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A COLLECTION OF PLANTS FROM FAIS, CAROLINE ISLANDS by F. R. Fosberg and Michael Evans

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A COLLECTION OF PLANTS FROM FAIS, CAROLINE ISLANDS

by F. R. Fosberg and Michael Evans

Fais (Tromelin) is an elevated coral island, surrounded by interrupted cliffs 15-20 meters high, lying some 140 miles east of Yap Island, at latitude 9°46' N, longitude 140°31' E in the western Caroline Islands. It has an area of 2.8 square km, and has a population of about 300 people, Micronesians, speaking a dialect of the Ulithi-Woleai tongue. As with many such raised coral islands, valuable calcium phosphate deposits occur on Fais, the greater portion of which was removed and exported during the period of Japanese rule (1914-1945).

At present the interior of the plateau and the sand flats at the bases of the cliffs and slopes back of the beaches are used for agriculture, mostly coconut plantations, though some areas of the plateau are open and devoted to cultivation of sweet potatoes, manihot, tobacco and even Alocasia macrorrhiza.

In the coconut plantations are scattered trees and shrubs of various sorts, especially Artocarpus altilis (breadfruit), Hibiscus tiliaceus, Morinda citrifolia, Calophyllum inophyllum, Premna obtusifolia, Ochrosia oppositifolia, Randia cochinchinensis, Eugenia aquea and E. javanica. Bananas, papayas, Tacca leontopetaloides, and especially Alocasia macrorrhiza are also common, as well as various herbaceous weeds. Weeds of a number of kinds are found in the cultivated fields. Around the villages ornamental as well as edible garden plants are found in great profusion.

Much of the periphery of Fais is lined by vertical, or usually undercut, cliffs, at the top of which is a zone of very rough deeply pitted coral limestone, about level with or in places slightly higher than the main interior plateau surface. This is covered by a belt of dense low forest, principally an almost pure stand of Barringtonia asiatica. On the inland side it is mixed with a number of species of trees and large shrubs, especially Premna obtusifolia, Hibiscus tiliaceus, Pipturus argenteus, Melochia compacta, Ficus tinctoria and Morinda citrifolia. On the seaward side are thickets and patches of Pandanus tectorius, fading into a narrow scrub fringe of Tournefortia argentea and Scaevola taccada. In places this forest comes right to the cliff edge, and here, and on ledges, is a massive scrub of Pandanus dubius, extending down the cliffs where there are broken parts. On the more sheer areas of these cliffs Fimbristylis cymosa and Hedyotis albidopunctata cling to slight irregularities. In front of the forest, on some stretches of cliffed coast is an open zone of herbaceous vegetation with scattered shrubs. This zone must in its entirety be subject

to drenching by salt spray during rough weather, and even with moderately strong waves the forward parts get considerable spray. This terrace-like area is eroded to extreme roughness and sharpness, but not pinnacled. The back parts of it are covered by a mixture of low-growing Heliotropium anomalum, Hedyotis albido-punctata, Fimbristylis cymosa and Wedelia biflora, the latter much more succulent here than usual. Locally this is replaced by a pure stand of Paspalum distichum. The front, more heavily spray-affected, belt of this terrace is locally bare, but generally covered by a pure stand of dense hard tussocks of a grass, sterile at the season of this visit, but probably Sporobolus farinosa, known previously only from rough limestone in the Marianas.

The tops of the beaches, in front of the coconut area, are green with a dense mat of Vigna marina and Triumfetta procumbens.

The above observations were made during a two and one-half hour visit by the writers on July 30, 1965, while on a Trust Territory "field trip" aboard M/V ROQUE. Thanks are due Captain L. B. Roberts, master of the vessel, for lying to offshore while the visit was made; to Mr. Stephen Echin, of Ulithi, Trust Territory field trip officer, for getting the party ashore and for introductions to the people of Fais; to Mr. Santos, of Fais, who supplied the vernacular names of certain plants, and to numerous small boys who enthusiastically carried plant presses and helped collect specimens.

Since the time was limited and only a small part of the island covered, this collection in all likelihood represents only a fraction of the total vascular flora of the island. In all 120 species are listed below, including several of which collections were not made. The collections came from the southwest part of the island. Krämer, in Thilenius, Erg. Südsee-Exp. II, B, 10: 299-413, 1937, gives an account of this island, mainly ethnological, but with a list of plants, apparently unsupported by specimens. These are cited here as appropriate, where they can be identified. Species presumed to have been introduced by human agency are marked by an asterisk *. The specimens cited have not been distributed, as they must still be studied for the flora of Micronesia. Some of them are not in good condition and may have to be discarded.

POLYPODIACEAE (sensu lato)

ASPLENIUM ADIANTOIDES (L.) C. Chr.

Local on shaded cliff, Fatadol, Fosberg 46732. Even fertile plants vary enormously in stature.

NEPHROLEPIS HIRSUTULA Forst. f.

Abundant in coconut plantations on plateau, terrestrial, <u>Fosberg</u> 46705. Fronds mostly erect.

POLYPODIUM SCOLOPENDRIA Burm. f.

Abundant in coconut plantations on plateau, terrestrial and climbing on bases of coconut trees, Fosberg 46697.

PANDANACEAE

PANDANUS DUBIUS Spreng.

Forming dense thickets on ledges and tops of cliffs, $\underline{\text{Fosberg}}$ $\underline{46723}$. Only seen sterile.

PANDANUS TECTORIUS Park.

Forming thickets and small patches of forest back of cliff tops, Fosberg 46715. Krämer, p. 389.

GRAMINEAE

*ANDROPOGON INTERMEDIUS R. Br.

Local weed in sweet potato field, <u>Fosberg 46675</u>. This is a dominant grass in the grassy savannas of Yap and may well have been introduced from there.

*CHRYSOPOGON ACICULATUS (Retz.) Trin.

Local in edges of sweet potato field, Fosberg 46659. A widespread weed in many Pacific islands.

*DIGITARIA VIOLASCENS Link

Common locally in sweet potato fields, Fosberg 46673. Clumps erect, unusually tall for this species.

*ELEUSINE INDICA (L.) Gaertn.

Common along paths in Lochochoy village, Evans 342; "fathil."

*ERAGROSTIS TENELLA (L.) Beauv. (E. ambilis (L.) W. & A.)
Occasional on cultivated ground in Lochochoy village, Evans 346;
"fathil."

ISCHAEMUM DIGITATUM Brongn. ?

Locally dominant in small clearing just inside forest strip on south side of island, Fosberg 46713. Culms erect, to 1 meter tall, from prostrate, superficial rhizomes; seen only sterile, therefore this determination is only very tentative.

*PASPALUM CONJUGATUM Berg.

Weed in cultivated ground, in paths and around dwellings, Fosberg 46657, 46665, Evans 347; "fathil."

PASPALUM DISTICHUM L. (P. vaginatum Sw.)

Dominant locally in open, very rough, eroded coral limestone terrace at top of cliffs on south shore of island, Fosberg 46733.

*PASPALUM SCROBICULATUM L.

Rare in sweet potato fields, Fosberg 46674. This is a very robust form that may best be placed in var. auriculatum (Pres1) Merr.

SPOROBOLUS FARINOSUS Hosok.

Forming pure stands on very rough, eroded coral limestone just back of edges of cliffs on terrace on south side of island,

Fosberg 46727. Dense, firm tussocks of fibrous leaf and stem bases, leaves glaucous, seen only sterile. Known otherwise from Guam.

THUAREA INVOLUTA (Forst. f.) R. & S.

Occasional in coconut plantation on plateau, Fosberg 46709.

Prostrate, forming loose mats.

*ZOYSIA TENUIFOLIA Trin.

Common, forming dense mats and cushions, in Lochochoy village, Evans 379; "fathil."

CYPERACEAE

FIMBRISTYLIS CYMOSA R. Br.

Common on rough limestone on cliffs and eroded terrace on south side of island, Fosberg 46725.

ARACEAE

*ALOCASIA MACRORRHIZA (L.) Schott

Commonly planted in village and in small clearings, spontaneous in coconut plantation on plateau, Evans 386, Fosberg 46696. Leaves reaching large size in favorable places. This is one of the few places where this aroid is planted for food. Krämer, p. 389, as "grosser Taro."

*COLOCASIA ESCULENTA (L.) Schott

Commonly cultivated in Lochochoy village, <u>Evans</u> 385. Krämer, p. 389, as "Taro."

*CYRTOSPERMA CHAMISSONIS Merr.

Planted in moist taro pit in coconut plantation on plateau, Fosberg 46683. Not seen elsewhere.

*XANTHOSOMA SAGITTIFOLIUM (L.) Schott

Frequently cultivated in Lochochov village Fy

Frequently cultivated in Lochochoy village, Evans 387.

PALMAE

*COCOS NUCIFERA L.

Planted abundantly on sand flats back of beaches and on large areas on plateau. Not collected. Krämer, p. 331.

COMMELINACEAE

*COMMELINA sp.

Not seen by us, but reported by Krämer, p. 390.

*RHOEO SPATHACEA (Sw.) Stearn

Common around taro pit in coconut plantation on plateau, <u>Fosberg</u> 46682. Probably persisting from cultivation as an ornamental.

AMARYLLIDACEAE

*CRINUM ASIATICUM L.

Occasional along path at back of beach rampart, Evans 363; "giob." Used for medicine. Krämer, p. 390.

*HYMENOCALLIS LITTORALIS (Jacq.) Salisb.

Planted and spontaneous in village and back of beach, Fosberg 46649, Evans 377; "ropig." Flowers used to make garlands, or "maremar."

*ZEPHYRANTHES ROSEA (Spreng.) Lindl.

Rare along path in Lochochoy village, Evans 375. "Introduced from Japan."

DIOSCOREACEAE

DIOSCOREA BULBIFERA L.

Occasional in coconut plantation on plateau, Fosberg 46689.

*DIOSCOREA ESCULENTA var. FASCICULATA (Roxb.) Pr. & Burk.
Occasional in edges of sweet potato fields and frequent in
village, climbing on shrubs, Fosberg 46676, Evans 351; "tal."
Tubers eaten. Krämer, p. 389, as "yams."

TACCACEAE

TACCA LEONTOPETALOIDES (L.) O. Ktze.

Common in coconut plantation on plateau, Fosberg 46702. Apparently spontaneous. Krämer, pp. 331, 390, as "Tacca Stärkewurzel."

MUSACEAE

*MUSA SAPIENTUM L.

Common in coconut plantation and village. Not collected. Krämer, p. 332.

ZINGIBERACEAE

CURCUMA spp.

Possibly two species present, a small one, Evans 381, "guchol," said to be used for medicine and to make garlands; another, much larger, to 1 meter or more tall seen but not collected. Both growing in village. Both seen sterile only.

PIPERACEAE

*PIPER BETLE L.

Occasional in Lochochoy village, climbing on large trees, <u>Evans</u> 357; 'habui.' Chewed with Betel nut.

MORACEAE

*ARTOCARPUS ALTILIS (Park.) Fosb.

Common in coconut plantation and on plateau, Fosberg 46703. The breadfruit. Krämer, pp. 332, 390, as "Brotfrucht-Arten."

FICUS TINCTORIA Forst. f.

Occasional in undergrowth in forest and coconut plantation on plateau, also in village, Fosberg 46717, Evans 382; "gawal." Fruit eaten. Krämer, p. 390.

URTICACEAE

*PILEA MICROPHYLLA L.

Common on stones lining paths in Lochochoy village, Evans 348. "Introduced."

PIPTURUS ARGENTEUS (Forst. f.) Wedd.

Common in dense scrub forest back of cliffs, Yldow, Fosberg 46719, 46720. Krämer, p. 389, as Pipturus.

NYCTAGINACEAE

BOERHAVIA MUTABILIS R. Br. ?

Occasional in sweet potato fields, Fosberg 46664. A very small-leafed form that may belong to this species.

*MIRABILIS JALAPA L.

Occasional in open spaces in Lochochoy village, Evans 380; "gaelun." Used for garlands, "maremar."

PISONIA GRANDIS R. Br.

We did not see this but Krämer, p. 390, reported it as "Strandbaum, Blüten mit 8 Staubgefässen."

AMARANTHACEAE

*ACHYRANTHES ASPERA L.

Common in small clearing dominated by long grass, Fosberg 46711.

AMARANTHUS VIRIDIS L.

Frequent in village, Evans 343; "waluwol."

PORTULACACEAE

PORTULACA SAMOENSIS v. Poelln.

Occasional in sweet potato fields, Fosberg 46661. Widespread weed of open places in the central Pacific islands. ? Krämer, p. 389, as "Fetthenne mit gelben Blüten."

LAURACEAE

CASSYTHA FILIFORMIS L.

Common, parasitic on various hosts, in coconut plantation on plateau, Fosberg 46693. Pantropical. Krämer, p. 390, as Cassytha.

HERNANDTACEAE

HERNANDIA SONORA L.

One tree seen in Lochochoy village, Fosberg 46654. Widespread strand tree.

CAPPARIDACEAE

CAPPARIS CORDIFOLIA Lam.

Occasional, sprawling on low shrubs on beach rampart, <u>Evans 359</u>; "choriuth." Widespread on elevated coral islands in central and western Pacific.

CRATEVA SPECIOSA Volk.

Occasional in Lochochoy village, Evans 374; "yafuch." Used for medicine; fruit eaten. Krämer, p. 389, as Crataeva.

LEGUMINOSAE

*CAESALPINIA PULCHERRIMA (L.) Sw.

Commonly planted in Lochochoy village, Fosberg 46652, Evans 352; "warapig." Flowers used for garlands, "maremar."

*CASSIA OCCIDENTALIS L.

Occasional in sweet potato fields, Fosberg 46677. Pantropical weed.

CASSIA SOPHERA L.

Not seen by us, reported by Kr#mer, p. 390, but this may be a misidentification of C. occidentalis L.

*DELONIX REGIA (Boj.) Raf. ?

Rare planted tree in Lochochoy village, Evans 372; "warapig." Sterile.

*DERRIS ELLIPTICA (Roxb.) Benth.
Not seen by us, but reported by Krämer, p. 390.

*DESMODIUM TRIFLORUM (L.) DC.
Occasional in sweet potato fields, Fosberg 46678. Widespread tropical weed.

VIGNA MARINA (Burm.) Merr.

Common in sweet potato fields and at top of beach, Fosberg 46660,

Evans 361; "holu." Leaves used for medicine. Krämer, p. 390,

as V. lutea.

OXALIDACEAE

*OXALIS CORNICULATA L.

Occasional in sweet potato fields, <u>Fosberg 46669</u>. Widespread, variable weed; var. corniculata probably the one found here.

RUTACEAE

*CITRUS GRANDIS (L.) Osb. ?
Planted around dwellings in Lochochoy village, Fosberg 46650.

*CITRUS SINENSIS Osb.
Planted around dwellings in Lochochoy village, Fosberg 46651.

SURIANACEAE

SURIANA MARITIMA L.

We did not see this, but Krämer, p. 390, reported it as "Strand-Myrthe."

SIMARUBACEAE

SOULAMEA AMARA Lam.

Not seen by us but reported by Krämer, p. 390, as Soulamea.

POLYGALACEAE

POLYGALA PANICULATA L.

Common in sweet potato fields, <u>Fosberg 46667</u>. Widespread weed in western Pacific.

EUPHORBIACEAE

*ACALYPHA LANCEOLATA Willd.

Common in open sweet potato fields, Fosberg 46666.

EUPHORBIA PROSTRATA Ait. ?

Frequent along paths and in open spaces in Lochochoy village, Evans 383. Pantropical weed.

*EUPHORBIA CYATHOPHORA Murr.

Rare, along paths in Lochochoy village, Evans 373. "Introduced."

*EUPHORBIA HIRTA L.

In village, coconut plantations and other disturbed places, Fosberg 46701, Evans 366; "habulbul." Pantropical weed. Krämer, p. 389, as E. pilulifera.

EUPHORBIA THYMIFOLIA L. ?

In village, along paths, Evans 388. Pantropical weed.

*MANIHOT ESCULENTA Crantz

Said to be cultivated on the island but not seen by us.

*PHYLLANTHUS AMARUS Schum. & Thonn. (P. niruri Sch. & Th. non L.)
Locally common in cultivated and disturbed ground, Fosberg 46668,
46680, Evans 345; "piapi." Widespread tropical weed.

*PHYLLANTHUS URINARIA L.

In sweet potato fields, Fosberg 46663. Widespread tropical weed.

SAPINDACEAE

ALLOPHYLUS TIMORENSIS B1.

Rare in dense scrub forest back of cliff, Fosberg 46722. Widespread strand species. Krämer, p. 390, as "Allophyllus Dreiblatt."

TILIACEAE

*CORCHORUS AESTUANS L.

Common in sweet potato fields, Fosberg 46671. Pantropical weed.

*MUNTINGIA CALABURA L.

Rare, in open space beside house in Lochochoy village, <u>Evans</u> 369; "sugar." "Introduced from Ulithi." Fruit eaten.

TRIUMFETTA PROCUMBENS Forst. f.

Top of beach, seen but not collected. Krämer, p. 389, as "Trionfettia procumbens."

MALVACEAE

*HIBISCUS ABELMOSCHUS L.

Uncommon in small opening in coconut plantation on plateau, Fosberg 46714. Only seen sterile. ? Krämer, p. 389, as H. moschatus.

HIBISCUS TILIACEUS L.

Common in coconut plantations and in inner edges of forest zone at top of cliffs, Fosberg 46691. Pantropical. Krämer, p. 390.

*HIBISCUS ROSA-SINENSIS L.

Not seen by us but reported by Krämer, p. 389.

*SIDA MICROPHYLLA Cav.

Occasional in sweet potato fields, Fosberg 46670.

STERCULIACEAE

MELOCHIA COMPACTA Hochr.

Occasional in inner edge of forest zone back of cliffs, and in coconut plantation on plateau, Fosberg 46694, 46707. Krämer, p. 390, as M. indica.

GUTTIFERAE

CALOPHYLLUM INOPHYLLUM L.

Occasional in coconut plantations and back of beach, <u>Fosberg</u> 46708. Only seen sterile. Pantropical. Krämer, pp. 324, 389, as Calophyllum.

MAMMEA ODORATA (Raf.) Kost.

One tree seen in Lochochoy village, Fosberg 46653. Characteristic plant of elevated limestone situations in Micronesia.

CARTCACEAE

*CARICA PAPAYA L.

Spontaneous in coconut plantations on plateau and commonly cultivated in Lochochoy village, <u>Evans 370</u>; "papaya." Fruit eaten. Flowers used for garlands, or "maremar." Krämer, pp. 331, 389, as "Papaya."

LYTHRACEAE

PEMPHIS ACIDULA Forst.

Not seen by us but doubtless present; probably the "gutes schweres Holz" and the "Myrthe" of Krämer, p. 389.

COMBRETACEAE

TERMINALIA CATAPPA L.

Rare in coconut plantation on plateau, Fosberg 46686. Krämer, p. 390. Pantropical lowland tree.

LECYTHIDACEAE

BARRINGTONIA ASIATICA (L.) Kurz

Dominant tree in scrub forest back of tops of cliffs on plateau, also frequent back of beaches, Fosberg 46716, Evans 376; "gol." Used medicinally; wood used for canoe-making. Krämer, p. 390, as "Barringtonie."

MYRTACEAE

*EUGENIA AQUEA L. ?

Occasional, planted in village, Evans 384; "apol garavan." Used medicinally.

EUGENIA JAVANICA Lam.

Occasional in coconut plantations on plateau. Fosberg 46698.

ARALIACEAE

*POLYSCIAS GUILFOYLEI (Cogn. & March.) Bailey
Frequent as hedge along paths in Lochochoy village, Evans 356.
"Introduced."

*POLYSCIAS SCUTELLARIA (Burm. f.) Fosb.
Occasional as hedge along paths in Lochochoy village, Evans 355.
"Introduced from Japan."

*POLYSCIAS FRUTICOSA (L.) Harms
Planted as hedge in village, Evans 365.

UMBELLIFERAE

CENTELLA ASIATICA (L.) Urb.

Very local in coconut plantation on plateau, $\underline{\text{Fosberg}}$ $\underline{\text{46710}}$. Widespread Pacific plant.

GENTIANACEAE

FAGRAEA BERTERIANA Gray ex Benth. ?
Not seen by us, but reported by Krämer, p. 390, as Fragraea.

APOCYNACEAE

OCHROSIA OPPOSITIFOLIA (Lam.) Schum.

Occasional in coconut plantation on plateau and in open spaces in Lochochoy village, Evans 378; "mo." Used for medicine.

*PLUMERIA RUBRA L.

Occasional along paths in Lochochoy village, Evans 350; "sour." Flowers used for garlands, "maremar."

CONVOLVULACEAE

*IPOMOEA BATATAS (L.) Lam.

Abundantly cultivated, Fosberg 46662. Probably more than one cultivar present. Krämer, pp. $\overline{330}$, $\overline{389}$.

IPOMOEA LITTORALIS B1.

Rare in coconut plantation on plateau, <u>Fosberg 46692</u>. Widespread Pacific and probably pantropical species. Only seen sterile on Fais. Krämer, pp. 332, 389.

*OPERCULINA VENTRICOSA (Bert.) Peter ?

Very local at inner edge of forest zone back of cliffs, in coconut plantation, Fosberg 46721. A very coarse, extensive twiner, only seen sterile. It is probably this species rather than <u>O. turpethum</u>, as the stems are not winged. If this identification is correct, this is an addition to the Caroline Islands flora, as the species is known in Micronesia only from the Marianas. Rrämer, p. 389, as "grosse Winde Marremia convolv."

BORAGINACEAE

HELIOTROPIUM ANOMALUM H. & A.

Very common on open, very rough, eroded coral limestone terrace at top of cliffs on west side of island, Fosberg 46726. A species of wide but peculiar distribution in the Pacific; this is the first record from the Caroline Islands.

TOURNEFORTIA ARGENTEA L. f.

Common at top of beach and on outer edges of forests at top of cliff, Evans 360, Fosberg 46729; "chel." Wood used for canoemaking. Krämer, p. 389, as Tournefortia.

VERBENACEAE

CALLICARPA CANDICANS (Burm. f.) Hochr.

Occasional in coconut plantation on plateau, Fosberg 46687. Widespread western Pacific species; the Micronesian plants often called C. erioclona Schauer, which may be identical or at least very close. ? Krämer, p. 389, as "lila Beeren."

CLERODENDRUM SPECIOSISSIMUM van Geert

Occasional in coconut plantation on plateau, Fosberg 46712. Apparently native in Western Carolines. Krämer, p. 390, as Clerodendron.

PREMNA OBTUSIFOLIA R. Br.

Common generally in interior of plateau and in village, Fosberg 46681, Evans 371; "yar." Used medicinally. Krämer, p. 389, as Premna.

LABIATAE

*OCIMUM SANCTUM L.

Occasionally planted in village. Two forms represented, one low growing and purplish, Fosberg 46648, Evans 368, and a taller greenish form, Evans 367; both called "warong." Commonly planted and highly prized for its odor throughout the Western Pacific. Krämer, p. 390, as "Minze riechend."

SOLANACEAE

*CAPSICUM FRUTESCENS L.

Uncommon around dwellings in Lochochoy, $\underline{\text{Fosberg}}$ $\underline{\text{46655}}$. The chili pepper.

*NICOTIANA TABACUM L.

Cultivated in substantial amounts on the island, but not seen or collected on this visit.

*PHYSALIS ANGULATA L.

Locally common in sweet potato fields, Fosberg 46679. Pantropical.

ACANTHACEAE

BLECHUM BROWNEI f. PUBERULUM Leonard

Weed in moist taro pit in coconut plantation on plateau, Fosberg 46684.

RUBIACEAE

GUETTARDA SPECIOSA L.

Common in dense scrub forest back of cliffs and occasional along paths in Lochochoy village, Fosberg 46718, Evans 353; "outh." Flowers used for garlands, or "maremar."

HEDYOTIS ALBIDO-PUNCTATA (Merr.) Fosb.

Generally common on rough, eroded limestone, <u>Fosberg 46728</u>, <u>46731</u>. Widespread in Western Pacific in strand situations, especially on rough limestone.

*HEDYOTIS CORYMBOSA (L.) Lam.

Occasional in clearings in coconut plantation on plateau, <u>Fosberg</u> 46685. Pantropical weed.

IXORA CASEI Hance

Occasional in village, Fosberg 46658, Evans 354; "hachiu" or "hachio."

MORINDA CITRIFOLIA L.

Common generally in coconut plantations; in inner edge of forest and in village, Fosberg 46706, Evans 358; "lol." Ripe fruit eaten with water and sugar. Krämer, pp. 331, 390, as Morinda.

MUSSAENDA FRONDOSA L.

Occasional in coconut plantation on plateau, Fosberg 46688, 46690. Common from India to Western Carolines. Variable species, often divided into several or many ill-distinguished microspecies. Krämer, p. 389, as Mussaenda.

PSYCHOTRIA ? sp.

Occasional in coconut plantation on plateau, Fosberg 46704. Sterile shrub, probably belonging to this genus. This may be an undescribed species and every effort should be made to re-collect it in a fertile condition.

RANDIA COCHINCHINENSIS (Lour.) Merr.

Common in coconut plantation on plateau, Fosberg 46699. Only seen as a shrub here. A common Indo-Pacific shrub or small tree, reaching as far east as the Southern Marshalls.

CAMPANULACEAE

*HIPPOBROMA LONGIFLORA (L.) G. Don

Frequent on cultivated ground, along paths and around dwellings in Lochochoy village, Fosberg 46656, Evans 349. "Introduced from Palau."

GOODENIACEAE

SCAEVOLA TACCADA (Gaertn.) Roxb.

Common at top of and back of beach, also at outer edge of forest at top of cliffs; less common in coconut plantations, Fosberg 46730, Evans 362; "lath." Stems used medicinally. A widespread Indo-Pacific strand shrub. Krämer, p. 390, as Scaevola.

COMPOSITAE

*AGERATUM CONYZOIDES L.

Not seen by us, but reported by Krämer, p. 390, as "Ageratum lila."

*EMILIA SONCHIFOLIA (L.) DC.

Common in sweet potato fields, Fosberg 46672. Pantropical weed.

*VERNONIA CINEREA (L.) Less. var. PARVIFLORA DC.

Locally common in coconut plantation on plateau and on cultivated ground in Lochochoy village, Fosberg 46700, Evans 344. "Introduced from Yap." Pantropical species.

WEDELIA BIFLORA (L.) DC.

Common on rough, eroded limestone at top of cliffs, Fosberg 46724. Widespread Indo-Pacific strand species. Krämer, p. 389, as Wedelia.