*Chambers 2639, Hodge 2801, Webster 13335, Whitefoord 4559, 5726*), Morne Plat Pays (*Hodge 1662*), Trois Pitons (*Ernst 1214, Hodge 1391, 1418*), Springfield (*Wilbur 7690*), Syndicate (*Ernst 2017*), sine loc. (*Imray 373* at GH).

Ernst 1214 from the summit of Trois Pitons may be a new species, teste Dr. Howard. Whitefoord specimens (*3858* and *4559*) were determined by Kellogg in 1985 as *Pilea rivoriae* Weddell. Kellogg (in Howard, 1988, 4:79) keys *P. parietaria* as having "inflorescences < leaves; bracts of staminate inflorescences minute" and *P. rivoirae* as having "inflorescences > leaves; bracts of staminate inflorescences > 1 mm long."

Pilea semidentata

Pilea semidentata (Poiret) Weddell, 1852:215.
Urtica semidentata Jussieu ex Poiret in Lamarck, 1816, Encycl., Suppl., 4:222.
Pilea elegans Weddell, 1852:215.—Grisebach, 1860:157.
Pilea semidentata var. *major* Weddell in A.P. Candolle, 1869, 16:142.

Erect, monoecious herb to 5 dm; leaves succulent, elliptic to oblanceolate, serrate near and above middle, the lower portion sometimes entire, blades to 11 cm long.

West Indies: in Dominica on coastal and inland exposed slopes and stream banks to 550 m: Anse du Mé (*Wilbur 8044*), Baiac (*Whitefoord 4615*), Boetica River (*Ernst 1909, 1916*), Brookhill (*Ernst 1158*), Clarke Hall (*Stern & Wasshausen 2406*), Colihaut (*Ernst 2112*), Grand Bay (*Wilbur 7920*), Laudat (*Lloyd 362*), Layou River Valley (*Webster 13279*), Ravine Grassa (*Webster 13452*), Roseau River (*Beard 1129*), Salybia (*Hodge 636*), Trafalgar Falls (*Hodge 639*).

Adjanohoun et al. (1985:185, pl. 152) reported this plant is said to be toxic to man.

Rousselia Gaudichaud

Rousselia humilis

Rousselia humilis (Swartz) Urban, 1905, 4:205.
Urtica humilis Swartz, 1785:34.
Urtica lappulacea Swartz, 1787:69.

Rousselia lappulacea (Swartz) Gaudichaud, 1830:503.

Monoecious, non-stinging herb to 4 dm; leaves alternate, entire, acute to rounded, the blades to 3 cm long; flowers in compact axillary clusters.

Greater Antilles; cited for Dominica by Grisebach (1860:160), based on an Imray collection, and subsequently by Urban (1920, 8:181) and others.

I have grave doubts that this species is on Dominica, because this is the only Lesser Antillean record south of St. Barthélemy. Could the Imray specimen be misidentified, say a *Pilea microphylla*?

Urera Gaudichaud

Urera caracasana

Urera caracasana (Jacquin) Gaudichaud ex Grisebach, 1860:154.
Urtica caracasana Jacquin, 1789, Pl., 1:71, pl. 396.

Monoecious, often stinging shrub to 4 m; pistillate flowers pedicellate and separate; staminate flowers in terminal glomerules.

Neotropics; apparently rare in Dominica and only known from areas slightly above Syndicate at 700–800 m: Morne Diablotins (*Ernst 2012, Hodge 2781, Whitefoord 4546*).

It is superficially similar to *Gyrotaenia crassifolia* in vegetative condition but lacks the radiate cystoliths of that species.

Kellogg (in Howard, 1988, 4:92) attributed the combination to "Steudel, Nomencl. Bot. ed. 2, 2:734. 1841." Alas, the combination is under *Urtica*, not *Urera*, Steudel citing the latter as a synonym of *Urtica*.

VERBENACEAE

(by A.C. Nicolson)

Faradaya splendida Mueller, a vine with elliptic, apiculate leaves and large (4 cm) flowers, was reported from Dominica by Moldenke (1971:363) but was omitted in his later list (1980:100).

Gmelina arborea Roxburgh was reported for Dominica by Moldenke (1971:363) but was omitted in his later list (1980:100).

Gmelina philippensis Chamisso (*Gmelina hystrix* Schultes ex Kurz), a shrub, sometimes with axillary spines, elliptic leaves, and large, yellow flowers was cited as "currently cultivated" on Dominica and other islands by Howard (1989, 6:214).

Holmskioldia sanguinea Retzius, a lax shrub with spreading, orbicular 2 cm broad calyx and red, cylindric corolla 2 cm long, was reported as "naturalized" on Dominica (*Eggers 1451*, without locality). It has not been recollected.

Tectona grandis Linnaeus f., the teak of Asia, a tree with elliptic-ovate leaves stellate-tomentose beneath and large terminal, profusely branching cymes and small flowers was collected at Woodford Hall (*Ernst 2092*) and in a small plantation on West Cabrit (*Whitefoord 3988*).

1. Flowers sessile, in a spike or head.
   2. Flowers in an elongate spike >5 cm long . . . . . ***Stachytarpheta***
   2. Flowers in heads (sometimes a spike <3 cm long).
      3. Erect shrub; calyx truncate or shallowly toothed; fruit drupaceous . . . . . ***Lantana***
      3. Shrub or prostrate creeping herb; calyx 2-toothed; fruit dry . . . . . ***Lippia***
1. Flowers pedicelled, in a raceme, cyme or panicle.
   4. Inflorescence a branching cyme or panicle.
      5. Leaves 3-foliolate (ours) . . . . . ***Vitex***
      5. Leaves simple.
         6. Inflorescence narrowly pyramidal . . . . . ***Cornutia***
         6. Inflorescence about as long as broad.
            7. Calyx ± truncate . . . . . ***Aegiphila***
            7. Calyx distinctly lobed . . . . . ***Clerodendrum***
   4. Inflorescence a raceme.
      8. Herb; leaves ± serrate . . . . . ***Priva***
      8. Tree, shrub or climber; leaves entire or undulate.
         9. Calyx lobes and pedicels >1 cm long; climber . . . . . ***Petrea***
         9. Calyx lobes and pedicels <1 cm long; tree or shrub.
            10. Calyx truncate, subtending a black drupe; leaves ovate to elliptic . . . . . ***Citharexylum***
            10. Calyx with acute lobes 0.5 mm long, enveloping an orange drupe; leaf apices attenuate . . . . . ***Duranta***

Aegiphila Jacquin

Aegiphila martinicensis

Aegiphila martinicensis Jacquin, 1767, Obs., 2:3.

Bois cabrit (report of bois chandelle may involve confusion with *Erithalis fruticosa* of Rubiaceae).

Shrub or small tree to 6 m; leaves elliptic to ovate, 8–18 cm × 3–8 cm, apex acuminate, primary veins arching and prominent; cymes paniculate, to 12 cm × 12 cm; calyx ± truncate (wavy-margined), 2 mm; corolla regular, white to cream, tube to 1 cm, lobes to 0.5 cm; stamens (or style) exserted to 5 mm; drupe with 4 1-seeded pyrenes, yellow-orange, subtended by saucer-like calyx, 0.4 mm long.

Neotropics; occasional in woods all over Dominica but generally in drier habitats: Cabrits (*Nicolson 1901*), Clarke Hall (*Stern & Wasshausen 2440, Webster 13189*), above Colihaut (*Ernst 1895*), Freshwater Lake area (*Ernst 1095, Smith 10236,*

10298, Stern & Wasshausen 2564), Hampstead (*Lloyd 606*), Layou Valley (*Nicolson 4183, Stehlé 6329*), L'Imprévue (*Narodny s.n.*), Lisdara (*Cooper 167*), Morne Diablotins (*Hodge 2802, Whitefoord 3500, 5722*), Petite Macoucherie (*Webster 13557*), Petite Soufrière Bay (*Stern & Wasshausen 2484*), Point Lolo (*Nicolson 1847*), Rasade (*Nicolson 4041*), Salybia (*Hodge 3093*), South Chiltern (*Hodge 1549*), Sylvania (*Cooper 60, 80*), Woodford Hill (*Nicolson 4242*). Flowering March–November, fruiting January–July.

Material from higher elevations (including summit of Diablotins) generally has larger leaves and flowers. Moldenke (1980:100) reported *Aegiphila martinicensis* var. *oligoneura* (Urban) Moldenke for Dominica.

Leaves are used in a ritual bath by Caribs and fruits are used as bait for snaring birds (Hodge and Taylor, 1957:600).

Citharexylum Linnaeus

Citharexylum caudatum Linnaeus, with secondary veins broad-arching from midrib and slightly longer pedicels, was reported for Dominica by Adams (1972:633), perhaps an error for the Dominican Republic, because *C. caudatum* is a Central American species extending into the Greater Antilles.

Citharexylum fruticosum Linnaeus was reported from Dominica by O. Schulz (in Urban, 1909, 4:535), Britton and Wilson (1925, 6:146), and Moldenke (1980:100). This species, if distinct from *C. spinosum*, is primarily found in the Greater Antilles and may extend through the Lesser Antilles into South America. It is supposedly distinguished from *C. spinosum* by more chartaceous leaves with secondary and tertiary venation more conspicuous and flowers with shorter pedicels. Dominican specimens approximating these leaf characters (*Wilbur 7379, 8236, 8263*) have been cited by Moldenke (1975a:200) as *C. spinosum*. Moldenke (1980:100) also reported *Citharexylum fruticosum* var. *subvillosum* (Moldenke) Moldenke and *Citharexylum fruticosum* var. *villosum* (Jacquin) Moldenke for Dominica.

Citharexylum spinosum

Citharexylum spinosum Linnaeus, 1753:625.—Moldenke, 1975a:200.
Citharexylum quadrangulare Jacquin, 1760:26.—Grisebach, 1862:497.

Bois cotlette, cotlette.

Tree to 15 m; twigs usually quadrangular; leaves membranous to chartaceous, broadly to narrowly elliptic, 15(–20) cm × 5(–8) cm, apex acute or obtuse, base obtuse to tapering, venation ± prominent; petioles 1–3 cm, sometimes pinkish; inflorescence a raceme 10–20 cm long; pedicels to 2 mm; calyx campanulate, ± truncate, 2–3 mm long; corolla fragrant, white, salverform, tube to 6 mm, pubescent within, lobes round, spreading, to 3 mm long; drupe round, fleshy, with 2 2-seeded pyrenes, orange but turning black, 0.7–1 cm long.

Antilles to northern South America, cultivated elsewhere; common in Dominica to 500 m on drier west side: Cabrits (*Hodge 871, Nicolson 1883, 1900, Whitefoord 3990, 4009, Wilbur 8263*), Clarke Hall (*Wilbur 7379*), Gabriel (*Wilbur 8236*), Lisdara (*Hodge 872, 2467*), Mero (*Ernst 1752, Stern & Wasshausen 2436*), Prince Ruperts Head (*Finlay s.n.* at K), St. George Parish (*Gillis 8149*), sine loc. (*Imray 100* at K). Flowering May–November, fruiting July–March.

Adjanohoun et al. (1985:185, pl. 152) discussed the medicinal uses of a Dominican plant called *Citharexylum fruticosum*, which may be misidentified.

Clerodendrum Linnaeus

Clerodendrum buchananii (Roxburgh) Walpers ("*buchanani*") was reported for Dominica by Moldenke (1980:100), perhaps an error for Martinique, because Dominica is not cited for the distribution of cultivated material on p. 348 and Martinique is. It is similar to *C. specisossimum* Morren.

Clerodendrum paniculatum Linnaeus was reported for Dominica by Howard (1989, 6:220) but the basis of his record wasn't given. This species was not attributed to Dominica by Moldenke (1971, 1980).

Clerodendrum ugandense Prain, with two-toned blue flowers, has been collected in the Roseau Botanic Garden (*Fairchild 2673, Hodge 1005*).

Clerodendrum wallichii Merrill (*Clerodendrum nutans* Wallich ex D. Don, non Jack), with apiculate leaves obovate to oblanceolate, a small purple calyx and large white flowers, is an Asiatic species occasionally cultivated in the neotropics. A Dominican collection (*Gillis 8228*) from "near Freshwater Lake on top of mountain" probably involves a location error, because that area is improbable for this cultivated plant. It is possible that this is the correct label information for *Gillis 8242*, which is *Tibouchina ornata* supposedly but surely erroneously from Antigua.

1. Armed with short recurved spines at petiole bases; leaves ovate to elliptic; flowers white; native . . . ***C. aculeatum***
1. Unarmed; escaping from cultivation.
   2. Leaves ovate to elliptic.
      3. Corolla tube white, >5 cm long . . . . . ***C. indicum***
      3. Corolla tube red, <3 cm long . . . . ***C. × speciosum***
   2. Leaves cordate or deltoid.
      4. Leaves deltoid; flowers white and pink, in dense cymes . . . . . ***C. philippinum***
      4. Leaves cordate; flowers scarlet in loose panicles . . . . . ***C. speciosissimum***

Clerodendrum aculeatum

Clerodendrum aculeatum (Linnaeus) Schlechtendal, 1831:750.—Grisebach, 1862:500.
Volkameria aculeata Linnaeus, 1753:637.

Dense, slightly puberulent shrub to 2.5 m; leaves subtended by stout, recurved stipular spines to 8 mm long; leaves entire,

elliptic, 1.0–5.5 cm × 0.5–2.5 cm; petiole to 1 cm; inflorescence an axillary cyme; pedicels slender, to 1 cm; calyx tube 1 cm, lobes 1 cm, acute, spreading; corolla white, tube 2 cm, lobes 0.7 cm, rounded; filaments purple, exserted 2 cm; drupe with 2 (usually) 1-seeded pyrenes.

Neotropics; common in Dominica along west coast: Cabrits (*Hodge 3701, Nicolson 1888*), Colihaut (*Ernst 1138, Kimber 1066*), Morne Bruce (*Lloyd 733*), Pointe Ronde (*Hodge 2698*), Pringles Bay (*Whitefoord 3734*), Salisbury (*Stern & Wasshausen 2424, Wilbur 8109*), Swamp Gutter (*Hodge s.n., Wilbur 8261*), Woodbridge Bay (*Webster 13294*). Flowering and fruiting April–November.

Clerodendrum indicum

Clerodendrum indicum (Linnaeus) Kuntze, 1891, 2:506.—Moldenke in Dassanayake, 1983, 4:426.
Siphonanthus indicus Linnaeus, 1753:109, "*indica.*"
Clerodendrum siphonanthus W.T. Aiton, 1812, 4:65, nom. illeg.

Herb or shrub to 1.2 m; branches slender, ribbed; leaves ± sessile, verticillate, oblong-lanceolate, to 15 cm × 3 cm, apex acute to acuminate, base tapering; inflorescence a large, leafy, terminal panicle of numerous cymes; pedicels to 3 cm; calyx 1 cm, lobes ovate-acute; corolla white, tube to 14 cm, very slender, lobes 1.5 cm, rounded; stamens long-exserted; drupe fleshy, globose, shining blue-black, 1 cm long.

East Indies, cultivated and naturalizing elsewhere; said to be a common weed in banana and coconut groves of Dominica: Stewarts River (*Wilbur 8028*), sine loc. (*Imray 153* at K). Flowering July.

Clerodendrum philippinum

Clerodendrum philippinum Schauer in A.P. Candolle, 1847, 11:667.—Howard & Powell, 1968:54.
Clerodendrum fragrans var. *multiplex* Sweet, 1826:322.
Clerodendrum fragrans var. *pleniflora* Schauer in A.P. Candolle, 1847, 11:666.
Clerodendrum philippinum f. *pleniflora* (Schauer) Moldenke, 1978a:260.
Clerodendrum philippinum f. *multiplex* (Sweet) Moldenke, 1978b.

Moselle, rosa alba.

Shrub to 1 m, puberulent; leaves deltoid, 10–22 cm × 8–22 cm, apex acute, margins ± dentate; petiole 8–15 cm; inflorescence a compact terminal cyme to 7 cm broad; calyx tube 7 mm, lobes 8 mm, lanceolate, reddish; corolla white and pink, fragrant, double (ours), fruits not set.

China, pantropically cultivated and naturalizing; cultivated but escaping and weedy in cleared areas of Dominica to 450 m: Delices (*Whitefoord 3694*), La Plaine (*Nicolson 2050*), Lisdara (*Hodge 865*), South Chiltern (*Ernst 1302*). Flowering May, August, September, and November.

Caribs use the scent of the flowers as a headache remedy (Hodge and Taylor, 1957:600).

Moldenke (in Dassanayake, 1983, 4:472) finds it difficult to decide the nomenclature for the three formae he accepts: (1) fully single-flowered, (2) mixed single- and double-flowered, and (3) fully double-flowered. From Howard and Powell's (1968) description of the lectotype of the species ("many of the flowers...are single, others are semi- to fully double ..."), it appears that the second is the typical element, i.e., f. *subfertile* Moldenke. Our material appears to be f. *multiplex*.

Clerodendrum speciosissimum

Clerodendrum speciosissimum Morren, 1836:322, pl. 68.—Moldenke in Dassanayake, 1983, 4:444.

Shrub to 2 m; leaves pubescent, broad-cordate, to 25 cm × 25 cm, apex acute; petiole to 14 cm; inflorescence a terminal panicle; calyx to 7 mm, lobes acute, persistent, red, ± fleshy; corolla scarlet, tube 2 cm long, lobes rounded, 1.5 cm; ripe drupe dark blue, 4-lobed, 7 mm broad.

Oceania, cultivated pantropically; cultivated in Dominica and perhaps escaping: Bellevue (*Cooper 176*), Côte d'Or (*Nicolson 2057*), west of Rosalie (*Ernst 1359*). Flowering and fruiting May–November.

The authorship of this binomial has been traditionally cited as Van Geert ex Morren. Morren only said (translated from French) "*Clerodendron speciosissimum* has received this name from the gardeners of Ghent (des jardiniers gantois)," not attributing it to Van Geert. Further on, Morren stated that it first flowered at the house of M. Van Geert, florist of Ghent. However, Van Houtte previously used the name (L'Hortic. Belg., 3:248, 1836), without a description, announcing that a drawing was being prepared and would appear in the next issue. Because no direct attribution is given by the validating author (Morren) and both Van Houtte and Van Geert have claims for being one of the gardeners of Ghent mentioned, it seems better not to use the "ex" citation.

Clerodendrum × *speciosum*

Clerodendrum × *speciosum* Dombrain, 1869 [month?].—Lemaire, 1869 [May].
[*Clerodendrum speciosum* Teijsmann & Binnendijk, 1866:386, nom. nud.]
Clerodendrum thompsoniae f. *speciosum* Voss in Siebert & Voss, 1894:830, "*thomsonae.*"
Clerodendrum umbellatum var. *speciosum* (Dombrain) Moldenke, 1937:1.

Low weedy shrub; leaf broad-elliptic to 14 cm × 7 cm, apex acuminate, base rounded; petiole 2 cm; inflorescence an axillary cyme to 18 cm broad; calyx 1.5 cm, cleft 2/3, becoming red; corolla red, tube 2 cm, lobes to 1 cm, rounded; fruit unknown.

Pantropically cultivated; occasional and escaping in Dominica: La Plaine (*Whitefoord 5364*), Roseau (*Wolf 15*), Walkers Rest (*Chambers 2618*).

This taxon has been cultivated for over a century and was first described as a hybrid between African *C. thomsoniae* and *C. splendens*. Its taxonomy is still unclear and its nomenclature chaotic. The epithet *speciosum* was first used by Teijsmann and Binnendijk (1866:386) as a nomen nudum. Either Dombrain (month unknown) or Lemaire (May) first validly published the

binomial in 1869. Later workers did not treat it as a hybrid but at some infraspecific rank in one species or another. More recently, Moldenke (letter of 22 Apr 1978) agreed with Voss' disposal, an option mentioned by Moldenke (in Dassanayake, 1983, 4:439). Moldenke (1980:100) appeared to regard this as *Clerodendrum umbellatum* Poiret. Pending a detailed study or revision we maintain the predominant usage.

It is presumed that *C. "thomsonae"* is named for a woman whose last name was Thomson, which is augmented (*thomsoniae*) under Art. 73.10 (*ICBN*). If demonstrably named for a man, the epithet is correctable to *thomsonii*.

Cornutia Linnaeus

Cornutia pyramidata

Cornutia pyramidata Linnaeus, 1753:628.—Grisebach, 1862:501.—Moldenke, 1975b:339.

Bois cassave.

Finely tomentose shrub or tree to 8 m; twigs and branches strongly 4-angled; leaves broad-elliptic, to 15 cm × 7 cm, apex apiculate, base attenuate into 1–2 cm petiole; inflorescence a narrow terminal panicle to 19 cm × 7 cm; pedicels 3 mm; calyx 1.5 cm, ± truncate; corolla irregular, lavender, tube 1 cm, lobes 6 mm; fertile stamens 2, staminodes 2; drupe black, with 1 4-locular pyrene.

Central America and West Indies; common in Dominica below 600 m: Antrim (*Nicolson 1877*), Bataca (*Stehlé 6413*), Cabrits (*Whitefoord 3992*), Carib Reserve (*Hodge 3275, Taylor 19*), Castle Bruce (*Wilbur 7981*), Fonde Hunte Estate (*Whitefoord 4450*), Grand Bay (*Wilbur 7900*), Grand Savanne (*Stern & Wasshausen 2453*), Hampstead (*Lloyd 602*), L'Anse Noire (*Wilbur 7515*), Salisbury (*Wilbur 8110*), Swamp Gutter (*Hodge 867, Wilbur 8254*), Sylvania (*Hodge 868*), Warner (*Ernst 1956*), Woodford Hill (*Ernst 1550, Wilbur 8309*). Flowering vigorously June–July, fruiting August–October.

The fruit juice is used as a blue (red if boiled with lime) ink or dye and the leaves are one of the ingredients in a tea to treat pain of a retroverted uterus (Hodge and Taylor, 1957:600).

Duranta Linnaeus

Duranta stenostachya

Duranta stenostachya Todaro, 1860:26.—Moldenke, 1980:100.

Duranta plumieri sensu Grisebach, 1862:498, as to Dominica material, non Jacquin.

Duranta erecta sensu Urban, 1911, 4:536, as to Dominica material, non Linnaeus.

Duranta repens sensu auctt., as to Dominica material, non Linnaeus.

Shrub or small tree to 2.5 m; branchlets ± 4-angled, with occasional corky lenticels; petiole 1 cm; leaves ovate-lanceolate, to 14 cm × 3.5 cm, apices long-attenuate, bases rounded; racemes unbranched, to 20 cm; pedicel 4 mm; calyx to 5 mm, ribbed, ± truncate but with 1 mm teeth, persistent in fruit; corolla irregular, lavender, tube 8 mm, lobes 5 mm; fruit globular, yellow, enclosed by yellowish beaked calyx, 1 cm long.

Martinique; occasional in Dominica at mid-elevations or montane (1200 m): Bernard Estate (*Wasshausen & Ayensu 361*), Morne Diablotins (*Whitefoord 3927, 4434*), South Chiltern (*Stern & Wasshausen 2491*). Flowering June–July.

Lantana Linnaeus

Apomixis and polyploidy play a part in the evolution and reproduction in this genus; workers relying on morphological characters (Moldenke and others) have described large numbers of taxa at specific and lower ranks. New approaches (Stirton, 1977), utilizing ecology, cytology, as well as morphology, are recognizing even more infraspecific taxa.

This treatment accords with Sander's paper (1987) and treatment in Howard (1989, 6:226). Sanders (1987) recognized the unarmed higher elevation material with subglabrous leaves as a distinct species, *L. hodgei*. Essentially he has redefined *L. camara* of Dominica into three entities: high elevation *L. hodgei*, and lower elevation *L. urticifolia* and *L. camara* with many intermediates (regarded as hybrids). These three taxa are difficult to recognize (requiring study under magnification of hairs, their frequency, kinds, and distribution on various leaf surfaces). Moldenke (1980:101) did not recognize *L. urticifolia* as occurring on Dominica.

1. Floral bracts >2 mm broad; inflorescence rhachis about the same diameter as the peduncle; flowers lilac, pink or white, with or without yellow eye.
   2. Leaves usually <5 cm long; inflorescence small; bracts white-sericeous . . . . . ***L. involucrata***
   2. Leaves usually >5 cm long; inflorescences larger, elongating; bracts coarsely hairy . . . . . ***L. radula***
1. Floral bracts <1 mm broad; inflorescence rhachis thicker than the peduncle; flowers usually yellow to red.
   3. Hairs on upper leaf surface usually occurring on all veins including areolar veinlets, usually abundant and crowded, at least along crevice between major veins and laminar surface, filiform (sometimes gland-tipped), not geniculate (bent) toward base but spreading from veins surface or erect on laminar surface . . . . ***L. urticifolia***
   3. Hairs on upper leaf surface mostly restricted to veins, sparse and remote, tapering (conical), bent toward base with distal 2/3 held parallel to vein (or leaf) surface.
      4. Leaf-blade 1.2×–1.6× longer than wide, base truncate to cordate upper surface dull, moderate green, becoming strigose or scabrous; hairs scattered, stout; lower surface with hairs scattered to moderately abundant, stout and bent but with tip held above surface; secondary and lesser veins keeled . . . . . ***L. camara***
      4. Leaf-blade 1.7×–2.5× longer than wide; base usually

attenuate; upper surface lustrous, dark green, smooth; hairs scattered and stout, restricted to veins (and 1 in each areole center); lower surface with hairs very sparse, weak and strongly appressed; secondary and lesser veins not or weakly keeled . . . . . ***L. hodgei***

Lantana camara

Lantana camara Linnaeus, 1753:627.
Lantana aculeata Linnaeus, 1753:627.
Lantana camara var. *aculeata* (Linnaeus) Moldenke, 1934:9; 1980:100.

Ramgoat leaf.

Shrubs, sometimes armed; leaves ovate, serrate, usually with pubescence restricted to veins below; flowers yellow to red; bracts linear; head capitate to slightly elongate.

Pantropical weed; common in Dominica at lower elevations: Grand Savanne (*Wilbur 7665*).

Sanders (in Howard, 1989, 6:228) commented that this easily hybridizes and that hybrids with *L. urticifolia* have both the geniculate, stout hairs of *L. camara* and the slender, straight hairs of *L. urticifolia* mixed on the lower leaf surface.

Adjanohoun et al. (1985:187, pl. 153) reported medicinal uses on Dominica of a plant called *Lantana camara*.

Lantana hodgei

Lantana hodgei Sanders, 1987:343.

Rambling shrub, recognizable on Dominica by being essentially glabrous.

Martinique (perhaps elsewhere); apparently frequent at mid-elevations (to 900 m) on Dominica: Laudat to Freshwater Lake (*DeFilipps 147, Ernst 1728, Fosberg 48269* [type of *L. hodgei*], *Hodge 1808, Lloyd 201, Nicolson 2102, Smith 10216, Whitefoord 3801*), Sylvania (*Cooper 5, Hodge 861, 1038, 1115*), Syndicate (*Whitefoord 3652, 5617*).

The following collections were cited by Sanders (1987:348) as intermediates with *L. urticifolia*, presumably hybrids: Belfast (*Shillingford 120* at MO), Marigot (*Hodge 858* p.p. at GH), Belle View (*Hodge 860* at GH), Milton Estate (*Hodge 2592* at GH).

It seems that *L. hodgei* could be an upper elevation aspect of "camaroid" *Lantana*, responding to lower insolation (more rain and clouds) and higher humidity.

Lantana involucrata

Lantana involucrata Linnaeus, 1756:22.
Lantana odorata Linnaeus, 1767a:418.—Grisebach, 1862:496.
Lantana involucrata var. *odorata* (Linnaeus) Moldenke, 1941:53; 1980:100.

Shrub; leaves elliptic, to 4 cm × 2 cm, scabrous above, densely pubescent and gland-dotted beneath, margins finely crenulate; bracts sericeous, ovate, acute, distinctly shorter than corolla tubes; corolla pink to pale lavender; fruit reddish-violet.

Essentially Caribbean; very common in Dominica along dry west coast: Batali River (*Chambers 2792, Webster 13401*), Cabrits (*Hodge 3724, Whitefoord 3983*), Canefield (*Whitefoord 6125*), Dublanc (*Whitefoord 4279*), Grand Savanne (*DeFilipps 173, Ernst 1635, Kimber 909, Lloyd 832, Nicolson 2046, Wilbur 7627*), Loubière (*Krauss 1250*), Petit Coulibri (*Whitefoord 6006*), Pointe Guignard (*Wilbur 8121*), Pointe Michel (*Ramage s.n.* at K), Pointe Ronde (*Hodge 2740*), St. Joseph (*Whitefoord 5685*), Scotts head (*Lloyd 530*), Solomon's Slide (*Hodge 3867*), South Chiltern (*Hodge 1617*) sine loc. (*Fishlock 50* at K), *Imray 50* at K).

Adjanohoun et al. (1985:187, pl. 154) reported medicinal uses.

Reports of *Lantana reticulata* Persoon from Dominica are probably attributable to this species. *Fishlock 50* approaches *L. radula* Swartz (q.v.). Sanders (in Howard, 1989, 6:229) commented: "Further research may show that var. *odorata* should be recognized as a separate species."

Lantana radula

Lantana radula Swartz, 1788:92.—Moldenke, 1980:100.

Bom la Vierge.

Shrub with hairy twigs; leaves broad-ovate, to 5 cm × 3 cm; bullate and scabrous above, densely hairy and orange-glandular beneath, base acute, apex obtuse; bracts coarse-hairy, broad-ovate, densely overlapping, apiculate, often reflexed; corolla white with yellow eye, tube slightly exceeding bracts; fruits pale purple.

Lesser Antilles into Venezuela; rare in Dominica at low to mid-elevations: En Haut Jean (*Whitefoord 5427*), Grand Savanne (*Stehlé 6396* in part), Jean (*Ernst 1815a*), Salisbury (*Whitefoord 4521*), Tapis Vert (*Nicolson 2155*).

Dominican reports of *Lantana trifolia* Linnaeus are probably attributable to this species, which appears to be a Lesser Antillean replacement.

Lantana fucata var. *antillana* Moldenke was attributed to Dominica by Moldenke (1980:100). A specimen from Roseau (*Krauss 1255*) was annotated as this by Moldenke in 1968. This specimen (US) was determined by R. Sanders in 1987 as "Probably *Lantana involucrata* × *radula*."

Lantana urticifolia

Lantana urticifolia Miller, 1768.
Lantana arida Britton, 1910:357.

Arching to ± scandent, sometimes armed shrubs to 3 m tall; leaves ovate, serrate, usually with felt-like pubescence below; flowers yellow to red; bracts linear; head capitate to slightly elongate.

Neotropics; in Dominica at lower elevations and common but technically a new record: Cabrits (*Hodge 855* at GH, NY, *Whitefoord 5593*), Delices (*Whitefoord 3787*), Dublanc (*Hodge 2535* at GH, *Whitefoord 4280, 4281*), Lisdara (*Hodge 857!*,

860), Marigot (*Hodge 858*! p.p.), Milton (*Hodge 2592*), Morne Bruce (*Hodge 859*!), Morne Brulés of Portsmouth (*Hodge 856* at GH), Ridgefield (*Hodge 2177*! at GH), Salybia (*Hodge 3201*! at GH), South Chiltern (*Hodge 1584*), sine loc. (*Eggers 86* at K, *Imray 95, 229*! at K). Flowering and fruiting throughout the year.

Collections marked with an exclamation mark (!) were cited by Sanders (1987) as being unadulterated *L. urticifolia*. Others are either hybrids or were not seen by Sanders. Sanders regarded this species as hybridizing on Dominica with *L. hodgei* (q.v.). However, that does not seem to me to be as big a problem as the possibility that there is introgression with *L. camara*. It seems that the Dominican material being called *L. urticifolia* is not nearly so "felty" on the lower leaf surface as it is elsewhere.

In dry habitats this (and *L. camara*) can be well armed with recurved prickles, the *aculeata* aspect.

Lippia Linnaeus

Lippia micromera Schauer, a thyme-scented shrub with subserrate leaves 1 cm × 0.6 cm and a short-peduncled inflorescence, has been collected from cultivation at Portsmouth (*Hodge 862* at GH) and along the Trafalgar Falls road (*Whitefoord 4590*).

Lippia strigulosa

Lippia strigulosa Martens & Galeotti, 1844:319.—Adams, 1972:631.
Phyla strigulosa (Martens & Galeotti) Moldenke, 1947:233.
Lippia reptans sensu auctt. as to Dominican material, non Kunth.

Weedy trailing herb, rooting at nodes; leaves spatulate, 1.0-2.5 cm × 0.5-1.5 cm, with ~4 pairs of coarse teeth on distal 2/3 of leaf-margin, veins ± prominent; inflorescence capitate, 0.7 long on 4-5 cm peduncle; calyx compressed, split abaxially to base, pubescent along lateral ribs; corolla purplish.

Neotropics; rarely collected on Dominica: Melville Hall (*Ernst 1573*).

Moldenke (1980:101) called this *Phyla strigulosa* var. *sericea* (Kuntze) Moldenke.

Petrea Linnaeus

Petrea kohautiana

Petrea kohautiana Presl, 1845:99.—Moldenke, 1938:26; 1980:101.
Petrea volubilis Jacquin, 1763:180, pl. 114, et auctt., non Linnaeus.

Purple wreath.

Liana; leaves scabrous, broad-elliptic, 12-20 cm × 7-12 cm, apiculate or rounded, base rounded; petioles very short (5 mm); raceme terminal, pedicels 1-2 cm; calyx deeply 5-lobed, persistent, light blue, tube puberulous, lobes 1.5 cm; corolla 5-lobed, 1.5 cm, dark blue.

Lesser Antilles, cultivated elsewhere; occasional vine in forests of Dominica: Carib Trail from Riversdale to Deux Branches (*Howard 11757*), Bernard Estate (*Wasshausen & Ayensu 357*), Blenheim River mouth (*Hodge 870*), Grand Bay (*Ernst 1075*), Hampstead (*Beard 1475*), La Chaudière (*Hodge 3651*), Pagua River (*Ernst 1972*), Wallhouse River (*Eggers s.n.*).

Caribs use the flowers in an abortifacient tea (Hodge and Taylor, 1957:601).

Priva Adanson

Priva lappulacea

Priva lappulacea (Linnaeus) Persoon, 1806, 2:139.
Verbena lappulacea Linnaeus, 1753:19.
Priva echinacea Jussieu, 1806:69, nom. illeg.—Grisebach, 1862:493.

Weedy herb to 1 m; leaves broad-ovate to triangular, to 6 cm × 4 cm, acuminate, base truncate, margins serrate to crenate; petiole to 3 cm; inflorescence a spiciform raceme to 20 cm; calyx inflated in fruit, to 6 mm, covered with hooked hairs; corolla 6 mm, 5-lobed, pink or white; fruit of 2 echinate cocci, each 2-celled.

Neotropics; a common weed in Dominica at lower elevations: Batali River (*Ernst 2120*), Cabrits (*Whitefoord 3984*), Goodwill (*Wilbur 7571*), Layou Valley (*Ernst 1273, Webster 13192*), Mero (*Chambers 2783*), Morne Bruce (*Hodge 873*).

Moldenke (1980:101) also accepted *Priva lappulacea* f. *albiflora* Moldenke as occurring on Dominica.

Stachytarpheta Vahl, nom. cons.

1. Corollas usually light blue, scarcely exceeding calyx; floral bracts linear-subulate; spikes 1-2 mm broad . . . . . ***S. cayennensis***
1. Corollas usually dark blue to violet, much exceeding calyx; floral bracts ovate to lanceolate; spikes 2-4 mm broad.
   2. Floral bracts ovate-lanceolate, scariously margined mostly above middle; leaf teeth obtuse . ***S. jamaicensis***
   2. Floral bracts lanceolate-subulate, scariously margined below middle; leaf serrations acute . . . . ***S. urticifolia***

Stachytarpheta cayennensis

Stachytarpheta cayennensis (L. Richard) Vahl, 1804, Enum., 1:208, "*cajanensis*".—Moldenke, 1980:101.
Verbena cayennensis L. Richard, 1792:105.

Suffrutescent herb to 1 m; leaves broad-elliptic, to 4 cm × 2.5 cm, apex rounded to obtuse, base truncate to tapering to 5 mm petiole, margins shallowly obtuse-serrate; terminal spikes to 20 cm long; corolla light blue to white (reported as deep purple in *Hodge 876*), scarcely exceeding calyx.

Neotropics; locally common in Dominica at low to mid-elevations: Carib Reserve (*Hodge 3305*), Lisdara (*Hodge 875A*), Milton (*Hodge 2595*), Morne Bruce (*Hodge 876*),

Soufrière (*Lloyd 458*), South Chiltern (*Ernst 1121*), Sylvania (*Cooper 72, Hodge 874*), Syndicate (*Whitefoord 4532*), sine loc. (*Imray 154*).

Stachytarpheta jamaicensis

Stachytarpheta jamaicensis (Linnaeus) Vahl, 1804, Enum., 1:206.—Moldenke, 1980:101.
Verbena jamaicensis Linnaeus, 1753:19.
Cymburus urticifolius Salisbury, 1806, sub pl. 53, nom. illeg., "*urticaefolius*."

Woody herbs to 1 m; leaves scabrous above, elliptic, to 9 cm × 4.5 cm, apex obtuse, base decurrent to petiole 1/2 the leaf length, teeth obtuse, antrorse (pointing forward); spikes to 35 cm; corolla dark blue (ours), much exceeding calyx, limb to 1.2 cm broad.

Neotropical weed; in Dominica at low to mid-elevations: Cabrits (*Whitefoord 4077*), Colihaut (*Ernst 1135*), Delices (*Whitefoord 3669*), La Savanne (*Whitefoord 4516*), Lisdara (*Cooper 144, Hodge 2417*), Mero Valley (*Kimber 931*), Milton (*Hodge 2596*), Salybia (*Hodge 3213*), Soufrière (*Lloyd 449*), South Chiltern (*Ernst 1122, Hodge 1486*), Syndicate (*Whitefoord 3502*).

Caribs are said to use this and the previous species for medicinal and ritual purposes (Hodge and Taylor, 1957:601). Adjanohoun et al. (1985:189, pl. 155) reported several medicinal uses.

Stachytarpheta urticifolia

Stachytarpheta urticifolia Sims, 1816, "*urticaefolia*."
Cymburus urticifolius sensu Salisbury, 1806, as to illustration, not as to type.

Suffrutescent herb; leaves broadly elliptic, to 5 cm × 3 cm, apex acute, base decurrent to slender 1 cm petiole, teeth acute, ± divergent; spikes to 35 cm; corolla violet, much exceeding calyx.

Native to Asia, apparently introduced elsewhere, such as Puerto Rico, Lesser Antilles; in rainforests of Dominica at mid-elevations: Delices (*Whitefoord 3670*), Laudat (*Lloyd 234*), Lisdara (*Hodge 875B*), Pont Cassé (*Wilbur 7780*), Ridgefield Estate (*Hodge 2184*).

Sims' binomial must be treated as a new name, not a new combination, under Art. 72, Note 1 (*ICBN*), because the epithet-bringing synonym, *Cymburus urticifolius* Salisbury, is an illegitimate renaming of *Verbena jamaicensis* Linnaeus. Sims explicitly excluded the Linnaean species.

Vitex Linnaeus

Howard (1989, 6:244) indicated a report of *Vitex incisa* Lamarck being cultivated on Dominica. This is generally regarded as a synonym of *Vitex negundo* Linnaeus.

Vitex divaricata

Vitex divaricata Swartz, 1788:93.—Moldenke, 1980:101.

Bois lezard.

Shrub or tree with peeling bark; leaves (1-)3-foliolate, leaflets elliptic, to 10 cm × 6 cm, acute, base rounded; petioles to 9 cm, petiolules 1 cm; inflorescence an axillary panicle, few-flowered; corolla blue, limb 1 cm broad; drupe with 1 4-locular pyrene.

West Indies; in Dominica at lower to mid-elevations: Clarke Hall (*Ernst 1713*), Pointe Michel (*Ramage s.n.*), sine loc. (*Fairchild s.n., Imray 144, 264, 348* at K).

Hodge and Taylor (1957:602) said that the Caribs use the timber and that the burnt bark serves to treat ulcers.

VIOLACEAE

Viola stipularis

Viola stipularis Swartz, 1788:117.

Spreading herb, erect to 3 dm; stipules fimbriate, longer than petioles; sepals auricled at base; petals pinkish, lavender or bluish-white.

Lesser Antilles and northern South America; occasional in Dominica in openings at or near summits, 1100–1400 m, of the two highest mountains: Morne Diablotins (*Nicolson 4081, Webster 13366, Wasshausen & Ayensu 409*), Morne Trois Pitons (*Hodge 432, Ernst 1225, Wilbur 8085*), sine loc. (*Krauss s.n.* at GH).

The Krauss collection indicates climbing of a major mountain of Dominica more than 150 years ago.

VITACEAE

Leea indica (N. Burman) Merrill, an herbaceous shrub with bipinnate leaves, was recently collected in fruit in the Roseau Botanic Gardens (*Whitefoord 6120*). The genus is often put in its own family, Leeaceae.

Vitis vinifera Linnaeus, the grape, has been observed in cultivation in Mrs. Didier's garden and at Canefield (DHN!).

Cissus Linnaeus

According to Vélez (1957:117) *Cissus trifoliata* (Linnaeus) Linnaeus, with trifoliolate and fleshy leaves, occurs in Dominica. This has not been confirmed and seems unlikely.

Cissus verticillata

Cissus verticillata (Linnaeus) Nicolson & Jarvis, 1984:727.
Viscum verticillatum Linnaeus, 1753:1023; 1759a:1289; 1763:1452.
Cissus sicyoides Linnaeus, 1759a:897; 1762:170.—Grisebach, 1860:102.
Phoradendron verticillatum (Linnaeus) Druce, 1914 [Feb]:422, non Fawcett & Rendle [for latter, vide *Phoradendron trinervium*].

Corde quaté.

Vine with leaf-opposed tendrils; leaves simple, cordate to deltoid, slightly serrate, membranaceous; inflorescences leaf-opposed; calyx red; petals 4, cream, quickly deciduous; fruit purple.

Neotropics; usually in lowlands of Dominica: Cabrits (*Wasshausen & Ayensu 379, Whitefoord 4015*), Clarke Hall (*Ernst 1691, Stern & Wasshausen 2413*), Laudat (*Gillis 8190*), Salisbury (*Ernst 1426, Nicolson 2040*), Salybia (*Hodge 3297*).

ZYGOPHYLLACEAE

(by R. DeFillips)

Guaiacum officinale Linnaeus, the lignum vitae of the West Indies and northern South America, is grown for its resin and strong wood. It is a small tree with blue flowers and fruit with 2–5 winged angles: Canefield Estate house (DHN! fl. June 1977), Roseau Botanic Garden (*Hodge 942*).

Tribulus cistoides Linnaeus was reported for Dominica by Vélez (1957:118). The genus resembles *Kallstroemia* but fruits have 5 spiny angles. It rarely occurs on sandy and calcareous substrates of Marie Galante and Martinique and possibly might be found on Dominica.

Kallstroemia Scopoli

Kallstroemia pubescens (G. Don) Dandy was reported for Dominica by Vélez (1957:118), as *Kallstroemia caribaea* Rydberg. This species, with smaller flowers and pilose fruits, has much the same distribution as *K. maxima* and is expected on Dominica.

Kallstroemia maxima

Kallstroemia maxima (Linnaeus) W. Hooker & Arnott, 1838, 6:282.—Porter, 1969:97.

Tribulus maximus Linnaeus, 1753:386.

Procumbent weedy herb; leaves opposite, with 6 or 8 leaflets; sepals hirsute; petals yellow or whitish; fruit with 10 tuberculate angles, glabrous.

Neotropics; in Dominica along dry west coast near sea level: Grand Savanne (*Hodge 3762*), Roseau (*Ernst 2153*).

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(Synonyms in italics)