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**THE VASCULAR PLANTS OF MAJURO ATOLL,  
REPUBLIC OF THE MARSHALL ISLANDS**

**BY**

**NANCY VANDER VELDE**

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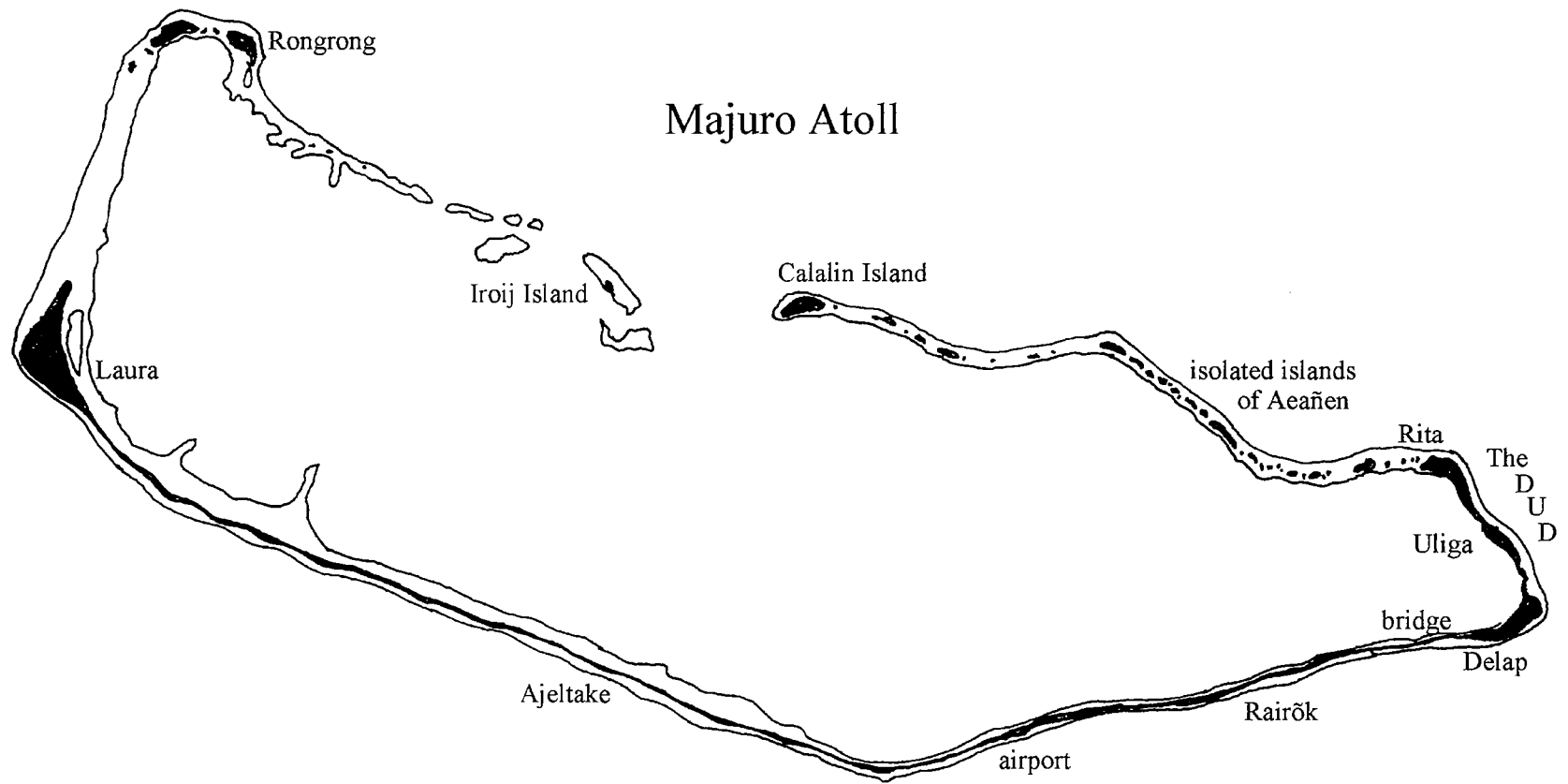


Figure 1. Majuro Atoll

# THE VASCULAR PLANTS OF MAJURO ATOLL, REPUBLIC OF THE MARSHALL ISLANDS

BY

NANCY VANDER VELDE<sup>1</sup>

## ABSTRACT

Majuro Atoll has been a center of activity for the Marshall Islands since 1944 and is now the major population center and port of entry for the country. Previous to the accompanying study, no thorough documentation has been made of the vascular plants of Majuro Atoll. There were only reports that were either part of much larger discussions on the entire Micronesian region or the Marshall Islands as a whole, and were of a very limited scope. Previous reports by Fosberg, Sachet & Oliver (1979, 1982, 1987) presented only 115 vascular plants on Majuro Atoll. In this study, 563 vascular plants have been recorded on Majuro.

## INTRODUCTION

The accompanying report presents a complete flora of Majuro Atoll, which has never been done before. It includes a listing of all species, notation as to origin (i.e. indigenous, aboriginal introduction, recent introduction), as well as the original range of each. The major synonyms are also listed. For almost all, English common names are presented. Marshallese names are given, where these were found, and spelled according to the current spelling system, aside from limitations in diacritic markings. A brief notation of location is given for many of the species.

The entire list of 563 plants is provided to give the people a means of gaining a better understanding of the nature of the plants of Majuro Atoll. It provides a convenient checklist for scientists, students, visitors and the general public. It can also serve as a new reference for a flora of the entire Marshall Islands.

## PREVIOUS REPORTS

Until Majuro became the military center in 1944 and subsequently the capital for the Republic of the Marshall Islands in 1979 (Sabath 1977, Hezel 1995), there was no justification for giving special attention to Majuro over any other "outer island." Early German and Japanese botanists focused their attention primarily on Jaluit Atoll, then the capital of the Marshall Islands. Okabe (1952) mentions the work of German botanists such as Betche (1884) who discussed 56 indigenous and nine introduced plants and Volkens (1903) who listed 126 species for the Marshall Islands and he himself presents 179 plants from 63 families.

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<sup>1</sup> Biological Consultant; P. O. Box 1603; Majuro, Republic of the Marshall Islands;  
vndvelde@ntamar.com

Subsequent to the United States Navy coming to Majuro, some reports apparently were made on the flora and/or vegetation observed. The earliest reports on Majuro accessible to the current authors were St. John (1951) and Sabath (1977). Fosberg, Sachet, & Oliver (1979, 1982, 1987) also have Majuro listings scattered among all their other Micronesian and Marshall Islands listings. Fosberg (1990) also listed species for Majuro.

According to the title, *A Brief Field Guide to the Plants of Majuro, Marshall Islands* (Stone & St. John 1956) would seem to have been the first report specifically to address the flora of Majuro. Unfortunately it is very limited and unfocused. Only a draft copy could be found of this report so it probably never achieved wide distribution.

The works of Taylor (1951) and Hatheway (1955) provide valuable insight into the overall flora and vegetation of the Marshall Islands. Merlin et al. (1994) provides a brief popularized view of some of the flora of the Marshall Islands. Whistler & Steele (1999) discuss Kwajalein, but only the areas leased by the U.S. Army. The most recent work by the RMI Biodiversity Team (2000) discusses Marshall Islands plants in general, along with a table of vascular plants.

## METHODS

By using the checklist of Fosberg, Sachet, & Oliver (1979, 1982, 1987) as a base list on which to build, the nonresident author of the accompanying report, R. R. Thaman, during his first visit to Majuro in 1991 began an initial comparison and expansion of the current flora of Majuro. He continued this comparison and expansion during his 1999 visit. During this visit he was also able to enlist the assistance of the resident author (Vander Velde).

As a resident, Vander Velde was able to make very thorough investigations into all areas and ecosystems of Majuro. Then Thaman, by having a broader familiarization with Pacific species, was able to identify many species new both to the Majuro and the Marshall Islands. Many of these were confirmed during Thaman's subsequent two visits in 2000 and in 2001. Confirmation of others was made through electronic scanning of specimens collected and digital photos that were sent via e-mail. Collections and records were made until January 2002.

## STUDY LOCATION

Majuro Atoll is located about 7° N, 171° E. Historically it consisted of 57 individual islets with total land area of only 3.75 square miles. However, a 30-mile-long road now connects about half of the islets. Many of the smaller islets on the north are still isolated at high tide (Fosberg 1990). According to the most recent census, 23,676 people live on Majuro Atoll, the majority or 15,486 being concentrated in the downtown DUD\* area. The suburban area of Rairök has 3,846 and 2,256 live in the more agricultural village of Laura (Office of Planning and Statistics 1999). All 30 miles of the islets connected by road were surveyed repeatedly in the course of preparing this flora.

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\* DUD is an abbreviation for the three main islets, Djarrit (which is also referred to as Rita), Uliga and Delap.

Some were examined in great detail by actually walking through the areas examining gardens and yards. Other areas were simply perused while driving through.

Fosberg (1990) mentioned that: “Surprisingly nothing seems to be on record about the numerous north and northeast islets. They would repay a visit, which should be easy...” In the course of preparing the accompanying report (and, to some extent, during earlier independent visits by the resident author), most of these islets were examined. Thaman went by boat to Calalin and Eneko. Vander Velde has been able to visit most of the more distant islets by boat and all of Aeañen from Eneko to Ejit by foot at low tide. A few of the islands were not personally visited by either Vander Velde or Thaman but information regarding them and specimens from them were provided by people who frequent them.

An effort was made to examine all environments where plants were to be found. This included not only the uninhabited sparsely inhabited areas but also the urban sections, farmlands, private decorative gardens and indoor potted plants. Often new species first are introduced into the atoll via indoor potted plants which, when they become large enough, are moved outside into flower gardens. Many species subsequently “escape” and become naturalized, even invasive, in the tropical environment of Majuro.

## RESULTS

Fosberg, Sachet, & Oliver (1979, 1982, 1987), have been the main references for the plants of Majuro. However, these reports deal with all of Micronesia making them rather cumbersome. One-hundred fifteen species were listed for Majuro. Other species were listed in a few other reports (St. John 1951, Sabath 1977, Watson 1993, RMI National Biodiversity Team 2000).

The current flora shows a total of at least 563 vascular plants. Included in this figure are a few widely accepted agricultural varieties, i.e. *Brassica chinensis* var. *chinensis* and *Brassica chinensis* var. *parachinensis*, which are so different from one another that they are considered by some to be distinct species. There are 12 ferns and allies, 5 gymnosperms, 193 monocots and 353 dicots. This number of 563 is significantly higher than the 468 listings that the RMI National Biodiversity Team (2000) had for vascular plants throughout the entire Marshall Islands which included Wake, geographically and traditionally part of the Marshalls. At times it was difficult to evaluate which category a species should be classified into, especially when some such as *Soulamea amara* and *Suriana maritima* are considered indigenous to other parts of the Marshalls but of recent introduction to Majuro. But even after taking these irregularities into account, only 56 indigenous species were identified (see Table 1). This figure is not too different from what Hatheway (1954) found almost half a century earlier when he surveyed Majuro’s closest neighbor, Arno, and calculated that there were only 44 indigenous species on that atoll.

There were 18 species of aboriginal introduction or aboriginal horticultural origin found on Majuro (see Table 2).

Table 1 — Indigenous Plants of Majuro	
<p><b>Ferns and allies</b></p> <p>1) <i>Asplenium nidus</i>            2) <i>Nephrolepis acutifolia</i>            3) <i>Ophioglossum nudicaule</i>            4) <i>Phymatosorus grossus</i>            5) <i>Psilotum nudum</i>            6) *<i>Pteris tripartita</i></p> <p><b>Monocotyledons</b></p> <p>7) #<i>Cocos nucifera</i>            8) +<i>Nypa fruticans</i>            9) <i>Eleocharis geniculata</i>            10) <i>Fimbristylis cymosa</i>            11) <i>Fimbristylis dichotoma</i>            12) <i>Cyperus javanicus</i>            13) <i>Cyperus odoratum</i>            14) <i>Cyperus polystachyos</i>            15) #<i>Pandanus tectorius</i>            16) <i>Lepturus repens</i>            17) <i>Cymodocea rotundata</i></p> <p><b>Dicotyledons</b></p> <p>18) <i>Neisosperma oppositifolium</i>            19) <i>Melanthera biflora</i>            20) <i>Cordia subcordata</i>            21) <i>Tournefortia argentea</i>            22) <i>Caesalpinia bonduc</i>            23) <i>Intsia bijuga</i>            24) *<i>Lumnitzera littorea</i>            25) <i>Terminalia samoensis</i>            26) <i>Ipomoea littoralis</i></p>	<p>27) <i>Ipomoea pes-caprae</i>            28) <i>Ipomoea violacea</i>            29) <i>Chamaesyce atoto</i>            30) <i>Canavalia cathartica</i>            31) <i>Canavalia rosea</i>            32) <i>Canavalia sericea</i>            33) <i>Sophora tomentosa</i>            34) <i>Vigna marina</i>            35) <i>Scaevola taccada</i>            36) <i>Hernandia nymphaeifolia</i>            37) <i>Cassytha filiformis</i>            38) <i>Barringtonia asiatica</i>            39) <i>Pemphis acidula</i>            40) <i>Sida fallax</i>            41) <i>Boerhavia tetrandra</i>            42) <i>Pisonia grandis</i>            43) <i>Portulaca australis</i>            44) +<i>Colubrina asiatica</i>            45) <i>Bruguiera gymnorrhiza</i>            46) <i>Guettarda speciosa</i>            47) <i>Hedyotis biflora</i>            48) <i>Allophylus timoriensis</i>            49) +<i>Bacopa monnieri</i>            50) *<i>Soulamea amara</i>            51) *<i>Suriana maritima</i>            52) <i>Triumfetta procumbens</i>            53) <i>Laportea ruderalis</i>            54) <i>Pipturus argenteus</i>            55) <i>Clerodendrum inerme</i>            56) <i>Premna serratifolia</i></p>
<p>* considered indigenous to some of the Marshall Islands but known to be introduced recently to Majuro through human activity            # wild varieties likely indigenous; aboriginal varieties also present            + only of recent record, likely arriving apart from human activity, but has either already been extirpated or will be extirpated soon</p>	

Table 2 — Aboriginal Plants of Majuro	
<p><b>Monocotyledons</b></p> <p>1) <i>Crinum bakeri</i>            2) <i>Alocasia macrorrhiza</i>            3) <i>Colocasia esculenta</i>            4) <i>Cyrtosperma chamissonis</i>            5) <i>Dioscorea bulbifera</i>            6) <i>Musa</i> (ABB Group)            7) <i>Tacca leontopetaloides</i></p>	<p><b>Dicotyledons</b></p> <p>8) <i>Centella asiatica</i>            9) <i>Adenostemma lanceolatum</i>            10) <i>Calophyllum inophyllum</i>            11) <i>Terminalia catappa</i>            12) <i>Ocimum sanctum</i>            13) <i>Hibiscus tiliaceus</i>            14) <i>Artocarpus altilis</i>            15) <i>Artocarpus mariannensis</i>            16) <i>Ficus tinctoria</i>            17) <i>Ixora casei</i>            18) <i>Morinda citrifolia</i></p>

The remaining 489 species are of recent origin (see the accompanying Appendix: *Comprehensive Listing of the Vascular Flora of Majuro Atoll*).

There are 415 species newly recorded for Majuro. Of these, there were 229 first-time records for the entire Marshall Islands. An additional 186 were first-time records for Majuro although they had previously been recorded on other atolls of the Marshall Islands. There were 17 families new to the country and another 27 families new to Majuro.

Some of the previous reports on plants in the Marshall Islands list many plant species as only on Jaluit. A large number of these were based on old introductions when that atoll was the capital of the country. Many of these were ill-suited for the atoll environment and, furthermore, a devastating typhoon in 1958 wiped out a large number of these introductions (Fosberg & Sachet 1962). Therefore, some of the species currently listed with the accompanying report as first recorded for only Majuro are in reality the only plants of these species known to be in the country.

The high number of recently introduced species is not surprising. Sabath (1977) noted that "urbanization has altered indigenous and aboriginally introduced plant communities primarily by replacing forested areas with open yards." He also showed how the trend was away from subsistence horticulture towards both a money economy and imported ornamental plants. The accompanying report documented that this trend has not only continued but accelerated in recent years.

Plant introductions were made from a wide variety of locales. When investigating various gardens, the owners were often more than willing to tell how they brought in certain new species. Hawai'i was the most frequently mentioned, but Saipan, Chuuk, Kiribati, Fiji, Malaysia, Nauru and Guam were also often cited. For a while, one of the main retainers, Robert Reimers Enterprises, was regularly importing plants from Australia. Some of the newly introduced plants came through seeds imported by local stores or through catalogs. One of the more interesting tales told was how a certain fragrant flower was brought in by putting the sprig in a stylish manner behind a woman's ear.

Six of the species reported by Fosberg, Sachet, & Oliver (1979, 1982, 1987) were not found by the current authors. Some of these were of recent introduction and presumably did not survive in the atoll environment of Majuro. *Crinum bakeri* Schumann, which is figured to be of aboriginal horticultural origin and only from the Marshall Islands (Fosberg 1990), was not observed. No local people had any knowledge or recollection of it. All of the 66 species observed by St. John (1951) and 30 reported by Sabath (1977) were found.

The six newly recorded species that likely occurred on Majuro on their own, and hence are to be classified as indigenous, are particularly noteworthy. *Ophioglossum nudicalue* is so ephemeral that it is hard to determine when and how it might have arrived. *Eleocharis geniculata* was previously reported on Ailuk, Arno, Jaluit, Likeip and Kwajalein Atolls (Fosberg, Sachet, & Oliver 1987). The single shrub of *Colubrina asiatica* was found in an area away from any house and near the beach where its seeds could have cast ashore on their own. This was the first record for the Marshall Islands and the first time it was observed on any atoll by the current authors. It seems to be suffering badly from being overgrown by the parasitic vine *Cassytha filiformis* and may not survive.

The single sprouted fruit of *Nypa fruticans* may likewise not be able to survive on its own. The littoral environment of Majuro where it was found is certainly quite different from the mangrove areas where it is typically found. A small patch of *Bacopa monnieri* was located in an area where it was uncertain if it arrived on its own or through human intervention. However, *Fimbristylis dichotoma* was found in a wide variety of locations throughout the atoll, so it would seem that it is a long time native that was merely overlooked during earlier surveys.

## CONCLUSION

As the current port of entry within an economically thriving nation, the number of plants will undoubtedly continue to grow. The species that are here will also continue to spread throughout the atoll and the country. The residents of Majuro are very proud of the new species and varieties of plants they are able to grow and are generous and anxious to share cuttings and seeds of the plants. When making records of new species, the authors found a network of gardeners who habitually exchanged whatever new or outstanding plants they had. The modern lifestyle is the main contributor to the great increase in the number of plants on Majuro. The increase of population and change from a subsistence lifestyle is frequently discussed in other reports as something occurring throughout the Pacific (Thaman 1994).

On Majuro there have been other significant changes as well. Regular air service allows live plants to be imported, which was never possible in the earlier days, and for the importation of plants that are not really well suited to the atoll environment. In times past, these would have quickly succumbed to the salt spray and heat of Majuro but now air conditioning allows them to survive. Air-conditioned homes and offices frequently seemed to serve as nurseries for starting plants from cuttings and seeds. Often, once they are larger, they can be moved outside without too many ill effects.

Some naturally occurring atoll soil is very good but, in general, it is low in nutrients. Many of the serious gardeners around Majuro use a large amount of imported potting mix for their decorative plants. Robert Reimers Enterprises imports approximately 25 bags per month of potting mix and 10 bags per month of manure. More economical soil improvement is often available for the taking in the form of copra cake at Tobolar, the copra processing plant.

Previously, storms and periodic droughts would limit the number and variety of plants able to survive on Majuro. For example, in the aftermath of Typhoon Axel in 1992, Majuro faced a critical shortage of freshwater. Some smaller, nonxerophytic/halophytic plants were kept alive by some people using the water that dripped out of air conditioners. But when the drought became severe enough, this water was in demand for bathing and even drinking. Thus many imported plants died.

However, there was adequate warning given ahead of time for Majuro's latest severe drought of 1998 and preparations were made beforehand; thus this same scenario was not repeated. Early on in this drought which followed Typhoon Paka, large salt-to-fresh reverse osmosis machines were brought in. These were able to provide an abundance of high-quality water for the entire atoll. Unattended palms close to the sea, and breadfruit trees that evidently had their roots in the water lens that went brackish, did die (RMI National Biodiversity Team 2000). But the vast majority of garden plants were kept alive.



Waves washing across the atoll nevertheless can still be quite destructive to most nonnative plants. The most recent wave action occurred in January 2001 and many plants died in the flooding. The only *Cananga odorata* known by the authors in recent times was one of the victims. Yet many residents of the area evacuated their potted plants with them when fleeing to safer ground. Upon surveying the damaged area, the resident author was told by some plant owners of gardens she had surveyed that their flowers were unharmed.

The floras of Majuro are expected to thus continue in their dynamic state with some species dying off while new species are imported. One of the last species to be found as part of the recent report was *Chromolaena odorata* that is very invasive in other parts of Micronesia. As of this writing, it is known only in a small area but what it will do if it escapes out into the wilds is unknown. *Antigonon leptopus* is also a terrible invasive on Guam but it is confined in Majuro to a planter box and it did not survive on either Jaluit or Kwajalein where it was previously recorded (Space & Falanruw 1999; Fosberg & Sachet 1962, Whistler & Steele 1999). Other species now recognized to be invasive, such as *Turnera ulmerifolia*, have spread all across the atoll and onto the outer islands. (It has also been reported on Kwajalein. During the resident author's 1999 visit to Jaluit, it was said to be known as "Majuro flower"). Continuous monitoring of the flora of Majuro might to be a practical means to keep tabs on changes of the flora of the entire country.

#### ACKNOWLEDGMENTS

This flora is truly a reflection of the horticultural skills and kindness of the residents on Majuro. So many local homeowners and gardeners graciously allowed the authors to examine their gardens and then also enthusiastically gave guided tours of those gardens, providing specimens and allowing photographs to be taken. Maria Kabua Fowler showed exceptional kindness in showing off her own personal garden and also that of her late father, President Amata Kabua. We appreciated the Fowler family allowing botanical exploration to be included during their picnic to Calalin in July 2000.

The botanical expertise and experience of Art Whistler was an integral part of the success of the recent report, helping with the identifications of the more obscure species. Brian Vander Velde proved to be much more than a supportive husband. By drawing upon his long-time knowledge of Micronesian plants, many of the new records were actually first located by him. We appreciate the proofreading done by Leslie A. Mead, Archaeologist at the RMI Historic Preservation Office, and by James C. Space of Pacific Island Ecosystems at Risk (PIER).

Maxine Becker, Librarian of the College of the Marshall Islands provided extremely useful help in allowing the use of the many quality references that made the recent report possible. Thanks also to Secretary of Resources and Development, Frederick Muller, and his brother Wayland for arranging a boat trip to Eneko in 1999, and to Marylou Foley for providing accommodations at the Outrigger Marshall Islands Resort.

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## APPENDIX

COMPREHENSIVE LISTING OF THE VASCULAR FLORA OF  
MAJURO ATOLL

BY

R. R. THAMAN<sup>1</sup> and NANCY VANDER VELDE<sup>2</sup>

## EXPLANATION OF THE ABBREVIATION, SYMBOLS, TERMINOLOGY, ETC.

## 1 DESIGNATION OF NEW RECORDS

\* indicates a new record (at the species, genus and/or family levels) for Majuro, but reported present on other atolls in the Marshall Islands by Fosberg, Sachet & Oliver (1979, 1982 & 1987) or other authors listed in the bibliography.

\*\* indicates a new record (at the species, genus and/or family levels) for the Marshall Islands, not listed as present on any of the atolls of the Marshall Islands by Fosberg, Sachet & Oliver (1979, 1982 & 1987) or other authors listed in the bibliography.

2 PRIMARY AUTHORITIES OR SOURCES OF DOCUMENTED SPECIES  
OCCURRENCES

**St J 1951** – St. John, H. 1951. Plant Records from Aur Atoll and Majuro Atoll, Marshall Islands, Micronesia. *Pacific Studies* 9. *Pacific Science* 5: 279 – 286.

**MDS 1977** – M. D. Sabath 1977. Vegetation and Urbanization on Majuro Atoll, Marshall Islands. *Pacific Science* 31: 4

**F, S, & O 1979, 1982 & 1987**

Fosberg, F.R., Sachet, M.-H. and Oliver, R. 1979. A Geographical Checklist of the Micronesian Dicotyledonae. *Micronesica* 15 (1-2):41-295;

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<sup>1</sup> Professor of Pacific Islands Biogeography, The University of the South Pacific, P. O. Box 1168, Suva, Fiji Islands, thaman\_r@usp.ac.fj

<sup>2</sup> Biological Consultant, P. O. Box 1603, Majuro, Republic of the Marshall Islands, vndvelde@ntamar.com

**FRF 1990** – Fosberg, F. R 1990. A Review of the Natural History of the Marshall Islands. *Atoll Research Bulletin* 330.

**RRT 1991; 1999; 2000A; 2000B; 2001** – Observations by R. R. Thaman during visits to Majuro in February 1991, August 1999, and August-September 2000 (2000A), again in late October 2000 (2000B) and November 2001.

**NVV 1999; 2000; 2001; 2002** – Observations or information gathered by Nancy Vander Velde. Although many observations were made from the start of continuous residence on Majuro in January 1988, the first date is based on when NVV joined the project. Only the first record is noted, although in most cases, observations were made every year during the process of the project. If RRT is placed after NVV, this indicates that RRT first recorded the presence of a given species after, and to verify, a previous identification made by NVV, in most cases in 2000 or before.

Other sources that are cited are done to a much more limited extent and often just when the listing of a plant changes the status of a species being a new record to Majuro or the Marshall Islands. Reference is also made to some persons, as well as businesses, which have been responsible for many the introductions of many ornamental species

### 3 VOUCHER SPECIMENS AND DIGITAL PHOTOGRAPHS

For most species, either voucher specimens were collected and/or digital images/photos taken to either validate the presence or to help confirm the identity of a given species. The respective numbers relating to both voucher specimens and digital photos are enclosed the second set of parentheses after the authorities and sources, e.g., (RRT 1991, 2000AB, 2001; NVV 2001) (2K00401; DPMJ0006, DPMJ0026). The voucher specimens, which have numbers beginning with 2K00001 are lodged with the South Pacific Regional Herbarium at the University of the South Pacific, Suva, Fiji Islands. The digital photos/images of plants taken in the field in Majuro have numbers beginning with DPMJ0001 (DPMJ signifies “Digital Photo Majuro”). They have been copied onto computer files in both the Geography Department and the South Pacific Regional Herbarium at the University of the South Pacific, Suva, Fiji and at the College of the Marshall Islands Library. A digital photo number with a capital S after the number (e.g., DPMJ0123S) indicates that it is a digital photo of an herbarium specimen held at the SPRH, and not a photo of a live plant. A number with ab or abcde, etc (for example) after the number, indicates that a given photo is of 2 to as many as 5 species together, designated by ab, abc, abcd or abcde.

### 4 NOMENCLATURE

**Scientific names** – The scientific or Latin names are written in **bold** when used in the main heading for each species and *italicized* when listed as synonyms or used in the text of the introduction or in explanatory information for each species.

**English names** – English or common names have been included for most species. Most of these are based on usage in the literature, although some are based on translations of the scientific name. For some species, no commonly used English or common names exist, or the English name is only a general term. For some species, well-known common names from other foreign languages are also included, e.g., ylang-ylang for the perfume tree (*Cananga odorata*).

**Marshallese names** – When known, the Marshallese name (s) for given species are given in ***bold italics***, according to the current spelling system. Many species names are listed according to their spelling as they appear in the *Marshallese-English Dictionary*, third edition. (Abo et al. 1985) However, due to restraints in type font, some older style phonemic symbols were used, particularly the tilde ("~") and circumflex ("^") rather than the macron ("¯"). The few Marshallese letters that employ the cedilla ("¸") were not used. Some names were based on older references and may not have use the current alphabet with all its markings. Many of the names are widely known, others are more obscure. When no or few persons were found to know a certain name, notation of this was made, but not all names were checked out. The authors saw no need to list the wide range of spellings that have been reported for most species in the literature. When known, a brief translation of the Marshallese name is provided. (Place locations are given according to popular usage, which may at times vary slightly from the current spelling system).

## 5 CATEGORIES USED TO INDICATE “ANTIQUITY STATUS” OR NATURE OF DISPERSAL TO OR INTRODUCTION INTO MAJURO

**Indigenous** - a plant that is assumed to have dispersed naturally to, and became successfully established in the Marshall Islands, in almost all cases prior to the settlement of the atolls by the first indigenous human inhabitants. In some cases, a given species may have arrived and established itself naturally, subsequently disappeared (became locally extinct or extirpated) due to some extreme event, such as a prolonged drought or tidal wave, and then naturally recolonized the island, sometimes very recently. This could be the case, for example, with *Colubrina asiatica*, which has apparently arrived recently in Lomajurok west of the airport.

**Aboriginal introduction** - a plant believed to have been introduced into the Marshall Islands by the indigenous (aboriginal) people of the Marshall Islands or other Pacific Islanders before the time of first European contact with the Marshall Islands. In some cases aboriginal introductions could have been also made through traditional contacts between islands after European contact.

**Aboriginal horticultural origin** – a plant which appears to have been developed through the horticultural activity of the early inhabitants of the Marshall Islands

**Horticultural origin** – a plant developed through recent horticultural activity.

**Recent introduction** – a post-European-contact introduction after the time of first European contact with the Marshall Islands.

## 6 CATEGORIES USED TO INDICATE THE ABUNDANCE OF A GIVEN SPECIES

**Extirpated** – Reported present in past, but not seen during more recent surveys and now possibly extirpated (locally extinct) on Majuro. The term “extirpated” is used for a species that, although locally extinct or no longer present on Majuro, is still found, and in many cases abundant, on other islands in the Marshall Islands, on other Pacific Islands or in other parts of the world. There is also the possibility that the species was misidentified and perhaps never was present on Majuro.

**Rare** – Seen present in only one or two locations on Majuro and possibly in danger of extirpation (local extinction) or is a rare ornamental, food plant, etc. that may be a recent trial introduction, and not really well suited to the atoll environment.

**Uncommon** – Found present in only a few locations, such as in the relatively few undisturbed habitats on outer islets, in specialized habitats, such as swampy areas, or in a few houseyard gardens and experimental agricultural areas.

**Occasional** – Occasionally seen in a number of places, or locally common in only a few locations.

**Common** – Found present in a number of locations, but not really dominant, or locally common or abundant in some locations.

**Abundant** – Widespread in a range of habitats or dominant in a number of different habitats throughout the atoll.

**Very abundant** – Abundant in most habitats and found on almost all atoll islets and constituting the dominant species in numerous sites or habitats.

## 7 PLACE NAMES AND GEOGRAPHICAL LOCATIONS ON MAJURO ATOLL

In general, a brief description of where a species was found is provided. Usually just the islet, village, district or area is designated. Major landmarks, such as the Capital Building, businesses, schools and hotels are also specifically designated. Except in a limited number of cases, private residences are simply referred to in general with respect to their geographic location.

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**PTERIDOPHYTA (Ferns and Fern Allies)**

**ASPLENIACEAE (Spleenwort Fern Family)**

**Asplenium antiquum** Osaka

Japanese bird's nest fern, "Victoria"

Recent introduction. Southern Japan. Rare. Introduced in 1998 by RRE as an ornamental houseplant. Some specimens may survive in houses and offices, but may be confused with the local indigenous species, *Asplenium nidus*, which is sometimes also utilized as an ornamental (NVV 1999).\*\*

**Asplenium nidus** L.

bird's-nest fern

Marshallese: *kartōp*

Indigenous. Paleotropical. Occasional to locally common. Uncommon as an epiphyte or a terrestrial species in abandoned or poorly maintained coconut plantations, secondary forest and inner coastal littoral forest on the main islets, particularly in Laura; more common to locally abundant on uninhabited islets in Aeañen, particularly on Calalin Islet; occasional as a planted ornamental or potted plant (StJ 1951; F, S & O 1982; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0037a, DPMJ0077, DPMJ0079, DPMJ0239).

**AZOLLACEAE (Water Fern Family)\*\***

**Azolla pinnata** R. Br.

ferny azolla, feathered waterfern

Syns. *Azolla imbricata* (Forst.) Nakai; *Azolla pinnata* var. *imbricata* (Forst.) Bonap.

Recent introduction. Paleotropics and subtropics and to Australia, New Caledonia and New Zealand. Rare or now extirpated. Found at one agricultural farm in Laura in 1991, but not seen since. Probably introduced as a natural fertilizer, because of its ability to take advantage of the nitrogen-fixing abilities of symbiotic blue-green algae (cyanobacteria). Could possibly have been another common species, red azolla (*Azolla filiculoides* Lam.). On the U. S. list of noxious weeds (RRT 1991).\*\*



**NEPHROLEPIDACEAE (Sword Fern Family)**

**Nephrolepis acutifolia** (Desv.) Christ sword fern, fishtail fern

Marshallese: *baidik* (a name at times also applied to other sword ferns); *iri*;  
*anmōkadede*

Indigenous. Paleotropics to Micronesia and Polynesia. Common. Found in colonies and dense populations as an understorey species in coconut plantations, shady ruderal sites and fallow areas, and in coastal vegetation; uncommon on Calalin Islet; occasional as a planted ornamental (StJ 1951; F, S & O 1982; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 2000) (2K00403; DPMJ0109, DPMJ0141, DPMJ0531).

**Nephrolepis biserrata** (Sw.) Schott var. **furcans** Hort. fishtail fern

Recent introduction. East Asia, Africa, Brazil, Florida. Uncommon. Ornamental potted plant in household gardens the DUD. Previously reported on Jaluit but did not survive (Fosberg & Sachet 1962) (NVV 2000; RRT 2000AB, 2001) (DPMK0114, DPMJ0184)\*

**Nephrolepis exaltata** (L.) Schott Boston fern

Recent introduction. Pantropical. Rare. Ornamental potted plant (RRT 1991, 2000AB, 2001; NVV 2000) (DPMJ0114, DPMJ0167c).\*\*

**OPHIOGLOSSACEAE (Adder's Tongue Fern Family)\***

**Ophioglossum nudicaule** L. f. adder's tongue fern

Indigenous, possibly ephemeral or perhaps of recent introduction. Tropical and subtropical areas throughout the world. Rare, seasonal and ephemeral. Small terrestrial fern found in parking lot of Majuro Clinic in February 2000, but not seen thereafter. Reported from Kwajalein by Whistler & Steele (1999) (NVV 2000) (DPMJ0159). \*

**POLYPODIACEAE (Common Fern Family or Polypody Fern Family)**

**Phlebodium aureum** (L.) J. Sm. hare's foot fern, mamdaoami  
Syn. *Polypodium aureum* L.

Recent introduction. Tropical America. Uncommon. Ornamental potted plant seen in a number of in household gardens in Delap, Rita and Rairōk (NVV 2000; RRT 2000AB) (DPMJ0183, DPMJ0379) \*\*

**Phymatosorus grossus** (Langsd. & Fisch.) Brownlie scented fern  
 Syns. *Microsorium grossum* (Langsd. & Fisch.) S.B. Andrews; *Polypodium grossum*  
 Langsd. & Fisch.  
 Misapplied names: *Phymatosorus scolopendria* (Burm.f.) Pichi-Serm.; *Polypodium scolopendria* Burm.f.; *Phymatodes scolopendria* (Burm.) Ching; *Microsorium scolopendria* (Burm.) Copel.; *Polypodium phymotodes* L.

Marshallese: *kino*

Indigenous. Paleotropical. Very abundant. Terrestrial and epiphytic fern under coconut plantations, on the bases of coconut trunks, and in the coastal strand vegetation; occasional as a planted ornamental. *P. grossus* has been widely mistaken for the small, almost exclusively epiphytic species *P. scolopendria* (StJ 1951; F, S & O 1982; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0526).

#### PSILOACEAE (Psilotum Family)

**Psilotum nudum** (L.) Beauv. psilotum, reed fern, whisk fern

Marshallese: *bāāñ*; *martok* ("weed that is approaching", a name not generally known)

Indigenous. Tropics and subtropics. Occasional. Reported on a wet mossy rock in Laura by St. John 1951; reported present on Majuro by F. S & O (1982). Not seen by current authors until September 2000 when RRT located a population on Calalin Islet. Subsequently it was found by both RRT and NVV in many other locations throughout the atoll, including abandoned, overgrown coconut plantations, and on the base of coconut trees in a undeveloped area of Rita, but also in the urban areas of Rita (StJ 1951; F, S & O 1982; FRF 1990; RRT 2000AB, 2001; NVV 2000) (2K00404; DPMJ0019, DPMJ0075, DPMJ0136S, DPMJ0137S, DPMJ0165, DPMJ0406, DPMJ0407).

#### PTERIDACEAE (Bracken Fern Family or Brake Fern Family)\*

**Pteris tripartita** Sw. lacy fern, giant bracken fern, sword brake  
 Syn. *Pteris marginata* Bory

Marshallese: *?kinien mānnueal* ('matress of the white-striped sand skink,' a large, secretive and diurnal ground lizard; name based on Stone & St. John's [1956] for a similar species which has never been recorded elsewhere for the Marshall Islands and hence was probably a misidentification of this species)

Indigenous? (perhaps only to the southern Railik atolls, but not Majuro). Paleotropical to Micronesia and Polynesia. Rare. Planted ornamental in the DUD and at the former President Amata Kabua's garden, where reportedly introduced from Pohnpei. Previously reported from

Namdrik, Jaluit and Ebon by F, S & O (1982) (RRT 1991, 2000A; NVV 2000) (DPMJ0026, DPMJ0648).\*

### SYNOPTERIDACEAE (Cliff Brake Fern Family)\*\*

**Pellaea rotundifolia** (Forst. f.) Hook

button fern

Recent introduction. New Zealand. Uncommon. Planted ornamental potted plant. Found in Rita, Delap, Rairōk and Ajeltake (NVV 2000; RRT 2000AB, 2001) (DPMJ0195, DPMJ0372).\*\*

### GYMNOSPERMAE (Gymnosperms)

#### ARAUCARIACEAE (Araucaria Family)

**Araucaria heterophylla** (Salisb.) Franco

Norfolk Island pine, star pine

Syn. *Araucaria excelsa* (Lamb.) R. Br.

Marshallese: *kûrijmōj teri* (“Christmas tree”)

Recent introduction. Norfolk Island. Common. Planted ornamental in home gardens and along roads. Reported present on Kwajalein and Jaluit by F, S & O (1982) (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0553).\*

#### CUPRESSACEAE (Cypress Family)

**Thuja orientalis** L.

Chinese arborvitae, Chinese thuja, biota, eastern arborvitae

Syn. *Biota orientalis* (L.) Endl.

Recent introduction. China. Rare. Single ornamental tree, about 4 m high, planted in Robert Reimer’s household garden in Rita. Previously noted on Majuro (but no location specified) by RMI Biodiversity Team (2000), and reported on Kwajalein by Whistler & Steele (1999) (NVV 1999; RRT 2000AB, 2001) (2K00407; (DPMJ0010, DOMJ0011, DPMJ0139S, DPMJ0140S, DPMJ0151a).

**CYCADACEAE (Cycad Family)**

**Cycas circinalis** L. cycad, sago palm, king sago  
 Syn. *Cycas rumphii* Miq. (some authorities)

Marshallese: *ni baam* ("palm tree"), *laukok*

Recent introduction. India to Micronesia and Polynesia. Occasional. Planted ornamental around houses. One very old tree along main road in Laura. According to some authorities, such as Fosberg & Sachet, take *C. circinalis* as an inclusive and highly variable species in Micronesia that includes *C. rumphii* and a number of other species (Smith 1979) (StJ 1951; F, S & O 1982; RRT 1991, 1999, 2000AB, 2001; NVV 1999).

**Cycas revoluta** Thunb. cycad

Recent introduction. Japan. Uncommon. Planted ornamental in household gardens and in front of Capital Building. Previously reported on Jaluit and Kwajalein by F, S. & O (1982), but apparently extirpated from both locations (Fosberg & Sachet 1962, Whistler & Steele 1999) (NVV 1999; RRT 2000AB).\*

**ZAMIACEAE (Zamia Family)\***

**Zamia furfuracea** L. f. Jamaica sago tree, cardboard plant

Recent introduction. Mexico. Uncommon. Single plant at Capitol Building, another potted plant at Ajidrik Hotel in Uliga, and several at Amata Kabua's residence. *Zamia* sp. reported on Kwajalein by Whistler & Steele (1999) (NVV 2000; RRT 2000AB, 2001) (DPMJ0090, DPMJ0635).\*\*

**ANGIOSPERMAE (Angiosperms)****MONOCOTYLEDONAE (Monocotyledons)****AGAVACEAE (Agave Family)**

**Agave sisalana** L. century plant, sisal, sisal hemp

Recent introduction. Mexico. Common. Planted for landscaping around various residences and buildings, including the planted area in the center of the divided road near the Capital Building. Previously reported on Jaluit, Jemo, Kwajalein and Likiep by F. S. & O (1987). Can become invasive and has become naturalized in Fiji (RRT 1999, 2000AB, 2001; NVV 1999) (DPMJ0219) \*

**Aloe vera** (L.) Burm. f. aloe vera  
 Syn. *Aloe barbadensis*

Recent introduction. Southwest Arabia and North Africa. Occasional. Potted plant around a few houses. Previously reported on Kwajalein by Whistler & Steele (1999) (NVV 2000; RRT 2000AB, 2001) (DPMJ0122).\*

**Cordyline fruticosa** (L.) A Chev. cordyline, ti-plant  
 Syns. *Cordyline terminalis* (L.) Kunth; *Taetsia fruticosa* (L.) Merr.; *Draecena terminalis* L.

Recent introduction. Tropical Asia. Common. Planted ornamental in household gardens and commercial areas. Sabath (1977) reports only observing this species in Uliga, but it is now to be found throughout the atoll. It is easy to propagate and is one of the species introduced by the Division of Agriculture. There are numerous cultivars with varying leaf colors and shapes. Kratz (1986) in his translation of Chamisso's account of the first contact of Europeans with the people of the Marshall Islands, reports that attempts were made to introduce this species (MDS 1977; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0720, DPMJ0737).

**Dracaena angustifolia** Roxb. narrow-leafed dracaena  
 Syn. *Pleomele angustifolia* (Roxb.) N.E. Br.

Recent introduction. India to Australia and Melanesia. Occasional. Planted ornamental and potted plant in household gardens (RRT 1991, 1999, 2000AB, 2001; NVV 2000) (DPMJ0045, DPMJ0299).\*\*

**Dracaena deremensis** Engler dracaena  
 Syn. *Pleomele deremensis* (Engler) N.E. Br.

Recent introduction. Tropical Africa. Occasional. Ornamental and potted plant. Both the 'Janet Craig' and 'Warnackei' varieties present (RRT 1991, 1999, 2000AB, 2001; NVV 2000) (DPMJ0604).\*\*

**Dracaena fragrans** (L.) Ker-Gawl. fragrant dracaena, dragon flower, pleomele  
 Syn. *Pleomele fragrans* (L.) Salisb.

Marshallese: *ut* (general term for flower or hedge)

Recent introduction. Tropical West Africa. Occasional. Ornamental potted plant and

planted ornamental shrub. Mainly young plants, but a large woody shrub in the interior of Rita. Leaves are attractively banded in shades of green and used in making flower garlands (RRT 1991, 1999, 2000AB, 2001; NVV 2000) (DPMJ0148, DPMJ0300, DPMJ0576).\*

**Dracaena marginata** Lam. Madagascar dragon tree, rainbow tree  
Syn. *Pleomele marginata* (Lam.) N. E. Br.

Recent introduction. Madagascar. Occasional. Planted ornamental in household gardens and commercial areas, both in outside planter boxes and as indoor potted plants. Both the larger, dark green variety and the colorful variegated form or "rainbow tree" (*D. marginata* "Tricolor") exist. Previously reported on Kwajalein by Whistler & Steele (1999) (RRT 1999, 2000AB, 2001; NVV 2000) (DPMJ0124b, DPMJ0548).\*

**Sansevieria cylindrica** Bojer cylindrical bowstring hemp

Recent introduction. Tropical Africa, Natal. Rare. Single plant seen in container at a private household garden in Woja (RRT 2000B; NVV 2000) (DPMJ0413).\*\*

**Sansevieria trifasciata** Prain bowstring hemp, mother-in-law's tongue

Recent introduction. Tropical West Africa. Common. Planted ornamental and potted plant in household gardens and commercial areas. Previously recorded on Jaluit and Kwajalein by F. S & O (1987). Can become invasive (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0414).\*

**Yucca gloriosa** L. yucca, Spanish bayonet

Recent introduction. Tropical America and southeastern United States. Uncommon. Planted ornamental in household gardens and commercial areas (RRT 1991, 1999, RRT 2000AB, 2001; NVV 1999).\*\*

#### ALLIACEAE (Onion Family)\*

**Allium cepa** L. onion

Recent introduction. Central Asia. Rare. Periodically planted from seed or onion tops in household gardens and in container gardens. Previously reported on Jaluit and Kwajalein by F. S & O (1987) and Enewetak by St. John (1960) (NVV 1999).\*

**Allium fistulosum** L. green onion, spring onion, Welsh onion, Japanese bunching onion

Recent introduction. East Asia. Uncommon. Planted in container at Japanese Takeout Restaurant (1991) and in commercial vegetable gardens and the Chinese experimental garden at Laura. Previously reported on Kwajalein by Whistler & Steele (1999) (RRT 1991, 1999, RRT 2000A; NVV 2000).\*

**Allium sativum** L. garlic

Recent introduction. Southern Asia. Rare. Found planted at K & P Gardens at Laura and household gardens in the DUD (RRT 1999, 2000AB, 2001; NVV 1999) (DPMJ0224).\*\*

**Allium schoenoprasum** L. chives

Recent introduction. North Hemisphere. Rare. Found planted at K & P Gardens at Laura and household gardens in the DUD (RRT 1999; NVV 2000).\*\*

**Allium tuberosum** Rottler ex. Sprengle Chinese chives

Recent introduction. East Asia. Rare. Planted in container at Japanese Takeout Restaurant (1991) and in Chinese experimental garden at Laura. Previously reported on Kwajalein by Whistler & Steele (1999) (RRT 1991, 1999, 2000A).\*

#### AMARYLLIDACEAE (Amaryllis Lily Family)

**Crinum asiaticum** L. false spider lily, crinum lily, grand crinum

Marshallese: *kieb* (general term for most lilies)

Recent introduction. Tropical Asia. Common. Planted ornamental lily with green leaves; often planted along borders (StJ 1951; F, S & O 1987; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0273, DPMJ0719).

**Crinum augustum** Roxb. Queen Emma lily  
Syn. *Crinum amabile* Don var. *augustum*; possibly not distinct from *C. amabile* Donn. and *C. pedunculatum* R. Br.

Marshallese: *kieb* (general term for most lilies)

Recent introduction. Indian Ocean islands. Occasional. Planted ornamental lily with red or purple tinted leaves. Planted around the grounds of the Outrigger Marshall Islands Resort

and other business and residential locations (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0274).\*\*

**Crinum bakeri** Schumann

Marshall Islands crinum lily

Marshallese: *kieb* (general term for most lilies)

Aboriginal horticultural origin. Known only from the Marshall Islands (and possibly from some of nearby atolls). Classified as among some of the most primitive of the crinums, with ancient ties with species in the wetlands of Asia and Malaysia. F. S. & O. 1987 and Fosberg 1990 list it as also recorded on Rongelap, Utdrik, Wotho, Likiep, Ailinglaplap, Mili and Jaluit.

The only description that could be found was the original description by Schuman in 1888 in *Engler's Jahrbuch IV*, p. 149: "Leaves lineary, 1- 1 ½ ft. long by 1 ¼ to 1 ½ inches wide, rather undulated on smooth margins. Perianth tube to blossom rather curves, only 1 ½ to 2 inches long by ¼ inch wide. Filaments rather shorter than the petals. Anthers linear, an inch long. Habitat: Marshall Islands."

Fosberg 1990 speculates that it was "probably brought by the Marshallese, but possibly a cultivar of local origin from *Crinum asiaticum* L." L. S. Hannibal (pers. comm. 2000) stated that it has similarities with the smaller *C. japonicum* (Baker) Stenaster, which is at times classified as a variety of *C. asiaticum*, although there is sufficient justification for a separate species status. Also bears a similarity with *C. wattii*. Not seen by any of the current authors, upon inquiring, no people indicated any knowledge of it (Hannibal undated, F, S & O 1987; FRF 1990).

**Crinum xanthophyllum** Hannibal

yellow crinum lily

Marshallese: *kieb* (general term for most lilies)

Recent introduction. Fiji, New Caledonia. Occasional. Planted ornamental lily with yellow to yellow-green leaves; found in the garden area of Robert Reimers Enterprises. Often mistaken for *C. asiaticum*, which is larger and has green, rather than yellow, mature leaves (RRT 1991, 1999, 2000AB, 2001; NVV 2000).\*\*

**Crinum zeylanicum** L.

milk-and-wine lily

Syns. *Crinum latifolium* var. *zeylanicum* (L.) Hook. ex Trimen; *C. scabrum* Herbert

Recent introduction. Africa to tropical Asia. Occasional. Planted ornamental in household gardens; planted near sign near the street of Marshall Islands High School (NVV 2000; RRT 2000B).\*\*



**Eucharis grandiflora** Planch. & Lind.  
Syn. *Eucharis amazonica* Lind.

Amazon lily, eucharis lily

Recent introduction. Colombia. Rare. Potted plant in household garden in Rita; also found in Amata Kabua's garden (NVV 2000; RRT 2000A, 2001) (DPMJ0650).\*\*

**Hippeastrum reticulatum** (L'Héritier) Herb.

Recent introduction. Southern Brazil. Rare. Single plant seen in private flower gardens Delap and Rita. White lily with red linear or reticulate markings (RRT 2000B; NVV 2000) (DPMJ0330).\*\*

**Hippeastrum striatum** (Lam.) Moore

Barbados lily, amaryllis

Syns. *Hippeastrum equestre* (Ait.) Herb.; *Amaryllis equestris* Ait.

Misapplied name: *Hippeastrum puniceum* (Lam.) Urban

Recent introduction. Tropical America. Occasional. Planted ornamental lily with salmon-orange colored flowers. Previously reported on Kwajalein by Whistler & Steele (1999) (RRT 1991, 1999, 2000AB, 2001; NVV 2000) (DPMJ0121, DPMJ0609).\*

**Hymenocallis petalis** Herbert

spider lily

Misapplied syn. *Hymenocallis littoralis* (Jacq.) Salisb., *Pancratium littorale* Jacq.

Marshallese: *kieb* (general term for most lilies); *kieb wau* ('lily of Oahu')

Recent introduction. Tropical America. Common. Planted ornamental in household; a couple of plants growing near the lagoon coast in Ajeltake (F, S & O 1987; RRT 1991, 1999, 2000AB, 2001; NVV 1999).

**Narcissus pseudo-narcissus** L.

daffodil, tete-a-tete

Recent introduction. Europe. Four young potted plants imported from Hawai'i by Bilimon's Store in Uliga, January 2001 (NVV 2001).\*\*

**Proiphys amboinensis** (L.) Herbert

Amazon lily, Brisbane lily, Cardwell lily

Syns. *Eurycles amboinensis* (L.) Lind.; *E. sylvestris* Salisb.

Recent introduction. Malaysia and northern Australia. Uncommon. Planted ornamental and potted plant in household gardens. Previously reported on Kwajalein by Whistler & Steele (1999) (RRT 1999, 2000AB, 2001; NVV 2000) (2K00418; DPMJ0400, DPMJ0401).\*

**Zephyranthes candida** (Lindl.) Herb.

zephyr flower, white star of Bethlehem, westwind flower, storm lily

Recent introduction. Argentina and Uruguay. Rare. Planted ornamental in private garden (RRT 1991, NVV 2000).\*\*

**Zephyranthes citrina** Baker

yellow zephyr flower, yellow rain lily

Syn. *Zephyranthes eggersiana* Urb.

Recent introduction. Cuba. Rare. Planted ornamental. In planter box at the Bank of Hawaii near the Capitol Building growing together with *Z. rosea* (NVV 2000; RRT 2000A).\*\*

**Zephyranthes rosea** (Lindl.) Green

pink lady, pink star of Bethlehem, pink zephyr lily, pink rain lily

Recent introduction. Guatemala and West Indies. Abundant. Planted ornamental used as a border in many private gardens. Extensively planted in planter boxes in front of the Capital Building and Gibson's Supermarket. Naturalized in some household gardens and rural ruderal sites (F, S & O 1987; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0443, DPMJ0444, DPMJ0618).

**ARACEAE** (Arum Family)**Aglaonema commutatum** Schott

Chinese evergreen, aglaonema

Recent introduction. Indonesia to the Pacific Islands. Occasional. Ornamental potted plant. Previously reported on Kwajalein by Hebst (1988) (RRT 1991, 1999, 2000AB, 2001; NVV 2000) (DPMJ0031, DPMJ0034a, DPMJ0220, DPMJ0660a, DPMJ0661).\*

**Aglaonema costatum** N.E. Br.

ribbed aglaonema

Recent introduction. Southeast Asia. Rare. Ornamental potted plant, possibly now extirpated (RRT 1991).\*\*

**Aglaonema crispum** (Pitcher & Manda) D.H. Nicholson

curly aglaonema

Syns. *Schismatoglottis crispa* Pitcher & Manda; *S. robelinii* Lind.; *Aglaonema robelinii* (Lind.) Hort. ex Gentil

Recent introduction. Philippines. Rare. Ornamental potted plant, found in the main office of the Outrigger Marshall Islands Resort (NVV 2000; RRT 2000A) (DPMJ0030).\*\*

**Aglaonema treubii** Engl.

ribbon aglaonema

Recent introduction. Celebes, Indonesia. Rare. Ornamental potted plant in Amata Kabua's garden (RRT 2001) (DPMJ0660b).\*

**Alocasia cucullata** (Lou.) G. Don

Chinese taro

Recent introduction. India. Occasional. Planted ornamental and potted plant (RRT 1991, 1999, 2000AB, 2001; NVV 2000) (DPMJ0226, DPMJ0646).\*\*

**Alocasia cuprea** C. Koch.

giant alocasia

Recent introduction. Borneo. Occasional. Planted ornamental and potted plant in household gardens and offices (NVV 2000; RRT 2000AB, 2001) (DPMJ0169a, DPMJ0227, DPMJ0565).\*\*

**Alocasia indica** (Roxb.) Schott var. **metallica** Schott

hybrid alocasia, hybrid elephant ears

Recent introduction. Java. Rare. Ornamental potted plant in household garden in Rairök (RRT 2000A) (DPMJ0446).\*\*

**Alocasia longiloba** Miq. x **sanderiana** Bull.

hybrid alocasia

Recent introduction. Philippines and Malaysia. Rare. Planted ornamental potted plant at Ajidrik Hotel in Uliga and in another household garden (NVV 2000; RRT 2000AB) (DPMJ0125, DPMJ0228).\*\*

**Alocasia macrorrhiza** (L.) Schott

giant taro, elephant ears

Syn. *Alocasia indica* (Roxb.) Schott

Marshallese: *wōt*

Aboriginal introduction. Tropical Asia. Occasional. Found naturalized in taro pits, other moist garden areas and under neglected coconut plantations in Laura; also found as a planted ornamental (StJ 1951; F, S & O 1987; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 2000) (DPMJ0511).

**Alocasia regina** N.E. Br. queenly alocasia

Recent introduction. Borneo. Rare. Ornamental potted plant at Ajidrik Hotel in Uliga and in a private garden in Rita (NVV 2000; RRT 2000A) (DPMJ0050, DPMJ0115).\*\*

**Alocasia sandariana** Bull. alocasia, kris plant

Recent introduction. Philippines. Occasional. Ornamental potted plant (RRT 1991, 1999, 2000AB, 2001; NVV 2000) (DPMJ0207, DPMJ0229).\*\*

**Anthurium andraeanum** Lind. common anthurium, hornet anthurium

Recent introduction. Tropical America. Uncommon. Ornamental potted plant in private garden in Rita and at Amata Kabua's residence. Previously reported from Kwajalein by F. S & O (1987) but evidently did not survive then was reintroduced (Whistler & Steele 1999) (RRT 1991, 2000AB, 2001; NVV 2000) (DPMJ0185, DPMJ0206, DPMJ0662).\*

**Caladium bicolor** (Ait.) Vent artist's pallet, caladium

Recent introduction. Brazil. Common. Planted ornamental and potted plant in private gardens, as landscaping for some businesses and in offices. A range of different cultivars with a range of leaf color patterns are planted. Previously reported on Jaluit and Kwajalein by F. S & O (1987), did not survive on the former (Fosberg & Sachet 1962) but did on the latter (Whistler & Steele 1999) (RRT 1991, 1999, 2000AB, 2001; NVV 2000) (DPMK0113, DPMJ0607, DPMJ0645).\*

**Colocasia esculenta** L. taro

Syns. *Colocasia antiquorem* Schott; *Caladium esculentum* Vent.

Marshallese: *kōtak*; *jibabwāi* (variety)

Aboriginal introduction. Tropical Asia. Occasional. Staple food plant found as a minor component in *Cyrtosperma* taro pits and planted at Laura Experimental Farm as an irrigated monoculture; also found in local household gardens, including a couple of gardens planted by workers from Fiji and in a Filipino garden east of the airport (StJ 1951; F, S & O 1987; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0537).

**Cyrtosperma chamissonis** (Schott) Merr. giant swamp taro  
 Syns. *Cyrtosperma edule* Schott; *C. merkusii* (Hask.) Schott

Marshallese: *iaraj*

Aboriginal introduction. New Guinea and Western Pacific Islands, to Micronesia and Polynesia. Common. Planted in taro pits in Laura, in pits at the Laura Experimental Farm and at Marshall Islands High School, Rita (1991), Robert Reimers Enterprises Hotel garden area and occasionally in some household gardens. Very important staple root crop and ceremonial food in the past. Corms cooked as a staple vegetable (StJ 1951; F, S & O 1987; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0523).

**Dieffenbachia amoena** Bull. giant dumb cane  
 Syn. *Dieffenbachia seguine* (Jacq.) Schott "amoena"

Recent introduction. Tropical America. Uncommon. Ornamental potted plant in household gardens and offices (NVV 2000; RRT 2000AB, 2001)\*\*

**Dieffenbachia maculata** (Lodd.) Bunt. spotted dumb cane  
 Syn. *Dieffenbachia picta* Schott

Recent introduction. Brazil. Occasional. Ornamental potted plant in household gardens and commercial areas (RRT 1991, 1999, 2000AB, 2001; NVV 2000) (DPMJ0034a, DPMJ0124a, DPMJ231a, DPMJ0476, DPMJ0629).\*\*

**Dieffenbachia seguine** (Jacq.) Schott dumb cane

Recent introduction. Northern South America and Caribbean. Occasional. Ornamental potted plant and garden plant. Previously reported on Kwajalein by F. S & O (1987). Can become invasive (RRT 1991, 1999, 2000AB, 2001; NVV 2000) (DPMJ0213b).\*

**Dieffenbachia splendens** Hort. Bull. splendid dumb cane  
 Syn. *Dieffenbachia leopoldii* Bull. X *Dieffenbachia maculata* (Loddiges) D. Don

Recent introduction. Tropical America. Rare. Ornamental potted plant in Amata Kabua's garden (RRT 2001) (DPMJ0655).\*\*

**Epipremnum aureum** (Lind. ex Andre) Bunt.

taro vine, pothos aureus, money plant, devil's ivy

Syns. *Rhaphidophora aurea* (Lind. ex Andre) Birds.; *Scindapsus aureus* (Lind. ex Andre) Engl.; *Pothos aureus* Lind. ex Andre; *Epipremnum pinnatum* (L.) Engler cv. "Aureum"; *Epipremnum pinnatum* (L.) Engler cv. "Pothos"

Recent introduction. Solomon Islands. Occasional. Planted ornamental high-climbing vine in household gardens; occasionally as a potted plant. Seems to be adventive and growing naturally on trees along the back road of Laura. Previously reported on Enewetak, Kwajalein and Jaluit by F. S & O (1987) (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0535).\*

**Monstera deliciosa** Liebm. var. **minima**

small monstera

Recent introduction. Tropical America. Rare. Potted ornamental climbing plant in office at the Outrigger Hotel (NVV 2000; RRT 2000A) (DPMJ0049).\*\*

**Monstera obliqua** Miq.

window-leaf taro vine

Recent introduction. Tropical America. Uncommon. Potted ornamental climbing taro-like vine with regularly spaced holes in the leaves found a couple household gardens in Rita and one in Woja (NVV 2000; RRT 2000B) (DPMJ0194).\*\*

**Philodendron andreanum** Devansaye

velour philodendron

Syn. *Philodendron melanochryson* Lind. & André

Recent introduction. Colombia and Costa Rica. Rare. Ornamental potted plant in household garden east of airport, at Ajidrik Hotel and the U. S. Embassy (NVV 2000; RRT 2000AB).\*\*

**Philodendron hastatum** C. Koch & Sellow.

spear-shaped philodendron

Recent introduction. Brazil. Rare. Ornamental potted plant seen in household garden in Rairök (RRT 1991, 2000B; NVV 2000) (DPMJ0375, DPMJ0480).\*\*

**Philodendron lacerum** (Jacq.) Schott.

lacerated philodendron

Recent introduction. Cuba. Uncommon. Ornamental potted plant, often planted indoors; found in planter box at Ajidrik Hotel (RRT 2000AB; NVV 2000) (DPMJ0126).\*\*

**Philodendron lehmannii** Engl.

Lehmann's philodendron

Recent introduction. Columbia. Rare. Ornamental potted plant with shiny *Aglaonema*-like leaves in garden in Rita (RRT 2000A; NVV 2000) (DPMJ0002).\*\*

**Philodendron oxycardium** Schott var. **variegatum**

sharp-heart philodendron

Syn. *Philodendron scandens* C. Koch & Sellow ssp. *oxycardium* (Schott) Bunt.

Recent introduction. Tropical America. Occasional. Ornamental potted plant; most commonly with variegated leaves. Previously recorded on Kwajalein by F. S & O (1987) (RRT 1991, 2000AB; NVV 2000) (DPMJ0020, DPMJ0376).\*

**Philodendron panduraeforme** (HBK.) Kunth.

fiddle-leaf philodendron

Recent introduction. Venezuela. Rare. Ornamental potted plant at Amata Kabua's residence (RRT 2001) (DPMJ0653).\*\*

**Philodendron radiatum** Schott.

rayed philodendron

Recent introduction. Central America. Uncommon. Ornamental houseplant, in office of Outrigger Marshall Islands Resort (NVV 2000; RRT 2000AB, 2001) (DPMJ0048, DPMJ0179).\*\*

**Philodendron squamiferum** Peopp.

squamiferous philodendron

Recent introduction. South America. Uncommon. Ornamental potted plant seen in a number of places as an indoor and outdoor plant (NVV 2000; RRT 2000AB, 2001) (DPMJ0017, DPMJ0377).\*\*

**Philodendron williamsii** Hook. f.

Williams' philodendron

Recent introduction. Tropical America. Rare. Potted plant in household garden in Rita and Rairōk (NVV 2000; RRT 2000AB) (DPMJ0378).\*\*

**Philodendron** sp.

philodendron

Recent introduction. Tropical America. Rare. Ornamental potted plant. Previously reported on Kwajalein by F. S & O (1987) (RRT 2000AB, 2001; NVV 2000) (DPMJ0049).\*

**Spathiphyllum** cv. "Clevelandii"

spathiphyllum, white sails

Recent introduction. Horticultural origin. Uncommon. Ornamental potted plant in offices and private gardens; imported by Robert Reimers Enterprises in 1998 and/or 1999 as houseplants. (RRT 1991, 1999, RRT 2000A; NVV 1999).\*\*

**Syngonium augustatum** Schott

syngonium, arrowhead vine, goosefoot

Syn. *Syngonium podophyllum* sensu Souder non Schott

Recent introduction. Mexico. Occasional. Potted plant and planted ornamental in household gardens. Previously reported on Kwajalein by F. S & O (1987) (RRT 1991, 1999, 2000AB, 2001; NVV 2000) (DPMJ0172, DPMJ0520a).\*

**Syngonium wendlandii** Schott.

velvety syngonium

Recent introduction. Costa Rica. Uncommon. Potted plant seen in two houseyard gardens (RRT 2000A, 2001) (DPMJ0123, DPMJ0448, DPMJ0579).\*\*

**Xanthosoma sagittifolium** (L.) Schott

tannia, yautia, cocoyam, American taro

Marshallese: *alōklōk* ("thorn"); *kālōklōk* ("thorns", "brambles", a name also applied to *Ximenia americana*, which is native to other Marshall Islands' atolls but not present on Majuro, *Cenchrus echinatus*, and *Caesalpinia bonduc*)

Recent introduction. West Indies. Uncommon. Food crop planted in some household gardens, in some taro pits and gardens in Laura and at the Laura Experimental Farm and Marshall Islands High School in 1991. Previously reported on Ailinglaplap, Arno and Jaluit by F. S & O (1987) (RRT 1991, 1999, 2000AB, 2001; NVV 2000) (DPMJ0578).\*

**Zantedeschia rehmanii** Engl.

red calla lily, pink calla lily

Recent introduction. South Africa. Rare. Ornamental household garden and potted plant (RRT 1991; NVV 2000).\*\*

**ARECACEAE** or **PALMAE** (Palm Family)**Areca catechu** L.

betelnut palm

Recent introduction. Malaya. Rare. A number of seedlings about 25 cm high from seed brought from Palau. Seen in a houseyard garden in Rairōk. Previously reported on Jaluit by F. S & O (1987) but did not survive (Fosberg & Sachet 1962) (RRT 2000B) (DPMJ0237).\*



**Caryota urens** L. fishtail palm, wine palm, toddy palm

Recent introduction. Tropical. Asia. Uncommon. Ornamental potted plant; single palms seen in two household gardens in Rita and another in the compound of the Chinese Embassy in Delap. Previously reported on Jaluit by F. S & O (1987) but did not survive (Fosberg & Sachet 1962). One or more could also be *C. mitus* recorded on Kwajalein by Whistler & Steele (1999) (NVV 2000; RRT 2000AB).\*

**Chamaedorea elegans** Mart. parlor palm, neanthe bella palm  
Syns. *Collinia elegans* (Mart.) Liebm.; *Neanthe bella* O.F. Cook

Recent introduction. Central America. Uncommon. Imported by Robert Reimers Enterprises in 1998 and/or 1999 as houseplants; some survive in household gardens and in houses and offices (NVV 1999).\*\*

**Chrysalidocarpus lutescens** H. Wendl. golden cane palm, golden-fruited palm

Recent introduction. Madagascar. Uncommon. Planted ornamental. A few trees planted on the grounds of the Capital Building and in household gardens in Rita. Previously reported on Kwajalein by F. S & O (1987) (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0056).\*

**Cocos nucifera** L. coconut palm

Marshallese: *ni*

Indigenous and aboriginal introduction. Southern Asia, Indian Ocean and Pacific Islands. Very abundant. Found in coastal strand vegetation, household gardens, and as a roadside tree throughout Majuro. Planted in coconut plantations in rural Majuro and on uninhabited islets of Aeañen. The major cash crop for making copra which is processed into coconut oil and a wide range of other products, much of which is processed at Tobolar Copra facilities in Delap (StJ 1951; MDS 1977; F, S & O 1987; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0598).

**Howea forsteriana** (C. Moore & F. Muell.) Becc. kentia palm, sentry palm, thatch palm

Recent introduction. Lord Howe Island. Uncommon. Imported by Robert Reimers Enterprises in 1998 and/or 1999 as houseplants; some remaining in household gardens, houses and offices (NVV 1999).\*\*

**Latania lontaroides** (Gaertn.) H.E. Moore red latan palm  
 Syn. *Latania borbonica* Lam.; *Latania commersonii* J.F. Gmelin; *Latania rubra* Jacq.

Recent introduction. Réunion Island. Rare. Ornamental palm planted at the Lojkar Resort (NVV 2000; RRT 2000AB) (DPMJ0478).\*\*

**Latania verschaffeltii** Lem. yellow latan palm

Recent introduction. Mascarene Islands. Uncommon. A number of young trees planted at the Lojkar Resort (NVV 2000; RRT 2000AB).\*\*

**Licuala grandis** Wendl. ruffled fan palm

Recent introduction. New Britain and Vanuatu. Rare. Ornamental potted plant found in Rita and in Amata Kabua's garden. Grows well even under other trees and is showing invasive properties in some parts of Polynesia (NVV 2000; RRT 2000AB, 2001) (DPMJ0043, DPMJ0642).\*\*

**Livistona carinensis** (Chiov.) J. Dransfield & N.W. Uhl banouale palm  
 Syn. *Wissmannia carinensis* Chiov.

Recent introduction. Somalia and Arabia. Uncommon. A number of young trees planted at the Lojkar Resort (NVV 2000; RRT 2000AB, 2001).\*\*

**Livistona chinensis** (Jacq.) R. Br. ex Mart. Chinese fan palm, fountain palm  
 Syn. *Latania chinensis* Jacq.

Recent introduction. China, Ryukyu and Bonin Islands. Uncommon. Planted ornamental. Some trees planted on grounds of Outrigger Marshall Islands Resort, others at the Lojkar Resort and in a few other areas. *Livistona* sp. recorded earlier on Jaluit by F, S & O (1987), but did not survive (Fosberg & Sachet 1962) (RRT 1999, 2000AB, 2001; NVV 1999) (DPMJ0354, DPMJ0478).\*\*

**Livistona rotundifolia** (Lam.) Mart. biroo palm, footstool palm

Recent introduction. Indonesia and Malaysia. Rare. Single plant in household garden along main road in Rita (RRT 2000B; NVV 2000) (DPMJ0355).\*\*

***Nypa fruticans* Wurm**

nipa palm, nypa

Indigenous. Ceylon to Solomon Islands, Ryuku Islands, Queensland and the Caroline Islands. Rare as drift fruit, likely not to survive. One sprouted drift fruit found along the beach near the airport in early 2002, along with several other non-sprouting fruit. All these possibly drifted in following the major tropical storm/typhoon that hit Kosrae and Pohnpei in late 2001, as other non-Marshalls drift seeds were also found with them (NVV 2002) (DPMJN010802).\*\*

***Phoenix dactylifera* L.**

date palm

Recent introduction. North Africa. Rare. Single seedling growing in a container in Maria Fowler's garden; started from seed brought in from California. Previously reported on Jaluit by F, S & O (1987) and on Kwajalein by Herbst (1988), but did not survive on either (Fosberg & Sachet 1962; Whistler & Steele 1999) (NVV 2001).\*

***Phoenix roebelenii* O'Brian ex. C. Roebelen**

dwarf date palm, pygmy date palm

Recent introduction. Sri Lanka. Uncommon. One young tree by entrance of Outrigger Marshall Islands Resort; others planted at the Lojkar Resort and in household gardens in Delap and Rairök. Some individuals could be *P. pusilla*, the Ceylon date palm (NVV 2000; RRT 2000AB, 2001) (DPMJ0380).\*\*

***Pritchardia pacifica* Seem. & Wendl.**

Pacific fan palm, Fiji fan palm

Recent introduction. Fiji, Tonga, and Samoa. Common. Planted ornamental behind Robert Reimers Hotel, Outrigger Marshall Islands Resort and in a number of other locations. Previously recorded on Ailinglaplap, Jaluit and Kwajalein by F. S & O (1987) (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0399).\*

***Ptychosperma macarthuri* (Wendl.) Nicholson**

MacArthur palm, hurricane palm

Recent introduction. Cape York Peninsula, Australia to New Guinea. Rare. Planted ornamental in a few household gardens and hotels. Previously reported on Kwajalein and Jaluit by F. S & O (1987) but did not survive (Fosberg & Sachet 1962; Whistler & Steele 1999) (RRT 1999, 2001; NVV 2000) (DPMJ0564a).\*

***Rhapis excelsa* (Thunb.) Henry ex Rehder**

lady palm, bamboo palm

Recent introduction. Southern China. Uncommon. Imported by Robert Reimers Enterprises in 1998 and/or 1999 as houseplants; some remaining in household gardens, houses

and offices. Previously reported on Kwajalein by F. S & O (1987) but did not survive (Whistler & Steele 1999) (NVV 1999; RRT 2000AB, 2001) (DPMJ0160, DPMJ0615, DPMJ0643).\*

**Sabal** sp.

palmetto palm

Recent introduction. Tropical America. Rare. A number of trees planted at the Lojkar Resort (NVV 2000; RRT 2000AB).\*\*

**Veitchia merrilli** (Becc. ) H.E. Moore

Manila palm, Christmas palm

Recent introduction. Philippines. Uncommon. A number of trees planted at the Lojkar Resort, on the grounds of the Capitol Building and in some other locations (NVV 2000; RRT 2000AB, 2001) (DPMJ0439).\*\*

#### **BROMELIACEAE** (Pineapple Family)

**Ananas comosus** (L.) Merrill

pineapple

Recent introduction. Brazil. Uncommon. Planted food plant in pots and sometimes in the ground in household gardens; one planted in container at Ajidrik Hotel. Kratz (1986) in his translation of Chamisso's account of the first contact of Europeans with the people of the Marshall Islands, reports that attempts were made to introduce pineapple (F, S & O 1987; RRT 1991, 1999, 2000AB; NVV 2000).

**Billbergia pyramidalis** (Sims) Lindl.

billbergia, summer torch

Recent introduction. Brazil. Rare. Ornamental potted plant in Rita (RRT 2001).\*\*

**Nidularium innocentii** Lem.

bird's nest bromeliad, nidularium

Recent introduction. Brazil. Rare or extirpated. Ornamental potted plant (RRT 1991).\*\*

**Tillandsia cyanea** Linden ex. K. Koch

pink quill

Recent introduction. Equador. Rare. Single potted plant imported from Hawai'i for sale at Bilimon's Store in Uluga, January 2001 (NVV 2001).\*\*

## CANNACEAE (Canna Family)\*

**Canna x generalis** L.H. Bailey Indian shot, canna lily  
Syn. often misidentified as *Canna indica* L.

Marshallese: *añ*

Recent introduction. West Indies. Occasional. Planted hybrid ornamental in household gardens; seen in Rita and at U. S. Embassy. Previously reported on Kwajalein, Arno and Jaluit by F. S & O (1987) as *C. indica*. Has the potential of becoming invasive and is difficult to remove when established in an area (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0246).\*

## COMMELINACEAE (Dayflower Family or Spiderwort Family)\*

**Callisia fragrans** (Lindl.) Woodson fragrant inch plant, basketplant  
Syns. *Spironema fragrans* Lindl.; *Rectanthera fragrans* (Lindl.) Degener

Recent introduction. Tropical America. Rare. Planted ornamental in a private garden in Rita. Can become invasive (NVV 2000; RRT 2000A) (DPMJ0196). \*\*

**Callisia repens** (Jacq.) L. mini turtle vine, creeping inch plant

Recent introduction. Tropical America. Uncommon. Potted plant at the University of the South Pacific Center in Delap and in a couple of other household gardens, one in Rairök (RT2000AB, 2001; NVV 2000) (DPMJ0102, DPMJ0105, DPMJ0106, DPMJ0266, DPMJ0602).\*\*

**Commelina diffusa** Burm. f. dayflower

Recent introduction. Southern Asia. Rare or extirpated. Growing against wall, possibly as an ornamental, in the garden of the Japanese Takeout Restaurant in 1991; not seen during any subsequent surveys. Previously reported on Jaluit by F. S & O 1987, but identification was uncertain and it did not survive (Fosberg & Sachet 1987). Can become invasive (RRT 1991).\*

**Dichorisandra thyrsiflora** Mikan blue ginger, purple ginger

Recent introduction. Brazil. Uncommon. Found as a potted plant in a number of household gardens in Rita, Rairök and Ajeltake (NVV 2000; RRT 2000AB).\*\*

**Tradescantia pallida** (Roxe) D. Hunt purple tradescantia, purple heart  
 Syn. *Setcreasea purpurea* B. K. Boom

Recent introduction. Mexico. Occasional. Ornamental potted plant in household gardens throughout the atoll. Previously reported on Kwajalein by Hebst (1988) (RRT 1991, 1999, 2000AB, 2001; NVV 2000) (DPMJ0435).\*

**Tradescantia spathacea** Swartz oyster plant, Moses-in-a-boat, dwarf oyster plant  
 Syns. *Rhoeo spathacea* (Sw.) Stearn; *Rhoeo discolor* (L'Her.) Hance.

Recent introduction. Mexico and West Indies. Common. Potted plant and planted ornamental; planted along borders and pathways in ornamental gardens. Previously reported on Kwajalein, Ailuk, Likiep, Arno, Ailinglaplap, Jaluit and Ebon by F. S & O (1987). Can become invasive (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0605).\*

**Tradescantia zebrina** Bosse wandering Jew, silver inch plant  
 Syn. *Zebrina pendula* Schnizl.

Recent introduction. Mexico. Occasional. Ornamental potted plant in private household gardens in Rita. Can become invasive (NVV 2000; RRT 2000AB) (DPMJ0168b, DPMJ0436)\*\*

#### **COSTACEAE** (Costus Family or Crepe Ginger Family)\*\*

**Costus malortianus** H. Wendland stepladder plant

Recent introduction. Costa Rica. Rare. Planted ornamental in household gardens (RRT 2000AB, 2001; NVV 2000) (DPMJ0271).\*\*

**Costus speciosus** (Koen.) Sm. crepe ginger, Malay ginger, spiral flag

Recent introduction. Malaysia to India. Rare. Planted ornamental. Has become invasive in some areas but not yet in Micronesia (RRT 1991, 1999, 2000AB, 2001; NVV 2000) (DPMJ0208, DPMJ0270, DPMJ0465).\*\*

## CYPERACEAE (Sedge Family)

**Cyperus compressus** L. summer sedge

Recent introduction. Pantropical. Abundant. Weed growing in rather dense populations in low ground near abandoned taro pits and poorly-drained areas in Laura; common in weedy areas in the industrial area (F, S & O 1987; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0284, DPMJ0285, , DPMJ0592, DPMJ0686, DPMJ0745).

**Cyperus difformis** L. smallflower umbrella sedge

Recent introduction. Old World tropics, now pantropical weed. Rare. A number of plants found in a swampy area in field and near dump area near Majuro Bridge in late 2001. Can become a weed of agricultural areas (RRT 2001, NVV 2001) (DPMJ0682, DPMJ0683, DPMJ0731) .\*\*

**Cyperus involucratus** Rottb. umbrella sedge, umbrella plant  
Syn. *Cyperus alternifolius* L.

Recent introduction. Madagascar. Uncommon. Planted as an ornamental in planter boxes of the Riwut Corner Gas Station in Delap and in household gardens. Previously reported on Jaluit by F. S & O (1987) but did not survive (Fosberg & Sachet 1962). Can become invasive (NVV 2000; RRT 2000AB, 2001) (DPMJ0286, DPMJ0630). \*

**Cyperus javanicus** (Houtt.) marsh sedge  
Syn. *Mariscus javanicus* Houtt. Merr.

Marshallese: *wûjooj-in-eoon-bōl* ("grass of the edge of the taro pit")

Indigenous. Paleotropical. Common. Found growing wild in isolated clusters and tufts and in colonies in moist habitats on the coastal strip, in and around taro pits in Laura, on the inner border of the coastal strand, and in ruderal habitats (StJ 1951; F, S & O 1987; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0360, DPMJ0361, DPMJ0362, DPMJ0527, DPMJ0536, DPMJ0539, DPMJ0586c).

**Cyperus lingularis** L. rocket sedge; swamp flatsedge; Caribbean sedge

Recent introduction. Tropical America and Africa. Uncommon. A large number of plants in a field where IBC's heavy equipment is stored, next to the south end of the water catchment. Also near the container yard of Delap Dock. Previously reported on Guam, so this species could have been brought in with heavy equipment or containers. Has spread to other ruderal and roadside sites in Rairōk. Potentially invasive and its attractive nature cause further

spread if used in flower arrangements (NVV 2000, RRT 2001) (DPMJ0730, DPMJ0740).\*\*

**Cyperus odoratus** L. fragrant flatsedge  
Syn. *Torulinium odoratum* (L.) S. Hooper

Marshallese: *būkōr*

Indigenous or possibly a weed of aboriginal introduction. Southern Asia to the Pacific Islands. Uncommon. Weed in moist ruderal sites, in and around taro pits and in other wet sites; found in a moist site just east of Majuro Bridge (F, S & O 1987; FRF 1990; RRT 1999, 2001; NVV 2001) (DPMJ0482, DPMJ681, DPMJ0732).

**Cyperus polystachyos** Rottb. wild sedge  
Syn. *Pycneus polystachyos* (Rottb.) P. Baeuv.

Indigenous? Uncertain origin, but now found throughout tropical and subtropical regions. Possibly native on at least some atolls and of aboriginal or recent introduction on others. Common. Weed in waste places and near giant swamp taro pits; common near the industrial area in some waste places (F, S & O 1987; RRT 1991, 1999; 2000AB, 2001; NVV 2000) (DPMJ0409).

**Cyperus rotundus** L. nut sedge, nut grass; flat sedge

Marshallese: *tuteoneon*

Recent introduction. Cosmopolitan. Common. Weed in gardens, at Laura Experimental Farm, in other vegetable farms at Laura and along roadsides, other ruderal sites and in sandy areas. Can become invasive (FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 2000) (DPMJ0740).\*\*

**Eleocharis geniculata** (L.) Roem. & Schulte spike rush

Marshallese: *pādādiimaan; pādālimaan* (names also applied to *Fimbristylis cymosa*, *Fimbristylis dichotoma* and sometimes to similar sedges)

Indigenous. Pantropical and subtropical. Rare. Seen present in one small, scattered population in a natural depression of freshwater of Lobat, Laura, along the back road. Previously reported present on Ailuk, Arno, Jaluit, Likiep, and Kwajalein by F, S & O (1987) (RRT 2000AB, 2001; NVV 2000) (2K0042; DPMJ129S; DPMJ0130S, DPMJ0303, DPMJ0304, DPMJ0305, DPMJ0528, DPMJ0529, DPMJ0530).\*



**Fimbristylis cymosa** R. Br.

beach sedge

Marshallese: *pādādiimaan*; *pādālimaan* (names also applied to *Eleocharis geniculata*, *Fimbristylis dichotoma* and sometimes to similar sedges)

Indigenous. Pantropical. Abundant. Found growing in clusters or tufts in open and semi-open places along ocean and lagoon coasts and in disturbed and open inland sites dominated by limestone rock and debris (F, S & O 1987; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999).

**Fimbristylis dichotoma** (L.) Vahl

tall fringe rush

Syn. *Scirpus dichotomus* L.; *Fimbristylis diphylla* (Retz.) Vahl

Marshallese: *pādādiimaan*; *pādālimaan* (names also applied to *Fimbristylis cymosa*, *Eleocharis geniculata* and sometimes to similar sedges)

Indigenous or possibly a weed of aboriginal introduction. Pantropical. Abundant. Found in grassy areas and ruderal sites throughout the atoll. Easily confused with *F. cymosa*, but has looser inflorescence, often of a lighter color and thus probably escaped notice in earlier surveys (RRT 2000A, 2001; NVV 2001) (DPMJ0743, DPMJ0744b).\*\*

**Kyllinga brevifolia** Rottb.

green watersedge, green kyllinga

Syn. *Cyperus brevifolius* (Rottb.) Hassk.

Recent introduction. Old World tropics, now pantropical. Occasional. Small patch found growing in wet area near Uliga dock and in lawns in Rita, Delap, Botkan and Lojkar Resort. Previously reported present on Jaluit but did not survive (Fosberg & Sachet 1962). An invasive weed of much of the Pacific (NVV 2000; RRT 2000AB, 2001) (DPMJ0168b, DPMJ0175).\*

**Kyllinga nemoralis** (Forst.) Dandy ex Hutchinson and Dalziel

white watersedge, white-flowered kyllinga

Syn. *Cyperus kyllingia* Endl.

Recent introduction. Old World tropics. Common to locally abundant. Found growing on the border of a giant swamp taro pit in Laura, in lawns at Gibson's Laura Superette and Lojkar Resort, and in many ruderal sites and gardens in the DUD. Previously reported on Jaluit and Arno by F. S & O (1987). An invasive weed (RRT 1999, 2000AB, 2001; NVV 2000) (DPMJ0345, DPMJ0725, DPMJ0558, DPMJ0595, DPMJ0725).\*

**DIOSCOREACEAE** (Yam Family)

**Dioscorea alata** L. greater yam

Recent introduction. Southeast Asia. Three plants planted in drums in nursery behind the Resources and Development Building in September 2000; reportedly introduced from Ebon Atoll. Large yam, which could be *D. nummularia* instead, climbing tree at Amata Kabua's in November 2001. Previously reported on Jaluit by F. S & O (1987) but did not survive (Fosberg & Sachet 1962). Kratz (1986) in his translation of Chamisso's account of the first contact of Europeans with the people of the Marshall Islands, reports that attempts were made to introduce this species (RRT 2000AB, 2001; NVV 1999) (DPMJ0296, DPMJ0574, DPMJ0669, DPMJ0670).\*

**Dioscorea bulbifera** L. bitter yam, air yam, aerial yam, air potato

Marshallese: *mata* (?) (name given by Fosberg & Sachet 1962 for *Dioscorea* sp.)

Aboriginal introduction? Tropical Asia to Africa. Uncommon. Growing wild in roadside vegetation and thicket in interior Laura and in another site near the Taiwanese Vegetable project (F, S & O 1987; RRT 1999, RRT 2000B; NVV 1999) (DPMJ0297, DPMJ0298).

**HAEMODORACEAE** (Hemodora Family)\*\*

**Xiphidium caeruleum** Aublet xiphidium

Recent introduction. Caribbean. Rare. Single potted plant in household garden in Delap (NVV 2000; RRT 2000A) (DPMJ0005).\*\*

**HELICONIACEAE** (Heliconia Family)\*\*

**Heliconia lathispatha** Benth. red gyro, golden lobster's claw

Recent introduction. Central America to northern South America. Rare. Planted ornamental in household garden near end of Rita (NVV 2000; RRT 2000A, 2001) (DPMJ0118).\*\*

**Heliconia psittacorum** L. f. parakeet heliconia, parrot flower

Recent introduction. Tropical South America. Uncommon. Ornamental potted plant in a private walled garden, at the U. S. Embassy and in a couple of other gardens (NVV 2000; RRT 2000AB, 2001) (DPMJ0192b, DPMJ0599).\*\*

**IRIDACEAE (Iris Family)\*\***

**Trimeza martinicensis** (Jacq.) Herb. trimeza, yellow walk iris

Recent introduction. Tropical America. Rare. Planted ornamental in household gardens in Rita and Ajeltake (NVV 2000; RRT 2000A) (DPMJ0146b).\*\*

**LILIACEAE (Lily Family)**

**Agapanthus praecox** Willd. African lily, lily of the Nile, agapanthus  
Syns. *Agapanthus orientalis* F.M. Leighton; *Agapanthus africanus* (L.) Hoffmannsegg

Recent introduction. South Africa. Rare or extirpated. Planted ornamental; not seen since 1991 (RRT 1991).\*\*

**Asparagus densiflorus** (Kunth) Jessup  
coarse asparagus fern, Sprenger's asparagus, regal fern  
Syns. *Asparagus sprengeri* Regel; *Asparagus aethiopicus* L.

Recent introduction. South Africa. Uncommon. Ornamental potted plant. Imported by Robert Reimers Enterprises in 1998 and 1999 as houseplants. Previously reported on Kwajalein by F. S & O (1987). Has invaded coastal forest and rainforests in Australia (RRT 1991, 2000AB, 2001; NVV 1999) (DBMJ0015c).

**Asparagus setaceus** (Kunth) Jessup lacy asparagus fern, climbing asparagus fern  
Syns. *Asparagus setacea* Kunth; *Asparagus plumosus* Baker

Recent introduction. South Africa. Rare. Ornamental potted plant; brought in by Bilimon's Store from Hawai'i. Previously recorded on Kwajalein but did not survive (Whistler & Steele 1999). Has become a serious weed on Lord Howe Island (NVV 2000; RRT 2000AB) (DPMJ0015a, DPMJ0238).\*

**Aspidistra elatior** Bl. aspidistra, cast-iron plant

Recent introduction. China. Rare. Ornamental potted plant in Amata Kabua's garden and in one other houseyard garden in Rita (RRT 2000B, 2001) (DPMJ0047, DPMJ0644).\*\*

**Chlorophytum comosum** (Thunb.) Jacq. spider plant, ribbon plant, bracket plant  
Syns. *Chlorophytum elatum* R. Br.; *Chlorophytum capense* (L.) Voss

Recent introduction. Africa. Occasional. Ornamental potted plant. Previously reported

on Kwajalein by Hebst (1988) (RRT 1991, 1999, 2000AB, 2001; NVV 2000) (DPMJ0601, DPMJ0603).\*

**Gloriosa superba** L. climbing lily, gloriosa lily, glory lily, fire lily  
Syn *Gloriosa rothschildiana* O'Brien

Recent introduction. Tropical Africa in the areas of Uganda. Rare. Ornamental found in garden of Good Earth Apartments, Delap (NVV 2000; RRT 2000A) (DPMJ0157).\*\*

**Hemerocallis fulva** L. orange day lily, fulvous day lily, pumpkin lily

Recent introduction. Europe and Asia. Uncommon. Ornamental lily with a compound orange flower found in household gardens in Rita, Lojkar Resort and a number of other locations. *H. fulva* var. "Kwanso" was seen at Lojkar Resort (NVV 2000; RRT 2000AB, 2001) (DPMJ0203).\*\*

**Tulipa** sp. tulip

Recent introduction. Europe and Asia. Rare. Four potted plants with withering yellow flowers imported from Hawai'i by Bilimon's Store in Uliga, January 2001; a species not suited to tropical climates and it is unlikely any survived (NVV 2000).\*\*

#### MARANTACEAE (Arrowroot Family)\*\*

**Calathea makoyana** (Mor.) Nichols peacock plant

Recent introduction. Brazil. Rare. Ornamental potted plant in Amata Kabua's garden (RRT 2001) (DPMJ0641, DPMJ0647).\*\*

**Calathea ornata** (Lind.) Koern. ornate calathea, ornate peacock plant  
Syn. *Maranta ornata* Lind.

Recent introduction. Northern South America. Occasional. Ornamental potted plant in offices and homes. Imported by Robert Reimers Enterprises in 1998 and/or 1999 as houseplants (RRT 1991, 1999, 2000AB; NVV 1999) (DPMJ0006, DPMJ0116).\*\*

**Calathea picturata** (Lind.) K. Koch picture calathea  
 Syn. *Calathea vandenheckei* (Lem.) Reg.

Recent introduction. Brazil. Rare. Ornamental potted plant in offices and homes (NVV 2000: RRT 2000B) (DPMJ0029c).\*\*

**Calathea zebrina** (Sims) Lindl. zebra calathea, zebra plant  
 Syn. *Maranta zebrina* Sims

Recent introduction. Brazil. Rare. Ornamental potted plant in offices and homes (RRT 1991, 2000AB; NVV 2000).\*\*

**Maranta leuconeura** Morr. prayer plant, ten commandments

Recent introduction. Brazil. Rare. Small potted plant found at a private household garden in Rairök (RRT 2000B) (DPMJ0359).\*\*

#### MUSACEAE (Banana Family)

The nomenclature for the genus *Musa* is confused, with most of the common seedless cultivars or clones being triploid crosses of the fertile species *Musa acuminata* Colla and *M. balbisiana* Colla. The Latin binomials *M. nana* Loureiro, *M. sapientum* L., and *M. paradisiaca* L. are commonly used as follows: *M. nana* for the dwarf Cavendish, and *M. sapientum* for the taller bananas, which are generally eaten ripe, but which are also cooked throughout the Pacific as starchy staples, and *M. paradisiaca* for the starchier bananas or plantains, which are usually eaten cooked as a staple starch, but occasionally eaten ripe as fruit. The nomenclature most widely used by agronomists is that developed by Simmonds, which classifies all cultivars or clones on the basis of their assumed genetic background, e.g., *Musa* ABB Group would be a triploid cross of one *M. acuminata* group and two *M. balbisiana* groups. Both nomenclature systems are presented here to more precisely identify the clones that are currently present in Majuro or the Marshall Islands.

**Musa** (AA Group) Simmonds banana

Marshallese: *löktaan*; *pinana* (from English "banana", general term); *keeprañ* (general term, obsolete)

Recent introduction. Southeast Asia. Common. Planted food plant in many gardens throughout the atoll (Abo et al. 1985; Watson 1993, NVV 2001; RRT 2001).

**Musa** (AAA Group) Simmonds banana, robusta, poyo, mons marie  
Syns. *Musa sapientum* L.; *Musa paradisiaca* L. var. *sapientum* (L.) Kuntze; *Musa paradisiaca* L. ssp. *sapientum* (L.) Kuntze; *Musa acuminata* Colla cvs.

Marshallese: *jeina* (from English word "China"); *pinana* ("banana", general term), *keeprañ* (general term, obsolete)

Recent introduction. Southeast Asia. Occasional. Planted food plant in some garden areas and at Laura Experimental Farm and other farms in Laura (StJ 1951; F, S & O 1987; RRT 1991, 1999, 2000, 2001; NVV 1999).

**Musa** (AAB Group) "Ney Poovan", "Lady's finger" Simmonds lady's finger banana  
Syn. *Musa acuminata* Colla x *Musa balbisiana* Colla

Marshallese: *jilubukwi* ("three-hundred", in reference to abundant number of fruit); *abōl* ("apple"); *Manila*; *aelōñ kein* (this country/domain); *jokuwa*; *pinana* (from English "banana", general term), *keeprañ* (general term, obsolete)

Recent introduction. South India. Abundant. Planted in household gardens throughout atoll. One of the most popular of the eating bananas (Abo et al. 1985; Watson 1993, RRT 1991, 1999, RRT 2000AB, 2001; NVV 1999) (DPMJ0727, DPMJ0519).

**Musa** (AAB Group) "Meika Maohi" Simmonds Pacific plantain

Recent introduction. Pacific Islands. Rare. Planted in gardens of some Fijian families; known in Fiji as "vudi" (RRT 2000) (DPMJ0198).\*\*

**Musa** (ABB Group) Simmonds cooking banana, plantain, bluggoe, Ney Mannan (blue Java)  
Syn. *Musa x paradisiaca* L. var. hort. Bluggoe (*M. acuminata* Colla x *M. balbisiana* Colla ); Saba (BBB?)

Marshallese: *jook* (from English "chalk" because of the whitish, waxy covering of fruits); *mikenji* ("McKenzie" after Boyd McKenzie, Trust Territory agriculturist who introduced this variety); *pinana* (from English "banana", general term); *keeprañ* (general term, obsolete)

Aboriginal introduction? Southeast Asia and Pacific. Common. Important traditional supplementary staple in many areas of the Pacific, where it also seems to be an aboriginally introduced cultivar. One of the most common cooking bananas in Majuro. Planted in household gardens, near taro pits and in rural areas (Abo et al. 1985; Watson 1993, RRT 1991, 1999, 2000A, 2001; NVV 1999) (DPMJ0534, DPMJ0727).

**Musa** cultivars

bananas and plantains

There are a number of banana and plantain cultivars of uncertain identity with the following Marshallese names, some of which may refer to some of the cultivars described above: *inajio*; *jolukur*; *jorukwōd*; *kaboj*; *kai mana*; *kilbōt* (Kiribati); *lōjennomaj*; *manlui*; *mile*; *mōkaddad* ("tramp")

### ORCHIDACEAE (Orchid Family)\*

**Arundina graminifolia** (D. Don) Hochr. bamboo orchid  
 Syns. *Cymbidium bambusifolium* Roxb.; *Bletia graminifolia* D. Don; *Arundina bambusifolia* Roxb. Ex  
 Lindl.

Recent introduction. India, southern China, southeastern Asia and Malaysia as far east as Celebes. Rare. Planted ornamental in houseyard gardens; planted in former President Amata Kabua's garden (NVV 2000; RRT 2000AB, 2001).\*\*

**Dendrobium bigibbum** Lindl. pink dendrobium

Recent introduction. Australia, Torres Strait Islands and New Guinea. Rare. Mauve to pink orchid in planter in houseyard garden (RRT 2000A; NVV 2000) (DPMJ0467).\*\*

**Dendrobium gracilicaule** F. Muell. yellow dendrobium

Recent introduction. Australia, Lord Howe Island, New Caledonia and Fiji. Rare. Yellow orchid with red-brown markings on the lip. Ornamental in the household garden near the airport; also possibly in private garden in Woja (RRT 1999, 2000AB, 2001; NVV 2000) (DPMJ0288, DPMJ0289).\*\*

**Dendrobium lasianthera** J.J. Smith dendrobium orchid

Recent introduction. Lowland New Guinea. Rare. Single plant grown in a private garden in Woja (RRT 2000B; NVV 2000) (DPMJ0290, DPMJ0291).\*\*

**Dendrobium lineale** Rolfe dendrobium orchid  
 Syn. *Dendrobium veratrifolium* Lindl.

Recent introduction. Lowland New Guinea and adjacent islands. Uncommon. Planted

ornamental with twisted purplish-pink petals. Ornamental in the private household garden near the airport and in a number of other gardens. This large section *Spathulata* is quite variable in color, and some of these plants could be color variants of *D. gouldii* Reichb. f., which is native from New Ireland to Solomon Islands (RRT 1999, 2000AB; NVV 2000) (DPMJ0215b, DPMJ0292, DPMJ0295).\*\*

**Dendrobium nobile** Lind. var. **virginalis** virginal orchid, "virginale"

Recent introduction. India, Burma, Thailand, Laos, Vietnam and China. Rare. Ornamental potted plant (NVV 2000; RRT 2000AB, 2001) (DPMJ0181, DPMJ0293).\*\*

**Epidendrum ibaguense** H.B.K. crucifix orchid  
Syn. *Epidendrum radicans* Paxón ex Lind (misapplied)

Recent introduction. Columbia. Rare. Found in a private garden just east of the airport. Apparently a hybrid cross between *E. evectum* J.D. Hooker and *E. radicans* Pavón ex Lindly (RRT 1999, 2000AB; NVV 2000) (DPMJ0215a).\*\*

**Oncidium bifolium** Sims dancing ladies, dancing dolls, butterfly orchid

Recent introduction. Bolivia, Brazil and Uruguay. Rare. Butterfly-like small yellow orchid with brown blotches in a private garden near the airport. An *Oncidium* sp., recorded on Kwajalein by Whistler & Steele (1999) (RRT 1999, 2000AB; NVV 2000) (DPMJ0369).\*\*

**Papilionanthe teres** (Lind.) Schlect. vanda orchid  
Syn. *Vanda teres* Lindl.

Recent introduction. Burma. Rare. Planted ornamental in household gardens (NVV 2000; RRT 2000A) (DPMJ0016, DPMJ0163).\*\*

**Papilionanthe 'Agnes Joaquim'** Ridley hybrid vanda orchid  
Syn. *Vanda* 'Miss Joaquim'

Recent introduction. Tropical Asia. Uncommon. On a trellis of the garden of former President Amata Kabua's residence; also found in several private gardens on Rairōk, where it was said to have been brought from Saipan. Naturally occurring vanda orchid hybrid between *Papilionanthe hookeriana* (Reich. F.) Schlect. and *P. teres* (Lind.) Schlect. Reportedly found in Miss Agnes Joaquim's garden in Singapore. Previously recorded on Kwajalein by F. S & O (1987) (NVV 2000; RRT 2000A).\*



**Spathoglottis plicata** Blume

Philippine ground orchid

Recent introduction. Ryukyu Islands to Australia and Caroline Islands. Common. Planted ornamental in gardens throughout the atoll. Deep purple variety is popular and said to have been brought in from Hawai'i in recent years. Previously recorded on Jaluit by F. S & O (1987) but did not survive (Fosberg & Sachet 1962), and on Kwajalein by Whistler & Steele (1999) (NVV 2000; RRT 2000AB, 2001) (DPMJ0107, DPMJ0631)\*

**PANDANACEAE** (Pandanus Family)

The nomenclature for the genus *Pandanus* is, like *Musa*, confused, with some taxonomists classifying many of the common cultivars and wild clones or species, both edible and non-edible, as forms or varieties of *P. tectorius*. Other taxonomists consider them distinct species, often listing numerous species or varieties for a given area. For example, *P. odoratissimus* L. f. has long been thought to be synonymous with *P. tectorius*, but is not considered, by many authorities, to occur east of Malaysia. Similarly, *P. odoratissimus* L. f. var. *performs* Mart. has been used as a synonym for a wild and doubtful variety of *P. tectorius*, whereas Stone (1970) considers *P. fragrans* Gad. to be the common wild species on Guam, and does not consider *P. tectorius* to be present. Thus, the identifications are provisional, with most named cultivars being grouped under *P. tectorius*. In the 1930s, R. Kanehira, who studied dried collections shipped to him in Japan, considered many of the Marshall Islands pandanus to be endemic species, 12 said to be endemic just to the Marshall Islands, and another two to the Marshall Islands and nearby Caroline atolls. (Stone 1960) However, most recent research indicates that these are all probably just forms or horticultural clones of *P. tectorius*.

**Pandanus tectorius** Warb.

pandanus, screw pine

Syns. for Marshall Islands primarily *Pandanus carolinianus* Martelli; *Pandanus pulposus* (Warb.) Martelli; *Pandanus fischerianus* Martelli; *Pandanus odoratissimus* L. f; others include many so-called endemics which are now considered invalid, such as *Pandanus jaluitensis* Kaneh., *Pandanus lakatwa* Kaneh., *Pandanus rhombocarpus* Kaneh.

Marshallese: **bōb** (general term for edible 'varieties' or horticultural clones); **edwaan** (wild 'varieties')

Indigenous as the wild **edwaan**; probably an aboriginal introduction or locally horticulturally developed in the case of edible and particularly useful 'varieties', which are clones rather than actual horticultural varieties. Pacific Islands. Abundant. Found in coastal strand and lagoon forest, in rural agricultural areas, around taro pits and in household gardens. Very important fresh fruit and staple food in the Marshall Islands and other atoll countries. Named varieties listed for Majuro Atoll by Stone (1963) include: **aelok**, **aelua**, **ajbwirik**, **bwiken**, **būkōr**, **dubijin**, **edwaan-en-an-Nelu**, **edwaan-in-matolej**, **idebdin**, **inietok**, **jabwanbwok**, **jabloed**; **jatūrwee**, **joibeb**, **jonman**, **kōpnaan**, **kinwum**, **kounmaan**, **kōmālij**,

*kúbwejeñōn, lañlōñ, leikmaan, lepni, libwijnmede, loarmwe, lōjokdād, lōjmoa, lōkōtwa, lōmōen, lopiñpiñ, luwaju, mwajaal, nibuñ, tobwotin, utōttōt* and *wūnmaañ* (other names are recorded for other atolls) (StJ 1951; MDS 1977; F, S & O 1987; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0698).

**Pandanus sanderi** Hort. ex Masters

variegated pandanus

Recent introduction. Indomalaysia to the Pacific Islands. Occasional. Planted ornamental; a large, very old tree in the garden of Amata Kabua, where it was imported from Australia and may be the original plant. Also planted on the grounds of the Capitol Building, the Outrigger Marshall Islands Resort and various other business and residential locations (RRT 1991, 1999, 2000AB, 2001; NVV 1999).\*\*

### POACEAE or GRAMINAE (Grass Family)

**Bambusa** spp.

bamboo

Marshallese: *bae; koba*

Recent introduction. Tropical Asia. Rare. Found at the Outrigger Marshall Islands Resort and in few other locations. A long-standing patch in Rairōk of a large type. Positive identity unsure and should be investigated further; *B. blumeana* and *B. multiplex* were recorded on Jaluit by F, S & O (1987) but neither species survived (Fosberg & Sachet 1962) (RRT 1999, 2000AB; NVV 1999).\*\*

**Bothriochloa bladhii** (Retz.) S.T. Blake

blue grass, Australian beadgrass

Syns. *Dichanthium bladhii* (Retz.) Clayton; *Andropogon bladhii* Retz.; *Dichanthium intermedium* (R. Br.) De Wit & Harl.; *Andropogon intermedius* R. Br.; *Bothriochloa intermedia* (R. Br.) Camus

Recent introduction. Tropical Africa through India to China and Australia. Abundant. Grass in open lots, roadsides and ruderal sites. Can become invasive (F, S & O 1987; RRT 1999, 2000AB, 2001; NVV 1999) (2K00401; DPMJ0134S, DPMJ0135S, DPMJ0687).

**Cenchrus echinatus** L.

burrgrass, sand burr

Marshallese: *lōklōk* ("prickly, prick"); *kālōklōk* ("thorns", "brambles", a name also applied to *Ximania americana*, which is native to other Marshall Islands' atolls but not present on Majuro, and *Xanthosoma sagittifolium*) *karumwij* ("to make late")

Recent introduction. Tropical America. Common. Weed occurring in clusters or tufts in open and ruderal habitats and in sandy areas near the coast. A weed and/or invasive in most

tropical countries (F, S & O 1987; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0517).

**Chloris inflata** Link finger grass, swollen fingergrass  
Syn. *Chloris barbata* sensu auct. non (L.) Sw.

Recent introduction. Tropical America. Rare. Weed occurring locally in isolated clusters or tufts in open and ruderal places, particularly along roadsides. Easily confused with *Bothriochloa bladhii* and *Eustachys petrea*, which look superficially the same and are abundant throughout most of the atoll. An invasive weed (F, S & O 1987; RRT 1991, 1999; NVV 2001) (DPMJ0747b).

**Chrysopogon aciculatus** (Retz.) Trin. golden beardgrass, love grass, Mackie's pest  
Syn. *Andropogon aciculatus* Retz.; *Rhaphis aciculata* (Retz.) Desv.

Recent introduction. Tropical Asia to Western Polynesia and possible western Micronesia. Rare. Found in a private lawn in Rita. Previously reported on Kwajalein by F. S & O (1987) but not found in later surveys (Whistler & Steele 1999). Its seeds are spikelets with pointed tips that easily attach to clothing and fur. Seeds not only spread this way but can also work their way into the flesh of people and animals causing sores. A major invasive, which can tolerate poor soil, trampling and moving. On the U. S. Federal noxious weed list (NVV 2001) (DPMJ0746).\*

**Cymbopogon citratus** (DC. ex Nees) Staph lemongrass  
Syn. *Andropogon citratus* DC. ex Nees

Recent introduction. East Indies. Uncommon. Planted in household gardens and multiplied for distribution at Marshall Islands High School in 1991. Previously reported on Kwajalein by Hebst (1988) (1999) (RRT 1991, 1999, 2000AB, 2001; NVV 2000) (DPMJ0562).\*

**Cynodon dactylon** (L.) Pers. Bermuda grass

Recent introduction. Old World. Occasional. Found in open places, along roadsides and forming mats or sod in some areas, such as by Alele Museum in Uliga. Can become invasive (F, S & O 1987; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 2000).

**Dactyloctenium aegyptium** (L.) Beauv.

four-finger grass, beach wiregrass, crowfoot grass

Recent introduction. Paleotropics. Occasional to locally abundant. Weed in clusters or tufts in open and ruderal habitats; seen along roadsides in the DUD and interior of Laura; locally common in the industrial area to the east of the Majuro Bridge. Previously recorded on Jaluit by F. S & O (1987) but did not survive (Fosberg & Sachet 1962) and as naturalized on Kwajalein by Whistler & Steele (1999) (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0287).\*

**Digitaria ciliaris** (Retz.) Koeler

large crabgrass, smooth crabgrass

Marshallese: *wûjooj* ("grass", general); *wûjooj aetok* ("tall grass")

Recent introduction. Tropical Asia. Uncommon. Tall grass with spreading inflorescence. Found along the far end of the runway, a small patch near the U. S. Embassy area of Rairōk and another at the east end of Didij in Aeañen. Previously reported on Rongelap and Kwajalein by F. S. & O (1987), and is naturalized on Kwajalein (Whistler & Steele 1999). Can become invasive and is a naturalized weed in many parts of the world (NVV 2001) (DPMJN122501).\*

**Digitaria setigera** Roth

itchy crabgrass, slender crabgrass

Syns. *Digitaria pruriens* (Fisher ex Trin.) Buse; *Digitaria microbachne* (J.S. Presl) Henr.

Marshallese: *wûjooj* ("grass", general)

Recent introduction. Southeast Asia to Polynesia. Uncommon. Weed occurring in clusters or tufts in open and ruderal habitats (F, S & O 1987; FRF 1990; RRT 1999, 2001; NVV 2000) (DPMJ0547).

**Eleusine indica** (L.) Gaertn.

wiregrass, goosegrass

Marshallese: *katejukjuk* ("try to stay put"; "make a community")

Recent introduction. India; long naturalized in Old World. Abundant. Growing in rather dense concentrations or colonies in gardens, waste places, along roadsides and in other ruderal habitats. An invasive of many regions (F, S & O 1987; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 2000) (DPMJ0306, DPMJ0567, DPMJ0747a).

**Eragrostis ciliaris** (L.) R. Br.

gophertail lovegrass

Recent introduction. Old World. Occasional. Weed occurring in open fields (F, S & O 1987; NVV 2001) (DPMJN112701, DPMJN121101).

**Eragrostis scabriflora** Swallen

Fijian lovegrass

Recent introduction. Fiji. Common to locally abundant. Weed occurring in open lots, along roadsides, other ruderal places, and in sandy areas near the coast. Previously reported as present on Majuro and other atolls (Whistler & Steel 1999; RRT 1999, 2000AB; NVV 2001) (DPMJ0308, DPMJ0588, DPMJ0589).\*

**Eragrostis tenella** (L.) Beauv. ex Roem. & Schult. delicate lovegrass, Japanese lovegrass  
Syn. *Eragrostis amabilis* (L.) Wight & Arn. ex Hook. & Arn.

Recent introduction. Old World. Common. Weed occurring in scattered clusters around buildings, along paths, in other ruderal places, and in sandy areas near the coast (F, S & O 1987; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0308, DPMJ0571).

**Eustachys petrea** (Sw.) Desv.

pinewoods fingergrass

Syn. *Chloris petrea* Sw.

Recent introduction. Tropical America. Very abundant. Weed of roadsides, airports, waste places and ruderal sites; also found on Calalin Islet. One of the most dominant grass species (F, S & O 1987; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0314, DPMJ0506).

**Lepturus repens** (G. Forst.) R. Brown

beach bunch grass

Marshallese: *wûjooj* (general term for grass); *wûjooj aetok* ("tall grass"); *ut madi* ('spear-flower', a name given by some of the participants at the University of the South Pacific herbal medicine workshop)

Indigenous. Pacific Islands. Abundant. Occurring in clusters among strand vegetation on both ocean and lagoon shores and in other sandy habitats including uninhabited islets. According to Fosberg 1990, this is: "The commonest, most ubiquitous plant in the Marshalls." (F, S & O 1987; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0144b, DPMJ0704).

**Oplismenus compositus** (L.) Beauv.

basket grass

Syn. *Panicum compositum* L.Marshallese: *wûjooj-in-Ep* ("grass of Ep", a mythical land to the West)

Recent introduction. Ceylon. Occasional. Weedy understorey species found around taro pits in Laura (F, S & O 1987; FRF 1990; RRT 1991, 1999, 2000AB; NVV 2000) (2K00405; DPMJ0138S).

**Paspalum conjugatum** Berg.

T-grass, sour grass

Recent introduction. Tropical America. Occasional. In tended lawns and disturbed sites; locally common in Laura, especially in moist sites. Previously recorded on Arno and Jaluit by F. S & O 1987. A hardy and persistent species which easily becomes invasive (RRT 1999, 2000AB; NVV 1999).\*

**Paspalum setaceum** Michx.

bullgrass, thin paspalum

Recent introduction. Mexico and the southeastern United States. Common. Weed of roadsides and ruderal sites (F, S & O 1987; RRT 1991, 1999, 2000AB, 2001; NVV 2000) (2K00411; DPMJ0132S, DPMJ0133S, DPMJ0174a, DPMJ0371, DPMJ0548).

**Paspalum vaginatum** Sw.

seashore grass, knottgrass, saltgrass, knottweed

Syns. *Paspalum distichum* L.; *Paspalum littorale* R. Br.Marshallese: *wûjooj katejukjuk* ("grass"-"try to stay put"; "make a community")

Recent introduction. Tropical America, but now pantropical. Common. Weedy plant forming dense patches near beaches and brackish marshy areas; often found in, or bordering, taro pits (F, S & O 1987; RRT 1991, 1999, 2000AB, 2001; NVV 2000) (DPMJ0144c).

**Pennisetum polystachion** (L.) Schult.

mission grass, feathery pennistem

Syns. *Pennisetum polystachyon* (L.) Schult (alternate spelling); *Pennisetum setosum* (Sw.) L. Rich.; *Cenchrus setosus* SW.; *Panicum polystachion* L.

Recent introduction. Tropical Africa. Occasional. Roadside and ruderal weed, particularly in recently cleared areas along the Laura Back Road and near the Laura Experimental Farm. An aggressive invasive weed with seeds that disperse in the wind, water or by sticking to clothing; on the U. S. list of noxious weeds and declared a noxious weed in the Northern Territory, Australia (F, S & O 1987; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0373).

**Pennisetum purpureum** Schumach.  
Syn. *Pennisetum merkeri* Leeke

elephant grass, Napier grass

Recent introduction. Tropical Africa. Uncommon. Locally common and spreading in dense stands along the Laura Back Road from the former Government agricultural farm; reportedly introduced as a fodder grass. Identified on Majuro by the RMI Biodiversity Team and included in 2000 report, but location not specified. Can become invasive and has become a problem in the Galapagos (NVV 1999; RRT 2000AB, 2001) (DPMJ0374, DPMJ0551).

**Saccharum officinarum** L.

sugar cane

Marshallese: *to*

Recent introduction. New Guinea and Tropical Asia. Uncommon. Planted bordering taro pits in Laura and at the Laura Experimental Farm. According to St. John, the one variety that he encountered in Laura was introduced from Kosrae by the Japanese; the local name is the same as the Kosraean name. Kratz (1986) in his translation of Chamisso's account of the first contact of Europeans with the people of the Marshall Islands, reports that attempts were made to introduce sugar cane (StJ 1951; F, S & O 1987; RRT 1991, 2000AB, 2001; NVV 1999) (DPMJ0192a).

**Sorghum bicolor** (L.) Moench.

broomcorn

Recent introduction. India. Rare and probably extirpated. Reported present on Majuro by F. S & O (1987); not seen by current authors (F, S & O 1987).

**Sorghum vulgare** Pers.

sorghum, Guinea corn

Recent introduction. India. Rare. A couple of plants planted inside a fenced area at College of the Marshall Islands, but extirpated when new buildings were constructed. Imported in wild birdseed mix that has been used as chicken feed, and periodically grows from spilt seeds, but does not survive. (RRT 1999, 2000A; NVV 1999).\*\*

**Sporobolus fertilis** (Steud.) Clayton

Indian dropseed

Recent introduction. Southern Asia. Uncommon. Growing along roadsides and in disturbed sites; reported on Kwajalein by Whistler & Steele (1999). Could possibly be *Sporobolus diander* (Retz.) P. Beauv., the branches of which spread at maturity. According to Whistler (1995), the taxonomy of this genus is not clear (RRT 1999, 2000B, 2001; NVV 2000) (DPMJ0425, DPMJ0688).\*

**Stenotaphrum micranthum** (Desv.) Hubb. small-flowered buffalo grass  
 Syn. *Ophiurinella micrantha* Desv.; *Stenotaphrum subulatum* Trin.

Recent introduction. Mascarene Islands to Malesia, Micronesia, and Polynesia. Uncommon. Found in a few sites slightly inland from the coast in Laura and in Rita in undeveloped areas (RRT 1999; RRT 2000B; NVV 2000) (DPMJ0427, DPMJ0428a, DPMJ0429).\*

**Thuarea involuta** (Forst. f.) R. Br. ex R. & S. beach grass

Marshallese: *wûjooj maroro* ("green grass"); *kakkûmkûm* ("suspenseful"; "risky"); *wûjooj-en-kijen-bao* ("chicken food grass", a name given by some of the participants at the University of the South Pacific herbal medicine workshop)

Indigenous. Madagascar to Eastern Polynesia and Micronesia. Occasional to locally common. Found in strand vegetation and sandy areas on both ocean and lagoon coasts (StJ 1951; F, S & O 1987; RRT 1991, 1999, 2000AB, 2001; NVV 2000) (DPMJ0097, DPMJ0509).

**Zea mays** L. maize, corn

Marshallese: *koon* (a corruption of the English common name)

Recent introduction. South, Central and warm North America. Uncommon. Planted at Laura Experimental Farm, at the Chinese vegetable farm and periodically in private gardens in Laura. Large plot of mature corn seen in a private garden along the Laura Back Road in November 2001. Previously recorded on Kwajalein by F. S & O (1987) (RRT 1991, 1999, 2000A, 2001; NVV 1999) (DPMJ0543, DPMJ0544).\*

**Zoysia japonica** Steud. Japanese lawngrass, Korean lawngrass

Recent introduction. Japan. Rare. Ground cover in some residential lawns. Further investigation is needed for all the *Zoysia* spp. found on Majuro, in order to better understand which species, hybrids and/or varieties exist. (NVV 2000).\*\*

**Zoysia matrella** (L.) Merr. Manila grass, temple grass, siglap grass  
 Syn. *Agrostis matrella* L.

Recent introduction. Southern Asia and Malaysia. Uncommon. Ground cover in some residential lawns and in front of CMI and at a residence in Delap, often forming small patches in association with other grasses and ground cover species. Could also be one of the other species. Previously reported on Jaluit by F. S & O (1987) (NVV 2000; RRT 2000A, 2001).\*



**Zoysia tenuifolia** Willd.

Korean velvetgrass, Mascarenegrass

Recent introduction. Southeast Asia. Rare. Ground cover in some residential lawns. Further investigation is needed for all the *Zoysia* spp. found on Majuro, in order to better understand which species, hybrids and/or varieties exist. (NVV 2000).\*\*

#### PONTEDERIACEAE (Pickerel Weed Family)\*

**Eichhornia crassipes** (Mort.) Solms.

water hyacinth

Recent introduction. Tropical and subtropical America. Uncommon. Planted ornamental in water-filled tubs and containers of residential gardens. Subsequently recorded on Kwajalein by Whistler & Steele (1999). Considered to be one of the "One Hundred of the World's Worst Invasive Alien Species" by the Global Invasive Species Database (RRT 1991, 2000B; NVV 2000) (DPMJ0302).\*\*

#### POTAMOGETONACEAE (Pondweed Family or Seagrass Family)

**Cymodocea rotundata** Ehreimb. & Hempr. ex. Aschers

rounded seagrass

Marshallese: *wûjooj-in-lojet* ("grass of the ocean", general term for sea plants, including algae)

Indigenous. Indian Ocean through Melanesia to Solomon Islands and the Marshall Islands. Occasional. A number of seagrass meadows or populations found on Majuro; a large one along the lagoonside of Laura, a smaller one on the oceanside near the end of Laura, one in the embayment south of CMI, and another in Aeañen (Tsuda, Fosberg & Sachet 1977; NVV 1999; RRT 2000AB, 2001) (DPMJ0098, DPMJ0099).

#### TACCACEAE (Polynesian Arrowroot Family)

**Tacca leontopetaloides** (L.) O. Kuntze

Polynesian arrowroot

Syn. *Tacca pinnatifida* Forst.Marshallese: *makmōk*

Aboriginal introduction. Malay Archipelago. Occasional to Common. Occurring spontaneously in old gardens and in sandy areas in interior coastal strand forest; more common on outer atoll islets, but rare in areas with high population density on Majuro. Corms traditionally an important source of starch; abundance said to have declined in recent years,

both in number and size, which is believed by many residents to be a result of fallout from the nuclear weapon testing programs of the 1940s and 1950s (StJ 1951; F, S & O 1987; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0081, DPMJ0510).

### ZINGIBERACEAE (Ginger Family)\*

**Alpinia purpurata** (Viell.) K. Schum red ginger

Recent introduction. Indonesia to Pacific Islands. Common. Planted ornamental in household gardens and around businesses. Previously recorded on Kwajalein by F. S & O (1987). Can become naturalized and invasive (RRT 1991, 1999, 2000B, 2001; NVV 2001).\*

**Alpinia vittata** Bull variegated ginger  
Syn. *Alpinia sanderae* Sand.

Recent introduction. New Guinea. Rare. Ornamental in household garden in Rita (NVV 2000; RRT 2000AB, 2001) (DPMJ0003, DPMJ0739).\*\*

**Hedychium coronarium** Koen. white ginger

Recent introduction. Himalayas and southwestern China. Rare. Planted ornamental in household garden in Rita. Previously recorded on Kwajalein by F. S & O (1987). Has become a major problem in Hawai'i but so far not in Micronesia (NVV 2000; RRT 2000AB, 2001) (DPMJ0112).\*

**Kaempferia ovalifolia** Roxb. peacock ginger  
Syn. *Kaempferia pasishii* Hook f. form

Recent introduction. Burma to Malaya. Rare. Ornamental in a planter box around breadfruit tree in private residence in Rita; also a potted plant at U. S. Embassy and growing unattended by the hospital. Positive identification should be reconfirmed, as it could also be *K. pulchra* (NVV 2000; RRT 2000B) (DPMJ0167a).\*\*

**Kaempferia rotunda** L. peacock ginger

Recent introduction. Southeast Asia. Rare. Imported by Robert Reimers Enterprises in 1998 and/or 1999 as houseplants; seen in a private household garden in Woja (NVV 2000; RRT 2000B) (DPMJ0343). \*\*

**Zingiber officinale** Roscoe

ginger, common ginger

Syn. *Zingiber zingiber* Karst.

Recent introduction. India and China. Rare. Planted in soil at Royal Garden Hotel and occasionally in private herb gardens; seen growing in settlement on Calalin Islet in 2000 and in a container at the R & D Building in 2001 (RRT 1999, 2000A, 2001; NVV 1999) (DPMJ0575).\*\*

**Zingiber zerumbet** (L.) Sm.

wild ginger

Recent introduction. Tropical Asia. Rare. Planted medicinal plant in household gardens of Fijian and Rotuman expatriate workers; introduced by contract workers from Fiji. Important medicinal plant in tropical Asia and the Pacific Islands (RRT 2000AB).\*\*

**DICOTYLEDONAE (Dicotyledons)****ACANTHACEAE (Acanthus Family)**

**Asystasia gangetica** (L.) Anders. asystasia, Chinese violet, Philippine violet, coromandel  
Syns. *Justicia gangetica* L.; *Asystasia coromandeliana* Nees

Recent introduction. Paleotropics. Occasional. Planted ornamental, often forming a semi-hedge around homes. The lavender variety is the most frequent, but the white variety is also present. Previously reported on Kwajalein by F. S & O (1972). Can become invasive and has become a potential problem in French Polynesia (RRT 1999, 2000AB, 2001; NVV 1999) (DPMJ0117, DPMJ0147c, DPMJ0147e, DPMJ0472).\*

**Blechnum pyramidatum** (Lam.) Urb.

green shrimp plant

Syns. *Blechnum brownei* Juss.; *Blechnum pyramidata* (Lam.) Urb.; *Barleria pyramidatum* Lam.; *Barleria pyrimidalis* Lam. ex Nees

Recent introduction. Peru. Occasional. Naturalized weed along road in banana plantation in Laura and a number of other ruderal places; also found in a number of locations in Rita. Appears to be spreading. Previously reported on Jaluit by F. S & O (1972) and was one of the few plants to survive the typhoon (Fosberg & Sachet 1962). Can become invasive (RRT 1991, 1999, 2000AB, 2001; NVV 2000) (DPMJ0182).\*

**Crossandra infundibuliformis** (L.) Nees firecracker flower; crossandra  
 Syns. *Justicia infundibuliformis* L.; *Crossandra undulaefolia* Salisb.

Recent introduction. India and Sri Lanka. Rare. Imported by Robert Reimers Enterprises in 1998 and/or 1999 as houseplants. Previously reported on Kwajalein by F. S & O (1979) but not observed since, according to Whistler & Steele (1999) (NVV 1999).\*

**Fittonia argyroneura** Coem. snail plant, nerve plant, silver-net leaf  
 Syn. *Fittonia verschaffeltii* var. *argyroneura* Nichols.

Recent introduction. Peru. Rare. Ornamental potted plant; imported by Robert Reimers Enterprises in 1998 and/or 1999 as houseplants, some surviving in CMI Land Grant Office (RRT 1991; NVV 2000).\*\*

**Graptophyllum pictum** (L.) Griff. caricature plant, morado  
 Syn. *Justicia picta* L.

Recent introduction. New Guinea. Occasional. Planted ornamental, sometimes as hedges around houses. Previously reported on Likiep by F. S & O (1972) and subsequently on Kwajalein by Whistler & Steele (1999) (RRT 1991, 1999, 2000AB, 2001; NVV 2000).\*

**Hemigraphis alternata** (Burm. f.) T. Anders. metal leaf, cemetery plant, red ivy  
 Syns. *Ruellia alternata* Burm. F.; *Ruellia colorata* Bl.; *Hemigraphis colorata* (Bl.) Hall f.

Recent introduction. Java. Rare. Planted ornamental ground cover. Can become invasive (RRT 1991, 2000AB, 2001; NVV 2000) (DPMJ0146a).\*\*

**Hemigraphis reptans** (Forst. f.) T. Anders. waffle plant  
 Syn. *Ruellia reptans* Forst. f.

Marshallese: *utilōmjān* ("flower of Lōmjān" – a woman's name)

Recent introduction (although Fosberg 1990 lists it as indigenous). Indonesia. Uncommon. Seen as an adventive in swampy area along the Laura back road in September and October 2000, growing in shade near the base of a coconut tree in Ajeltake, in Amata Kabua's garden and other private gardens (StJ 1951; F, S & O, 1979; FRF 1990; RRT 2000AB, 2001; NVV 2000) (DPMJ0327, DPMJ0524, DPMJ0525, DPMJ0649).

**Justicia brandegeana** Wasm. & L.B. Sm. shrimp plant  
 Syns. *Beloperone guttata* Brandegee; *Justicia fulvicoma* Schlect. & Chamisso

Recent introduction. Mexico. Rare. Planted ornamental in a private walled garden in Rita and alongside another potted plant in Laura. Previously reported on Kwajalein by Whistler & Steele (1999) (NVV 2000; RRT 2000A).\*

**Odontonema cuspidatum** (Nees) Kuntze fire spike, cardinal flower, odontonema, red justicia  
 Syns. *Odontonema tubiforme* (Bertol) Kuntze; *Justicia tubaeformis* Bertol;  
*Odontonema strictum* (Nees) Kuntze

Recent introduction. Central America. Rare. Potted plant in a few household gardens. Can become invasive (NVV 2000; RRT 2000A).\*\*

**Pachystachys lutea** Nees yellow shrimp plant, lollipop plant

Recent introduction. Brazil. Rare. On sale at Bilimon's store in Rita; imported from Hawai'i in late 2000, unknown if it survived (NVV 2000) (DPMJ0015b).\*\*

**Pseuderanthemum bicolor** (Schrank) Radlk. bicolor false eranthemem  
 Syn. *Eranthemum bicolor* Schrank

Recent introduction. Eastern Malaysia. Rare. Planted ornamental (RRT 1991, 1999, 2000A; NVV 2000)\*\*

**Pseuderanthemum carruthersii** (Seem.) Guill. false eranthemum  
 Syn.: (var. *carruthersii*): *Eranthemum carruthersii* Seem. (var. *atropurpureum*):  
*Pseuderanthemum atropurpureum* (Bull) Radlk.; *Eranthemum atropurpureum* Bull.

Marshallese: *tirooj* (a combination of "ti" in reference to *Cordyline fruticosa* and "rose" the general term for *Hibiscus* and other flowers)

Recent introduction. Melanesia? Var. *carruthersii*, occasional; var. *atropurpureum* (Bull) Fosb. (the purple or false face variety) more common. Planted ornamental shrub and hedge plant. Sabath (1977) lists *Pseuderanthemum* sp. as only observed in Uliga (F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0583).

**Pseuderanthemum reticulatum** (Bull) Radl                      yellow-vein pseuderanthemum  
Syn. *Pseuderanthemum carruthersii* (Seem.) Guill. var. *reticulatum* (Bull) Fosb.

Marshallese: **tirooj** (a combination of "ti" in reference to *Cordyline fruticosa* and "rose" the general term for *Hibiscus* and other flowers)

Recent introduction. Melanesia? Uncommon. Planted ornamental shrub and hedge plant. Previously reported on Kwajalein by F. S & O (1972) (RRT 1999, 2000AB, 2001; NVV 1999) (DPMJ0402, DPMJ0403, DPMJ0404, DPMJ0405).\*

**Ruellia brittoniana** Leonard    bellweed

Recent introduction. Mexico. Uncommon. Planted ornamental, seen as a potted plant at the College of the Marshall Islands and in several household gardens. Previously reported on Kwajalein by Whistler & Steele (1999) (NVV 1999; RRT 2000AB, 2001) (DPMK0058, DPMJ0158).\*

**Thunbergia erecta** (Bentham) T. Anders.                              king's mantle, bush thunbergia

Recent introduction. Tropical West Africa. Occasional. Planted ornamental erect shrub in houseyard gardens, usually with purple flowers, although a white cultivar (*T. erecta* var. *alba*) is also present in a private garden in Rita, reportedly imported from Fiji. Subsequently reported on Kwajalein by Whistler & Steele (1999) (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0057, DPMJ0518, DPMJ0632).\*\*

#### AMARANTHACEAE (Amaranth Family)

**Alternanthera brasiliana** (L.) Kuntze                                      purple alternanthera

Recent introduction. Tropical South America. Uncommon. Ornamental in household gardens. Has become weedy in some parts of the Pacific Islands, since its recent introduction in the 1980s (RRT 1999, 2000AB, 2001; NVV 2000) (DPMJ0230, DPMJ0664).\*\*

**Alternanthera sessilis** (L.) R. Br. ex R. & S.                              sessile joyweed, dwarf copperleaf

Recent introduction. Pantropical. Occasional. Weed of gardens and around houses in the DUD area. On the U. S. list of noxious weeds (RRT 1991, 1999, 2000A; NVV 2000) (DPMJ0170).\*\*

**Alternanthera sissoo**

Brazilian spinach

Recent introduction. Brazil? Occasional. Food plant found in some household gardens and in student garden at the College of the Marshall Islands. Introduced in the early 1990s from Hawai'i as part of the PRAP Atoll Agriculture Programme to improve nutrition through increasing the supply of fresh vegetables. Grows very well on atolls (RRT 2000AB, 2001; NVV 2000) (DPMJ0573).\*\*

**Alternanthera tenella** Colla joyweed, alternanthera, telanthera, calico plant

Syns. *Alternanthera bettzickiana* (Reg.) Voss; *Alternanthera ficoidea* L. var. *bettzickiana* (Reg.) Backer; *Alternanthera amoena* (Lem.) Regel; *Alternanthera versicolor* (Lemaire) Seubert; *Telanthera bettzickiana* Reg.

Recent introduction. Brazil. Uncommon. Planted ornamental and border plant in household gardens. Both variegated red and green and white and green varieties present. Previously reported on Kwajalein by Hebst (1988) (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0104, DPMJ0232, DPMJ0521).\*

**Amaranthus dubius** Mart. ex Thell.

spleen amaranth

Recent introduction. Tropical America. Occasional. Weed around houses in Rita and near vegetable garden in Laura (F, S & O 1979; FRF 1990; RRT 2000A, 2001A; NVV 2000) (DPMJ0171, DPMJ0594).

**Amaranthus tricolor** L.

Chinese spinach, amaranth spinach

Syns. *Amaranthus gangeticus* L.; *Amaranthus melancholis* L.

Recent introduction. Southeast Asia. Rare. Raised as a pot herb in garden behind Gibson's supermarket in Delap. Possibly introduced from Fiji where it is the most common spinach grown by Fiji Indians (RRT 2000B; NVV 2001) (DPMJ0233, DPMJ0234).\*\*

**Celosia argentea** L.

cock's comb

Recent introduction. Tropical Asia. Rare. Planted annual potted plant in nursery near Lojkar Resort (NVV 2000; RRT 2000AB) (DPMJ0475).\*\*

**Celosia cristata** L.

cock's comb, coral garden

Syn. *Celosia argentea* L. var. *cristata* (L.) Ktze.

Recent introduction. Tropical Asia. Uncommon. Planted annual potted plant and garden flower in some houseyard gardens and in nursery at Lojkar Resort. An attractive plant

with bright red flowers (NVV 2000; RRT 2000AB) (DPMJ0190, DPMJ0474).\*\*

**Gomphrena globosa** L. globe amaranth, pearly everlasting

Marshallese: *ablajtiñ* (a corruption of the English common name "everlasting")

Recent introduction. Tropical America. Common. Planted ornamental annual potted plant; the purple-flowered cultivar is most common (StJ 1951; F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0193).

**Iresine herbstii** Hook. f. iresine, bloodleaf

Recent introduction. Brazil. Rare. Ornamental potted plant. Subsequently reported on Kwajalein by Whistler & Steele (1999) (RRT 1991, 1999, 2000A; NVV 2000).\*

#### ANACARDIACEAE (Cashew or Rhus Family)\*

**Mangifera indica** L. mango

Marshallese: *mañko* (a corruption of the English common name)

Recent introduction. Indo-Burma. Uncommon. One tree growing at the edge of a taro pit in Laura, another in a container in Delap. Smaller trees often seen in containers in private gardens. Previously reported on Arno and Jaluit by F, S & O (1979) but did not survive on Jaluit (Fosberg & Sachet 1962), and on Kwajalein by Whistler & Steele (1999) where it also did not survive (RRT 1999, 2000AB, 2001; NVV 1999).\*

#### ANNONACEAE (Custard Apple Family)

**Annona muricata** L. soursop

Marshallese: *jojaab* (a corruption of the English common name)

Recent introduction. Tropical America. Uncommon. One tree in household garden in Laura, one at R & D, one in Delap and another in a Filipino garden just east of the airport. Reportedly extensively planted throughout the atoll in the past by the Agricultural Department, with many trees bearing abundant fruit. Can become invasive in other areas but does not seem to do well in the Marshall Islands' environment (StJ 1951; F, S & O 1979; RRT 1999, 2000AB, 2001; NVV 2000).



**Annona squamosa** L.

sweetsop, sugar apple

Recent introduction. Tropical America. Rare. Fruit tree introduced by Jimmy Joseph at the Government Agricultural Farm in Laura. Can become invasive in other areas but does not seem to do well in the Marshall Islands' environment (NVV 2000).\*\*

**Cananga odorata** (Lam.) Hook. f. and Thoms.

ylang-ylang, perfume tree

Syns. *Canangium odoratum* (Lam.) Baill. ex King; *Uvaria odorata* Lam.

Marshallese: *ilañlañ* (a corruption of the English common name)

Recent introduction. Indomalaysia. Rare. One large tree on the ocean road in Rita introduced from Chuuk; seems to have died during the flooding of January 2001; another flowering tree in Rairök destroyed by flooding in 1991. Reported as being present by the participants in the Namdrik Biodiversity Workshop and recorded as such by the RMI National Biodiversity Team (2000). Can become adventive but does not seem to do well in atoll environment (NVV 1999; RRT 2000A).\*

#### APIACEAE (Carrot Family or Parsley Family)

**Centella asiatica** (L.) Urb.

Asiatic pennywort

Syn. *Hydrocotyle asiatica* L.

Marshallese: *mariko*

Aboriginal introduction, perhaps as a weed. Pantropical. Common. Found along roadsides and in somewhat shady areas, often at the bases of coconut palms; abundant on Calalin Islet. Important medicinal plant in the Marshall Islands and elsewhere in the Pacific Islands (StJ 1951; F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0082, DPMJ0706).

#### APOCYNACEAE (Dogbane Family)

**Adenium obesum** (Forssk.) Roem. & Schultes

desert rose, mock azalea, impala lily

Syn. *Adenium coetatum* Stapf.

Recent introduction. East Africa. Occasional. Ornamental and potted plant in household gardens. Previously reported on Kwajalein by Whistler & Steele (1999). Parts of the plant are poisonous (RRT 1999, 2000AB, 2001; NVV 1999) (DPMJ0217, DPMJ218, DPMJ0654).\*

**Allamanda blanchetti** DC. purple allamanda  
Syn. *Allamanda violacea* Gardn. and Field

Recent introduction. Brazil. Occasional. Planted ornamental climbing shrub (RRT 1991, 1999, 2000AB, 2001; NVV 2000) (DPMJ0221).\*\*

**Allamanda cathartica** L. allamanda, cup of gold  
Syns. *Allamanda hendersonii* Bull; *Allamanda cathartica* L. var. *hendersonii* (Bull) Bailey and Raff.

Recent introduction. Brazil. Uncommon. Planted ornamental climbing shrub with bright yellow hibiscus-like flowers; one large plant in houseyard garden in Rairōk. Previously reported on Kwajalein by F. S & O (1979). Has become invasive in northern Australia (RRT 1991, 2000AB; NVV 2000) (DPMJ0222, DPMJ0223).\*

**Carissa macrocarpa** (Ecklon) DC. Natal plum, Christ's thorn  
Syn. *Carissa grandiflora* (E. Meyer) DC.

Recent introduction. South Africa. Uncommon. Ornamental potted plant in garden in Rita and Uliga and another near the airport. Previously reported on Kwajalein by Whistler & Steele (1999) (NVV 2000; RRT 2000AB, 2001) (DPMJ0153d).\*

**Cascabela thevetia** (L.) Lippold be-still tree, yellow oleander  
Syn. *Thevetia peruviana* (Pers.) K. Schum.

Recent introduction. Peru. Uncommon. Planted ornamental in residential areas; yellow and light orange cultivars seen in Amata Kabua's garden in 2001. Previously reported on Kwajalein by F. S & O (1979) but did not survive (Whistler & Steele 1999). All parts of the plant are poisonous, especially the sap and seeds. Can become invasive, preferring drier areas (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0624, DPMJ0626, DPMJ0718).\*

**Catharanthus roseus** (L.) G. Don Madagascar periwinkle  
Syns. *Vinca rosea* L.; *Lochnera rosea* (L.) Reich.

Marshallese: *raan-ñan-raan* ("day-to-day", in reference its continuous flowering)

Recent introduction. Madagascar. Common. Planted ornamental and potted plant. Often used as a border planting around private homes, schools and businesses. The lavender flowered variety is the most common but white flowered and deep pink varieties also present (FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0186, DPMJ0249, DPMJ0619, DPMJ0656, DPMJ0659).

**Mandevilla splendens** (Hook.) Woodson red riding hood  
 Syns: *Mandevilla sanderi* (Hemsl.) Woodson; *Dipladenia splendens* Hook.

Recent introduction. Tropical America. Rare. Four young potted plants imported for sale by Bilimon's Store in Uliga, January 2001 (NVV 2001).\*\*

**Neisosperma oppositifolium** (Lam.) Fosb. & Sachet  
 Syns. *Ochrosia oppositifolia* Lam.; *Neisosperma oppositifolia* (Lam.) Fosb. & Sachet

Marshallese: *kōjbar*

Indigenous. Philippines to southeast Polynesia and Micronesia. Occasional. Single trees, probably deliberately planted, on lagoon coast in DUD and in a household garden in Woja; a number of mature trees present on a few of the islets of Aeañen; common on the windward side and slightly inland on Calalin Islet. Considered to be one of the dominant climax species of the original inland mixed forest of the Marshall Islands (MDS 1977; FRF 1990; RRT 1991, 1999, 2000AB; NVV 1999) (DPMJ0366, DPMJ0367).

**Nerium oleander** L. oleander

Marshallese: *oliaanta* (a corruption of the English common name)

Recent introduction. Asia. Occasional. Planted ornamental shrub. Many variations in flower colors and shape found. All parts of the plant are highly poisonous (MDS 1977; RRT 1991, 1999, 2000AB, 2001; NVV 1999).

**Plumeria obtusa** L. white frangipani, Singapore plumeria

Marshallese: *meria* (a corruption of the English common name)

Recent introduction. Tropical America. Common. Planted ornamental tree. Flowers used for making garlands and leis, and for scenting coconut oil. Sabbath (1977) lists two species of *Plumeria* for Majuro, presumably both of the ones included here (MDS 1977; RRT 1991, 1999, 2000AB, 2001; NVV 1999).

**Plumeria rubra** L. frangipani, plumeria, temple tree  
 Syns. *Plumeria acuminata* Ait. f.; *Plumeria acutifolia* Poir.

Marshallese: *meria* (a corruption of the English common name)

Recent introduction. Tropical America. Common. Planted ornamental. Flowers used for making garlands and leis, and for scenting coconut oil (StJ 1951; MDS 1977; F, S & O

1979; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0717).

**Tabernaemontana divaricata** (L.) R. Br.

false gardenia, paper gardenia, crepe jasmine, scentless gardenia

Syns. *Tabernaemontana coronaria* (Jacq.) Willd.; *Ervatamia divaricata* (L.) Burkill;  
*Ervatamia coronaria* (Jacq.) Stapf

Recent introduction. India. Rare. Planted ornamental shrub. Previously reported on Kwajalein by F. S & O (1979) (RRT 1991, 2000A; NVV 2000) (DPMJ0145a).\*

**ARALIACEAE** (Panax Family)

**Dizygotheca elegantissima** Vig. and Guill.

false aralia, dizygotheca

Recent introduction. Pacific Islands. Rare. Ornamental potted plant in Amata Kabua's garden (NVV 2000, RRT 2000A) (DPMJ0033).\*\*

**Polyscias filicifolia** (C. Moore ex. Fourn.) L. H. Bailey

golden prince panax, fern-leaf aralia, angelica

Syn. *Polyscias cumingiana* (Presl.) Fern.-Vill.

Recent introduction. Polynesia and Tropical Asia. Occasional. Planted ornamental in household gardens in Rita, Jenrok, Ajeltake and the residence of the former president, Amata Kabua (RRT 1999, 2000AB, 2001; NVV 2000) (DPMJ0389, DPMJ0658).\*\*

**Polyscias fruticosa** (L.) Harms

parsley panax, ming aralia

Syn. *Nothopanax fruticosum* (L.) Miq.

Marshallese: *ut kakinono* (general term for flower or hedge; mixture of several different types of flowers; in reference to its frequent use in garlands; a term not necessarily in general use)

Recent introduction. India to western Polynesia. Occasional. Ornamental commonly planted as a hedge or living fence (F, S & O 1979; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0393).

**Polyscias guilfoylei** (Cogn. and March.) Bailey

Guilfoyle's panax

Syn. *Nothopanax guilfoylei* (Cogn. and March.) Merr.

Marshallese: *ut* (general term for flower or hedge)

Recent introduction. Melanesia to Southern Polynesia. Common. Ornamental shrub commonly planted as a hedge or living fence (StJ 1951; F, S & O 1979; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0390, DPMJ0520b).

**Polyscias scutellaria** (Burm. f.) Fosb. saucer panax  
Syns. *Polyscias balfouriana* (Sander ex André) L.H. Bailey; *Polyscias pinnata* J.R. & J.G.A. Forst.

Marshallese: *ut lot* ('coconut shell flower'), *ut kup* ('cup flower')

Recent introduction. Southeast Asia. Abundant. Ornamental planted in hedgerows or living fences (F, S & O 1979; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0391, DPMJ0556).

**Polyscias tricochleata** (Miq.) Fosb. panax  
Syns. *Nothopanax trichochleatus* Miq.; *Polyscias pinnata* Forst. var. *tricochleata* Stone

Recent introduction. Pacific Islands. Common. Planted erect ornamental shrub. Previously reported on Kwajalein, Arno and Jaluit by F. S & O (1979) (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0392).\*

**Schefflera actinophylla** (Endl.) Harms  
Queensland umbrella tree, octopus tree, umbrella plant  
Syn. *Brassaia actinophylla* Endl.

Recent introduction. Northern Australia. Occasional. Planted ornamental tree. Previously reported on Kwajalein and Jaluit by F. S & O (1979). A very invasive species which has invaded undisturbed forests in other areas of Micronesia and in French Polynesia (RRT 1991, 2000AB, 2001; NVV 1999).\*

**Schefflera arboricola** (Hayata) Merr. dwarf umbrella tree, dwarf schefflera

Recent introduction. Taiwan. Uncommon. Ornamental potted plant. Among unspecified species imported by Robert Reimers Enterprises in 1998 and/or 1999 as houseplants. A variegated variety, *S. arboricola* var. *variegata* seen in a houseyard garden in Rita. Previously reported on Kwajalein by Hebst (1988). Can become invasive (RRT 1991, 2000AB, 2001; NVV 2000) (DPMJ0053, DPMJ0420, DPMJ0564b).\*

**Schefflera taiwaniana** (Nakai) Kanehira

Taiwan dwarf umbrella tree

Recent introduction. Rare. Single plant in household garden in Rita and Woja. (RRT 2000A; NVV 2000) (DPMJ0023, DPMJ0420).\*\*

### ASCLEPIADACEAE (Milkweed Family)

**Asclepias curassavica** L.

milkweed, butterflyweed, red cotton bush

Marshallese: *kabbok* ("to cause or attract butterflies"), *ialo* ("yellow")

Recent introduction. Tropical America. Rare. Planted ornamental. Recorded by St. John in Laura. In recent times, only found in a single planter box in a household garden in Uliga, in front of the newly opened Middle School Building and in a private garden in Laura (StJ 1951; F, S & O 1979; FRF 1990; NVV 2000).

**Calotropis gigantea** (L.) R. Br.

crown flower, giant milkweed

Recent introduction. India to Indonesia. Uncommon. Planted ornamental shrub in cemetery in Delap and in one household garden. Has become invasive in Timor (MDS 1977; RRT 1991, 1999, 2000AB, 2001; NVV 1999).

**Hoya australis** R. Br.

wax flower, wax plant

Syn. *Hoya bicarinata* A. Gray

Recent introduction. Australia to Samoa. Uncommon.. Planted ornamental found as a climbing plant in a number of household gardens. Previously reported on Kwajalein by Herbst (1988) (RRT 1991, 1999, 2000AB, 2001; NVV 2000) (DPMJ0331, DPMJ0577).\*

**Hoya** sp.

wax plant

Recent introduction. Tropical Asia. Rare. Small waxy vine with almost circular, shallowly-toothed leaves found as a potted plant in Amata Kabua's garden in 2000 and 2001 (RRT 2000A, 2001; NVV 2000) (DPMJ061, DPMJ0651).\*\*

**Stephanotis floribunda** Brongniart

Madagascar jasmine

Recent introduction. Madagascar. Uncommon. Ornamental vine climbing on a fence in Rita and in one garden in Rairök. Previously reported on Kwajalein by Herbst (1988) (NVV 2000, RRT, 2000A) (DPMJ0199, DPMJ0430).\*

**ASPHODELACEAE (Asphodel Family) \*\***

**Gasteria** sp. gasteria, ox tongue

Recent introduction. South Africa. Rare. Ornamental potted plant, in household garden in Rita. Could be *Gasteria brevifolia* Haw., but *Gasteria* spp. easily hybridize, yielding many hybrid crosses. They also cross with *Aloe* spp. to produce what are known as “gaster-aloes” (NVV 2000).\*\*

**ASTERACEAE or COMPOSITAE (Aster, Sunflower or Composite Family)**

**Adenostemma lanceolatum** Miq. adenostema

Syn. *Adenostemma lavenia* sensu auct. Micr. non (L.) O. Ktze.

Marshallese: *bwilbwilikkaj* (a name probably originally applied to *Chamaesyce hypericifolia*, but by extension sometimes applied to this species as well as to *Synedrella nodiflora*)

Aboriginal introduction. Pantropical, possibly of Tropical American origin. Rare or extinct. Reported present on Majuro by F. S & O (1979) and Fosberg (1990) and as occasional on Ailinglaplap, Arno, Jaluit, Lae, as well as Majuro; not seen in recent times by current authors (F, S & O 1979, FRF 1990).

**Bidens pilosa** L. var. **radiata** Sch.-Bip.

cobble's peg, Spanish needles, beggars tick, burr-marigold

Syn. *Bidens alba* (L.) DC.

Recent introduction. Tropical America; now pantropical. Very abundant. Dominant weed of roadsides, waste places, around houses and other ruderal sites. Spreading rapidly throughout atoll, even on to isolated islands of Aeañen. Previously reported on Kwajalein by F. S & O (1979) and on Enewetak by Lamberson (1982) Named as one of the top-ten invasives for the Marshall Islands during a South Pacific Commission workshop (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0242, DPMJ0568).\*

**Chromolaena odorata** (L.) King and Robinson.

Siam weed, jack-in-the-bush

Recent introduction. Tropical America. Rare. Major invasive in other parts of Micronesia. Small patch located by the former garment factory in Laura during a weed and invasive plants workshop in the summer of 2001. Named as one of the top-ten invasives for the Marshall Islands during a South Pacific Commission workshop. Considered to be among "One Hundred of the World's Worst Invasive Alien Species" by the Global Invasive Species Database (NVV 2001).\*\*

***Conyza canadensis*** (L.) Cronq. var. *pusila* (Nutt.) Cronq. hairy horseweed

Recent introduction. Pantropical. Abundant. Weed in waste places and ruderal sites and along the borders of the airport (F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0269, DPMJ0505, DPMJ0586b).

***Eclipta prostrata*** (L.) L. false daisy  
Syn. *Eclipta alba* (L.) Hassk.

Recent introduction. Tropical Asia, now pantropical weed. Uncommon. Weed of moist waste places and edges of lawns near building or cement paths; in moist sites between Gibson's Supermarket and the Capitol Building (F, S & O 1979; FRF 1990; RRT 1999, 2000AB; NVV 2000) (DPMJ0149, DPMJ0180c, DPMJ0301).

***Emilia fosbergii*** Nicholson red sow thistle

Recent introduction. Pantropical. Rare, possibly extirpated. Weed in ruderal sites; not seen in after 1999 (F, S & O 1979; FRF 1990; RRT 1991, 1999).

***Erigeron belloides*** DC. fleabane daisy

Recent introduction. Greater Antilles. Uncommon. Ground cover and locally common and apparently spreading weed in lawns and planter boxes around Royal Garden Hotel and near Marshall Islands High School. Previously reported as naturalized on Kwajalein by Whistler & Steele (1999) (RRT 1999, 2000AB; NVV 2000) (DPMJ0101, DPMJ0180a).\*

***Gerbera jamesonii*** Bolus Transvaal daisy, gerbera, African daisy

Recent introduction. South Africa. Rare. Recently imported potted plant (NVV 1999).\*\*

***Gynura aurantiaca*** (Bl.) DC. purple passion flower, velvet plant

Recent introduction. Java. Occasional. Ornamental potted plant and decorative garden plant around houses (RRT 1991, 2000AB; NVV 1999).\*\*

***Gynura bicolor*** (Willd.) DC. gynura

Recent introduction. Moluccas. Rare. Food plant introduced by the PRAP Atoll Agricultural Programme as a nutritious cooked vegetable; also grown in student garden at the



College of the Marshall Islands (RRT 1999, 2000AB; NVV 2000).\*\*

**Helianthus annuus** L. common sunflower

Recent introduction. Western United States. Rare, probably extirpated, at least periodically. Planted ornamental observed in household garden adjacent to Lojkar Resort, also sometimes sprouts from imported bird seed mixes (NVV 1999; RRT 2000A).\*\*

**Lactuca sativa** L. lettuce

Recent introduction. Southern Europe and western temperate Asia. Uncommon. Seasonal food plant planted at Marshall Islands High School (1991) and at K & P Farm, Laura (1999) Previously reported from Kwajalein by F. S & O (1979) but did not survive (Whistler & Steele 1999) (RRT 1991, 1999, 2000B).\*

**Melanthera biflora** (L.) Wild. beach sunflower

Syn. *Wollastonia biflora* (L.) DC.; *Wedelia biflora* (L.) DC.

Marshallese: *marjej*, *markûbwebwe* ('toilet paper bush')

Indigenous. Tropical Asia to eastern Polynesia and Micronesia. Very abundant. Weedy species in coastal strand on ocean and lagoon shores, in neglected coconut plantations, around taro pits and in ruderal sites (StJ 1951; F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999).

**Pluchea indica** (L.) Less. Indian pluchea

Recent introduction. Southern Asia. Occasional. Weed of roadsides and waste places. A number of good-sized bushes around Majuro bridge and the nearby industrial area, spreading in recent years (F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0388, DPMJ0733).

**Pluchea carolinensis** (Jacq.) G. Don pluchea, shrubby fleabane, sourbush

Syns. *Pluchea odorata* (L.) Cass; *P. symphytifolia* (Mill.) Gillis

Recent introduction. Tropical America. Uncommon. A single plant seen just to the west of the Airport, near IBC. Has become invasive in Hawai'i and is spreading rapidly in parts of Tonga (MDS 1977; F, S & O 1979; FRF 1990; RRT 1999, 2000AB; NVV 2000).

**Senecio confusus** Britt. Mexican flamevine, orange-flowered senecio  
Syns. *Senecio chenopodioides* HBK; *Pseudogynonix chenopodioides* (HBK) Canberra

Recent introduction. Mexico. Uncommon. Planted ornamental in a few household gardens in the DUD (NVV 2000; RRT 2000AB (DPMJ0054, DPMJ0062)).\*\*

**Sphagneticola trilobata** (L.) Pruski wedelia, trailing daisy, Singapore daisy  
Syns. *Wedelia trilobata* (L.) Hitchc.; *Telechitonina trilobata* (L.) H. Rob. & Cautrec.; *Silphium trilobatum* L.

Marshallese: *ut mōkadm* ("flower"-tramp", "move from one place to another" in reference to how it easily spreads); *ut telia* (based on the generic name *Wedelia*, arbitrarily contrived during a weed workshop in connection with the South Pacific Commission)

Recent introduction. Tropical America. Abundant. Planted ornamental groundcover also planted in roadside planter boxes; naturalized in some sites and spreading rapidly, covering large areas near the Royal Garden Hotel and the new Capital Building. Was spreading rapidly and very invasive in late 2000 at Mile 0 on the north end of Rita, where it was replacing native coastal plants. By 2001 had also invaded taro pits and swamps along the Laura Back Road. Previously reported on Enewetak and Kwajalein by F. S & O (1979). Named as one of the top-ten invasives for the Marshall Islands during a South Pacific Commission workshop. Considered to be among the "One Hundred of the World's Worst Invasive Alien Species" by the Global Invasive Species Database (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0027, DPMJ0028, DPMJ0513a, DPMJ0532, DPMJ0540).\*

**Synedrella nodiflora** (L.) Gaertn. synedrella, nodeweed, Cinderella weed

Marshallese: *bwilbwilikkaj* (a name probably originally applied to *Chamaesyce hypericifolia*, but by extension also applied to this species and *Adenostemma lanceolatum*)

Recent introduction. Tropical America. Abundant. Weed of waste places and ruderal sites around houses in the DUD and in Laura (F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0673).

**Tagetes erecta** L. marigold

Recent introduction. Mexico. Uncommon. Planted ornamental annual that is planted from year to year (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0432).\*

**Tridax procumbens** L.

wild daisy, coat buttons

Recent introduction. Tropical America. Abundant. Weed of roadsides, wastepplaces, ruderal sites and occasionally near beaches. Previously reported on Kwajalein by F. S & O (1979), where it is naturalized (Whistler & Steele 1999) and as an established weed on Enewetak by Lamberson (1982). On the U. S. Federal list of noxious weeds (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0008, DPMJ0507, DPMJ0513c).\*

**Vernonia cinerea** (L.) Less.

ironweed

Marshallese: *jān-aelōñ-ñan-aelōñ* ("from-island-to-island"; name not generally known and may be in complete disuse)

Recent introduction. Tropical Asia. Common. Weed around houses, along roadsides, in waste places and ruderal sites (F, S & O 1979; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0685).

**Zinnia violacea** Cav.

zinnia

Syn. *Zinnia elegans* Jacq.

Recent introduction. Mexico. Occasional. Planted ornamental annual and potted plant in household gardens. Previously reported on Kwajalein and Jaluit by F. S & O (1979) (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0445).\*

**BALSAMINACEAE** (Balsam Family)\***Impatiens balsamina** L.

balsam, garden balsam

Recent introduction. India. Uncommon. Planted ornamental. Previously reported on Jaluit by F. S & O (1979) but did not survive (Fosberg & Sachet 1962) and subsequently on Kwajalein by Whistler & Steele (1999). Can become invasive (RRT 1991, 2000AB; NVV 2000) (DPMJ0332).\*

**Impatiens wallerana** Hook.

sultan's flower, sultans balsam, busy lizzie

Syn. *Impatiens sultani* Hook.

Recent introduction. Tropical Africa. Uncommon. Planted ornamental potted plant; found in a private walled garden and in Bilimon's store as an import from Hawai'i. Previously reported on Kwajalein by Whistler & Steele (1999). Can become invasive (RRT 1999, 2000A; NVV 2000).\*

**BASELLACEAE (Basella Family)\*\***

**Basella rubra** L. Indian spinach, Ceylon spinach, Malabar nightshade  
 Syn. *Basella alba* L.

Recent introduction. Tropical Asia. Rare. Succulent dark-green herbaceous, perennial twining vine grown as a food plant in Chinese gardens in Rita (RRT 2000B) (DPMJ0241).\*\*

**BEGONIACEAE (Begonia Family)\***

**Begonia coccinea** Hook. f. angel-wing begonia

Recent introduction. Brazil. Uncommon, possibly extirpated. Ornamental potted plant (RRT 1991, 1999).\*\*

**Begonia × hiemalis** Fotsch Reiger begonia

Recent introduction. Horticultural origin. Rare. Two potted plants brought in from Hawai'i by Bilimon's store, January 2001 (NVV 2001)\*\*

**Begonia rex** Putz hybrid begonia

Recent introduction. Tropical America. Occasional. Ornamental potted plant represented by a range of horticultural varieties, including a red leafed variety. Imported by Robert Reimers Enterprises in 1998 and/or 1999 as houseplants (RRT 1991, 2000AB; NVV 1999) (DPMJ0036).\*\*

**Begonia** sp. unidentified begonia

Recent introduction. Tropical America. Occasional. Potted plants and planted ornamentals. Similarly unidentified begonia(s) reported on Kwajalein by F. S & O (1979) (RRT 1991, 1999, 2000A; NVV 1999).\*

**BIGNONIACEAE** (Bignonia Family)

**Tabebuia heterophylla** (DC). Britt. pink tecoma, pink tabebuia  
Syns. *Tabebuia pallida* Miers; *Tecoma pentaphylla* (L.) Hemsley

Recent introduction. Tropical America. Occasional. Planted ornamental around a few houses and in the yard of the Capitol Building. Previously reported on Kwajalein by F. S & O (1979), having become naturalized there, according to Whistler & Steele (1999). Can become invasive (RRT 1999, 2000AB, 2001; NVV 1999).\*

**Tecoma stans** ( L.) Juss. ex HBK. tecoma, yellow elder, ginger Thomas  
Syn. *Stenolobium stans* ( L.) D. Don

Recent introduction. Tropical America. Common. Planted ornamental shrub with bright yellow flowers, beginning to become naturalized in some areas. Has become a serious invasive in French Polynesia (MDS 1977; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0542).

**BOMBACACEAE** (Bombax Family)\*

**Durio zibethinus** Murray durian

Recent introduction. Southeast Asia. Rare. A few small seedlings in the experimental garden of Jesse Napolitano at the College of the Marshall Islands; grown from seeds imported from the Philippines (NVV 2000).\*\*

**BORAGINACEAE** (Heliotrope Family or Borage Family)

**Cordia subcordata** Lam. sea trumpet, island walnut

Marshallese: *kōno* ("pink"?)

Indigenous. Indian Ocean to Hawai'i. Common. In coastal strand forest throughout atoll; occasionally planted in household gardens and as ornamental shade trees, as in front of Alele Museum and at the courthouse. Small nutlike kernels are often eaten as a snack (StJ 1951; MDS 1977; F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0684, DPMJ0705).

**Heliotropium procumbens** Mill. var. **depressum** (Cham.) Fosb. and Sachet  
prostrate heliotrope

Recent introduction. Tropical America. Common. Weedy species found along roadsides and in wastelands and ruderal sites (F, S & O 1979; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0326, DPMJ0585).

**Tournefortia argentea** L. f, heliotrope tree, beach heliotrope, tree heliotrope  
Syns. *Messerschmidia argentea* (L. f.) M. Johnst.; *Argusia argentea* (L. f.) Heine

Marshallese: *kiden*

Indigenous. Indian Ocean to Southeastern Polynesia. Common. In strand forest on ocean and lagoon shores, in taro pit areas, coconut plantations and in household gardens and as a street tree. One of the most important sources of traditional medicine (StJ 1951; MDS 1977; F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0584, DPMJ0715, DPMJ0716).

#### BRASSICACEAE or CRUCIFERAE (Cabbage Family or Mustard Family)

**Brassica chinensis** L. var. **chinensis** Chinese cabbage, Chinese white cabbage, bok choy  
Syn. *Brassica chinensis* Juslenius; *Brassica pekinensis* (Lour.) Rupr.

Recent introduction. Asia. Occasional. Found in extensive plantings at Laura Experimental Farm and in other vegetable farms at Laura. Previously reported on Kwajalein by F. S & O (1979) but did not survive (Whistler & Steele 1999) (RRT 1999, 2000AB; NVV 1999).\*

**Brassica chinensis** L. var. **parachinensis** (Bailey) Tsen & Lee  
flowering white cabbage, choy sum  
Syn. *Brassica parachinensis* Bailey

Recent introduction. Asia. Uncommon. Found in extensive plantings at Laura Experimental Farm at Laura (RRT 1999, 2000A).\*\*

**Brassica juncea** (L.) Czern and Cossin mustard cabbage, Chinese or brown mustard  
Syn. *Sinapis juncea* L.

Recent introduction. Asia. Occasional. Planted in household vegetable gardens and at the Laura Experimental Farm (RRT 1999, 2000A; NVV 2000).\*\*

**Brassica oleracea** L. var. **capitata** L. English cabbage, head cabbage

Marshallese: *kapej* (a corruption of the English common name)

Recent introduction. Europe. Occasional. Food plant at Laura Experimental Farm and at Marshall Islands High School. Previously recorded on Kwajalein by F. S & O (1972) and on Enewetak by St. John (1960) (RRT 1991, 1999, 2000A; NVV 2000).\*

**Brassica oleracea** L. var. **gongylodes** L. kohlrabi  
Syn. *Brassica oleracea* L. *caulorapa* Pasq.

Recent introduction. Asia. Rare. Single plant seen in houseyard garden at Lojkar Resort (RRT 2000B) (DPMJ0243).\*\*

**Brassica x hybridus** Saladeer hybrid Chinese cabbage

Recent introduction. Asia. Occasional. Food plant at Laura Experimental Farm and at Marshall Islands High School (RRT 1991, 2000AB).\*\*

**Rhaphanus sativus** L. var. **sativus** radish, red radish

Recent introduction. East Asia. Rare; probably periodically extirpated. Food plant reported present on Majuro by F. S & O (1979); not seen growing by current authors, but probably periodically replanted with imported seed available at the major retailers (F, S & O 1979).

**Rhaphanus sativus** L. var. **longipinnatus** Bailey  
daikon, white or Chinese/Japanese radish, loh bok

Recent introduction. East Asia. Rare. Food plant at Laura Experimental Farm in Laura and at Japanese Takeout Restaurant in Botkan (RRT 1991, 2000A, 2001).\*

#### CACATACEAE (Cactus Family)\*

**Cereus** sp. cereus cactus

Recent introduction. Tropical America. Rare. Small potted ornamental cactus. Identification tentative. Found as an indoor houseplant in Uliga. Similarly unidentified species of this genus previously reported on Jaluit by F. S & O (1979) but did not survive (Fosberg & Sachet 1962) and on Kwajalein by Whistler & Steele (1999) (NVV 2000) (DPMJ0191a).\*

**Epiphyllum oxypetalum** (DC.) Haw. gooseneck cactus  
 Syn. *Phyllocactus grandis* Lem.

Recent introduction. Mexico. Rare. Single young potted plant seen in houseyard garden in Rairōk. Previously reported on Jaluit by F. S & O (1979) but did not survive (Fosberg & Sachet 1962) and on Kwajalein by Whistler & Steele (1999) (RRT 2000B) (DPMJ0307).\*

**Mammillaria** sp. mammillaria cactus

Recent introduction. Mexico? Ornamental potted plant. Could possibly be *Mammillaria guelzowiana*. Found as an indoor house plant in Uliga (NVV 2000) (DPMJ0191b).\*\*

**Opuntia** sp. prickly-pear cactus, beaver-tail cactus

Recent introduction. Tropical and subtropical America. Uncommon. Planted ornamental and potted plant. Similarly unidentified species of this genus previously reported on Jaluit by F. S & O (1979) but did not survive (Fosberg & Sachet 1962), and on Kwajalein by Whistler & Steele (1999) Can become invasive; has been declared noxious in Fiji and Samoa (RRT 1999, 2000AB, 2001; NVV 1999) (DPMJ0370, DPMJ0520c).\*

A number of other unidentified ornamental Cactaceae.\*

#### CAESALPINIACEAE (Senna Family)

**Bauhinia monandra** Kurz pink bauhinia, orchid tree, pink butterfly tree

Recent introduction. Burma. Uncommon. Planted ornamental tree, reportedly introduced from Saipan, found on along ocean road in Delap; also seen at former President Amata Kabua's residence and a few other locations. *Bauhinia* sp. reported from Kwajalein by Whistler & Steele (1999) and could be the same species. Can become invasive (RRT 1991, 1999, 2000A, 2001; NVV 1999) (DPMJ0667).\*\*

**Caesalpinia bonduc** Roxb. beach nicker, gray nickers, wait-a-bit

Marshallese: *kālōklōk* ("thorns", "brambles", a name also applied to *Ximania americana*, which is native to other Marshall Islands' atolls but not present on Majuro, *Cenchrus echinatus*, and *Xanthosoma sagittifolium*)

Indigenous. Pantropical. Uncommon. Large thorny shrub with yellow flowers in localized roadside coastal thicket in recently cleared area north of Laura seen in 1991, in a



lagoon side coastal thicket just west of the airstrip in 1999, and a very dense thicket of many plants on the oceanside of the road west of the airstrip in 2000. Previously reported on Ujae and Jaluit by F. S & O (1979) and on Kwajalein by Whistler & Steele (1999) (RRT 1991, 1999, 2000AB; NVV 1999) (DPMJ0244, DPMJ0245).\*

**Caesalpinia pulcherrima** (L.) Swartz

pride of Barbados, dwarf poinciana, Barbados flower fence

Syn. *Poinciana pulcherrima* L.

Marshallese: *jeimōtia* (reportedly named after the grandfather of the first President of the Marshall Islands, Amata Kabua)

Recent introduction. Tropical America. Occasional. Planted ornamental shrub in Rita, in Amata Kabua's garden and a number of other household gardens. Yellow, orange-red and pink cultivars are present. Previously reported from Kwajalein by Hebst (1988) (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0633, DPMJ0634).\*

**Cassia x nealii** Irwin & Barneby

rainbow shower tree

Recent introduction. Horticultural origin. Occasional. A sterile hybrid of *C. fistula* L. and *C. javanica* L. Two mature trees planted in grounds of Capital Building and another in a private household garden in Woja (RRT 1999, 2000AB, 2001; NVV 1999) (DPMJ0156).\*\*

**Delonix regia** (Bojer) Raf.

poinciana, flame tree, flamboyant

Recent introduction. Madagascar. Common. Planted ornamental tree in household gardens and around institutional buildings and commercial areas. Sabath (1977) reports that he only observed this tree in Uliga, but it is now found throughout the atoll; one tree planted near an abandoned structure on Calalin Islet. Can become invasive, forming dense monospecific stands (MDS 1977; RRT 1991, 1999, 2000AB, 2001; NVV 1999).

**Intsia bijuga** (Colebr.) O. Ktze.

ipil tree, island teak

Marshallese: *kubōk*

Indigenous. Madagascar to Polynesia. Occasional. Few isolated trees in Laura and Woja. A number of small stands of saplings and mature trees found slightly inland from the north end of Eneko Islet and on Bok-botun in Aeañen (F, S & O 1979; FRF 1990; RRT 1999; NVV 2000).

**Senna occidentalis** (L.) Link coffee senna, arsenic bean  
 Syn. *Cassia occidentalis* L.

Recent introduction. Tropical America. Uncommon. Weed of waste places and roadsides; found near a waste area near a small dump and in a vacant lot in Delap (RRT 1991, 1999, 2000AB; NVV 2000).\*

**Senna surattensis** (Burm. f.) Irwin & Barneby  
 glaucous cassia, sunshine tree, Singapore shower tree  
 Syn. *Cassia surattensis* Burm. f.

Recent introduction. Tropical Asia. Uncommon. Small tree found in Maria Fowler's household garden, in the center of the Capital complex, and in front of the Middle School Building. (RRT 2000AB, 2001; NVV 2000) (DPMJ0093, DPMJ0094).\*\*

#### CANNABACEAE (Cannabis Family)\*\*

**Cannabis sativa** L. Indian hemp, marijuana

Recent introduction. Tropical and subtropical Asia. Reported by Majuro police to be present and in cultivation in the early 1990s. Persons responsible for its cultivation were asked to leave the country or face criminal charges (NVV 1999).\*\*

#### CAPPARIDCEAE (Caper Family)\*

**Cleome speciosa** Volk. spider flower  
 Syn. *Gynandropsis speciosa* (Raf.) DC.

Recent introduction. Tropical America from Mexico to Peru. Occasional. Annual of household gardens in Rita, surviving without cultivation. Seeds imported for sale at Robert Reimer's Enterprise (RRT 1999; NVV 1999).\*\*

**Crateva religiosa** Forster f. temple plant, garlic pear  
 Syn. *Crateva speciosa* Volk.

Recent introduction. Tropical Africa and Asia. Uncommon. Single small tree on the grounds of Capital Building and a few other trees planted in household gardens in Woja and Laura (RRT 1999, 2000AB; NVV 2000) (DPMJ0024, DPMJ0164, DPMJ0272).\*\*

## CAPRIFOLIACEAE (Honeysuckle Family)

**Lonicera japonica** Thunb.

Japanese honeysuckle

Recent introduction. Eastern Asia and Japan. Rare. Planted ornamental in household garden at Good Earth Apartments. Can become invasive and has become a pest in parts in many states in the U.S, including Hawai'i, and on Christmas Island, Indian Ocean; sale is banned in New Zealand and in parts of the U.S. (NVV 2000; RRT 2000AB, 2001) (DPMJ0151b, DPMJ0356).\*\*

**Sambucus mexicana** Presl. Ex. DC.

Mexican elderberry

Recent introduction. Mexico. Rare, possibly extirpated. Recorded on both Majuro and Jaluit by F, S & O (1979), but reported as extirpated on Jaluit by Fosberg & Sacht (1962) and not reported by current authors on either atoll (F, S & O 1979).

## CARICACEAE (Papaya Family)

**Carica papaya** L.

papaya, papaw

Marshallese: *keinabbu*

Recent introduction. Tropical America. Common. Planted fruit tree in household gardens, agricultural areas and around taro pits; planted in excavated pit plantations at Laura; occasional as an escape or volunteer in garden areas and on Calalin Islet (StJ 1951; MDS 1977; FRF 1990; F, S & O 1979; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0680).

## CASUARINACEAE (Casuarina Family)

**Casuarina equisetifolia** L.

casuarina, ironwood, Australian pine, she-oak

Syn. *Casuarina litorea* L.

Marshallese: *pietri* ("pinetree"); *nidöl* ("needle" on some atolls); *bülukam* ("blue gum" on some atolls); *mejinoki*

Recent introduction. Indian Ocean to Polynesia and Micronesia. Common. Occasional in household gardens, as a roadside tree and as planted windbreaks; naturalized in some areas. Some very large mature trees on the protected lagoon coast and slightly inland on Calalin Islet. Although often planted as a windbreak and to protect inland areas from salt spray, it can cause environmental damage by out competing *Scaevola taccada*. Listed as *Casuarina* sp. by Sabath (MDS 1977; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0703).

**CLUSIACEAE or GUTTIFERAE (Mangosteen Family)**

**Calophyllum inophyllum** L.                      beauty leaf, Alexandrian laurel, beach mahogany

Marshallese: *lukwej; jijo; ijo*

Aboriginally introduced. Some Marshallese believe that it might have been introduced during the German period. Tropical Africa to eastern. Polynesia and Micronesia. Common to locally abundant. A large stand of trees found along the lagoon coast between Ajeltake and Laura. Large hardwood shade tree in home gardens, along the lagoon shore of the DUD, growing on the protected lagoon areas of Aeañen (StJ 1951; MDS 1977; F, S & O 1979; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0699, DPMJ0723).

**Clusia rosea** Jacquin                                      autograph tree, Scotch attorney, pitch apple  
Syn. *Clusia major* (Jacquin) L.

Recent introduction. West Indies. Rare. Three young trees planted on the lawn behind the Capital Building. Can become invasive and has become a problem in other tropical Pacific areas, including Hawai'i (RRT 2001; NVV 2001).\*\*

**COMBRETACEAE (Terminalia Family)**

**Lumnitzera littorea** (Jack) Voigt                                      red-flowered black mangrove  
Syn. *Lumnitzera coccinea* Wight & Arn.

Marshallese: *kimeme; kimā* (archaic name)

Indigenous, or possibly indigenous to at least on some atolls of the Marshall Islands, but of recent introduction to Majuro. Tropical Asia through Malaysia into Micronesia and Polynesia to the Marshall Islands, Kiribati and Tonga and Tuvalu in Polynesia. Several small, but flowering trees seen along small inner lagoon near a stand of *Bruguiera gymnorrhiza* at former President Amata Kabua's residence. These were introduced from Namdrik and the flowers used for making traditional garlands, hence the reason for keeping the trees small (RRT 1999, 2000AB, 2001; NVV 1999) (DPMJ0712, DPMJ0713).\*

**Quisqualis indica** L.    Rangoon creeper

Recent introduction. Southeast Asia and Malaysia. Rare. A couple small plants found in household garden in Rairök. Previously reported on Jaluit by F. S & O (1979) but did not survive (Fosberg & Sachet 1962). Can become invasive (RRT 2000B) (DPMJ0410, DPMJ0411).\*

**Terminalia catappa** L. tropical almond, beach almond, Indian almond, Malabar almond

Marshallese: *kotōl*

Aboriginal introduction. Tropical Asia and Australia to West Polynesia and Micronesia. Occasional. Medium to large semi-deciduous tree planted in household gardens. A number of large trees are found near the R & D Building and Pacific International Inc. Almond-like kernels used for food. Previously recorded on Kwajalein, Arno, Likiep and Jaluit by F. S & O (1999) (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0433, DPMJ0566, DPMJ0692, DPMJ0693).\*

**Terminalia samoensis** Rech. beach almond, Samoan almond

Syns. *Terminalia littoralis* sensu auct. non Seem.; *Terminalia saffordii* Merr.

Marshallese: *kukōñ* (Ratak); *ekkōñ* (Railik)

Indigenous. Indonesia to Micronesia and Eastern Polynesia. Occasional. Found in a number of household gardens and along the streets throughout the DUD and in the coastal forest or slightly inland from the coastal forest of Aeañen (StJ 1951; F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0434).

### CONVOLVULACEAE (Morning-Glory Family)

**Evolvulus glomeratus** Nees & Martius

blue daze

Recent introduction. Tropical America. Uncommon. Blue-flowered potted plant in a few household gardens in Rita. Previously reported on Kwajalein by Whistler & Steele (1999) (RRT 2000A; NVV 2000) (DPMJ0018).\*

**Ipomoea aquatica** Forsk.

water spinach, swamp cabbage, ung ts'oi, kang kong

Syn. *Ipomoea repens* Poir.

Recent introduction. Pantropical. Uncommon. Food plant at Laura Experimental Farm, in a Filipino garden east of the airport and at Marshall Islands High School in 1991. Can become invasive and is on the U. S. list of noxious weeds (RRT 1991, 1999, 2000AB; NVV 2000).\*\*

***Ipomoea batatas* (L.) Lam.**

sweet potato, kumara

Marshallese: *piteto* ("potato")

Recent introduction. Tropical America. Occasional. Food plant at Laura Experimental Farm and in a couple of home gardens in Laura; periodically grown at schools, such as Rita Elementary School and Marshall Islands High School, and in private home gardens in the DUD. Also grown in a Filipino garden and at the Laura Experimental Farm. St. John describes it as being rare in cultivation, having been introduced by the Germans. Kratz (1986) in his translation of Chamisso's account of the first contact of Europeans with the people of the Marshall Islands, reports that attempts were made to introduce sweet potato *I. tuberosa*, and so probably this species and not the wood rose (*Merremia tuberosa* = *I. tubersoa*) (StJ 1951; F, S & O 1979; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0173).

***Ipomoea fistulosa* Mart. ex Choisy**

bush morning-glory

Recent introduction. Brazil. Rare, possibly extirpated. Planted ornamental shrub (RRT 1991, 1999).\*\*

***Ipomoea littoralis* Bl.**

beach morning-glory

Syn. *Ipomoea gracilis* R. Br.

Marshallese: *lojilñin kijdik* ("rat's ear"; a name also used for certain fungi that are flat and spreading)

Indigenous or possibly weed of aboriginal introduction . Malaysia and the Pacific. Occasional. Creeping or twining vine in inner coastal strand vegetation, inland thickets, ruderal sites and along roadsides, mainly in Laura (StJ 1951; F, S & O 1979; FRF 1990; RRT 1991, 2000AB, 2001; NVV 2000) (2K00408; DPMJ0333, DPMJ0549).

***Ipomoea pes-caprae* (L.) Sweet ssp. *brasiliense* (L.) v. Ooststr.**

goat-foot beach morning-glory

Syn. *Ipomoea brasiliense* (L.) Sweet

Marshallese: *topo*; *marlap* ("big-bush", general term)

Indigenous. Pantropical. Abundant. Vigorous creeping vine in coastal vegetation on ocean and lagoon shores and along roadsides, in ruderal sites and waste places (StJ 1951; F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0691, DPMJ0741).

**Ipomoea quamoclit** L.

cypress vine

Recent introduction. Tropical America. Rare. Sprawling vine growing on the window screen of a private residence in Uliga, at the Chinese Embassy and a single young plant in private garden in Rita (NVV 2000).\*\*

**Ipomoea violacea** L.

wild moon flower; white morning-glory

Syns. *Ipomoea macrantha* R. & S., *Ipomoea tuba* (Schlecht.) G. DonMarshallese: *marpele*

Indigenous. Pantropical. Common. Somewhat woody creeping or climbing vine festooning inner coastal strand forest, in neglected coconut plantations and in ruderal sites; abundant in parts of Laura and Aeañen, but occasional in the inhabited areas of DUD (StJ 1951; F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0552).

**Merremia peltata** (L.) Merr.

merremia

Recent introduction. Indian Ocean islands to the Society Islands in Polynesia and to Pohnpei and Kosrae in Micronesia. Occasional. Not recorded present in the Marshall Islands by F, S & O (1979) and not seen in 1991. Seen present in three locations in Laura in 1999 and 2000, climbing in secondary forest inland from the pastor's house in Laura, in secondary forest near the Laura Experimental Farm, and climbing a fence of an abandoned farm. An invasive vine that seems to have spread since 1999; could potentially cause ecological problems and thus should probably be eliminated before it spreads out of control. Identified on Majuro for the National Biodiversity Report by the RMI Biodiversity Team (2000), although location not specified. Named as one of the top-ten invasives for the Marshall Islands during a South Pacific Commission workshop (RRT 1999, 2000AB, 2001; NVV 1999) (DPMJ0363, DPMJ0522).

**CORNACEAE** (Dogwood Family)\*\***Griselinia littoralis** (Raoul.) Raoul

green jewel, broadleaf

Recent introduction. New Zealand. Rare. Small shrub with leathery variegated leaves growing in a container in household garden in Rairök (RRT 2000B) (DPMJ0323).\*\*

**CRASSULACEAE (Orpine Family or Stonecrop Family)\***

**Kalanchoë blossfeldtiana** v. Poelln. flaming Katy

Recent introduction. Madagascar. Occasional. Succulent potted plant found in a number of household gardens; imported by Robert Reimers Enterprises in 1998 and/or 1999 as houseplants; several color varieties are present (RRT 1991, 2000AB, 2001; NVV 2000) (DPMJ0041).\*\*

**Kalanchoë daigremontianum** Hamet & Per Mexican hat plant  
Syn. *Bryophyllum daigremontianum* (Hamet & Perrier) Berger

Recent introduction. Madagascar. Uncommon. Ornamental potted plant (NVV 2000; RRT 2000AB, 2001) (DPMJ0103, DPMJ0119, DPMJ0111, DPMJ0145c, DPMJ0147d, DPMJ0344, DPMJ0483, DPMJ0600).\*\*

**Kalanchoë fedtschenkoi** Hamet & Perrier lavender scallops

Recent introduction. Madagascar. Rare. Ornamental potted plant (NVV 2000; RRT 2000A).\*\*

**Kalanchoë gastonis-bonnieri** Hamet & Perrier donkey ears

Recent introduction. Madagascar. Rare. Ornamental potted plant (NVV 2000; RRT 2000AB, 2001) (DPMJ0014).\*\*

**Kalanchoë pinnata** (Lam.) Pers. air plant, miracle plant, life plant  
Syns. *Bryophyllum calycium* Salisb.; *Bryophyllum pinnatum* (Lam.) Kurz

Marshallese: *kibilia*

Recent introduction. Indian Ocean islands. Occasional. Planted ornamental and potted plant. Previously reported on Kwajalein, Arno, Likiep and Jaluit by F. S & O (1979). Can become invasive (RRT 1991, 1999, 2000AB, 2001; NVV 1999).\*

**Kalanchoë tomentosa** Bak. panda plant, pussy ears; cocoon plant; velvet leaf kalanchoë

Recent introduction. Madagascar. Rare. Single plant seen in private garden in Rita (RRT 2000A; NVV 2000).\*\*



**Kalanchoë tubiflora** (Harvey) Hamet

chandelier plant, mother-of-thousands, friendly neighbor

Syns. *Bryophyllum tubiflorum* Harvey; *Kalanchoë verticillata* Scott-Elliot

Recent introduction. Madagascar. Rare. Ornamental potted plant, found in nurse's room and the library at Marshall Islands High School and in an outdoor garden area in Rairök. Previously reported on Kwajalein by Whistler & Steele (1999) (NVV 2000).\*

**CUCURBITACEAE** (Melon Family or Gourd Family)**Benicasa hispida** (Thunb.) Cogn.

wax gourd, ash pumpkin, winter melon, tung kwa

Syns. *Benicasa cerifera* (Fisch.) Savi; *Cucurbita hispida* Thunb.; *Cucurbita cerifera* Fisch.

Recent introduction. Southeast Asia. Rare. Food plant at Laura Experimental Farm and poultry farm (RRT 2000A).\*\*

**Citrullus lanatus** (Thunb.) Matsum. and Tan. var. **cafferorum** (Alef.) Fosb.

watermelon

Syn. *Citrullus vulgaris* Schrad. ex Eckl. and Zeyh.

Recent introduction. South Africa. Occasional. Food plant at Laura Experimental Farm and at Marshallese commercial garden in Laura, and periodically in private household gardens. Kratz (1986) in his translation of Chamisso's account of the first contact of Europeans with the people of the Marshall Islands, reports that extensive attempts were made to introduce this plant (RRT 1991, 1999, 2000AB; NVV 1999).\*

**Coccinia grandis** (L.) Voigt

ivy gourd, scarlet gourd

Syn. *Coccinia cordifolia* (L.) Cogn.

Marshallese: *kiuri awia* ("wild cucumber" a name arbitrarily contrived during a weed workshop in connection with the South Pacific Commission)

Recent introduction. Tropical Africa to Australia. Rare. Single vine in household food garden near the dock in Uliga, but did not survive; subsequently seen climbing on the back fence of the Agricultural farm in Laura, where it was introduced experimentally; and later, growing on the fence of the R & D Building nursery and in a private garden in Botkan. A destructive invasive that has caused great ecological problems on Saipan. Named as one of the top-ten invasives for the Marshall Islands during a South Pacific Commission workshop (NVV 2000; RRT 2000B, 2001) (DPMJ0261, DPMJ0572).\*\*

**Cucumis melo** L. var **cantalupensis** Naud cantaloupe, rock melon

Recent introduction. Southwest Asia to Africa and the Mediterranean. Occasional. Food plant at Laura Experimental Farm and in Marshallese commercial garden in Laura and periodically in private household gardens; one plant also seen growing on Calalin Islet. Kratz (1986) in his translation of Chamisso's account of the first contact of Europeans with the people of the Marshall Islands, reports that attempts were made to introduce a melon, presumably this species (RRT 1991, 2000A; NVV 1999).\*

**Cucumis melo** L. var **conomon** Makino oriental pickling melon, ts'it kwa (Chinese)

Recent introduction. China. Rare. Food plant at Laura Experimental Farm and poultry farm. Previously reported on Jaluit by F. S & O (1979) but did not survive (Fosberg & Sachet 1962) (RRT 2000A).\*

**Cucumis sativus** L. cucumber

Marshallese: *kiuri* (from Japanese)

Recent introduction. North India. Occasional. Annual food plant in Marshallese commercial garden and at Chinese experimental garden at Laura; a large private planting seen along Laura backroad in November 2001. Previously reported from Kwajalein and Jaluit by F. S & O (1979) (RRT 1991, 1999, 2000B, 2001; NVV 1999) (DPMJ0275, DPMJ0276, DPMJ0277, DPMJ0545, DPMJ0546).\*

**Cucurbita maxima** Duch. squash

Recent introduction. South America. Rare. Food plant at Laura Experimental Farm. Previously reported on Enewetak, Ujelang, Rongelap and Aur by F. S & O (1979) (RRT 1991).\*

**Cucurbita moschata** (Duch. Ex Lam.) Duch. ex Poir. winter squash

Recent introduction. Central America and Northern South America. Rare. Food plant at the Laura Experimental Farm in 2000. Previously reported on Jaluit by F. S & O (1979) (RRT 2000A).\*

**Cucurbita pepo L.** pumpkin

Marshallese: *baañke* (a corruption of the English common name)

Recent introduction. Tropical America. Occasional. Food plant in household gardens and at Laura Experimental Farm, often adventive in waste places and gardens (StJ 1951; F, S & O 1979; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0278).

**Lagenaria siceraria L.** bottle gourd

Recent introduction. Tropical Africa. Rare. Planted on Laura Experimental Farm. Previously reported on Aur by F. S & O (1979) (RRT 1991, 1999, 2000A).\*

**Luffa acutangula (L.) Roem.** angled loofah, ridge gourd, silk gourd, sze kwa

Recent introduction. Tropical Asia. Uncommon. Food plant at Laura Experimental Farm, at poultry farm and in household gardens in the DUD (RRT 1999, 2000A; NVV 1999).\*\*

**Luffa cylindrica (L.) Roem.** smooth loofah, wild vegetable sponge, sponge gourd

Recent introduction. Tropical Asia. Occasional. Food plant at Laura Experimental Farm and also present in a household garden; seen as an adventive in trees at Laura in 1999; found in 2000 at Natural Resources building and one very large plant growing on the fence at Elm Garage in 2000 and 2001 (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0357, DPMJ0358, DPMJ0561).\*\*

**Momordica charantia L.** bitter gourd, balsam pear

Recent introduction. Paleotropics. Occasional. Climbing food plant household gardens, particularly in Filipino gardens. Both the small wild and the larger garden varieties found. Has become naturalized in some areas, and is invasive in other parts of the Pacific, such as Guam (RRT 1991, 1999, 2000AB; NVV 1999).\*\*

#### CUSCUTACEAE (Cuscuta Family)\*\*

**Cuscuta campestris Yuncker** golden dodder, field dodder

Recent introduction. Originally America, now widely dispersed in Old World. Rare. Found in a large patch growing in seaside roadside vegetation about 200 m north of the

Marshall Islands Club, the end of the road in Rita, at the CMI Marshall Islands Science Station in Arrokk and in a roadside thicket opposite the Industrial Area just east of Majuro Bridge. Parasitic vine, with very small scale-like leaves and thin yellowish stems; slightly thinner and more delicate than the very similar *Cassytha filiformis*. Can become invasive and is on the U.S. Federal noxious weed list (RRT 2000B, 2001; NVV 2000) (DPMJ0280, DPMJ0281, DPMJ0282, DPMJ0283, DPMJ0700).\*\*

### ERICACEAE (Heath Family)\*\*

**Rhododendron** sp.

azalea

Recent introduction. Rare, possibly extirpated. Planted ornamental; not seen after 1991 (RRT 1991).\*\*

### EUPHORBIACEAE (Spurge Family)

**Acalypha godseffiana** Masters

copper leaf, three-seeded mercury

Recent introduction. Origin uncertain, but possibly Malaysia and New Guinea. Rare. Planted ornamental and hedge plant. Previously reported on Likiep by F. S & O (1979) (NVV 2000; RRT 2000AB).\*

**Acalypha hispida** Burm. f.

cat's tail, chenille plant, red-hot poker, red-tassel plant

Recent introduction. Indonesia. Uncommon. Planted ornamental in household gardens; one seen along the main road in Rita. Previously reported on Likiep and Kwajalein by F. S & O (1979) but did not survive on Kwajalein according to Whistler & Steele (1999) (RRT 1991, 1999, 2000AB; NVV 1999) (DPMJ0216).\*

**Acalypha wilkesiana** Muell.-Arg.

Joseph's coat, copper leaf, beefsteak plant

Syns. *Acalypha amentacea* Roxb. ssp. *wilkesiana* (Muell.-Arg.) Fosb.; *Acalypha grandis* Benth.

Recent introduction. Melanesia. Occasional. Planted ornamental and hedge plant. Observed in cultivation in Laura by St. John. Imported by Robert Reimers Enterprises in 1998 and/or 1999 as houseplants (StJ 1951; MDS 1977; F, S & O 1979; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0623).

**Acalypha wilkesiana** Roxb. f. **circinata** Muell.-Arg. picottee acalypha  
 Syns. *Acalypha amentacea* Roxb. f. *circinata* (Muell.-Arg.) Fosb.; *Acalypha hamiltoniana*

Recent introduction. Pacific Islands. Uncommon. Planted ornamental, often as hedges (RRT 1991, 1999, 2000AB, 2001; NVV 1999).\*\*

**Breynia disticha** Forst. f. leaf-flower of the Pacific Islands, snow bush  
 Syn. *Breynia nivosa* (W.G. Sm.) Small

Recent introduction. Pacific Islands. Occasional. Planted ornamental in household gardens and potted plant when young; sometimes found in hedges. Previously reported on Kwajalein by F. S & O (1979) (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0508).\*

**Chamaesyce atoto** (Forst. f) Croizat beach spurge  
 Syns. *Euphorbia atoto* Forst. f.; *Euphorbia chamissonis* (Kl. and Gke.) Boiss.

Marshallese: **pādāl** ("push up soil", "of roots"; a name at times also applied to *Boerhavia tetrandra*); **maldok**

Indigenous. Tropical Pacific. Uncommon. Spreading small shrub on ocean shore north of Laura; also seen on seaside in Lomajurok west of Peace Park near a *Colubrina asiatica* plant in an area where sea-borne seeds may have been deposited during high waves. Initially observed around Laura by St. John (StJ 1951; F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000AB; NVV 1999) (DPMJ0251).

**Chamaesyce hirta** (L.) Millsp. garden spurge, asthma plant, hairy spurge, old blood  
 Syn. *Euphorbia hirta* L.

Recent introduction. Pantropical. Abundant. Weed in waste places and open areas; also seen near an abandoned structure on Calalin Islet. Previously reported on Enewetak, Utdrik, Kwajalein, Jemo, Likiep and Jaluit by F. S & O (1979) (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0252, DPMJ0587).\*

**Chamaesyce hypericifolia** (L.) Millsp. graceful spurge  
 Syn. *Chamaesyce glomerifera* Millsp.; *Euphorbia glomerifera* (Millsp.) Wheeler

Marshallese: **bwilbwilikkaj** (a name sometimes also applied to *Adenostemma lanceolatum* and *Synedrella nodiflora*)

Recent introduction. Tropical America. Common. Garden and ruderal weed (F, S & O 1979; RRT 1991, 1999, 2000AB, 2001; NVV 1999).

**Chamaesyce prostrata** (Ait.) Small prostrate spurge, red caustic creeper  
Syn. *Euphorbia prostrata* Ait.

Marshallese: *dāpijbok* ("to hold onto the sand"; a name also used for *C. thymifolia*)

Recent introduction. Tropical America. Common. Weed along paths, roadsides, parking lots and in open waste places (F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000B, 2001; NVV 1999) (DPMJ0253, DPMJ0254, DPMJ0504a).

**Chamaesyce thymifolia** (L.) Millesp. thyme-leafed spurge  
Syn. *Euphorbia thymifolia* L.

Marshallese: *dāpijbok* ("to hold onto the sand"; a name also used for *C. prostrata*); *natto* (a name also applied to *Boerhavia tetrandra*)

Recent introduction. India. Common to Abundant. Weed along roadsides, in ruderal sites and around buildings in Rita and in many other areas. Previously reported on Ujelang, Kwajalein and Jaluit by F. S & O 1979) (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0092, DPMJ0119, DPMJ0255, DPMJ0504b).\*

**Cnidoscolus chayamansa** McVaugh chaya, tree spinach

Marshallese: *pele* (misapplication of "bele" or "pele" the Fijian and Polynesian names for *Abelmoschus manihot*, a spinach plant similar in appearance to *Cnidoscolus*)

Recent introduction. Mexico. Occasional. Food plant in household gardens and food gardens. Introduced as part of the European Community Pacific Regional Agricultural Project (PRAP) program for atolls (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0674).\*\*

**Codiaeum variegatum** (L.) Bl. croton  
Syn. *Croton variegatum* L.

Marshallese: *ut* (general term for flower or hedge)

Recent introduction. Malaysia to Melanesia. Common. Planted ornamental, singly and as hedges in household gardens and around businesses. *C. variegatum* var. *aucubafolium* (DBMJ0007) found as a potted plant at Robert Reimers Hotel and a number of other locations; a wide range of extremely variable cultivars exists (StJ 1951; MDS 1977; F, S & O 1979; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DBMJ0007, DPMJ0582).

**Euphorbia antiquorum** L.

Malayan cactus spurge, Malayan spurge tree

Recent introduction. India and Southeast Asia. Uncommon. Ornamental potted plant at the College of the Marshall Islands Library and a few household gardens (RRT 1991, 2000AB; NVV 2000) (DPMJ0197).\*\*

**Euphorbia cotinifolia** L.

hierba mala

Recent introduction. West Indies. Uncommon. Ornamental potted plant and garden border (RRT 1991, 1999, 2000A; NVV 2000).\*\*

**Euphorbia cyathophora** Murr.

Mexican fire plant, hypocrite plant, wild poinsettia, dwarf poinsettia  
Syn: *Euphorbia heterophylla* L.

Marshallese: *nukne* (from a corruption of "New Guinea")

Recent introduction. Tropical America. Occasional. Roadside and waste place weed, including fields in Laura (StJ 1951; F, S & O 1979; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0309, DPMJ0310, DPMJ0679).

**Euphorbia lactea** Haw.

mottled candlestick, mottled spurge, milkstripe euphorbia

Recent introduction. India. Rare. A few plants seen in containers in a private household garden in Woja. Previously reported on Kwajalein by Whistler & Steele (1999) (RRT 2000B, 2001; NVV 2000) (DPMJ0311).\*

**Euphorbia milii** Ch. des Moul.

crown-of-thorns

Recent introduction. Madagascar. Occasional. Planted ornamental and potted plant. Previously reported on Jaluit by F. S & O (1979) and on Kwajalein by Hebst (1988) (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0312).\*

**Euphorbia pulcherrima** Willd. ex Klotszch

poinsettia

Syn. *Poinsettia pulcherrima* (Willd.) R. Grah.

Recent introduction. Mexico. Rare; possibly extirpated. Planted ornamental seasonally imported. Previously reported on Jaluit and Kwajalein by F. S & O (1979) but did not survive on either (Fosberg & Sachet 1962, Whistler & Steele 1999) (RRT 1999; NVV 1999).\*

**Euphorbia tirucalli** L.

pencil plant, naked lady, milk hedge

Recent introduction. East Africa and India. Occasional. Planted ornamental around houses. Previously reported on Kwajalein by Hebst (1988). The milky sap is highly poisonous and can cause blindness (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0313).\*

**Glochidion ramiflorum** Forst.

glochidion

Recent introduction, possibly from Chuuk or Pohnpei where it is listed as indigenous. New Guinea to Vanuatu and the Caroline Islands in Micronesia. Rare. Single tree about 7m high growing inland in an undeveloped lot across the street from Robert Reimer's residence in Rita. Damaged in October 2001 by a fire that burned a nearby abandoned structure. *Glochidion* is a highly variable genus that is characterized by adaptive varieties on high islands. As a result the nomenclature is confused and, although the species found in Majuro is most likely *G. ramiflorum*, it could be one of three other species also reported present in Chuuk and/or Pohnpei, which include *G. kanehirae* Hosok; and *G. ponapense* Hosok.; and *G. puberulum* Hosok (NVV 2000; RRT 2000B, 2001) (DPMJ0320, DPMJ0321, DPMJ0322).\*\*

**Jatropha integerrima** Jacq.

rose-colored jatropha

Syn. *Jatropha hastata* Jacq.

Recent introduction. Cuba. Occasional. Planted ornamental shrub or small tree in household gardens and around some businesses. Previously reported on Kwajalein by Hebst (1988) (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0516, DPMJ0627).\*

**Jatropha multifida** L.

coral plant

Syn. *Jatropha hastata* Jacq.

Recent introduction. Texas to Brazil. Rare. A single potted plant seen in Amata Kabua's garden. Previously reported on Kwajalein by Whistler & Steele (1999) (RRT 2000A; NVV 2000) (DPMJ0032).\*

**Manihot esculenta** Crantz

cassava, manioc, tapioca

Syn. *Manihot utilissima* Pohl

Marshallese: *maniok* (a corruption of one of its English common names)

Recent introduction. Tropical America. Occasional. Food plant at Laura Experimental Farm, Marshall Islands High School and in some household gardens, especially in gardens of contract workers from Fiji. Previously reported on Jaluit by F. S & O, and although those plants did not survive, according to Fosberg & Sachet (1962), observed by NVV during more recent visits; also reported on Kwajalein by Whistler & Steele (1999) (RRT 1991, 1999, 2000AB, 2001; NVV 1999).\*



**Pedilanthus tithymaloides** (L.) Poit. slipper flower, shoe spurge, red-bird cactus

Recent introduction. Caribbean. Occasional. Planted ornamental and potted plant. Previously reported on Kwajalein by F. S & O (1979) (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0044).\*

**Phyllanthus amarus** Sch. & Th. sleeping plant, six-o'clock  
Syn. *Phyllanthus niruri* L.

Marshallese: *jiljino awa* ("six-o'clock")

Recent introduction. Africa. Abundant. Weed of gardens, roadsides, farms, waste places and other ruderal sites; one of the most common weeds in Majuro; also common in disturbed sites on Calalin Islet. Leaves used in local medicine (F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0570, DPMJ0590).

**Ricinus communis** L. castor bean

Recent introduction. Africa. Rare. A number of plants around the buildings of the CMI Marshall Islands Science Station in Arrak, apparently left by the Koreans who initially built the complex. Source of commercial castor oil, but unprocessed seeds highly poisonous. Previously reported on Enewetak, Ailinglaplap and Jaluit by F. S & O (1979) but did not survive at least on Jaluit (Fosberg & Sachet 1962). Can become invasive and has become a weed of ruderal sites in Hawai'i, Kiribati and other Pacific Islands and a noxious weed in South Africa (NVV 2000; RTT 2000A).\*

#### FABACEAE (Pea Family)

**Canavalia cathartica** Thou. purple beach pea  
Syn. *Canavalia microcarpa* (DC.) Piper

Marshallese: *jüpkako* (from English "chief cargo" due to the wallet-like shape of the seedpod); *marlap* ("big-bush", general term)

Indigenous. Pantropical. Occasional. Vine climbing on trees in neglected coconut plantation in Laura area and in lagoon vegetation of some of the less inhabited islets of Aeañen. Although not previously recorded on Majuro, this species was previously recorded for Enewetak, Rongelap, Ujelang, Ujae, Wotho, Lae, Kwajalein, Jemo, Likiep, Ailinglaplap, Arno and Jaluit by F. S & O (1972) (FRF 1990; RRT 1991, 1999, 2000A; NVV 1999) (DPMJ0131S)\*

**Canavalia rosea** (Sw.) DC. sea bean  
 Syns. *Canavalia maritima* (Aubl.) Urb.; *Canavalia obtusifolia* (Lam.) DC.

Marshallese: *marlap* ("big bush", general term)

Indigenous. Pantropical. Occasional. Found in inner beach forest and abandoned coconut plantations in Laura; found along and just inland from coast on Calalin Islet; rare on the main islets of Majuro (F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000AB, 2001).

**Canavalia sericea** A. Gray silky jackbean

Marshallese: *marlap* ("big bush", general term)

Indigenous. Fiji to eastern Polynesia and Micronesia. Rare, possibly extirpated. Reported on Majuro by St. John as a new record for Micronesia, with subsequent collections on Ailinglaplap and Wotje Atolls. At that time, the nearest known established location was Fiji. F. S & O (1979) also list it for Ulithi and Puluwat in the Caroline Islands. This species has not been observed by either of the current (StJ 1951; F, S & O 1979; FRF 1990).

**Clitoria ternatea** L. butterfly pea

Recent introduction. Tropical America or Pantropical. Uncommon. Growing in a hedge in a household garden in Laura, on fence near a home in Rita, at a Filipino residence next to the Natural Resources Building, and at the residence of former President Amata Kabua. Can become invasive (RRT 1999, 2000AB, 2001; NVV 1999) (DPMJ0665).\*\*

**Crotalaria juncea** L. Sunn hemp

Recent introduction. India. Rare; probably now extirpated. Single mature plant growing in a fenced area near the Land Grant Building at CMI. Planted experimentally, but never produced seed, and was extirpated with the construction of new buildings in late 1999 (RRT 1999; NVV 1999).\*\*

**Crotalaria pallida** L. rattlepod  
 Syn. *Crotalaria mucronata* Desv.

Recent introduction. Old World Tropics. Occasional. Weed of wastelands and ruderal sites; weed in schoolyard in Rita; locally common in waste places near the industrial area to the east of Majuro Bridge. Previously reported on Jaluit by F. S & O (1979) and although reported by have not survived by Fosberg & Sachet (1962), it either did actually survive or was introduced as it was observed there during recent visits by NVV (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0581).\*

**Desmodium incanum** DC.

Spanish clover

Syn. *Desmodium canum* (Gmel.) Sch. & Th.

Marshallese: *lattel pako* ("sharksucker", a name arbitrarily contrived during a weed workshop in connection with the South Pacific Commission)

Recent introduction. West Indies. Abundant. Weed in lawns, gardens, roadside and ruderal sites throughout atoll. Invasive weed that spreads by seeds that stick to clothing and other objects. Previously reported on Kwajalein by F. S & O (1979) and naturalized there by Whistler & Steele (1999). Has spread to other atolls visited by NVV. Named as one of the top-ten invasives for the Marshall Islands during a South Pacific Commission workshop (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0559).\*

**Erythrina variegata** L. var. *variegata*

variegated coral tree, variegated dadap

Recent introduction. Pacific Islands. Rare; possibly now extirpated. Planted ornamental (RRT 1991, 1999).\*\*

**Erythrina variegata** var. *orientalis* (L.) Merr.

coral tree, dadap

Recent introduction. Indo-Pacific. Occasional. Planted tree, along lagoon coast in the vicinity of the dump and in household gardens. One large tree at former President Imata Kabua's residence is known to flower; others reportedly do not produce flowers. Sabbath reports that this tree was part of the secondary forest along the old World War II runways and military areas on eastern Rairōk, which is still where the majority are to be found. Reported present on Kwajalein, Likiep and Jaluit by F, S & O (1979) (MDS 1977; RRT 1991, 1999, 2000AB, 2001; NVV 2000).

**Glycine max** (L.) Merr.

soybean, soya bean

Syns. *Glycine soja* (L.) Sieb. & Zucc.; *Glycine hispida* (Moench.) Maxim.

Recent introduction. Southern Asia. Rare. Planted at Laura Experimental Farm in 1991 and at the Taiwanese experimental farm in 2000. Green pods and seeds cooked as a vegetable (RRT 1991; 2000A; NVV 2001).\*\*

**Inocarpus fagifer** (Parkinson) Fosb.

Polynesian chestnut, Tahitian chestnut

Syns. *Inocarpus edulis* J.R. and G. Forst.; *Inocarpus fagiferus* Fosberg ex Yuncker ParkinsonMarshallese: *kûrak*

Recent introduction. Malaysia into Micronesia and as far west as French Polynesia.

Uncommon. One mature tree and a number of young trees seen in household gardens in Laura. Indigenous on high islands such as Pohnpei, but current trees seem to be recent introductions due to the age of the trees in Laura. During the Majuro Biodiversity Workshop (1998), said not to be a Marshall Islands tree but still a useful species worthy of mention (RRT 1999, 2000A, 2001; NVV 1999) (DPMJ0515).

**Lablab purpureus** (L.) Sweet

hyacinth bean, lablab bean, bonvist bean, Egyptian kidney bean  
Syns. *Lablab niger* Medik.; *Dolichos lablab* L.; *Dolichos purpureus* L.

Recent introduction. Paleotropical. Occasional. Planted on a fence near the west end of the airport and in Filipino gardens in the DUD and Rairök, and in a Chinese garden in Rita. Previously reported on Kwajalein by F. S & O (1979) but did not survive (Whistler & Steele 1999). Can become invasive (RRT 1999, 2000AB, 2001; NVV 1999) (DPMJ0346, DPMJ0347, DPMJ0563).\*

**Pachyrhizus tuberosus** (Lam.) Spreng.

West Indies yam bean, jicama

Recent introduction. Mexico and northern Central America. Rare. Planted in garden of the former President Amata Kabua, climbing on a fence and growing well, but somewhat chlorotic. Planted years previous and the edible tuberous root is periodically harvested for food (RRT 2001; NVV 2001) (DPMJ0636).\*\*

**Phaseolus vulgaris** L.

string bean, French bean, haricot bean

Marshallese: *piin* (a corruption of the English common name)

Recent introduction. Tropical America. Rare, probably at least periodically extirpated. Food plant at Laura Experimental Farm and planted annually in vegetable gardens. Previously reported on Kwajalein but did not survive (Whistler & Steele 1999) (RRT 1991; NVV 1999).\*

**Sophora tomentosa** L.

silverbush, yellow necklace pod

Marshallese: *kille*

Indigenous. Indian Ocean to eastern Polynesia and Micronesia. Uncommon. Rare on beaches and occasionally planted in household gardens. One small tree on beach of Calalin Islet, a couple of other plants in household gardens in Delap and Rita, one planted at a private residence in Ajeltake, and a large mature shrub and other small bushes along beach and just inland from the lagoonside beach in Woja (StJ 1951; F, S & O 1979; FRF 1990; NVV 1999; RRT 2000AB).

**Vigna marina** (J. Burm.) Merr.

yellow beach pea

Marshallese: *marlap* ("big bush", general term); *markinenjojo* ("bush for therapeutic bathing" in reference to its medicinal use)

Indigenous. Pantropical. Abundant. Found on beaches, in coastal forest on both ocean and lagoon coasts and in waste places and ruderal sites along roadways (StJ 1951; F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0440, DPMJ0513b, DPMJ0690).

**Vigna unguiculata** ssp. *sesquipedalis* (L.) Verdc. long bean, snake bean, asparagus bean  
Syn. *Vigna sesquipedalis* (L.) Fruw.

Recent introduction. Tropical Africa. Occasional. Food plant at Laura Experimental Farm and in other vegetable gardens, sometimes in containers (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0441).\*\*

#### GESNERIACEAE (Gloxinia Family)\*

**Chrysothemis pulchella** (Donn ex Simms) Decaisne

chrysothemis, dozakie

Recent introduction. Central America and Caribbean. Occasional. Planted ornamental and potted plant (RRT 1999, 2000AB; NVV 2000) (DPMJ0055, DPMJ0147a, DPMJ0256).\*\*

**Columnnea microphylla** Klotzsch and Hanst.

goldfish plant, goldfish vine

Recent introduction. Central America. Uncommon. Potted plant at the University of the South Pacific Center in Delap and in a couple of other household gardens, one in Rairök (RT2000AB, 2001; NVV 2000) (DPMJ0102, DPMJ0105, DPMJ0106, DPMJ0266, DPMJ0267, DPMJ0268, DPMJ0602).\*\*

**Episcia cupreata** (Hook.) Hanst.

flame violet, episcia

Recent introduction. Nicaragua. Occasional. Potted ornamental plant. Among unspecified species imported by Robert Reimers Enterprises in 1998 and 1999 as houseplants. Previously reported on Kwajalein by Whistler & Steele (1999) (RRT 1991, 2000AB, 2001; NVV 2000) (DPMJ0012, DPMJ0013, DPMJ0608). \*

**Saintpaulia ionantha** Wendl.

African violet

Recent introduction. Tropical Africa. Rare. Ornamental potted plant. Unspecified species imported by Robert Reimers Enterprises in 1998 and 1999 as houseplants (RRT 1991; NVV 2000).\*\*

### GOODENIACEAE (Naupaka Family)

**Scaevola taccada** (Gaertn.) Roxb.

half-flower, saltbush

Syns. *Scaevola sericea* Vahl.; *Scaevola frutescens* (Mill.) Krause, Pflanzenr.

Marshallese: *kōnnat* (white-flowered form), *kōlaimē* (form with purple-centered petals)

Indigenous. Tropical Asia to Hawai'i. Very abundant. A dominant component of the strand vegetation on both ocean and lagoon coasts; forms thickets that protect coastlines from wave erosion. Also found in waste places and planted along roads and causeways and in household gardens. Although almost all plants are the white-flowered form, there also exists a rare form with white flowers streaked with purple. This form is reported by Neal (1965) to exist in Hawai'i. There are two trees with purple-streaked flowers along the lagoon shore of the airport, one near the back entrance to the Capitol Building and one along the crossroad in Rita. Many Marshallese recognize the purple-centered petaled variety by the separate name of *kōlaimē* (StJ 1951; MDS 1977; F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0415, DPMJ0416, DPMJ0417, DPMJ0418, DPMJ0419; DPMJ0697, DPMJ0701).

### HERNANDIACEAE (Hernandia Family)

**Hernandia nymphaeifolia** (Presl.) Kubr.

jack-in-the box tree, lantern tree

Syns. *Hernandia sonora* L.; *Hernandia peltata* Meisn; *Hernandia ovigera* sensu auct. Non L.

Marshallese: *piñpiñ*

Indigenous. Tropical Asia to Pacific Islands. Occasional to locally common. Tree along lagoon coasts and occasionally in household gardens; relatively common and a large grove on the lagoon side in Ajeltake; mature trees also present on the lagoon coast on Calalin Islet. Dark brown seeds used extensively as beads in necklaces and local handicrafts (StJ 1951; MDS 1977; F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999).

**LAMIACEAE** or **LABIATAE** (Mint Family)

**Mentha spicata** L. mint, spearmint  
 Syn. *Mentha viridis* L.

Recent introduction. Europe. Rare. Growing unattended under air conditioning in Rairök (NVV 2000) (DPMJ0187)\*\*.

**Ocimum basilicum** L. basil, sweet basil

Recent introduction. Africa to Pacific Islands (Paleotropics). Uncommon. Planted in household gardens and pots. Leaves used in garlands and to scent coconut oil by Marshallese and Fijian residents. A variety known as lemon basil planted at one residence. Previously reported on Jaluit by F. S & O (1979) but did survive (Fosberg & Sachet 1962), and on Kwajalein by Whistler & Steele (1999) (RRT 1999, 2000AB, 2001; NVV 2000).\*

**Ocimum sanctum** L. sacred basil, holy basil

Marshallese: *katriiñ* (from English, or possibly German, for "Catherine")

Aboriginal introduction. Pantropical. Uncommon. Planted ornamental, in the planter box of May C's Store in Delap and in private gardens. *Ocimum* sp. with the same Marshallese name was observed in cultivation in Laura by St. John. Fosberg & Sachet have this as aboriginally introduced plant on Jaluit. Flowers used in garlands and to scent coconut oil (StJ 1951; F, S & O 1979; RRT 1991; NVV 1999).

**Plectranthus amboinicus** (Lour.) Spreng.

Indian borage, Spanish thyme, Mexican oregano

Syns. *Coleus amboinicus* Lour.; *Coleus aromaticus* Benth.

Recent introduction. Africa and India to Indonesia. Rare. Very aromatic, densely pubescent, somewhat succulent, low sprawling perennial herb. Initially found in a planter box at Amata Kabua International Airport but was subsequently extirpated there, then found in household gardens, including one at Lojkar Resort. Can become invasive (NVV 1999; RRT 2000AB) (DPMJ0162, DPMJ0387).\*\*

**Salvia splendens** Sello ex Schultes scarlet sage, bonfire salvia

Recent introduction. Brazil. Rare. Ornamental potted plant seen in nursery at Lojkar Resort and at one private residence (RRT 2000AB; NVV 2000).\*\*

**Solenostemon scutellarioides** (L.) Codd                      painted nettle, coleus, variegated coleus  
 Syns. *Plectranthus scutellarioides* (L.) R. Br.; *Coleus scutellarioides* (L.) Benth.;  
*Coleus blumei* Benth.

Recent introduction. Malaysia. Rare. Ornamental potted plant in household garden in Rairōk. Previously reported on Kwajalein and Jaluit by F. S & O (1979) but did not survive on either (Fosberg & Sachet 1962; Whistler & Steele 1999). Can become invasive (RRT 1991, 2000B) (DPMJ0422).\*

### LAURACEAE (Laurel Family)

**Cassytha filiformis** L.    laurel dodder; beach dodder; devil's twine

Marshallese: *kaōnōn*; *kanōōn*

Indigenous. Pantropical. Abundant. Parasite on other plants, generally on natural vegetation; found in inner coastal strand vegetation, in ruderal sites and in downtown areas, including the Outrigger Marshall Islands Resort (StJ 1951; F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0248).

**Persea americana** Miller    avocado

Recent introduction. Central America. Rare. Young tree about two feet tall, but not in good health, seen in a container in the garden at Rairōk Head Start which subsequently died. Although numerous attempts have been made to establish trees from seeds from imported fruit, no established trees have been reported. Previously reported on Kwajalein by F. S & O (1979) but did not survive. Although it can become invasive, it does not seem to do well in the Marshall Islands' environment (Whistler & Steele 1999) (NVV 2000).\*

### LECYTHIDACEAE (Brazilnut Family)

**Barringtonia asiatica** (L.) Kurz.    fish-poison tree, barringtonia

Marshallese: *wōp*

Indigenous. Indo-Pacific. Occasional. Planted in household gardens; one immature seedling also seen, possibly planted from a drift seed; one large tree along the main road just west of the Outrigger Marshall Islands Resort, and one large tree seen in the oceanside coastal forest on Calalin Islet. Previously reported by F, S & O (1979) on six other atolls and by Vander Velde on other atolls, in one case as a monospecific forest on Namu. Participants of the Majuro Biodiversity Workshop identified it as one of the more useful plants of the Marshall Islands (2000) (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0554).



**LEEACEAE (Lee Family)\*\*****Leea guineensis** G. Don

West Indian holly

Syn. *Leea manillensis* Walpers

Recent introduction. Tropical Africa. Rare. Planted ornamental shrub with purplish tripinnate leaves in houseyard garden in Rairōk (RRT 2000B) (DPMJ0352).\*\*

**LOGANIACEAE (Strychnine Family)\*****Polypremum procumbens** L.

juniperleaf, rust weed, wireweed

Recent introduction. America. Occasional. Prostrate spreading herb with needlelike leaves and small white flowers found in back lawn at the Royal Garden Hotel, the lawn by NTA and in ruderal areas of the DUD. Previously reported from Enewetak by Lamberson (1982), and as naturalized on Kwajalein by Whistler & Steele (1999) (RRT 1999, 2000AB, 2001; NVV 2000) (DPMJ0501).\*

**LYTHRACEAE (Loosestrife Family)****Cuphea hyssopifolia** HBK.

Mexican heather, Hawaiian heather, false heather

Recent introduction. Mexico and Guatemala. Uncommon. Planted ornamental. Found in growing in driveway of residence in Rita, in a few other private gardens including the former President Amata Kabua's residence, and for a time, in the planter box at the main entrance of the airport. Previously reported on Kwajalein by Whistler & Steele (1999) (RRT 1999, 2000AB, 2001; NVV 2000) (DPMJ0009, DPMJ0144a, DPMJ0153d, DPMJ0279, DPMJ0668).\*

**Lagerstroemia indica** L.

crepe myrtle, Chinese crepe myrtle

Recent introduction. South China. Uncommon. Planted ornamental in containers in household gardens; several mature shrubs in Rita; a large shrub at Robert Reimer's Enterprises in Uliga. Previously reported on Kwajalein by F. S & O (1979) but did not survive (Whistler & Steele 1999) (NVV 2000; RRT 2000A, 2001).\*

**Pemphis acidula** J.R. & G. Forst

pemphis, ironwood

Marshallese: *kōñe, kiej; kiejor*

Indigenous. Tropical East Africa to southeastern Polynesia and Micronesia. Common. Small groves on rocky outcrops, with a major concentrations bordering a small *Bruguiera gymnorhiza* population on the lagoon near Amata Kabua's former residence, on the ocean shore of Jable, and along the raised coastal front on the lagoon side in Ajeltake (StJ 1951; F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0714).

**MALPIGHIACEAE** (Malpighia Family)**Malpighia coccigera** L.

Singapore holly, Florida holly, miniature holly

Recent introduction. West Indies. Rare. Planted ornamental in a container garden in Rita (NVV 2001; RRT 2000B) (DPMJ0029a).\*\*

**Tristellateia australasiae** Rich.

bagnit, shower of gold

Recent introduction. Malaysia and Australia. Occasional. Planted ornamental climber seen in a number of locations in Rita and elsewhere.(RRT 1991, 1999, 2000AB, 2001; NVV 1999).\*\*

**MALVACEAE** (Mallow Family)**Abelmoschus esculentus** (L.) Moench.

okra

Syn. *Hibiscus esculentus* L.

Recent introduction. Northeast Africa. Rare. Several plants found in home garden in residence in Rita; also planted by Indian families from Fiji; planted at Taiwanese experimental garden and one plant seen in household garden at Lojkar Resort. Previously reported on Jaluit by F. S & O (1979) and although reported still present by Fosberg & Sachet (1962), not seen during 1999 visit (NVV 2000; RRT 2000A).\*

**Abelmoschus manihot** (L.) Moench.

bush hibiscus spinach, edible hibiscus, pele

Syn. *Hibiscus manihot* L.Marshallese: *pele* (from “bele” or “pele” the Fijian and Polynesian names)

Recent introduction. Tropical Asia. Occasional. Food plant introduced by UNICEF Family Food Production Programme; found in home gardens of residences, particularly Fijian

residences, throughout the atoll. Green leaves cooked as a very nutritious spinach-like vegetable. (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0214, DPMJ0471).\*\*

**Abelmoschus rugosus** Wight & Arnott red musk mallow  
Syn. *Hibiscus rugosus* (Wight & Arnott) Roxb.

Recent introduction. India. Rare. Seen in Maria Fowler's household garden in Delap, reportedly purchased from a seed catalog and also in Amata Kabua's garden (RRT 2000AB, 2001; NVV 2000) (DPMJ0085, DPMJ0086, DPMJ0614).\*\*

**Gossypium barbadense** L. sea-island cotton, cotton

Marshallese: *kotin* (a corruption of the English common name)

Recent introduction. Tropical America. Presumably extirpated. Observed being cultivated in Laura by St. John (1951) but not observed by current authors. Listed by F. S & O (1979); also on Utdrik, Kwajalein, Jaluit and Arno, but did not survive at least on Kwajalein and Jaluit (Whistler & Steele 1999, Fosberg & Sachet 1962) (StJ 1951; F, S & O 1979; FRF 1990).

**Hibiscus cannabinus** L. kenaf, Deccan hemp, wild stockrose

Recent introduction. Old World tropics and subtropics. Uncommon. Several plants in planter box at the main entrance of the airport and planted in household gardens (RRT 2000AB, 2001; NVV 2000) (DPMJ0328, DPMJ0728).\*\*

**Hibiscus mutabilis** L. changeable rose mallow, changeable rose

Recent introduction. Southern China. Uncommon. Planted ornamental. Seen in a few household gardens, one at the north end of Rita. Previously planted on Arno, Jaluit, and Kwajalein, but did not survive at least in the latter two (Fosberg & Sachet 1962; Whistler & Steele 1999) (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0628).\*

**Hibiscus rosa-sinensis** L. common hibiscus, red hibiscus, China rose

Marshallese: *rooj* ("rose")

Recent introduction. Tropical Asia. Common. Planted ornamental around private homes and businesses. Occasional in rural garden areas (StJ 1951; F, S & O 1979; RRT 1991, 1999, 2000AB, 2001; NVV 1999).

**Hibiscus schizopetalus** (Mast.) Hook. f. coral hibiscus, fringed hibiscus, dragon flower

Recent introduction. Tropical America. Rare. Single bush in household garden in Delap and another in Rita. Previously reported on Kwajalein by F, S & O (1979) (NVV 2000).\*

**Hibiscus syriacus** L. blue hibiscus, rose of Sharon

Recent introduction. China. Rare. Several small bushes brought in from Hawai'i and planted at the former President Amata Kabua's residence (NVV 2000; RRT 2000A, 2001) (DPMJ0663).\*\*

**Hibiscus tiliaceus** L. beach hibiscus, hibiscus tree

Syn: *Talipariti tiliaceum* (L.) Fryxell

Marshallese: *lo*

Aboriginal introduction. Pantropical. Common. Occasional in household gardens, as a roadside tree, in tree groves and in areas near taro pits; more extensive stands found in thickets in swampy areas near Rairök Elementary School, and in swampy areas of Laura (StJ 1951; F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0555, DPMJ0689).

**Hibiscus x hybridus** ornamental hybrid hibiscus

Marshallese: *rooj* ("rose")

Recent introduction. Horticultural origin. Common. Planted ornamentals around private homes and businesses. Many color and petal variations found (MDS 1977; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0329).

**Lavatera trimestris** tree mallow, annual mallow

Recent introduction. Mediterranean. Rare. Single mature flowering plant in Filipino doctor's garden east of the airport (RRT 2000AB; NVV 2000) (DPMJ0349, DPMJ0350, DPMJ0351).\*\*

**Malviscus penduliflorus** Moc. & Sesse ex DC.

Turk's cap, sleeping hibiscus, firecracker hibiscus

Syns. *Malviscus arboreus* Cav.; *Malviscus konzatti* Greenm.; *Malviscus grandiflorus* Hort. non H.B.K.

Recent introduction. Tropical America. Uncommon. Planted ornamental shrub at Royal Garden Hotel and in a household garden in Rita. Previously reported on Kwajalein by Hebst (1988) but did not survive according to Whistler & Steele (1999) (RRT 1991, 1999, 2000A; NVV 1999).\*

**Sida fallax** Walp.

golden mallow; ilima (Hawai'ian)

Marshallese: *kio* ("yellow")

Indigenous. Indo-Pacific. Uncommon. Observed as present in Laura by St. John (1951) and reported present on Majuro by F. S & O (1979); not seen in 1991 or 1999 on the main islets of Majuro; about ten mature plants seen planted in a settlement on Calalin Islet in September 2000 and 2001; also reported to be present on Rongrong Islet north of Laura and in some household gardens in Rita and Botkan. Flowers used in gardens and said to give power to warriors in the past (StJ 1951; F, S & O 1979; FRF 1990; RRT 2000A; NVV 2000) (DPMJ0083, DPMJ0084, DPMJ0095).

**Thespesia populnea** (L.) Sol. ex Correa

Thespian's tree, Pacific rosewood

Recent introduction. Paleotropics and the Pacific Islands. Uncommon. Single tree planted along the west border of the Royal Garden Hotel; single tree seen inland from the lagoon coast in Ajeltake; and number of young trees seen as part of a living fence just west of the Royal Garden Hotel. Previously reported on Kwajalein and Jaluit by F. S & O (1979); still present on Kwajalein (Whistler & Steele 1999), but did not survive on Jaluit (Fosberg & Sachet 1962) (RRT 1991, 1999, 2000AB; NVV 1999).\*

**MELIACEAE** (Mahogany Family)\***Azadiracta indica** A. Juss.

nim, neem tree

Recent introduction. India and Southeast Asia to the East Indies. Rare. Reportedly successfully introduced by Jimmy Joseph to the Agricultural Farm; a single mature tree seen in the former President, Amata Kabua's garden. Can become invasive (NVV 2000, RRT 2001) (DPMJ0637).\*\*

**Lansium domesticum** Corr.

langsar

Recent introduction. Malaysia. Rare. Numerous small seedlings in the experimental garden of Jesse Napolitano at the College of the Marshall Islands, grown from seeds imported from the Philippines (NVV 2000).\*\*

### MIMOSACEAE (Mimosa Family)\*

**Acacia auriculiformis** A. Cunn. Ex Benth.

northern black wattle, earpod wattle

Recent introduction. New Guinea, Torres Strait Island and northern Australia. Rare. Single tree about 2 m tall planted in a household garden in Delap, but by early 2002, it was not doing well and may die. Has become an environmental pest in Florida but does not naturally reproduce well in Micronesia (RRT 2000A; NVV 2000) (2K00406; DPMJ0127S, DPMJ0128S).\*\*

**Adenanthera pavonina** L.

red-bead tree, false wiliwili, coral bean tree, red sandalwoodtree

Recent introduction. Malaysia. Rare. Single mature tree found in garden of the old Sun Hotel in Rairök. Has become invasive in other parts of the Pacific, including Kosrae (RRT 1999, 2000A; NVV 2000).\*\*

**Leucaena leucocephala** (Lam.) de Wit

leucaena, tangan tangan, leadtree

Syn. *Leucaena glauca* (L.) Benth.

Recent introduction. Tropical America. Occasional. Planted in household gardens, near industrial areas and possibly spontaneous in some areas; giant cultivars planted around Laura Experimental Farm. Present on Calalin Islet and spreading into disturbed sites. Previously reported on Utdrik, Kwajalein, Ailuk, Likiep and Jaluit by F. S & O (1979) Considered to be one of the "One Hundred of the World's Worst Invasive Alien Species" by the Global Invasive Species Database (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (PDMJ0734).\*

## MORACEAE (Mulberry Family)

**Artocarpus altilis** (Park.) Fosb. breadfruit  
 Syns. *Artocarpus incisus* (Thunb.) L. f.; *Artocarpus communis* Forst.

Marshallese: *mā* (general term for all breadfruit)

Aboriginal introduction. Malayo-Pacific. Abundant. Planted staple food tree in household gardens and in rural agricultural areas near taro pits; large old trees particularly common south of Delap to Laura in more rural areas; one tree planted on Calalin Islet. Very important staple food plant on the atolls. Marshallese names for breadfruit cultivars, which probably also include cultivars of *A. mariannensis* and hybrids, include *botaktak*, *bukdol*, *mejenwe*, *kûbwedoul*, *kûtroro*, *mā kinono*, *mā jileklek*, *māikwe*, *mākwōle*, *maloke*, *māroñ*, *mejidduull nenen* and *nōñnōñ* (MDS 1977; F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0724).

**Artocarpus mariannensis** Trec. Mariana Islands breadfruit

Marshallese: *mā* (general term), *mejwaan* ("false-eye"), *metete*

Aboriginal introduction Micronesia. Occasional. Planted staple fruit tree in household gardens and near settled areas (StJ 1951; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999).

**Ficus benjamina** L. weeping fig, weeping banyan, Benjamin tree

Recent introduction. Common. Tropical. Asia. Planted ornamental and shade tree. "Golden princess" variety and possibly other varieties imported by Robert Reimers Enterprises in 1998 and/or 1999 as houseplants still exist. Can become invasive (RRT 1991, 1999, 2000AB, 2001; NVV 1999).\*

**Ficus carica** L. common fig, edible fig

Marshallese: *wōjke-piik* ("fig tree")

Recent introduction. Probably originally native to Southwest Asia, but was spread in ancient times to the Mediterranean area. Uncommon. Several trees were planted experimentally at Laura Farms, but none remain. About three fruit bearing trees at Amata Kabua's residence. One tree planted in settlement on Calalin Islet. Previously recorded by F, S & O (1979) on Jaluit, but did not survive (Fosberg & Sachet 1962) (NVV 2000; RRT 2000AB, 2001) (DPMJ0038, DPMJ0638, DPMJ0639, DPMJ0640).\*

**Ficus elastica** Roxb.

Indian rubber tree, rubber plant

Marshallese: *wōjke-roba* ("fig tree")

Recent introduction. India. Uncommon. Planted ornamental tree in household gardens; one large tree in Amata Kabua's garden. Previously reported on Ailinglaplap and Jaluit by F. S & O (1979) and one at least one large old tree remains on the main street of Jabor, Jaluit as observed during 1999 visit. Can become invasive but only where the pollinating wasp is found (RRT 1991, 1999, 2000A, 2001; NVV 1999) (DPMJ0671).\*

**Ficus microcarpa** L. f.

Chinese banyan, laurel fig

Recent introduction. Tropical Asia and western Micronesia. Occasional. A mature tree along the road in front of the Resources and Development Building; other trees planted in garden west of the Airport near Rairōk, in a private garden in Woja and in a several other household gardens. Previously recorded on Kwajalein by F. S & O (1979) but did not survive (Whistler & Steele 1999). Can become invasive (RRT 1991, 1999, 2000AB, 2001; NVV 2000) (DPMJ0039, DPMJ0108, DPMJ0316, DPMJ0694).\*

**Ficus tinctoria** Forst. f. var. *neo-ebudarium* (Summerh.) Fosb.

dyer's fig, native fig

Marshallese: *tōpdo* (from the I-Kiribati "te bero")

Aboriginal introduction Southeast. Asia to Polynesia and Micronesia. Occasional. Planted food tree surrounding taro pits in Laura and in scattered private gardens throughout the atoll, including Aeañen. According to Fosberg 1990: "On Majuro said to have been brought from the Gilbert Is." (StJ 1951; MDS 1977; F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0318, DPMJ0569).

**MORINGACEAE** (Moringa Family)\***Moringa oleifera** Lam.

horseradish tree, drumstick tree

Recent introduction. India. Occasional. Food plant some food gardens at Laura, including former President Kabua's family garden and numerous other private gardens on the atoll. One of the few more recent agricultural introductions that seems to thrive in the atoll environment. Previously recorded on Kwajalein by Hebst (1988). Has begun to become naturalized on Guam and potentially could become invasive (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0365).\*



## MYRTACEAE (Myrtle Family)\*

**Psidium guajava** L.

guava

Recent introduction. Tropical America. Uncommon. Food tree in some food gardens at Laura, including former President Amata Kabua's garden. Previously recorded on Kwajalein by F. S & O (1979). Can become invasive (RRT 1991, 1999, 2000AB, 2001; NVV 1999).\*

**Syzygium aqueum** (Burm. f.) Merr. & Perry  
Syn. *Eugenia aquea* Burm f.

water apple

Marshallese: **abā** (a corruption of the English "apple")

Recent introduction. Southern India. Uncommon. Tree seen in a private household garden in Woja bearing many bright pink-red top-like fruit (RRT 2000B, 2001; NVV 2000) (DPMJ0431).\*\*

**Syzygium malaccense** (L.) Merr. and Perry  
Syn. *Eugenia malaccensis* L.

Malay apple, mountain apple

Marshallese: **abā** (a corruption of the English "apple")

Recent introduction. Southeast Asia. Occasional. A number of mature and immature trees found in household gardens and in agricultural developments in Laura and in DUD; one bearing tree seen on Calalin Islet. Reported by the Namdrik Biodiversity Workshop and recorded by the RMI National Biodiversity Team (2000). Some of these immature trees may in fact be *S. aqueum* rather than *S. malaccense* (RRT 1999, 2000AB, 2001; NVV 2000).\*

## NYCTAGINACEAE (Four-O'clock Family)

**Boerhavia tetrandra** Forst. f.

Syns: *Boerhavia diffusa* var. *tetrandra*(Forst.)Heimerl; *Boerhavia repens* sensu Catala, Guillaumin, non L.

Marshallese: **dābijdekā**, ("to hold on to a rock"; a name that is also applied to *Peperomia ponapensis*, which occurs on other atolls, but not on Majuro, and to other small ground cover plants); **natto** (a name also applied to *Chamaesyce thymifolia*); **pādāl** ("push up soil", "of roots"; a name also applied to *Chamaesyce atoto*); **marmilliñ** (name used by Herbst 1988 but not known from any other source)

Indigenous. Central Pacific atolls. Rare and ephemeral. Listed on 18 atolls by F. S. & O. 1979, but not on Majuro. However, in Fosberg (1990), those same 18 atolls are listed, with

an additional 3, including Majuro. Small patch found amidst other native herbs on Bok-botun in Aeañen in October 2001 by NVV (FRF 1990; NVV 2001) (DPMJ0742).

**Bougainvillea x buttiana** Holttum & Standl. hybrid bougainvillea  
Syn. mistakenly identified as *Bougainvillea spectabilis* Willd.

Marshallese: *kōtōmānlimpok* (sometimes shortened to just *limpok*; from a Pohnpeian word meaning "reminder of love"); *ikdelel* ("desire something," a name used by Herbst 1988, with spelling updated, but not know from any other source; perhaps used because being similar in meaning to the Pohnpeian)

Recent introduction. Horticultural origin. Common. Planted ornamental in household gardens. According to Whistler (2000), it is commonly misidentified as the Brazilian species, *B. spectabilis* Willd., and is apparently a hybrid of two other species, one of which is possibly *B. spectabilis* (StJ 1951; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0004, DPMJ0666).

**Bougainvillea glabra** Choisy lesser bougainvillea, red bougainvillea

Marshallese: *kōtōmānlimpok* (sometimes shortened to just *limpok*; from a Pohnpeian word meaning "reminder of love")

Recent introduction. Tropical America. Occasional. Planted ornamental with small white flowers and magenta bracts. Previously reported on Utdrik, Likiep, Arno and Jaluit by F. S & O (1979) (RRT 1991, 1999, 2000AB, 2001; NVV 1999).\*

**Mirabilis jalapa** L. four-o'clock, marvel of Peru, false jalap

Marshallese: *emān-awa* ("four o'clock")

Recent introduction. Mexico. Common. Planted ornamental in household gardens; sometimes surviving without cultivation as a protected adventive, because of its attractive flowers which come in a variety of colors (StJ 1951; F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999).

**Pisonia grandis** R. Brown great lettuce tree, great birdcatcher tree, pisonia  
Syn. *Pisonia alba* Span.

Marshallese: *kañal*

Indigenous. Indo-Pacific. Occasional to locally abundant. Soft-wooded tree found in inland forest on uninhabited atoll islets of Aeañen; particularly common inland in abandoned

and unused coconut plantations on Calalin Islet; also found in a few household gardens in Laura, and a single medium sized tree planted along the lagoon in Boktan and a smaller one along the back road of Delap. The dominant tree species of the traditionally taboo (*mo*) island of Iroj and commonly the dominant inland climax forest tree species on undisturbed and uninhabited atolls; also renown as the most important seabird rookery species on most Pacific Islands (F, S & O 1979; FRF 1990; RRT 1999, 2000AB, 2001; NVV 1999) (DPMJ0037b).

#### OLEACEAE (Olive Family)\*

**Jasminum laurifolium** Roxb. angle-wing jasmine  
Syns. *Jasminum nitidum* Skan.; *Jasminum laurifolium* f. *nitidum* Skan.

Recent introduction. Rare. Planted ornamental in a houseyard garden in Rita (NVV 2000; RRT 2000B) (DPMJ0201).\*\*

**Jasminum sambac** (L.) Ait. Indian jasmine

Recent introduction. India. Uncommon. Planted ornamental. Found in Filipino household garden just east of the airport. Previously reported on Jaluit by F. S & O (1979) and on Kwajalein by Whistler & Steele (1999) (RTT 1999, 2000AB, 2001; NVV 2000) (DPMJ0341, DPMJ0342).\*

#### ONAGRACEAE (Evening Primrose Family)

**Ludwigia octovalvis** ( Jacq.) Raven swamp primrose, willow primrose  
Syn. *Jussiaea suffruticosa* L.

Marshallese: *utilolōb* ('flower at the grave', a name also applied to *L. hyssopifolia*, which is present in some other Marshall Islands' atolls but not on Majuro)

Recent introduction. Pantropical. Occasional to locally common. Weed in swampy areas and taro pits in Laura, at Robert Reimer's Hotel, and in ruderal areas in Delap (StJ 1951; F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 2000) (DPMJ0166, DPMJ0538, DPMJ0729).

**OXALIDACEAE (Wood Sorrel Family)\*\*****Averrhoa bilimbi L.**

bilimbi

Recent introduction. Malaya to India. Rare. Mature fruit tree in household east of Royal Garden Hotel and another seen in Rairōk, both reportedly introduced by the same person (RRT 1991, 1999, 2000AB, 2001; NVV 2000).\*\*

**Averrhoa carambola L.**

carambola

Recent introduction. Malaysia and Southeast Asia. Rare. Small fruit tree in private household garden in Woja (RRT 1991, 2000B; NVV 2000) (DPMJ0240).\*\*

**Oxalis corniculata L.**

yellow wood sorrel

Recent introduction. Cosmopolitan weed, origin unknown. Rare, possibly extirpated. Weed at Japanese Takeout Restaurant, observed in 1991 but not seen again. *Oxalis* sp. subsequently reported on Kwajalein by Whistler & Steele (1999) (RRT 1991).\*\*

**PASSIFLORACEAE (Passion Flower Family)\*****Passiflora edulis Sims**

passionfruit

Recent introduction. Tropical America. Rare. Single plant seen in household garden east of the Royal Garden Hotel; one very large vine seen climbing in weedy vegetation in Amata Kabua's garden, just west of the main house. Previously reported on Jaluit and Kwajalein by F. S & O (1979), where those from the earlier records did not survive, but it was evidently reintroduced into Kwajalein (Fosberg & Sachet 1962; Whistler & Steele 1999). Although it has become a pest species in other areas, does not seem to do well in the Marshall Islands' environment (RRT 1999, 2001; NVV 2001) (DPMJ0677, DPMJ0678).\*

**PIPERACEAE (Pepper Family)\*****Peperomia obtusifolia (L.) A. Dietr.**

Jade plant, peppercorn, baby rubber plant

Recent introduction. Tropical America. Rare. Potted plant. Variegated cultivar also seen in 1999. Previously reported on Likiep by F. S & O (1979) and subsequently on Kwajalein by Whistler & Steele (1999) (RRT 1991, 1999, 2000AB, 2001; NVV 2000) (DPMJ0168a).\*

**Peperomia pellucida** (L.) HBK. Shiny bush, pepper elder, rat's ear, peperomi:

Syns. *Peperomia pellucidum* L.; *Peperomia lineata* Miq. ex Yuncker

Recent introduction. Tropical America. Rare; possibly now extirpated. Found in moist area of limestone rocks near Gibson's Supermarket growing with *Pilea microphylla*; not seen again. Can be eaten as a cooked vegetable or in salads. Previously recorded on Jaluit by F. S & O (1979) but did not survive (Fosberg & Sachet 1962). Can become invasive (RRT 1999).\*

**Piper betle** L. betel pepper

Recent introduction. India to Malaysia. Rare. Vine climbing on a log in household garden in Rairōk. Reportedly introduced from Palau. Leaves chewed with betelnut in western Micronesia, Melanesia and Asia (RRT 2000B) (DPMJ0385).\*\*

#### PLUMBAGINACEAE (Leadwort Family or Plumbago Family)\*

**Plumbago auriculata** Lam. Cape plumbago, Cape leadwort, blue plumbago  
Syn. *Plumbago capensis* Thunb.

Recent introduction. South Africa. Rare. Seen as a potted plant in one houseyard garden in Rita. Previously reported on Kwajalein by Whistler & Steele (1999) (NVV 2000; RRT 2000A) (DPMJ0051).\*

#### POLYGONACEAE (Buckwheat Family)

**Antigonon leptopus** H. & A. Mexican creeper, chain-of-love, Mexican love vine

Marshallese: *to- in-iokwe* ("chain-of-love" a name arbitrarily contrived during a weed workshop in connection with the South Pacific Commission)

Recent introduction. Mexico. Rare. Planted ornamental vine in planter box and climbing on a trellis in a yard outside of MIKA's store in Delap. Previously reported on Jaluit by F. S & O (1979) but did not survive (Fosberg & Sachet 1962) and Kwajalein, where it also did not survive, by Whistler & Steele (1999). A potentially destructive invasive which has caused tremendous damage on Guam but is often planted because of its bright attractive flowers. Named as one of the top-ten invasives for the Marshall Islands during a South Pacific Commission workshop (NVV 2001; RRT 2001) (DPMJ0606, DPMJ0735, DPMJ0736).\*

**Coccoloba uvifera** (L.) Jacq.

sea grape

Recent introduction. Tropical America. Uncommon. Planted ornamental tree; a couple trees in the garden area of Robert Reimers Hotel and another poorly maintained plant in residential area, ocean road, in Rita; another tree in household garden in Laura. Previously reported on Jaluit and Kwajalein by F. S & O (1979) but did not survive on either atoll (Fosberg & Sachet 1962; Whistler & Steele 1999) (RRT 1991, 2000AB, 2001; NVV 2000).\*

### PORTULACACEAE (Purslane Family)

**Portulaca australis** Endl.

portulaca

Syns. *Portulaca samoensis* v. Poelln.; *Portulaca pilosa* sensu auct. non L.

Marshallese: *kûrañ* ("shocked", "startled", "stunned", a name also applied to *P. oleracea*, although perhaps only the wild varieties)

Indigenous. Pantropical? Uncommon. Seen in disturbed sites slightly inland from the seaside coast in Laura and near the wall at Peace Park (F, S & O 1979; FRF 1990; RRT 1999, 2000B, 2001; NVV 1999) (DPMJ0394, DPMJ0395, DPMJ0502).

**Portulaca grandiflora** Hook.

portulaca, rose moss

Recent introduction. Brazil. Occasional. Ornamental potted succulent plant with linear to awl-shaped leaves. An ornamental cultivar of *Portulaca oleracea*, which has more flattened oblanceolate to elliptic leaves has, according to Whistler, been widely misidentified as *P. grandiflora* (see below) (RRT 1991, 1999, 2000AB; NVV 1999).\*\*

**Portulaca oleracea** L.

sun plant, wildfire, eleven o'clock (cultivated); pigweed, purslane (wild)

Marshallese: *kûrañ* ("shocked", "startled", "stunned", a name also applied to *P. australis*)

Recent introduction. Europe. Common. According to Whistler there are two types of *P. oleracea*, one the common weedy species, probably *P. oleracea* var. *granulato-stellulata* v. Poelln., and another ornamental variety ("Wildfire"), which is represented by numerous cultivars with five-parted red, yellow, white or mauve flowers, that has been widely misidentified as *P. grandifolia*. The yellow-flowered wild variety is a weed of gardens and waste places, especially in sandy soils; it is common on abandoned plots in vegetable gardens and at the Experimental Farm in Laura. The cultivated ornamental variety is found in household gardens, usually as a potted plant (StJ 1951; F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0396, DPMJ0397).

**PUNICACEAE** (Pomegranate Family)\*

***Punica granatum* L.** ornamental flowering pomegranate

Recent introduction. Middle East? Rare. Ornamental potted plant, sterile, non-fruiting flowering variety planted at a couple of private residences in Rita. Previously recorded on Jaluit by F. S & O (1979) but it was most likely the fruit-bearing variety, and did not survive (Fosberg & Sachet 1962) (NVV 2000; RRT 2000B, 2001) (DPMJ0167b, DPMJ0408).\*

**RHAMNACEAE** (Buckthorn Family)\*\*

***Colubrina asiatica* (L.) Brongn.** soapbush, hoop withe

Syns. *Ceanothus asiaticus* L.; *Ceanothus capsularis* Forst. f.

Indigenous, but of recent arrival. Paleotropical. Rare. A single mature plant about 2 m high seen in Lomajurok in an open field about 10 m from the oceanside of the island, just inland from an area with a large concentration of seaborne seeds and other jetsam. The plant was about 2.5 m high in November 2001, but unhealthy and covered with the parasitic vine, *Cassytha filiformis*. A common Indo-Pacific coastal plant not recorded previously from the Marshall Islands but may periodically grow only to be extirpated by *Cassytha filiformis* and other native vines (RRT 2000AB, 2001; NVV 2000) (DPMJ0263, DPMJ0264, DPMJ0265, DPMJ0503).\*\*

***Ziziphus mauritiana* Lam.** Indian jujube

Recent introduction. India and Southeast Asia to the East Indies. Rare. Reportedly successfully introduced by Jimmy Joseph to the Agricultural Farm. Has become moderately invasive in Fiji (NVV 1999).\*\*

**RHIZOPHORACEAE** (Mangrove Family)

***Bruguiera gymnorrhiza* (L.) Lam. f.** black, oriental or brown mangrove

Marshallese: *joñ*

Indigenous, at least on some atolls, although its range has been greatly extended by intentional plantings since aboriginal times. Indo-Pacific. Occasional. A number of mature trees are found in an interior depression in the center of Delap, which had been partly filled with household garbage; there is a small stand in a protected area on the lagoon side near Amata Kabua's residence; larger stands of mature trees exist slightly inland from the lagoon in





**Gardenia taitensis** DC.

Tahitian gardenia, tiare Tahiti

Recent introduction. Pacific Islands. Occasional. Planted ornamental in houseyard gardens. Subsequently reported on Kwajalein by Whistler & Steele (1999) (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0319, DPMJ0620, DPMJ0625).\*\*

**Guettarda speciosa** L.

Marshallese: *utilomar* ("flower of the bush"); *ut* (general term for flower or bush); *utin-ākōj* (a term generally not used)

Indigenous. Tropical Asia to Pacific Islands. Common. In the coastal strand forest, household gardens, abandoned coconut plantations and around taro pits in Laura. Although not official, it is considered by many people to be the national flower of the RMI; the fragrant, night-blooming flowers are popular for making garlands (StJ 1951; MDS 1977; F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0707, DPMJ0708, DPMJ0709).

**Hamelia patens** Jacq.

scarlet bush, firebush

Recent introduction. Tropical America. Rare. Planted potted plant in household garden in Delap (NVV 2000; RRT 2000A) (DPMJ0188)\*\*

**Hedyotis biflora** (L.) Lam.

two-flowered hedyotis

Syns. *Oldenlandia biflora* L.; *Oldenlandia paniculata* L

Marshallese: *kinwōj*

Indigenous or perhaps aboriginally introduced as a weed. Tropical Asia and Indian Ocean to western Polynesia and Micronesia. Uncommon. Found growing in disturbed sites near coast and as a weed in houseyard gardens and waste places; seems to be slowly replaced by introduced weedy species (StJ 1951; F, S & O 1979; FRF 1990; RRT 1999, 2000AB, 2001; NVV 2000) (DPMJ0484).

**Hedyotis corymbosa** (L.) Lamb.

Old World diamondflower

Syn. *Oldenlandia corymbosa* L.

Recent introduction. Africa. Common. Weed in gardens, in potted plants, along roadways and ruderal areas. Previously reported on Kwajalein and Jaluit by F. S & O (1979) (RRT 1999, 2000AB, 2001; NVV 2000) (DPMJ0153a, DPMJ0180b, DPMJ0324, DPMJ0325, DPMJ0477, DPMJ0592)\*

***Ixora casei*** Hance flame of the forest, Case's ixora, Caroline Island ixora, great red ixora  
Syn. *Ixora carolinensis* (Val.) Hoosokawa var. *typica* Fosberg; *Ixora longifolia* Sm.

Marshallese: *kajdo* (although this name originally referred to this species, it is now sometimes used in reference to other *Ixora* spp.)

Aboriginal introduction. Caroline Islands. Occasional. Planted ornamental bush or small tree in household gardens. Probably an introduction from Pohnpei or another Micronesian island where it is a native endemic species (StJ 1951; F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 2000) (DPMJ0088, DPMJ0621, DPMJ0622).

***Ixora chinensis*** Lam.

Chinese ixora

Recent introduction. China and East Indies. Occasional. Planted ornamental around houses and businesses (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0334).\*\*

***Ixora coccinea*** L.

red ixora, flame of the woods, flame flower

Syn. *Ixora fraseri* Hort ex Gentil

Recent introduction. Southeast Asia. Occasional. Planted ornamental. Previously reported on Aur and Jaluit by F. S & O (1979) but did not survive at least the latter (Fosberg & Sachet 1962) (RRT 1991, 1999, 2000AB, 2001; NVV 2000) (DPMJ0533).\*

***Ixora finlaysoniana*** Lam.

white ixora, fragrant ixora

Recent introduction. Thailand and Southeast Asia. Occasional. Planted ornamental (RRT 1991, 1999, 2000AB, 2001; NVV 2000) (DPMJ0040, DPMJ036, DPMJ037).\*\*

***Ixora lutea*** Hutchinson

yellow ixora

Syn. *Ixora coccinea* L. var. *lutea* Corner

Recent introduction. Southeast Asia. Occasional. Planted ornamental (RRT 1999, 2000AB, 2001; NVV 2000) (DPMJ0338).\*\*

***Ixora siamensis*** Wallich ex G. Don

pink ixora, Siamese ixora

Recent introduction. Southeast Asia. Uncommon. Planted ornamental (RRT 1999, 2000AB, 2001; NVV 2000) (DPMJ0146c, DPMJ0339, DPMJ0340, DPMJ0657).\*\*

**Ixora x hybrid**

hybrid ixora

Recent introduction. Horticultural origin. Uncommon. Several well-established plants in gardens in DUD and at the Outrigger Marshall Islands Resort. Bright red flowers fewer in number than other *Ixora*, with individual flowers having frilly petals rather than the typical cruciform petals (NVV 1999; RRT 2000AB, 2001) (DPMJ0335).\*\*

**Morinda citrifolia** L. var. **citrifolia**

beach mulberry, Indian mulberry

Marshallese: *nen*; *kalenen*

Aboriginal introduction. Tropical Asia and Australia to Southeast. Polynesia. Common. Cultivated and growing wild in household gardens, in neglected coconut plantations, as an understorey species in secondary forest, around taro pits, and in inner coastal forest. A larger cultivar from Polynesia has been introduced recently and is now planted around some homes in Rita and Rairök. A small cottage industry has developed recently for the processing and local sale of *nen* juice locally as a medicinal drink and in the production of a new soap (StJ 1951; MDS 1977; F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0364, DPMJ0696).

**Nertera granadensis** (L. f.) Druce

coral-bead plant, baby tears, pin cushion

Syns. *Gomozia granadensis* L. f. ; *Nertera depressa* Banks. and Sol.

Recent introduction. New Guinea, New Zealand, Cape Horn and South and Central America, often montane. Rare. Mat-forming groundcover with tiny broad oval leaves found planted in a pot in houseyard garden in north Rita in September 2000; not seen in flower or fruit. (RRT 2000A; NVV 2000) (DPMJ0059).\*\*

**Pentas lanceolata** (Forsk.) K. Schum.

pentas, Lady Fletcher, Egyptian star cluster

Syn. *Ophiorrhiza lanceolata* Forsk.

Recent introduction. Tropical Africa and Arabian Peninsula. Uncommon. Planted ornamental and potted plant; both the light purple and red cultivars seen present. Previously reported on Kwajalein by F. S & O (1979) but did not survive (Whistler & Steele 1999) (RRT 1991, 1999 2000AB, 2001; NVV 2000) (DPMJ0738).\*

**Spermacoe assurgens** R. & P.

woodland false buttonweed

Syn. *Borreria laevis* (Lam.) Griseb.

Recent introduction. Tropical America. Common. Weed in waste places and vegetable gardens. Previously reported as naturalized on Kwajalein by Hebst (1988) (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0591).\*

**Spermacoce bartlingiana** (DC) Fosb. buttonweed

Recent introduction. Southern Asia. Occasional. Weed in waste places (RRT 1999, 2000AB, 2001; NVV 2000) (DPMJ0423, DPMJ0424, DPMJ0500, DPMJ0674).\*\*

### RUTACEAE (Rue Family)

**Citrus aurantiifolia** (Christm.) Swingle lime

Marshallese: *laim* (a corruption of the English common name)

Recent introduction. India. Common. Planted fruit tree in household gardens and near settlements and taro pits. The only citrus species which seems to do well in the atoll environment (StJ 1951; MDS 1977; F, S & O 1979; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0726).

**Citrus limon** (L.) Burm. f. lemon

Recent introduction. East Asia. Rare. Planted fruit tree in Majuro Mayor Kabua's garden at Laura. Previously reported on Jaluit by F. S & O (1979). Kratz (1986) in his translation of Chamisso's account of the first contact of Europeans with the people of the Marshall Islands, reports that attempts were made to introduce a lemon tree, presumably this species (RRT 1991, 2000AB).\*

**Citrus limon** (L.) Burm. f. x **Citrus medica** rough lemon  
Syns. *Citrus medica* L. var. *limon* L.; *Citrus hystrix* DC.

Recent introduction. Tropical Asia. Rare. Plant seen in two household gardens of Fijian contract workers. The nomenclature of the rough lemon is somewhat unclear and the species is very similar and may be the same as the kaffir lime or Mauritius papeda (*Citrus hystrix* DC.), which is common in Southeast Asia (RRT 2000A).\*

**Citrus mitis** Blanco calamondin orange, kalamondin

Recent introduction. East Asia. Rare, now possibly extirpated. Planted fruit tree in household garden in Rita; reportedly introduced from Pohnpei. Subsequently not observed. (RRT 1991).\*\*

**Citrus sinensis** (L.) Osbeck

orange, sweet orange

Syn. *Citrus aurantium* var. *sinensis* L.

Marshallese: **oran** (a corruption of the English common name)

Recent introduction. Southern Asia. Rare. Single tree planted at the former President Amata Kabua's residence. Previously reported on Jaluit by F. S & O (1979) but did not survive (Fosberg & Sachet 1962) (RRT 2000A; NVV 2000).\*

**Euodia hortensis** J.R. & G. Forst.

island musk

Recent introduction. Melanesia. Uncommon. Small ornamental shrub with somewhat fragrant or fetid smelling leaves. Ornamental and cultural plant in a number of household gardens of Fijian and Rotuman contract workers from Fiji. Leaves and flowers used in garlands and to scent coconut oil by Fijians (RRT 2000AB; NVV 2000).\*\*

**Murraya koenigii** (L.) Spreng.

curry leaf, Indian bay leaf, tej patti, karipilai

Recent introduction. India and Southeastern Asia. Rare. A single nature plant seen in the lawn area between the main road and the residence of the former President Amata Kabua's residence and another in a household garden just behind Gibson's Supermarket in Delap (RRT 2000AB; NVV 2000) (DPMJ0365).\*\*

**Murraya paniculata** (L.) Jack

mock orange, orange jessamine, orange jasmine, satinwood

Syn. *Murraya exotica* L.

Recent introduction. Southeast Asia to Australia. Rare. Ornamental potted plant in front of Ajidrik Hotel in Uliga. Previously reported on Kwajalein by F. S & O but did not survive (Whistler & Steele 1999). Can become invasive and favors limestone soil (NVV 2000; RRT 2000A)\*

#### SAPINDACEAE (Soapberry Family or Litchi Family)

**Allophylus timoriensis** (DC.) Bl.

Syns. *Schmidelia timoriensis* DC.; *Allophylus litoralis* Bl.

Marshallese: **kûtaak**

Indigenous. Malaysia to eastern Polynesia and Micronesia. Uncommon. A member of the inner coastal strand forest. St. John observed this species in Laura village, where trees are

still present. Single trees were located behind Marshalls Broadcasting Company in Uliga, in Jenrok by Retty Reimer's, Amata Kabua's garden, at the U. S. Embassy, and a few large trees in household gardens in rural Ajeltake. Also found in the inner coastal strand forest and portions of the inland forest on Calalin Islet (StJ 1951; F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (2K00409; DPMJ0142S, DPMJ0143S, DPMJ0225, DPMJ0617).

**Litchi chinensis** Sonn.

litchi, lychee, leechee nut

Syn. *Nephelium litchi* Cambess

Recent introduction. Southern China. Rare. A few seedlings growing in a container at Maria Fowler's garden; sprouted from seeds of imported fruit (NVV 2001).\*\*

**Manikara zapota** (L.) van Royen

sapodilla

Syn. *Achras zapota* L.

Recent introduction. Mexico and Central America. Uncommon. Planted fruit trees in a couple household gardens. Introduced by the Agricultural Department as a promising fruit tree. Previously reported on Kwajalein by Whistler & Steele (1999) (RRT 1999, 2000AB, 2001; NVV2000).\*

**SCROPHULARIACEAE** (Snapdragon Family or Figwort Family)\*

**Angelonia biflora** Benth.

angelonia, monkey face

Syn. *Angelonia gardneri* Hook.

Marshallese: ***jab meloklok*** ("don't forget")

Recent introduction. South America. Rare. Planted ornamental in household garden in Rairök (RRT 2000B) (DPMJ0235).\*\*

**Angelonia salicariifolia** Humb. & Bonpl. angelonia, monkey face, grandmother's bonnets

Syn. *Angelonia angustifolia* Benth.

Marshallese: ***jab meloklok*** ("don't forget")

Recent introduction. Tropical America. Occasional. Planted ornamental. Previously reported on Kwajalein, Arno and Jaluit by F. S & O (1999) (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0236).\*

**Bacopa monnieri** (L.) Pennell

smooth water hyssop

Syn. *Bacopa monniera* (L.) Pennell

Indigenous, or possibly of recent introduction as a garden plant. Pantropical. Rare. Ground cover around the teachers' housing of Coop School in Delap, very close to the ocean. This area is periodically inundated by high waves, which could have washed seeds ashore. Indigenous to some Pacific Islands, including the Marquesas and Hawai'i, but in Micronesia, only previously known from Guam and Kiribati (NVV 2002) (DPMJN010602).\*\*

**Lindernia procumbens** (Krock.) Philcox

procumbent false pimpernel

Recent introduction. Morava River floodplain, Poland. Endangered in its native habitat, a pestiferous weed resistant to pesticides elsewhere in the world. Uncommon to locally common. Few small yellow-flowered procumbent plants found in lawn area near taro pit in Laura and in a ruderal areas in Rita (NVV 1999; RRT 2000B) (DPMJ0211, DPMJ0212, DPMJ0353).\*\*

**Russelia equisetiformis** Schlect. and Cham.

firecracker flower, coral plant

Marshallese: *albokbōroro* ("to bud, flower or about to bloom" and "pregnant, budding"); *kwōdeak* ("whiskers")

Recent introduction. Mexico. Occasional. Planted ornamental in several private gardens in Rita, Laura, at the U. S. Embassy and the residence of the former President Amata Kabua. Previously reported on Utdik, Kwajalein, Likiep, Ailinglaplap and Ebon by F. S & O (1979) (RRT 1991, 1999, 2000AB, 2001; NVV 1999).\*

**Scoparia dulcis** L..

sweetbroom, broomweed, bitterbroom, riceweed, licoriceweed

Recent introduction. Tropical America. Rare. Small weed of marshy and disturbed areas. Few plants found in wet area by the bridge. Previously reported on Kwajalein by F. S & O (1979) but not found by Whistler & Steele (1999) (NVV 2001) (DPMJN122701).\*

### SIMAROUBACEAE (Quassia Family)\*

**Soulamea amara** Lam.

bitter tree

Marshallese: *kabwjlōñ* (Railik), *keinwa* (Ratak)

Indigenous, to at least on some atolls of the Marshall Islands, but of recent introduction to Majuro. Rare. Indo-Pacific as far east as Solomon Islands and Vanuatu in Melanesia and to

the Caroline Islands and Marshall Islands in Micronesia. Reported to have been found in the past in Laura and on the isolated islands of Aeañen. Single tree growing in a container, with its roots breaking through, in household garden in Delap. Reported present on ten other islands in the Marshall Islands, but not on Majuro by F. S & O 1979, and again on 13 other islands but again not Majuro by Fosberg (1990) (NVV 2000; RRT 2000AB, 2001) (DPMJ0087, DPMJ0096, DPMJ0152, DPMJ0610, DPMJ0611, DPMJ0612, DPMJ0613).\*

### SOLANACEAE (Nightshade Family)\*

**Brugmansia x candida** Pers. angel's trumpet  
Syn. *Datura candida* (Pers.) Stapf.

Recent introduction. Tropical America. Uncommon. Several mature shrubs seen in household gardens in Rita; two smaller plants seen on Small Island. All parts of the plant are poisonous (NVV 2000; RRT 2000A) (DPMJ0035).\*\*

**Capsicum annuum** L. var. **acuminatum** (L.) Fingerh. cayenne pepper, long red pepper

Recent introduction. Tropical America. Rare. Food plant planted at farms in Laura. Previously reported on Jaluit by F. S & O (1979) (RRT 1991, 1999, 2000B) (DPMJ0247).\*

**Capsicum annuum** L. var. **grossum** (L.) Sendtn. bell pepper, sweet pepper, sweet capsicum  
Marshallese: *pepa* (a corruption of the English common name)

Recent introduction. Tropical America. Occasional. Food plant planted at farms in Laura and periodically in household food gardens. Previously reported on Kwajalein by Whistler & Steele (1999) (RRT 1991, 1999, 2000AB; NVV 1999).\*

**Capsicum annuum** L. varieties chili pepper cultivars

Recent introduction. Tropical America. Rare. Various annual or biennial chili pepper cultivars, including jalapeño and "Serrano" periodically planted. Previously reported on Jaluit by F. S & O (1979) (RRT 2000B, 2001).\*

**Capsicum frutescens** L. tabasco, bird chili, perennial chili

Recent introduction. Tropical America. Uncommon. Planted spice in household gardens, often in containers. Previously reported on Arno by F. S & O (1979) and on Kwajalein by Hebst (1988) (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0473).\*



**Cestrum nocturnum** L.      night flowering cestrum, lady of the night, queen of the night

Marshallese: *joñoul ruo awa* (“twelve o’clock”, in reference to its nocturnal blossoms that are fragrant at night)

Recent introduction. West Indies. Uncommon. Planted ornamental. In private gardens in DUD and in household gardens Jenrok, Rita, Ajeltake and another in a private household garden in Woja. Previously reported on Likiep by F, S & O (1979). Has become invasive on Tahiti and began to show invasive qualities on Guam but later became only a localized problem (RRT 1991, 1999, 2000AB, 2001; NVV 2000) (DPMJ0250).\*

**Nicotiana tabacum** L.      tobacco

Recent introduction. Tropical America. Rare, probably extirpated. Brought in experimentally a few years ago to see if could be grown, but failed to survive. Previously reported on Jaluit by F. S & O but did not survive (Fosberg & Sachet 1962) (per. comm. with importer; NVV 2000).\*

**Physalis angulata** L.      cape gooseberry, bladderberry, ground cherry

Marshallese: *kaōrōr* (grate ones teeth)

Recent introduction. Tropical America. Occasional. Weed of wastelands and ruderal sites, in recently abandoned fields at Laura Experimental Farm and in hydroponic plots at K & P Farm in Laura; found in one small population near an unfinished structure on Calalin Islet. Previously reported on Bikini, Ujae, Kwajalein, Jemo, Arno, and Jaluit by F. S & O (1979) (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0381, DPMJ0672, DPMJ0514, DPMJ0672, DPMJ0676).\*

**Solanum lycopersicum** L. var. **lycopersicum**      tomato  
Syn. *Lycopersicon esculentum* Mill.

Marshallese: *tōmato* (a corruption of the English common name)

Recent introduction. Tropical America. Occasional. Food plant in commercial and experimental food farms in Laura; occasionally in household gardens. Previously reported on Enewetak, Kwajalein, Ailinglaplap and Jaluit by F. S & O (1979) (RRT 1991, 1999, 2000AB, 2001; NVV 1999).\*

**Solanum melongena** L.

egg plant, aubergine

Recent introduction. Southern Asia. Occasional. Food plant at farms in Laura, at Marshall Islands High School in 1991, at the Taiwanese experimental garden, and periodically planted in household gardens. Previously reported on Jaluit by F. S & O (1979) and while those specimens may not have survived, observed replanted for food on Jaluit during 1999 visit as is undoubtedly done many other atolls, including Kwajalein (Whistler & Steele 1999) (RRT 1991, 1999, 2000AB; NVV 1999).\*

**Solanum tuberosum** L.

potato, Irish potato

Recent introduction. Andes Mountains. Rare. Single young plant seen in Chinese garden in Rita, probably grown from a potato skin cutting (RRT 2000B) (DPMJ0421).\*\*

**SURIANACEAE** (Bay Cedar Family)\***Suriana maritima** L.

bay cedar

Marshallese: *ñeñe* (Ratak); *kalañe* (Railik)

Indigenous to the Marshall Islands, particularly more northern, drier atolls, but of recent introduction to Majuro. Pantropical. Rare. One mature tree planted near the tennis court at the residence of the late President Amata Kabua with a number of seedlings underneath. Although several plants were imported for medicinal purposes from one of the islets of Kwajalein, only one survived (NVV 2001; RRT 2001) (DPMJ0616, DPMJ0721, DPMJ0722)\*

**TILIACEAE** (Linden Family)**Triumfetta procumbens** Forst. f.

prostate beach burr

Marshallese: *atat*

Indigenous. Paleotropics. Occasional. Growing in sandy areas on the lagoon coastal strip in the Delap area and in sandy inland area in Laura. Locally common in open sites and on the east end of Calalin Islet near the ocean. Traditionally used to produce fiber and dye, the fiber being used in fine mats; plant also used medicinally (StJ 1951; F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000AB; NVV 1999).

## TURNERACEAE (Turnera Family)

**Turnera ulmifolia** L. yellow alder; sage rose, Marilopez, West Indian holly

Marshallese: *nōr in jiboñ* ('blooming in the morning', a name arbitrarily contrived during a weed workshop in connection with the South Pacific Commission)

Recent introduction. Mexico and the Caribbean to Northern South America. Common to locally abundant. Introduced in the mid-1990s and planted in household gardens; has escaped and become adventive in Fiji, Kiribati and other countries; spreading rapidly throughout Majuro as a cultivated ornamental because of its bright yellow flowers. Also spreading to outer islets; a single plant found at an abandoned compound on Calalin Islet. Identified on Majuro by the RMI Biodiversity Team and included in 2000 report, but location not specified. Named as one of the top-ten invasives for the Marshall Islands during a South Pacific Commission workshop in 2001 (NVV 1999, RRT 1999, 2000AB, 2001) (DPMJ0025, DPMJ0437, DPMJ0438).

## URTICACEAE (Nettle Family)

**Laportea ruderalis** (Forst. f.) Chew

Syn. *Fleurya ruderalis* (Forst. f.) Gaud. ex Wedd.

Marshallese: *neen kōtkōt* ("leg of the ruddy turnstone", a shorebird, due to the reddish color of the stems)

Indigenous. Malayo-Pacific. Occasional. Growing in shady and moist disturbed sites in household gardens and coconut plantations in rural areas; under *Pisonia grandis* on Iroij Island. Common and locally dominant in open sites and openings in the tree cover on Calalin Islet (StJ 1951; F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000AB; NVV 1999) (DPMJ0080).

**Pilea cardieri** Gagn. and Guill. aluminum (aluminium) plant

Recent introduction. Vietnam. Rare, possibly extirpated. Potted plant (RRT 1991).\*\*

**Pilea depressa** (Sw.) Bl. baby's tears

Recent introduction. Caribbean. Occasional. Single hanging potted plant at Lanai Night Club and a few other plants in private gardens in Rairōk and Woja (RRT 2000AB) (DPMJ0145b, DPMJ0382, DPMJ0383).\*\*

**Pilea microphylla** (L.) Liebm. artillery plant, artillery fern

Marshallese: *loktōktōk* ("wrinkly"); *mōlowi* ("moisture" in reference to growing in damp areas)

Recent introduction. Tropical America. Common. Weed in potted plants, under planted ornamentals and in other moist ruderal sites; common in areas near hydroponic gardens. Locally common, often with *Phyllanthus amarus*, on Calalin Islet. Previously reported on Kwajalein, Ailinglaplap and Jaluit by F. S & O (1979) (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0178, DPMJ0481, DPMJ0550, DPMJ0652).\*

**Pilea nummularifolia** (Sw.) Wedd. creeping Charlie

Recent introduction. Tropical America. Uncommon. Ornamental groundcover and potted plant at Good Earth Apartments and private gardens (NVV 1999; RRT 2000AB) (DPMJ0384).\*

**Pilea serpyllacea** (Kunth) Liebm. artillery plant, artillery fern

Recent introduction. Northern South America. Rare. Ornamental potted plant (NVV 2000) (DPMJ0001).\*\*

**Pipturus argenteus** (Forst. f.) Wedd. var. **argenteus** silver pipturus

Marshallese: *armwe*

Indigenous. Malaysia to Polynesia and Micronesia. Occasional. Uncommon. Shrub or small tree in disturbed sites; occasionally in household gardens; one tree planted at the U. S. Embassy. A single small tree seen near ocean road in Rita, small groves in Laura, and locally common in inland disturbed forest on Calalin Islet. Fiber produces strong fish line useful, in the past, for catching tuna; leaves used as pig feed (St J. 1951; MDS 1977; F, S & O 1979; FRF 1990; RRT 1999, 2000AB, 2001; NVV 2000) (DPMJ0078, DPMJ0385, DPMJ0512).

## VERBENACEAE (Verbena Family)

**Clerodendrum buchananii** (Roxb.) Walp.  
scarlet clerodendrum, red clerodendrum, Java glorybower  
Syns. *Clerodendrum fallax* Lindl.; *Clerodendrum speciosissimum* Van Geert ex Morren

Recent introduction. Java. Occasional. Planted ornamental in private gardens; also

found as an adventive in a thicket to the south of the Laura back road. Can become invasive (RRT 1991, 1999, 2000AB; NVV 2000) (DPMJ0258, DPMJ0260).\*\*

**Clerodendrum inerme** L. var. **oceanicum** A. Gray beach privet

Marshallese: *wûlej*

Indigenous. Indomalaysia, Australia and the Pacific Islands. Occasional. In coastal vegetation and as a planted ornamental or hedge plant in household gardens (F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0257).

**Clerodendrum paniculatum** L. pagoda flower

Recent introduction. Malaysia to China. Uncommon. In household gardens in Rita. Can become invasive (NVV 1999; RRT 2000A) (DPMJ0259).\*\*

**Clerodendrum quadriloculare** (Blanco) Merr. Philippine glorybower

Marshallese: *tirooj in belle* ("foreign false eranthemum" a name arbitrarily contrived during a weed workshop in connection with the South Pacific Commission)

Recent introduction. Philippines. Occasional. Large ornamental shrub with leaves purplish on the lower surface and beautiful long, white *Ixora*-like flowers. Subsequently reported on Kwajalein by Whistler & Steele (1999). Named as one of the top-ten invasives for the Marshall Islands during a South Pacific Commission workshop (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0557). \*\*

**Clerodendrum thomsonae** Balf. bleeding heart

Recent introduction. West Africa. Uncommon. Planted ornamental climbing potted plant. Imported by Robert Reimers Enterprises in 1998 and/or 1999 as houseplants (RRT 1991, 1999, 2000AB; NVV 1999) (DPMJ0153b).\*\*

**Holmskioldia sanguinea** Retz. cup-and-saucer plant, parasol flower

Recent introduction. Himalayas. Rare, possibly extirpated. One potted plant observed in Rita in 1998 but it was not observed later. It either was moved to another location or it did not seem to survive. Identified on Majuro by the RMI National Biodiversity Team (2000), although location was not stated (NVV 1999).

**Lantana camara** L.

lantana, shrub verbena

Marshallese: *lantōna* (a corruption of the English common name)

Recent introduction. Tropical America. Occasional. Planted ornamental; possibly adventive in inland areas of Laura. The bright colored var. *aculeata* (L.) Mold is the more commonly observed, but the white and yellow var. *nivea* (Vent.) Bailey also present; one plant near the entrance of the Outrigger Marshall Islands Resort and others at private residences in Rita and Ajeltake. Previously reported on Ailinglaplap and Jaluit by F. S & O (1979) but did not survive in Jaluit (Fosberg & Sachet 1962); and subsequently on Kwajalein by Whistler & Steele (1999). Named as one of the top-ten invasives for the Marshall Islands during a South Pacific Commission workshop. Considered to be one of the "One Hundred of the World's Worst Invasive Alien Species" by the Global Invasive Species Database (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0348, DPMJ0154).\*

**Phyla nodiflora** (L.) E. Greene

turkey tangle, mat grass, false thyme

Syns. *Lippia nodiflora* (L.) Michx.; *Verbena nodiflora* L.

Recent introduction. Warm temperate America. Common. Low ground cover with rounded serrated leaves and small white or lavender flowers in back yard at the Royal Garden Hotel and in ruderal areas throughout the DUD. Reported present on Enewetak by Lamberson (1982) and naturalized on Kwajalein by Whistler & Steele (1999) (RRT 1999, 2000AB, 2001; NVV 1999) (DPMJ0100, DPMJ0593, DPMJ0597).\*

**Premna serratifolia** L.

false elderberry

Syns. *Premna obtusifolia* R. Br.; *Premna taitensis* SchauerMarshallese: *kaar*

Indigenous. Indo-Pacific. Common. Tree or shrub in coastal vegetation, common pioneer in abandoned coconut plantations and secondary vegetation and in household gardens as single tree or living fence; occasional in disturbed sites on Calalin Islet (StJ 1951; MDS 1977; F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0398, DPMJ0541, DPMJ0695).

**Stachytarpheta jamaicensis** (L.) Vahl.

Jamaica vervain, blue rat's tail

Recent introduction. Tropical America. Common. Blue-flowered weed of roadsides, waste places, fallow vegetable plots and other ruderal sites. Although it can become invasive and has become a problem in Niue and French Polynesia, has not yet caused problems in Micronesia (F, S & O 1979; FRF 1990; RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0426, DPMJ0580, DPMJ0586a).

**Vitex trifolia** L. var. **subtrisecta** (Kuntze) Mold.

blue vitex, mosquito bush

Marshallese: *utkanamnam* ("flower-to-cause-mosquito-mosquito", in reference to its use as mosquito repellent)

Recent introduction. East Africa to the Pacific Islands. Very abundant. Small aromatic tree or shrub widely planted as a manicured hedge, with reported mosquito-repellent properties; occasional as a planted ornamental and naturalized in some areas. Reportedly introduced from Pohnpei or from Kwajalein, where it is planted as a hedge. Previously reported on Kwajalein by F. S & O (1979) (RRT 1991, 1999, 2000AB, 2001; NVV 1999) (DPMJ0442, DPMJ0560).\*

### ADDENDUM

These five species were recorded after January 2002, thus after the completion of the main list and not included in the total of 563. Four are new records to the country and the other, new to Majuro. None represents a new family.

#### POLYPODIACEAE (Common Fern Family or Polypody Fern Family)

**Adiantum tenerum** Swartz

brittle maidenhair fern, fan maidenhair fern

Recent introduction. Florida, Caribbean and Central America. Rare. Small patch found in November 2002, under the raised foundation of a house in Delap. Has become naturalized in Guam (NVV 2002) (DPMJN111602).\*\*

#### AMARYLLIDACEAE (Amaryllis Lily Family)

**Hymenocallis latifolia** (Miller) M. J. Roemer

broadleafed spider lily

Recent introduction. Southeastern United States. Rare. A few plants in a household garden in Rita. Flowers similar to *H. pedalis* but has leaves that are notably wider. Said to have purchased several years earlier from Robert Reimers Enterprises (NVV 2002) (DPMJN1127a, DPMJN1127b)\*\*

**POACEAE or GRAMINAE (Grass Family)****Eragrostis pectinacea** (Michx.) Nees

tufted lovegrass

Recent introduction. North America. Rare. Small patch found in December 2002 near Pacific Basin Wholesale in Delap. Identification not certain and so it could possibly be another closely related species (NVV 2002) (DPMJN122102).\*\*

**FABACEAE (Pea Family)****Pithecellobium dulce** (Roxb.) Benth.

Manila tamarind

Recent introduction. Mexico to Venezuela. Rare. Single large tree about 4 meters in height behind a house in Uliga. Brought in as a seedling from Hawai'i as a novelty and has never produced any fruit. Previously reported on Jaluit by F. S & O (1979) but did not survive (Fosberg & Sachet 1962) Has become naturalized on Guam and Hawai'i (NVV 2002) (DPMJN090502).\*

**SCROPHULARIACEAE (Snapdragon Family or Figwort Family)****Buchnera americana** L.

American bluehearts

Syns. *Buchnera floridana* Gandog.; *Buchnera breviflora* Pennell

Recent introduction. Eastern United States. Rare. Delicate lavender colored wildflower found just past reservoir, near airport in November 2002. Several small patches found and it may be showing invasive qualities. Has long been naturalized on Guam (NVV2002) (DPMJN112102)\*\*

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