

SPECIMEN EXAMINED: ECUADOR: Subandine woods, between Cotacallao and Nono, *Sodi* 44/1 (fragments of type coll.; U. S. Nat. Herb. no. 1,059,381).

3. *Ericentrodea mirabilis* (Sherff) Blake & Sherff.

Bidens mirabilis Sherff, Bot. Gaz. 61: 496. pl. 31. 1916.

SPECIMEN EXAMINED: PERU: Humabalpa, November, 1857, *Spruce* 6273 (fragments of type coll. in Gray Herb. and herb. Sherff; photograph in U. S. Nat. Herb.).

Described by Spruce as a climbing herb, but probably, like the other species of the genus, either shrubby or suffrutescent. The heads examined have only young achenes. In these the awns, borne on a definite although short neck, are usually in two groups of 5 or sometimes 6 over the angles of the achene, agreeing in this respect with those of the other two species, but they do not seem to be united at base. In a few achenes, however, there were 2 or 3 shorter awns on each side of the achene between the main groups of awns. One achene examined bore altogether 15 awns, 5 each in the two groups and 5 smaller ones between them. From the appearance of some of the young achenes, it seems probable that a narrow wing is developed at maturity, at least in some cases.

3. *Cyathomone* Blake, gen. nov.

Shrub (?); leaves opposite, petioled, biternate or pinnate-ternate, membranaceous; heads 7 to 15, cymose, nodding, long-peduncled; involucre double, as in *Bidens*, the outer phyllaries about 5, herbaceous, the inner longer, submembranous; receptacle convex, the pales flattish, membranous, lineate; flowers unknown; achenes strongly obcompressed, the body narrowly obovate, contracted at apex, with two broad, ciliolate, somewhat pectinate-lobate wings, these usually adnate to the pappus cup; pappus of 2 very fragile retrorsely hispid awns and a turbinate, spinulose-ciliolate, persistent corona about 1 mm. high.

Type species *Narvalina sodiroi* Hieron.

1. *Cyathomone sodiroi* (Hieron.) Blake.

Fig. 1, d.

Narvalina sodiroi Hieron. Bot. Jahrb. Engler 29: 50. 1900.

SPECIMEN EXAMINED: ECUADOR: Subtropical woods along the Río Pilatón, *Sodi* 44/3 (fragments of type coll.; U. S. Nat. Herb. no. 1,059,380).

The generic name, from *κναφος*, *cup*, and *μωνη*, *an abiding*, refers to the persistent corona.

BOTANY.—*Three new plants of the family Rubiaceae from Trinidad.*

N. L. BRITTON, New York Botanical Garden, and PAUL C. STANDLEY, U. S. National Museum.

Study of a collection of plants received by the New York Botanical Garden as a loan from the Trinidad Botanic Garden has revealed material of many interesting plants, particularly some not previously recorded from Trinidad. Among them are the three species of

Rubiaceae here described as new. The two new species of *Urceolaria* are of special interest, since this genus is a very small one, and only two species have been known hitherto to occur in the West Indies.

Evea tontaneoides Britton & Standl., sp. nov.

Plants herbaceous, the stems slender (1 to 1.5 mm. thick), ascending or decumbent, densely pilose with slender whitish spreading multicellular hairs; stipule sheath greenish, 2 to 3 mm. long, densely pilose, the lobes two on each side, lance-linear, 3 to 4 mm. long, long-ciliate, pilose on the outer surface; petioles slender, 4 to 6 mm. long, densely pilose; leaf blades lanceolate, lance-oblong, or oblong-ovate, 3 to 6 cm. long, 1.5 to 2.5 cm. wide, acute or acuminate, rounded and often unequal at base, thin, above deep green, pilose with long, slender, apparently appressed hairs, beneath pale and similarly pilose; peduncles solitary in the forks of the branches, slender, densely pilose, about 3 cm. long, the flowers few, sessile in a dense head; bracts obovate or spatulate, 4 to 6 mm. long, acute or apiculate, green, sparsely pilose; calyx lobes linear, green, pilose; corolla (in bud) villosulous.

Type in the Herbarium of the Trinidad Botanic Garden, collected at Caparo, Trinidad, October 26, 1916, by W. E. Broadway (no. 9774).

A well-marked species, in habit strongly suggesting certain plants of the genus *Tontanea*, of the same family.

Urceolaria clusiaefolia Britton & Standl., sp. nov.

Branches stout, brown, angulate, somewhat lustrous, the internodes 2 to 8 cm. long; stipules quickly deciduous; petioles stout, 1 to 1.5 cm. long, glabrous; leaf blades oblong-obovate to obovate-elliptic, 8 to 11 cm. long, 3.5 to 5.5 cm. wide, acute, often somewhat abruptly so, at base acute or acuminate and decurrent upon the petiole, coriaceous, glabrous, lustrous above, the costa shallowly channeled, the lateral nerves evident and slightly elevated, beneath brownish, the costa and lateral nerves prominent, the latter about 8 pairs, ascending at an acute angle, anastomosing to form a continuous nerve remote from the margin, the ultimate nerves prominulous and irregularly reticulate; peduncle over 1.5 cm. long, stout, the involucre entire, about 3 mm. long; calyx spathaceous, in fruit about 1 cm. long, the immature fruit 5 to 6 mm. in diameter.

Type in the Herbarium of the Trinidad Botanic Garden, collected on Mt. Toeuhe, Trinidad, August, 1847, *Botanic Garden Herbarium* 673.

Although only imperfect specimens are available for study, these differ so conspicuously in leaf characters from the other West Indian representatives of the genus that it seems safe to assume that they represent a distinct species.

Urceolaria angustifolia Britton & Standl., sp. nov.

Branches stout, angulate, glabrous, brownish, the internodes 1 to 3 cm. long; stipules caducous; petioles 6 to 10 mm. long; leaf blades oblong-oblanccolate or narrowly oblong, 4.5 to 8 cm. long, 1.2 to 2.5 cm. wide, obtuse, cuneate at base, coriaceous, glabrous, lustrous above, the costa shallowly channeled, the lateral nerves evident and slightly elevated, beneath brownish, the costa and lateral nerves prominent, the latter about 11 pairs, ascending at a very acute angle, curving outward and anastomosing remote from the

margin, the ultimate nerves slightly elevated, irregularly reticulate; peduncles terminal, solitary, 2.5 cm. long, the involucre entire, 3 mm. high; calyx in bud 1 cm. long.

Type in the Herbarium of the Trinidad Botanic Garden, collected on Mt. Touche, Trinidad, June 21, 1907, by William Leslie (no. 9363).

While this may be only a form of *U. clusiaefolia*, the shape of the leaves is strikingly different, and it is probable that the present plant is specifically distinct. Flowering specimens of both are a desideratum.

ENTOMOLOGY.—*A new Reticulitermes from the Orient.* THOMAS E. SNYDER, U. S. Bureau of Entomology.

Reticulitermes Holmgren was established in 1913 as a subgenus of the genus *Leucotermes* Silvestri. N. Banks, in 1920, raised *Reticulitermes* to generic rank. I am adopting the generic value given this genus by Banks, although I am doubtful as to whether *Reticulitermes* can be considered of generic rank. I place *Reticulitermes* in the family *Rhinotermitidae*, since the species have protozoa (*Trichonympha*) in the guts and subcordate pronota which would exclude them from the family *Termitidae* where placed by Banks.

Species of both the genera *Leucotermes* and *Reticulitermes* are extremely destructive to timber and other woodwork. Winged adults of species of *Reticulitermes* are dark colored, with the wings strongly reticulated, but with few hairs or marginal cilia; they are species of relatively northern distribution, the centre of distribution being North America. Species of *Leucotermes* are lighter colored, have the margins of the wings ciliate and are of relatively southern distribution. I have recently revised this genus.

Only two species of *Reticulitermes* are known from the Orient; these eastern species are *R. speratus* Kolbe and *R. flaviceps* Oshima, both being from Japan. The new species to be described is from China.

***Reticulitermes chinensis*, sp. nov.**

Winged adult.—Head dark castaneous-brown (dark finished mahogany), smooth, shining, semi-quadrilateral, but rounded posteriorly, slightly longer than broad; at anterior of head above the ocelli are two prominent white spots (muscle attachments); head with dense, long, light yellow hairs. Fontanelle a small white point on a line connecting the backs of the eyes.

Antennae grey-brown with tips of segments whitish, 17-18 segments, pubescent; first segment clavate, elongate; second cylindrical, shorter; third very short, ring shaped; fourth twice as long as third; fifth more wedge shaped, slightly shorter than fourth; sixth longer than fifth; last segment elongate, sub-oval.