

## MATERIALS OF THE BOTANICAL RESEARCH TOWARDS THE FLORA OF MICRONESIA IV.

by

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### Piperaceae

**Piper carolinense** HOSOKAWA, *sp. nov.* (*Nematanthera*)

Dioicum? Scandens? Ramulus glaberrimus, striatus, ad nodos paullo incrassatus, internodiis ca. 4-8 cm. longis. Folia petiolata, petiolis glabris basi vaginantibus 2-2.5 cm. longis; laminae ovatae vel elliptico-ovatae, apice acutae, basi obliquae, acutae v. cuneatae v. obtusae, margine integrae, chartaceae, 5-plinervatae, nervo centrali paullo supra basin trifido caetero utroque uno e basi soluto, utrinque glabrae, supra opacae, subtus reticulatae, nervis paullo elevatis, ad 9 cm. longae 6 cm. latae. Amenta oppositifolia, densiflora, solitaria, pedunculata, pedunculo glabro ca. 1.2 cm. longo, parte florifero ca. 3 cm. longo. Flos ♂ : bractee pelta glabra, orbicularis, ca. 0.5 mm. in diam., centro breviter pedicellata. Stamen unicum, peltis bractearum paullo superans, antherâ filamentis fere aequilongâ.

HAB. *Caroline*: Palau, in a forest on the coral islet of Urktable, at middle altitudes (T. HOSOKAWA, no. 7505 ! X. 15, 1933—*Type in Herb. Taihoku Imp. Univ.*).

**Piper guahamense** C. DC. in DC. Prodr. XVI. 1. (1869) p. 336; MERR. in Philip. Journ. Sci. IX. (1914) bot. p. 71; KANEHIRA Fl. Micron. (1933) p. 418.

HAB. *Marianne*: Guam!—Rota, growing in luxuriance as a undergrowth in a primary forest near Sinapal, at low altitudes (T. HOSOKAWA, no. 7568 ! VII. 10, 1934),—Agrigan, in a primary forest at low altitudes (T. HOSOKAWA, no. 8011 ! VIII. 1, 1934).

paniculati. Paniculae sessiles, ca. 10 cm. longae, prope basin fasciculatim dispositae, rachibus velutino-tomentellis. Calyx late cupulatus, extus et intus adpresse tomentosus, 9 mm. longus 16 mm. latus, dente superiore obsolete integro, dentibus infero-lateralibus late deltoideis ca. 1.5 mm. longis, dente infero lanceolato-deltoideo apice aceroso-acuminatissimo 9 mm. longo 5 mm. lato. Vexillum ovatum, glabrum, apice bifidum, 4 cm. longum 3.2 cm. latum. Alae falcatae, apice obtusae, prope basin extus pubescentes, stipitatae, stipitibus dense hirtellis ca. 5 mm. longis, 5 cm. longae 1.7 cm. latae. Carina valde incurva, quam alae angustior, apice acuta, glabra, ca. 5 cm. longa 1 cm. lata, stipite ca. 5 mm. longo. Stamina valde incurva, 5 cm. longa, antheris brevioribus barbatis 2 mm. longis. Ovarium dense ferrugineo-villosum, 8 mm. longum, stylo filiformi longe piloso inferiore 6 cm. longo. —Proxima *M. tomentosae* K. Schumm. in K. Schumm. u. K. Lauterb. Nachträge Fl. Deutsch. Schutzgeb. Südsee (1905) p. 277.

HAB. *Caroline*: Ponape, leaned on *Ficus carolinensis* WARB. by a riverside near Nampil (T. HOSOKAWA, no. 6036! VIII. 25, 1933—*Type in Herb. Taihoku Imp. Univ.*); in a *Campnosperma* forest at low altitudes of Mt. Nānaraut (T. HOSOKAWA, no. 5926! VIII. 22, 1933).

***Mucuna pacifica* HOSOKAWA, sp. nov.**

Alte scandens, ramulis in siccitate nigricantibus pilosis pilis demum deciduis. Folia petiolata, petiolis pilosis et hirtellis striatiusculis 12–20 cm. longis. Foliola petiolulata, petiolulis dense hirsutis ca. 5 mm. longis; terminalia suborbicularia, apice abrupte acuminatissima vel cuspidato-acuminata, basi rotundata, margine integra, 5-penninervia, membranacea, supra in siccitate nigricantia, adpresse sericeo-pilosa, subtus dense adpresseque sericeo-pilosa, pallidiora, laxe retiformia, costis et venis prominentibus, ad 14 cm. longa ad 11 cm. lata, lateralia oblique ovata, gibbosa, apice cuspidato-acuminata, basi truncata vel rotundata, caetera foliolo terminali similia. Flores ignoti. Legumen oblongum, supra pilis ferrugineis (tamen demum deciduis) dense vestitum, 2–3-seminiferum, in utrinque suturis bialatum, alis membranaceis ca 8 mm. latis, inclinatim lamellosum, lamellis membranaceis

3 mm. latis, ad 13 cm. longum, ca. 5.8 cm. latum.—Proxime affinis ad *M. Kraetkei* Warb. [in ENGL. Bot. Jahrb. XIII. (1891) p. 329].

HAB. *Marianne*: Saipan, in a *Claoxylon* forest at about 300 m. above the sea-level on Mt. Tappocho (T. HOSOKAWA, no. 6725! VII. 17, 1933—*Type in Herb. Taihoku Imp. Univ.*); in a secondary thicket at middle altitudes of Mt. Tappocho (T. HOSOKAWA, no. 6684! & 6647! VII. 17, 1933); in a *Artocarpus-Barringtonia* forest at low altitudes of Mt. Tappocho (T. HOSOKAWA, no. 6605! VII. 17, 1933).

***Mucuna sp. nov.?***

Scandens, ramulis nigricantibus filiformibus striatiusculis pilosis. Petiolus longe sericeo-pilosus, ad 9 cm. longus, stipellis setosis 4 mm. longis, petiolulis dense hirsutis 3 mm. longis. Foliola terminalia membranacea, lanceolata vel ovato-lanceolata, apice caudata vel caudatim acuminata, basi rotundata, margine integra, 7-penninervia, supra laxe sericeo-pilosa, subtus subdensiora, ad 15 cm. longa 6 cm. lata; lateralia gibboso-obliqua, caetera foliolo terminali similia.

HAB. *Caroline*: Ponape, in a *Campnosperma* forest at low altitudes of Mt. Sankaku (T. HOSOKAWA, no. 5483! VIII. 8, 1933); in a *Campnosperma* forest at low altitudes of Mt. Nānaraut (T. HOSOKAWA, no. 5917! VIII. 22, 1933).

As the characteristic feature in this climber, in Ponape they will recognize the species with narrower leaflets which have always caudately acuminate or caudate apices.

***Derris mariannensis* HOSOKAWA, sp. nov. (*Paraderris* BENTH.)**

Frutex, ramis glabris, ramulis juvenibus dense ferrugineo-hirsutis. Folia 5-7-foliolata, petiolis parce pilosa, ad 9 cm. longa. Foliola opposita, petiolulata, petiolulis hirtellis 4-5 mm. longis; laminae elliptico-oblongae vel ovato-ellipticae, apice acuminatae mucronulatae, basi cuneatae rarius truncatiusculae, margine integrae, chartaceae, 7-penninerves, utrinque pilosae, reticulatae, subtus costis et venis ferrugineis prominentibus, ad 7 cm. longae 4.2 cm. latae. Racemi axillares, quam folia breviores, ad 5 cm. longi, rachibus ferrugineo-hirtellis. Flores saepius geminati, pedicellati, pedicellis pubescentibus 6 mm. longis prope apicem bibracteolatis bracteolis minimis. Calyx cupuliformis, extus ferrugineo-pubescentis, ad marginem remotissime un-