

# Noteworthy Micronesian Plants. 1.

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During work on collections of Micronesian vascular plants and in the course of preparing treatments of various genera for the Flora of Micronesia, a number of new distributional records and new varieties were found. New records were found in *Eustachys*, *Malaisia*, *Boehmeria*, *Canavalia*, *Teramnus*, *Euphorbia*, *Polypremum*, and *Eupatorium*, and new varieties in *Canavalia* and *Ochrosia*. Further papers in this series are in preparation.

## GRAMINEAE

*Eustachys petraea* (Sw.) Desv., *Nouv. Bull. Soc. Philom. Paris* 2: 189, 1810.

*Chloris petraea* Sw., *Prodr. Veg. Ind. Occ.* 25, 1788.

This is a common widespread strand species in the Caribbean region, usually called *Chloris petraea* Sw. It has been known for 14 years from Micronesia, apparently introduced first on Saipan at least by 1965, and around the airfield on Kwajalein by 1966. It appeared later on Guam by 1968, and seems to have become well established.

The broad, equitant, strongly compressed paperlike leaf bases and oblong-linear blades with wide bluntish apices, and the round lenticular spikelets with firm blackish lemmas without awns and blunt usually awnless glumes, seem to justify maintaining *Eustachys* as a genus distinct from *Chloris*. Vegetatively it much more closely resembles the east African *Daknopholis* Clayton.

The following key to separate the Guam genera of Chlorideae may be substituted for that in Stone's Flora of Guam (*Micronesica* 6: 194, 1971).

Lemmas with awns . . . . . *Chloris*

Lemmas without awns

    Spikelets orbicular, lenticular . . . . . *Eustachys*

    Spikelets distinctly longer than wide . . . . . *Cynodon*

MARIANAS ISLANDS: SAIPAN: east of Ogo Tapotchau, just north of Kannat Tadung Laulau, 170–190 m, *Fosberg 50547* (US); Marpi Point, 15 m, *Fosberg 47715* (US). GUAM: Tamuning, 35 m, *Falanruw 1286* (US); Wettengel, *Falanruw 956* (US).

MARSHALL ISLANDS: KWAJALEIN ATOLL: Kwajalein Islet, *Fosberg 48036* (US), *48047* (US).

### MORACEAE

*Malaisia scandens* (Lour.) Planch., Ann. sci. nat. Bot. IV, 3: 293, 1855.

This vine, reported by Kanehira from Saipan and Rota, may now be recorded from Palau. The material is sterile and very slender, probably juvenile, but matches reasonably well specimens from the Philippines. It was climbing on a limestone wall in shade just above sea level. It is widespread in the Indo-Pacific region, first described from Cochin China.

CAROLINE ISLANDS., PALAU: Koror Island, near ferry crossing, *Falanruw, Fosberg & Woodrich 1077* (US, BISH, Fo).

### URTICACEAE

*Boehmeria densiflora* H. & A., Bot. Beechey's Voy. 271, 1841.

This species was reported from Alamagan by Hosokawa, Trans. Nat. Hist. Soc. Formosa 25: 268, 1935, as *B. boninensis* Nakai. Although we are satisfied that the specimens cited here are properly referred to *B. densiflora* we are not prepared to reduce *B. boninensis* since we have seen no authentic material of the latter species. The Pagan plant referred to *B. celebica* Bl. by Fosberg, Pac. Sci. 12: 19, 1958, may probably go here, also, though we have not seen Hosokawa's specimen.

*B. densiflora* is characterized by ovate to lanceolate, strongly trinerved leaves, obtuse to acute and not very oblique at base, margins coarsely serrate, not crenate, veins strigose, pistillate spikes densely and continuously floriferous or almost so, up to 8 cm long. Its type locality is the Ryukyu Is. and we have seen a number of specimens from there.

MARIANAS ISLANDS: PAGAN ISLAND: summit of Mt. Pagan, *Villagomez JV-X-14* (US); inside Mt. Pagan, *Villagomez* in 1970 (US), *JV-4K* (US); Mt. Pagan, 1870 ft, *Moore 367* (US), *382* (US), *393* (US).

Alamagan Island *Hosokawa 7914* (A); South-southwest coast, 500 ft, *Falanruw 1908* (US).

### LEGUMINOSAE

*Canavalia megalantha* Merr. var. *falanruwiae* Fosberg, n. var.

*Ab var. megalantha partibus juvenalibus foliisque valde sericeis differt.*

The typical form of this endemic species of the Marianas Archipelago has glabrous leaves and other vegetative parts. Specimens from the volcanic northern Marianas are strongly sericeous, especially on young parts and under-sides of leaves.

MARIANAS ISLANDS: PAGAN ISLAND: *Bonham 37* (US). SARIGAN ISLAND:

Track leading north from village, 175–250 m, June 23, 1967, *Evans 2416* (US, type, BISH, K, MO), *2418* (US, BISH, K, NY). GUGUAN ISLAND: *Falanruw 1829* (US). ALAMAGAN ISLAND: Around Partido Village, in forest on lava flow, *Fosberg 31655* (US). (This sheet is less sericeous and has larger leaflets than Sarigan material.) *Teramnus volubilis* Sw., Nov. Gen. & Sp. Pl. 105, 1788.

This seems to be new to Guam. It may be most easily distinguished from the common *T. labialis* by its lanceolate leaflets, which are obtuse at the tips. This species is common in tropical America and may have been recently introduced.

MARIANAS ISLANDS: GUAM: Cella Bay, *Cushing & Falanruw 722* (US).

## EUPHORBIACEAE

*Euphorbia heterophylla* L., Sp. Pl. 453, 1753.

This species, as distinct from *E. cyathophora*, may now be definitely reported from Guam. Its leaves are more or less entire, linear-lanceolate, and the involucreal leaves are not red at base. The seeds have a transverse groove and a keel at right angles to it. Some of the previous records for which we have not seen specimens could possibly go here, but the common, widespread weedy, "false-Poinsettia" with the partly red involucreal leaves is *Euphorbia cyathophora* Murr.

MARIANAS ISLANDS: GUAM: Just south of Togcha River near Pirate's Cove, *Falanruw & Salomon 964* (US).

Since the above was written we have examined Stone's specimen no. 3979, from Barrigada, Guam, on which his record of *E. geniculata* Ort. (*Micronesica* 6: 374, 1970) was based. It is *E. heterophylla* of a broader (ovate) leafed form than no. 964. Dressler, in his synopsis of *Poinsettia* (*Ann. Mo. Bot. Gard.* 48: 329–341, 1961) considered these two names synonymous, and there seems no reason not to accept this disposition. The hairy stems, entire leaves, green- or pale-based bracteal leaves, and, especially, the funnel-shaped glands with a circular opening rather than somewhat compressed with oblong opening, serve further to separate the Guam population of this species from *E. cyathophora* Murr. Dressler gives an excellent illustration showing the differences in glands and seeds.

## LOGANIACEAE

*Polypremum procumbens* L., Sp. Pl. 111, 1753.

This east American species was found in Hawaii, on the rim of Kilauea Caldera in 1962 (*Fosberg, Occ. Pap. Bishop Mus.* 23: 40, 1962). In 1968 it appeared in the Tamuning area in Guam. In 1970 it was found in Angaur, Palau. None of these locations are near airfields, so we have no suggestion as to how the introductions took place, nor that there is any connection between the three introductions.

The plant is a depressed wiry herb, with procumbent stems and short stiff linear-subulate leaves. The flowers are very inconspicuous, with inferior ovaries, and occur in terminal loose to glomerate cymes. The foliage turns orange with

age or drought. In 1968 it was well established very locally on Guam on bare crushed coral.

MARIANAS ISLANDS: GUAM: Tamuning, *Falanruw* 1095 (US), 1272 (US).

CAROLINE ISLANDS: PALAU: Angaur Island, shady roadside 1/2 mile from Coast Guard Station, *Salsedo* 354 (US).

#### APOCYNACEAE

**Ochrosia mariannensis** A. DC. var. **crassicarpa**, Fosb. & Falanruw, n. var.

*Arbor parva foliis anguste ellipticis, fructibus flavis crassis ovoideis 4-4.5 x 3-3.4 cm bicarinatis.*

Small tree, leaves in whorls of 3-4, narrowly elliptic, 10-13 cm long, 3-4 cm wide, blades decurrent into short petioles, slightly acuminate but blunt; ripe fruit fleshy, yellow, broadly ovate to oval in outline, 4-4.5 cm long, 3-3.6 cm wide, 3-3.4 cm thick, apex blunt, lateral keels fairly prominent, 1, rarely 2, blunt ridges on dorsal and ventral sides, tending to be rather obscure toward base, stone ovoid, rather flat, smooth, 3.7 cm long, 2.8 cm wide, 1.5 cm thick, keels on sides acute, none on faces, apex thin, sharp, obtuse in outline, cavities none.

This plant differs from var. *mariannensis* in the very thick fruit, yellow rather than red when ripe, and in elliptic rather than oblanceolate or obovate leaves.

MARIANAS ISLANDS: SAIPAN: inland from Marpi Point, in forest on limestone, Oct., 24, 1968, *Falanruw & Bungud* 994 (US, holotype).

#### COMPOSITAE

**Eupatorium odoratum** L., Syst. Nat. ed. 10, 1205, 1759; Stone, *Micronesica* 6: 581, 1971.

This is a widespread and very aggressive weed in many tropical countries. It appeared in Saipan, probably sometime after 1950, as it was not found there during rather intensive collecting in 1946 and 1950, but was found by Courage in 1958. When it spread to Tinian and Guam is not certain. The Tinian collection was made about 1952 and that on Guam in 1964. It would pay to eradicate it from the Marianas while it may still be possible. Stone describes this plant and comments on its origin, introduction and spread from Saipan to Guam, and cites a Saipan collection (*Stone* 5172, UG) and a Guam collection (*Wade* 22, UG).

King and Robinson have transferred this species to *Chromolaena* DC. in their dismemberment of *Eupatorium*. We will reserve judgment on the desirability of this for the time being, since they propose to publish a key to their generic arrangement.

MARIANAS ISLANDS: SAIPAN: Marpi, *Courage* 45 (US), 60 (US); Marpi Point, *Fosberg* 47714 (US). TINIAN: North Field, *Kondo* 17 (BISH). GUAM: Apra, *Wade* 22 (UG, US).