PLANTS OF THE MANUA ISLANDS

BY

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INTRODUCTION

The volcanic islands of Ofo, Ofonega, and Tau are known collectively as Manua, now part of American (Eastern) Samoa. They are situated between 169 and 170 degrees west longitude and 14 and 15 degrees south latitude and are about 67 miles east of Pago Pago on the island of Tutuila. Tau, containing about 14 square miles, is the largest and attains an altitude of over 900 meters. It is more or less dome shaped with precipitous coasts on the northern and western sides. Ofo and Ofonega, only a few miles distant, are rugged and picturesque and are separated from each other by a narrow and shallow strait.

The islands lie outside the regular trade routes and are rarely visited by ships other than occasional small trading vessels or those making official governmental visits. The only white persons residing there are a few connected with the United States Navy Department, which has jurisdiction over the islands, and occasional transient visitors. There are about 2,500 natives living on the three islands, who subsist principally on sea food, bananas, taro, breadfruit, and coconuts. Breadfruit trees grow in large numbers in and about every village. Taro, bananas and coconuts are extensively cultivated in plantations. Timed foods are also used to some extent, salmon being a favorite.

The original vegetation has now been eradicated to a large extent on the lowlands and lower hillsides to provide for coconut and banana plantations. It still persists, however, at the higher altitudes and in ravines and other areas too rough for cultivation. The vegetation in these regions, especially on Tau, is exceedingly dense and travel on the trails is difficult.

A number of botanists have made collections on the islands. Among the older collections are those made by Reisneck, Powell, Brackenridge, and McCallum. More recently, collections have been made by D. W. Garber, between 1921 and 1925; by Anna and Wrio Harris, usually during 1938; and by me. I spent several weeks on the islands of Tau and Ofu during October and November of 1938. Christopherson in his Flowering Plants of Samoa (B. P. Bishop Mus. Bula, 128 and 154, 1935 and 1938) cites the collections made by Garber. Aside from this, no attempt at a complete listing of the plants has been made. The Garber and the Harris collections included in the present list, as well as most of the other scattered citations, are in the Bernice P. Bishop Museum herbarium and have been examined by me. I have not seen collections
made by earlier visitors to the islands. They are now mostly in European herbaria and, with a few exceptions, are not included. During the summer of 1939, Paul L. Goss of Honolulu made a survey of the economic trees of American Samoa, including those of Manua. His manuscript report in the Bishop Museum library is not, unfortunately, supported by herbarium materials. However, it has been checked against this list and its observations have been included wherever they extend the range or report a species overlooked by other botanists.

The present list includes 37 species of mosses, 53 species of pteridophytes, 95 species of monocotyledons, and 256 species of dicotyledons, or a total of 442 species. More careful botanizing, particularly at high altitudes on Tāu, will probably bring to light several species hitherto overlooked.

The spelling of native names, obtained from natives or from the publications of Christiansen and of Ketelle (Vegetation of Tutuila Island, Carnegie Inst., Vol. 20, 1924), have been checked by Dr. Peter H. Buck.

The islands were visited and the collections made while I was on an appointment as Bishop Museum Fellow in Yale University. I am deeply indebted to Dr. Peter H. Buck, Director of Bishop Museum, for placing the facilities of the Museum at my disposal and for assistance in arranging the itinerary; to Captain E. W. Hansen, then Curator of American Samoa, and the other officers and men of the United States Navy stationed in the islands for transportation to Manua fromPago Pago and for the many kindnesses and courtesies which were shown me while in Manua; and to Chiefs Tūfēle and Lafiite of Tāu who placed a guest house at my disposal during my stay on the island and who assisted in my work in every way possible.

I am also indebted to a number of specialists who have cooperated in the identifications of the specimen and have contributed bibliographic data. Miss Marie Neal, botanist at Bishop Museum, assisted in the preliminary identification of much of the material and helped in making comparisons with specimens in the Museum herbarium; Mr. E. B. Bartram contributed the list of mosses; Dr. E. B. Copeland named the ferns, except those collected by Garber and Harris and identified by Dr. Carl Christiansen; Dr. F. E. Fosberg identified a number of specimens, particularly those in the Rubiaceae and Euphorbiaceae, and in addition made a number of nomenclatural suggestions; Mrs. Agnes Chase named the grasses; Dr. L. O. Williams identified the orchids; Mr. Hugh O'Neill identified the sedges; Dr. E. D. Merrill and Dr. A. C. Smith named a number of sterile or otherwise obscure specimens; Dr. Leon Croizat supplied the description of a new species of Scaurioides, and Dr. H. W. Raven and Mr. C. V. Morton contributed nomenclatural data. To all who have assisted in any way I wish to express my thanks.
This list of species from the Manua islands represents a substantial and interesting addition to the moss flora of Samoa. With two minor exceptions, the collections are all from the larger island of Tau and no doubt give a fairly complete outline of the mosses of this outlying region. At least nine species are new to Samoa, as far as I know; and four reductions to synonymy are proposed based on the information at hand.

One cannot fail to be impressed with the strong west to east course of geographical distribution shown in the list of species. This is especially true of Calypogea, a genus with marked insular tendencies, and may indicate a continuous land connection from Malaysia through Polynesia at no very remote period.

**FAMILY FISSIDENTACEAE**

**Genus Fissidens Hedwig**

*Fissidens mangarevanus* Montagne, Voy. au Pôle Sud, Crypt., 344, 1845.

Tau: on tree trunk in forest, alt. about 130 m., Oct. 1, 1939, *Yuncker* 7354; Palapala, gulch above Palapala Hill, on mountainside, damp native forest, banks of dry stream on trunks of tree fern and other trees, 1½ miles from shore, alt. 270-300 m., *W. Harris* 54b.

San to Samoa. Distribution: Mangareva, Austral Islands, Rapa, Fiji, Solomon Islands.

**FAMILY LECOCHRYACEAE**

**Genus Lecosphanes Hampe**


Tau: north slope of Lepeu, near summit of cone, under cover of forest, on 1½ boulder, one third mile from shore, alt. 285 m., *W. Harris* 1759.

Distribution: Ceylon, Malaysia, New Guinea, Philippines, Fiji.

**Lecosphanes purpureus** Fleischer, unpublished manuscript.

Tau: Tuna Peak, summit, ridge, medium damp, one eighth mile from shore, alt. 189 m., growing on dead logs in forest, *W. Harris*.

Distribution: Fiji.

**Genus Exedrotyos Carlot.**


Tau: Faalefau, edge, hillside, in native forest on living tree trunks, damp, 1 mile from shore, alt. 480 m., *W. Harris*.

*Contributed by Edwin B. Carlow.

Tahiti: Faleula Valley, south of Muno's house, on damp dead wood, light forest, hillside, moderate slope, 0.75 mile to shore, alt. 210 m., W. Harris 404; Palapala, guilh above Palapala Hill, on mountainside, damp native forest, banks of a dry stream, on trunks of tree ferns and other trees 1.5 miles from shore, alt. 270-300 m., W. Harris 53.

Distribution: Tahiti, New Hebrides, New Caledonia.

Family Calypisperaceae

Genus Calypisperes Swartz


Tahiti: Papatea, South Cove, lower edge of forest, steep hillside, crater rim, 5-30 feet from shore, alt. 1.5-6 m., growing on lower trunks of coconut tree and exposed feet of forest tree, A. Harris 418; Papatea, South Cove, on turf at shore, under lower edge of strand forest, damp crater rim, steep hillside, 5-30 feet from shore, A. Harris 614; upper Luma plantation, east of pig fence, along Vaona trail, plantation amphitheater plateau, moderate slope, damp, 2-10 feet above ground on trunks of coconut and breadfruit trees, 0.75 mile from shore, alt. 90 m., W. Harris 444a.

New to Samoa. Distribution: Sumatra, Java, Philippines.


Tahiti: Judas Crater, northwest rim, on trunks and limbs of trees, in damp, rather open forest, 0.75 mile to shore, alt. 150 m., W. Harris 413, 414; on coconut tree, alt. 250-300 m., Yunker 9293.

Endemic.

Calypisperes strictifolium (Mitten) Roth, Hedwighia 51:127, 1911.


Tahiti: Tavalogi Ridge, west end, ridge summit, under light forest cover, moss taken from north face of tuff capping, medium damp, one eighth mile from sea, alt. 143 m., W. Harris; Tavalogi Ridge, west end, north face, summit of ridge, cliff face, under forest, medium dry, on tuff rock, one eighth mile from shore, alt. 100 m., W. Harris; Fakalua Valley, one eighth mile south of Muno's house, growing on dead logs and fallen wood lying on moist soil under cover of light forest, hillside, gentle slope, 0.75 mile from shore, alt. 213 m., Harris 636b.

Upon examination of part of the type collection of this species, the highly characteristic tuberculate costa and leaf margins at once suggested a close relationship with S. tuberculans Dixion and Therist. Further comparisons failed
to reveal any noteworthy distinctions. Dinsan has compared the type material of his species with C. orientarium and agrees that they are conspecific. Under the circumstances, S. strictifolius safely can be reduced to synonymy. It is odd that Müll. ex Benth. failed to mention the stalked character that at once distinguishes this very individual species.

**Distribution**: Borneo, Philippines, Fiji.

*Calyptris porrectum* Müll. ex Benth., Jour., 177, 1869.


**Tas:** on coconut tree trunk, along Loma-Faleasao trail, alt. 43-50 m., Sept. 30, 1939, Vanacker 9145; Fatuca Valley, one eighth mile south of Mau’s house, growing on dead logs and fallen wood lying on moist soil under cover of light forest, hillside, gentle slope, 0.75 mile from shore, alt. 214 m., W. Harris 425a.

As far as I can see, the Samoan collections agree perfectly with *C. strictifolia* Benth. Fletchener evidently recognized this agreement (Lathoniavirus *v.* Java, p. 221) but he erroneously cites *C. porrectum* Benth. instead of *C. porrectum* Müll. As Müll. ex Benth. name was published in 1869, it has unquestioned priority and *C. strictifolia* Benth. should be reduced to synonymy.

**Distribution**: Maleca, Java, New Guinea, Philippines.

*Calyptris porrectum* Müll. ex Benth., Jour., Suppl. 1 (Java, Ind. Ctr.): 42, 1869.

**Tas:** on coconut tree trunk, along Loma-Faleasao trail, alt. 45-50 m., Sept. 30, 1939, Vanacker 9146a.

**New to Samoa**. **Distribution**: Ceylon, Sumatra, Java, Borneo, Philippines.

*Calyptris moluccens* Schweinfurth, Suppl. 2(2): 99, pl. 127, 1824.

**Tas:** upper Lume plateau, east of pig fence, along Vana trail, plantation in amphibious plateau, moderate slope, camp, 2-10 feet above ground on trucks of coconut and breadfruit trees, 0.75 mile to shore, alt. 90 m., W. Harris 448.

**New to Samoa**. **Distribution**: Malaccas, Fiji.


**Tas:** just south of Fatuca, on face of cliffs, 6 m. below top, Flitute trail, on surface of massive lava boulders, 800 feet from beach, alt. 36 m., W. Harris 429.

**New to Samoa**. **Distribution**: Cebes, Marquesas Islands.

*Calyptris tahitiensis* (Sulliv.) Müll. ex Benth., Jour., 10: 172, 1869.

**Tas:** Judith’s Crater, northwest rim, on trunks and limbs of trees in damp, rather open forest, 0.75 mile to shore, alt. 164 m., Harris 425a; Fatuca Valley.
one eighth mile south of Miao’s house, 0.75 mile from shore, alt. 204 m., growing on trunks of five trees, 1-8 feet above ground in medium damp, open forest, on gentle slope, foot of mountains, W. Harris 421; Palapala Valley, woodland south of Miao’s plantation, 0.75 mile from shore, alt. 204 m., growing on damp lava rock bed of small intermittent stream, on hillside in damp, rather open forest, moderate slope, W. Harris 439; upper Luna plantation, east of pig fence, along Vaona trail, plantation in amphibolite plateau, moderate slope, damp, 2-10 feet above ground, on trunks of coconut and breadfruit trees, 0.75 mile from shore, W. Harris 444h.

Distribution: Java, Borneo, Philippines, Fiji, Tahiti.

Calypteryx serratum A. Braun, in C. Müller, Syn. 1: 827, 1869.

Taa: Palapala gully above Palapala Hill, on mountain side, damp native forest, beds of dry stream, on trunks of tree ferns and other trees, 1.5 miles from shore, alt. 270-300 m., W. Harris 58.

Distribution: Malaysia, East China, Philippines, New Caledonia, Fiji.

FAMILY DIPHILOACEAE

Genus Hyophila Brong.

Hyophila inovolata (Hooker) Japper, Adans. 1: 202, 1871-1872.

Hyophila samoana Mitten, Sam. M., 193, 1871.

Taa: Faleasao, old beach flats, middle section behind Falepopo, growing on tuff at lower edge of talus, under plantation trees, damp, 450 feet from shore, alt. 4-5 m., W. Harris.

I have not seen the original of H. samoana Mitten, but the present collection is apparently typical and differs in no important particulars from H. inovolata. I have expressed the thought (Moses of the Philippines, Philip. Jour. Sci. 68: 114, 1939) that H. inovolata in a broad sense probably has a wide distribution and an extensive synonymy.

Distribution: India, eastern China, Philippines, and probably wider.

FAMILY DRIPANOPHYLLACEAE

Genus Maipalia C. Müller

Maipalia semilimibata (Mitten) C. Müller, Mus. Godfrey, Jour. 5: 60, 1873-1874.

Taa: Luna, cliffs east of dispensary, open forest, medium damp, 1,503 feet from shore, alt. 39 m., W. Harris 31; Faddy Crater, midway between bottom of pit and northwest rim, under forest and plantation cover, on talus below cliff, on rotten log, damp, alt. 135 m., W. Harris.

Distribution: Sumatra, Borneo, Philippines, New Guinea.
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FAMILY SPIRIDIACEAE

Genus: Spiridina Nees
Tui: on tree in moist forest, west slope of Mt. Veinamana, alt. 450 m., Oct. 5, 1939; Yamerry 5236; Falulu Valley, one eighth mile south of Manus's house, on dead logs and stumps lying on moist soil, gentle slope, hillside, 0.75 mile from shore, alt. 216 m., W. Harris 114; Falulu Dew, damp shallow draw on steep mountainside, in forest, growing on tree trunks 1-8 feet above ground, 1.5 miles from shore, alt. 540 m., W. Harris.
Distribution: Fiji.

FAMILY ORTHOTRICHACEAE

Genus: Macrotrichium Bridel
Tui: Palapala, gulch above Palapala Hill, on mountainside, damp native forest, banks of dry stream, on trunks of tree ferns and other trees, 1.5 miles from shore, alt. 270-300 m., W. Harris 56; Falulu Valley, one eighth mile south of Manus's house, growing on trunks of living trees in light forest, damp situation, hillside, gentle slope, 1.5 miles from shore, alt. 210 m., W. Harris 182.
Distribution: Savena, Borne, Philippines, New Guinea.

FAMILY PTEROBLAECACEAE

Genus: Gavaglia Endlicher
Tui: Palapala, gulch above Palapala Hill, on mountainside, damp native forest, banks of dry stream, on trunks of tree ferns and other trees, 1.5 miles from shore, alt. 270-300 m., W. Harris 56a; Falulu Valley, one eighth mile south of Manus's house, growing on trunks of living trees in light forest, damp situation, hillside, gentle slope, one to one eighth mile from shore, alt. 210 m., W. Harris 181.

The spines on the back of the leaf are confined to the edges of the pleace and easily overlooked. The best way to view them is to put part of the stem under a cover glass when some of the leaves will show the edges of the folds in profile.

Endemic.

FAMILY METEORIACEAE

Genus: Floribundaria C. Müller
Floribundaria seruginosa (Mitten). Fleischer, Hedwigia 44: 302, 1905.
Tui: trail to peak back of Luma, 2 side of gulch, on damp rocks, alt. 300 m., Voster 715a; Luma cliffs, east of dispensary, on large lava boulders,
partly shaded, medium damp, south side of trail under open forest, 1,500 feet from shore, alt. 15 m., W. Harris 128.
Olonega: Closegauna-Piamaia Ridge, on mossy tree trunk, alt. 510 m., Garber 1086a.
Distribution: Fiji, Tahiti.

**FAMILY NECKERACEAE**

**Genus Himantocladium** (Mitten) Fleischer

Tsai: Palapala, gulch above Palapala Hill, on mountain side, damp native forest, banks of dry stream, on trunks of tree ferns and other trees, 1.5 miles from shore, alt. 270-300 m., W. Harris 57.
Distribution: Fiji, Rapa.

**Genus Pinatella** (C. Müller) Fleischer

Tsu: Afuli, Fagamalo beach trail, forest cover is strand trees (mostly *jau* and *jawa*), moss from lava boulders in talus below shore cliffs, 30 feet from upper beach line, alt. 6 m., W. Harris.
Distribution: Suamatra, Java, Celebes, Ceram, New Guinea, Tahiti.

**FAMILY HOOKERIACEAE**

**Genus Callicotella** (C. Müller) Mitten

Tsu: Fareiva Valley, one eighth mile south of Musc’s house, growing on dead logs and fallen wood lying on moist soil under cover of light forest, hillside, gentle slope, 0.75 mile from shore, alt. 213 m., W. Harris 436d.
Distribution: India, Sumatra, Java, Borneo, Philippines, Pacific Islands.

**FAMILY THUIDIACEAE**

**Genus Plesiolum** Mitten

Tsu: Tavaliu Ridge, west end, ridge summit, under light forest cover, moss taken from north face of tuft capping, medium damp, one eighth mile from sea, alt. 143 m., W. Harris.
Distribution: Malaya Peninsula, Siam, Malaysia, Philippines.

**Genus Thuidium** Bruch and Schimp.

Tsu: Afuli-Fagamalo beach trail, talus on steep hillside below shore cliffs,
strand forest mainly fox and faiu trees, 30 feet from shore, alt. 6 m. W. Harris 678a; Aulii-Fagamalo beach trail, forest cover is strand trees (mostly fox and faiu) on high from lava bluffs in talus below shore cliffs, 30 feet from top of beach, alt. 5 m. W. Harris; Faleulu Valley, woodland, south of Mauo's plantation, 0.75 mile from shore, alt. 204 m., growing on damp lava bed of small intermittent stream, on hillside in damp rather open forest, moderate slope, W. Harris 438.

Distribution: Solomon Islands, Fiji.


Tax.: Palapala stream above Palapala Hill, gully on north slope of Vaoa-manu Mtn. below Obumau, on rock on stream bank under native forest cover, 1.5 miles to shore, alt. 270-300 m., W. Harris 395.

Distribution: Malaysia, Philippines, Formosa, Lord Howe Island, New Guinea, China, Japan.

FAMILY BRACHYTRICIACEAE

Genus Rhyndostegium Broch and Schimper


Tax.: Faleulu Valley, woodland south of Mauo's plantation, 0.75 mile from shore, alt. 204 m., growing on damp lava rock bed of intermittent stream, on hillside in damp rather open forest, moderate slope, W. Harris 474a.

New to Samoa. Distribution: Fiji, Austral Islands.

FAMILY SEMATOPHYLACEAE

Genus Acreperium Mitten


Tax.: Palapala, gulch above Palapala Hill, on montane side, damp mauge forest, banks of dry streams, on trunks of tree ferns and other trees, 1.5 miles from shore, alt. 270-300 m., W. Harris 54.

Apart from the relatively shorter setae there are apparently no other characters distinguishing A. brevirostre (C. Müller) Jäger from A. insignisdomatum. The variety brevirostre (Gesner) Bertram is a parallel form, so I think that A. brevirostre may be safely dropped.

Distribution: Ceilce, Sumatra, Java, New Guinea, Philippines, Tahiti.
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Genus Taxithelium Spruce


Tasu: Faleulu Valley, one eighth mile south of Mauo’s house, growing on dead logs and fallen wood lying on moist soil under cover of light forest, hillside, gentle slope, 0.75 mile from shore, alt. 213 m., A. Harris 476a.

Endemic.

Taxithelium tenuepetra (Sullivant) Mitten, Fl. Viti., 397, 1871.

Tasu: Faleulu Valley, one eighth mile south of Mauo’s house, growing on dead logs and fallen wood lying on moist soil under cover of light forest, hillside, gentle slope, 0.75 mile from shore, alt. 213 m., W. Harris 435c.

Otua: on rotten log along southeastern shore trail, alt. 5 m., Nov. 26, 1939, Yasuda 9517.

Distribution: Fiji, Niue Island.

Family Hypnaceae

Genus Etropothecium Mitten

Etropothecium sodale (Sullivant) Mitten, Linn. Soc. B. L., Jour. 10: 180, 1865.

Tasu: Faleulu Valley, one eighth mile south of Mauo’s house, growing on dead logs and fallen wood lying on moist soil under cover of light forest, hillside, gentle slope, 0.75 mile from shore, alt. 213 m., W. Harris 356, 436, 403; A. Harris 176.

Distribution: Fiji, Tahiti.


Tasu: Palapala, gulch above Palapala Hill, on mountain side, damp native forest, banks of dry stream, on trunks of tree ferns and other trees, 1.5 miles from shore, alt. 270-350 feet, W. Harris 55.

New to Samoa. Distribution: Java, Fiji.

Etropothecium adnatum Brotherus, unpublished manuscript.

Tasu: Faleulu Valley, Mauo’s plantation, south of house, in rocky soil under coconut, breadfruit, and banana trees, medium damp soil, hillside, moderate slope, 0.5 mile from shore, alt. 195 m., W. Harris 375; Faleulu Valley, one eighth mile south of Mauo’s house, 0.75 mile from shore, alt. 204 m., growing on trunks of live trees, 1-8 feet above ground, in medium damp open forest, on gentle slope, foot of mountains, W. Harris 422; Faleulu Valley, one eighth mile south of Mauo’s house, growing on trunks of living trees in light forest, damp situation, hillside, gentle slope, one eighth mile from shore, alt. 210 m.
A. Harris 130; Papata, South Cove, alt. 1.5-6 m., taken on tuft, damp lower edge of strand forest, 5-20 feet from shore, \textit{W. Harris} 407; on old log in forest south of Sinuaf, alt. 200 m., Oct. 4, 1939, \textit{Yuncker} 9236, 9244.

New to Samoa. Distribution: Solomon Islands, Fiji, Niue Island.


Tau: Faluolu Valley, one eighth mile south of Moso's house, on dried logs and sticks lying on moist soil, gentle slope, hillside, 0.75 mile from shore, alt. 216 m., \textit{W. Harris} 116.

Distribution: Fiji.


Tau: Faluolu Valley, woodland south of Moso's plantation, 0.75 mile from shore, alt. 204 m., growing on damp lava rock bed of small intermitent stream on hillside in damp rather open forest, moderate slope, \textit{W. Harris} 137, 138; Faluolu, Moso's plantation, alt. 168 m., growing on rock wall under over of plantation, 0.5 mile from shore, \textit{A. Harris} 160; Pakisola stream above Pakisola Hill, gulch on north slope of Mt. Vaosamau below Otomanu, on rock on stream bank under native forest cover, 0.5 mile to shore, alt. 270-300 m., \textit{W. Harris} 194.

Distribution: Fiji.

Genus \textit{Ventricularia} C. Müller


Tau: Judd's Crater, northwest rim, spur rim, south exposure, under light forest cover of tree ferns and other trees, cliff face, growing on volcanic cinder, 6.5 mile from shore, alt. 105 m., \textit{W. Harris} 1764B.

New to Samoa. Distribution: Tahiti, Rapa, Pichiris Island.


Tau: south side of South Cove, Papata, rocky point, foot of hill, lower edge of strand forest at beach, growing on tuft rock, 5-20 feet from shore, alt. 3-4.5 m., \textit{W. Harris} 313; just south of Faluolu, on face of cliffs, 20 feet below top, Pittura trail, on surface of massive lava boulders, 800 feet from beach, alt. 36 m., \textit{W. Harris} 682; Judd's Crater, bottom of pit, on lava boulders, under cover of shrubs, fern and mixed plantation and forest trees, 0.5 mile from shore, alt. 114 m., \textit{W. Harris}; Aniti-Paganala beach trail, forest cover is strand trees (mostly \textit{fox} and \textit{juta}), moss from lava boulders in tulas below shore cliffs, 30 feet from upper beach line, alt. 6 m., \textit{W. Harris}.

Distribution: Hong Kong, Borneo to Isa and Austral Islands.
PTERIDOPHYTA
PSILOPHYTINAЕ
FAMILY PSILOTACEAE

Genus Psilotum Swartz
Psilotum complanatum Swartz, Syn. Fil., 118, 414, pl. 4, 1806.

Tau: epiphytic on tree ferns, in moist ravine, alt. 200 m., Sept. 25, 1939, Yüncker 9016; alt. 250 m., Sept. 27, 1939, Yüncker 9075; Amodui trail, alt. 180 m., Sept. 16, 1921, Garber 626; trail to peak back of Tau, alt. 350 m., Jan. 28, 1922, Garber 716; Fächelu Valley, in light forest, alt. 210 m., July 27, 1938, W. Harris 158.

LYCOPODINAЕ
FAMILY LYCOPODIACEAE

Genus Lycopodium Linnaeus

Tau: pendant from tree branches in damp ravine south of Siufaga, alt. 350 m., Sept. 27, 1939, Yüncker 9073.


Tau: epiphytic on rotten tree trunk in damp ravine, alt. 200 m., Sept. 27, 1939, Yüncker 9071, 9074. Native name, le'au foi pale.


Tau: epiphytic on tree branch in damp ravine, alt. 250 m., Sept. 27, 1939, Yüncker 9072; on rotten log in forest on west slope of Mt. Vaaimanu, alt. 450 m., Oct. 5, 1939, Yüncker 9247. Native name, las iodotalo.

FAMILY SELAGINELLACEAE

Genus Selaginella Spring
Selaginella Reichei Hieronymus, in Engler and Prantl, Nat. Pflanzen-

fam. 1, 4: 676, 1902.

Tau: in moist, shady ravine on slope south of Siufaga, alt. 150 m., Sept. 27, 1935, Yüncker 9069; in deep forest, slope south of Siufaga, alt. 150 m., Oct. 1, 1939, Yüncker 9159; in deep, moist forest 2 miles south of Siufaga, alt. 300 m., Oct. 1, 1939, Yüncker 9151; in deep, moist ravine on south slope of Siufaga, alt. 150 m., Sept. 25, 1939, Yüncker 9030; Amodui trail, alt. 165 m., Sept. 16, 1921, Garber 618; trail back of Luma, alt. 240 m., Jan. 28, 1922, Garber 713. Olu: on moist forest floor, main ridge, alt. 250 m., Nov. 27, 1939, Yüncker 9517. Native name, le'au veve.
Tau: Pounell 37; Amouli trail, alt. 180 m., Sept. 16, 1921, Garber 621.

FILICINAE

FAMILY OPHIOGLOSSACEAE

Genus Ophioglossum Linnaeus
Tau: epiphyte in moist ravine on mountain slope south of Sifanu, alt. 290 m., Sept. 27, 1939, Yunker 9078; epiphyte, Amouli trail, alt. 135-150 m., Sept. 16, 1921, Garber 616; 612. Native name, longopapa (also used for Aralia nidus L.).

FAMILY MARATTIACEAE

Genus Angiopteris Hoffmann
Angiopteris evecta (Forster) Hoffmann var. variegata Heteroymus, Hedwig 61: 250, 1919.
Tau: plateau back of Paleasao, alt. 180 m., Aug. 4, 1921, Garber 579. Absent on all islands, except. Native name, of oil.

Genus Marattia Swartz
Olosega: top of Pumaha mountain, alt. 600 m., June 17, 1925, Garber 1017.

FAMILY GLEICHENIACEAE

Genus Dicksonopteris Berry
Dicksonopteris linearis (Buserian) Underwood, Torrey Bot Club, Bull. 34: 220, 1907.
Otu: trailing over edge of cliff, slope back of Otu village, alt. 240 m., Nov. 25, 1939, Yunker 9439.
Olosega: Olosegautu-Pumanga ridge, alt. 480 m., June 17, 1925, Garber 1017. Native names, ooone, oao tanamotamotana.

FAMILY SCHIZARIOIDEAE

Genus Schizaea Smith
Schizaea dichotoma (Linnaeus) Smith, Ac. Turin. Mem. 5: 422, pl. 9, fig. 9, 1791.
Olosega: in deep forest on western slope of Mt. Vamosiama, alt. 300 m., Oct. 5, 1939, Yunker 9062; Amouli trail, alt. 180 m., Sept. 16, 1921, Garber 6506.
Ofu: on moist forest floor on main ridge, alt. 350 m., Nov. 27, 1939, YOUNKER 5252; Honia Point, alt. 90 m., May 25, 1923, Garber 971.
Olosega: Olosoguta-Piumafua ridge, alt. 420 m. June 17, 1935, Garber 1082.

**FAMILY HYMENOPHYLLACEAE**

**Genus Trichomanes** Linnaeus

**Trichomanes apicifolium** Fensl., Hym., 16, 44, 1843.

Tau: on decayed tree trunk, below peak back of Tau, alt. 525 m., Jan. 28, 1922, Garber 722; on tree trunk, alt. 630 m., Jan. 28, 1922, Garber 740; on the ground, alt. 630 m., Jan. 28, 1922, Garber 741; at alt. 600 m., Jan. 28, 1922, Garber 757.

Olosega: Olosoguta-Piumafua ridge, alt. 540 m. June 17, 1935, Garber 1042.

**Trichomanes assimile** Mettenius, Kuhn, Linnaea 35: 396, 1868.

Tau: in damp moss on tree trunk, trail to peak back of Tau, alt. 430 m., Jan. 28, 1922, Garber 718.

**Trichomanes bipunctatum** Peiroet, in Lamarck, Encycl. Méth. 8: 69, 1808.

Tau: on mossy tree trunk, below peak back of Tau, alt. 680 m., Jan. 28, 1922, Garber 741.

**Trichomanes Boryanum** Kunze, Farnrkr. 1: 237, pl. 97, 1847.

Tau: on wet rocks in shady ravine on slope two miles south of Siaoaga, alt. 50 m., Sept. 25, 1939, YOUNKER 9077; Amouli trail, alt. 165 m., Sept. 16, 1921, Garber 627; trail to peak back of Luma, alt. 300 m., Jan. 28, 1922, Garber 715.

**Trichomanes dentatum** van den Bosch, Neuerl. Kruidk. Arch. 51: 182, 1866.

Olosega: Reinecke 64; on mossy tree trunk, top of Piumafua mountain, alt. 630 m., June 17, 1925, Garber 1052; on mossy tree trunk, Piumafua ridge, alt. 570 m., June 17, 1925, Garber 1057.


Tau: Powell 155.

Ofu: Reinecke 434.


Tau: on moist rocks and tree trunks along Fitiuta trail, Sept. 26, 1939, YOUNKER 9077; on rotten log in moist, shady ravine, alt. 45 m., Sept. 25, 1938, YOUNKER 9001; on volcanic cinder, northwest rim of Judd's Crater, alt. 165 m., June 17, 1937, W. Harris 1764a; northwest rim of Judd's Crater, on trunks of trees, alt. 170 m., July 27, 1938, W. Harris; on face of cliffs just south of Pale- ma, Fitiuta trail, alt. 36 m., April 3, 1937, W. Harris 692a; grolch above Fale-
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pala Nilj, alt. 270-200 m., July 10, 1938, W. Harris; on face of lava cliff behind Luxa, alt. 45 m., July 24, 1938, W. Harris; on damp mossy rock at base of tree along rocky stream bef. Amoudi trail, alt. 180 m., Sept. 16, 1921, Garber 628.

Olosega: Olosegaua-Plomatua ridge, on mossy tree trunk, alt. 510 m., June 17, 1925, Garber 1081.


Tas: below peak back of Tau, alt. 585 m., Jan. 28, 1922, Garber 729; patch above Pabylala Hill, on tree trunk, alt. 270-300 m., July 10, 1938, W. Harris.

Olosega: Olosegaua-Plomatua ridge, alt. 370 m., June 17, 1925, Garber 1065.

Trichomanes palidum Blume, Enum., 225, 1828.


Trichomanes saxifragoides Presl, Hym. 16, 39, 1843.

Tas: in damp moss on tree fern trunk, slope back of Tau, alt. 645 m., Jan. 28, 1922, Garber 744.

Mamou: Pondui 181.

Genus Hymenophyllum Smith


Tas: below the peak back of Tau, alt. 370 m., Jan. 28, 1922, Garber 759.

Olosega: on mossy tree trunk near top of Plomatua mountain, June 17, 1925, Garber 1060.

Hymenophyllum polyanthum Swartz, Jour. Bot. Socrod. 2: 100 (1800) 1801.

Tas: epiphytic, in dense, wet forest on west slope of Mt. Yonamotou, alt. 490 m., Oct. 5, 1939, Fuscker 9255; on damp tree trunk below peak back of Tau, alt. 585 m., Jan. 28, 1922, Garber 727; also at 615 m. Garber 737; Fale-ulu base, on hillside on rising, alt. 480 m., Sept. 24, 1936, W. Harris.

Mamou: Reinecke 175.


Mamou: Reinecke 88c.

Family Cyatheaceae

Genus Alsophila K. Brown


Abundant on all islands as reported by Guest in 1939. Native name, ol ol
Genus Dryopteris Adanson

Dryopteris dissecta (Forster) O. Kuntze, Rev. Gen. 2: 812, 1891.
Tas: on moist banks along Luma-Fiasafo trail, alt. 50 m., Sept. 30, 1939, Yanech 9137; on damp, rocky soil, hillside, Faalulu valley, alt. 210 m., July 27, 1938, W. Harris 385; on lava rock, open forest, cliffs behind Luma village, alt. 30 m., July 24, 1938, W. Harris 48; on lava rock in trees at foot of cliff behind Luma village, alt. 8 m., July 13, 1938, W. Harris 347.
Ofu: on rocky cliff, slope back of Ofa village, alt. 30 m., Nov. 25, 1939, Yanech 9478.

Dryopteris gongyloides (Schkuhr) O. Kuntze, Rev. Gen. 2: 811, 1891.
Tas: in low, marshy area, alt. 5 m., Oct. 7, 1939, Yanech 9297.

Dryopteris setigera (Blume) O. Kuntze, Rev. Gen. 2: 813, 1891.
Tas: on old lava outcropping, slope south of Sinuaga village, alt. 250 m., Oct. 4, 1939, Yanech 9239; on face of lava cliff, behind Luma village, alt. 45 m., July 24, 1938, W. Harris 386.
Ofu: in thicket along southeastern shore trail, alt. 5 m., Nov. 26, 1939, Yanech 9498.

Genus Tectaria Cavanilles

Ofu: on dry bank along trail on slope back of Ofa village, alt. 240 m., Nov. 25, 1939, Yanech 9455. Native name, atu mua, le‘ou foi pūe.

Genus Athyrium Roth

Tas: on lava outcropping on slope 1-1.5 mile south of Sinuaga, alt. 240 m., Oct. 4, 1939, Yanech 9237; in coconut, breadfruit and banana plantation, Faalulu, alt. 280 m., July 27, 1938, W. Harris 147.

Genus Bischria Linnane

Tas: in open area along trail on slope south of Sinuaga, alt. 60 m., Sept. 25, 1939, Yanech 9041.
Ofu: on clay bank along trail on slope back of Ofa village, alt. 240 m., Nov. 25, 1939, Yanech 9434. Native name, lali māmusaga.

Genus Asplenium Linnane

Tas: in dair, wet, cavern-like depression in old lava outcropping, alt. 220 m., Oct. 4, 1939, Yanech 9246; on lava rocks, cliffs behind Luma village, alt. 39 m., July 24, 1938, W. Harris 41. Native name, tao iuana.
**Asplenium nidus** Linnaeus, Sp. Pl., 1079, 1753.
Tauf: on lava cliff behind Luma, alt. 45 m., July 24, 1938, Wray Harris 123.
Ofu: on rocky cliff, slope back of Ofu village, alt. 45 m., Nov. 25, 1939, Yunker 9474. Native name, launapapa.

**Genus Lemagramma** J. Smith

Tauf: in damp forest, Faleulu valley, alt. 210 m., July 27, 1938, W. Harris 209.

**Genus Nephrolepis** Schott

**Nephrolepis biserrata** (Swartz) Schott, Gen. Fil., ad. pl. 3, 1834.
Tauf: epiphytic on tree in thicket about two miles south of Sisfaga, alt. 150 m., Oct. 1, 1939, Yunker 9156.

**Nephrolepis hirumula** (Forster) Presl, Tent. Pterid., 79, 1836.
Tauf: on moist shady bank along Fiituta trail, Sept. 26, 1930, Yunker 9044; in moist, rocky ravine on slope about two miles south of Sisfaga, alt. 50 m., Sept. 25, 1939, Yunker 9419; on lava rock, cliffs back of Luma village, alt. 50 m., July 24, 1938, W. Harris 127; in coconut, breadfruit, and banana plantation, Faleulu, alt. 180 m., July 27, 1938, W. Harris 146.

**Genus Microlepia** Presl

**Microlepia species**.
Tauf: on lava cliff, behind Luma village, alt. 45 m., July 24, 1938, W. Harris 384.

**Genus Lindsaya** Dryander

Tauf: in rich soil of wet, dense forest on west slope of Mt. Varatamau, alt. 500 m., Oct. 5, 1939, Yunker 9259, 9257; epiphytic on tree in wet forest on slope about two miles south of Sisfaga, alt. 300 m., Oct. 1, 1939, Yunker 9152.

**Genus Pieris** Linnaeus

Tauf: in low wet area south of Sisfaga, alt. 3 m., Sept. 29, 1939, Yunker 9007; south side of South Cove, Papinga, on turf, alt. 3-5 m., July 1938, W. Harris 315.

**Pieris eustemonis** Burman f., Fl. Ind., 230, 1768.
Tauf: on face of lava cliff, back of Luma village, alt. 45 m., July 24, 1938, W. Harris 28.
Ofu: on rocky cliff, slope back of Ofu village, alt. 45 m., Nov. 25, 1939, Yunker 9479. Native name, laun manamana.


Ofu: Garber 998; in thicket along southeastern shore trail, alt. 5 m., Nov. 26, 1939, Yunker 9501. Native names, oli oli, tipapatea.

Genus Acraxanthus Linnaeus


Tau: within a few feet of the sea on a rocky point in Lums, Nov. 5, 1922, Garber 108.

Ofu: in will pocket in lava rocks near the sea along the northwestern shore, alt. 5 m., Nov. 28, 1939, Yunker 9561. Native names, leu lepalea, lepele.

Genus Humata Cavanilles

Humata heterophylla (Smith) Desvaux, Prodor. fam. fung., 323, 1825.

Tau: epiphytic on trees in shady, damp ravine, south of Siufaga, alt. 150 m., Sept. 27, 1939, Yunker 9066. Native name, yao saolea.

Genus Dovallia Smith

Dovallia salda (Forster) Swartz, Jour. Bot. Schrad. 2: 87 (1900) 1801.

Tau: clinging to tree along Filiuta trail, Sept. 26, 1939, Yunker 9550.

Ofu: clinging to coconut trees, slope behind Ofu village, alt. 150 m., Nov. 25, 1939, Yunker 9456, 9457. Native name, yao saolei le miu.

Genus Anthropteris J. Smith


Tau: clinging on trees and rocks, alt. 5 m., Oct. 7, 1939, Yunker 9292; open woodland, on trunks of living trees, alt. 210 m., July 27, 1938. A. Harris 388; on damp mossy rocks, in bed of intermittent stream, Paleleu Valley, alt. 294 m., July 27, 1938, W. Harris 231; on lava rock, talus at foot of cliff behind Lama village, alt. 8 m., July 13, 1938, W. Harris 348; on lava cliff behind Lama village, alt. 45 m., July 24, 1939, W. Harris 44.

Genus Cyclophorus Desvaux


Tau: epiphytic on trees along Filiuta trail, Sept. 26, 1939, Yunker 9555.

Ofu: clinging to coconut tree, slope back of Ofu village, alt. 130 m., Nov. 25, 1939, Yunker 9438.

Genus Polypodium Linnaeus

Polypodium biechowskii (Grevel) Hooker, Sp. Fil. 4: 182, 1862.

Tau: epiphytic on trees in moe ravine on slope south of Siufaga, alt. 110 m., Sept. 27, 1939, Yunker 9077.
**Poyppodium Scloenosdris** Burman i, Fl. Ind., 242, 1768.
Tui: terrestrial and epiphytic, near shore, alt. 3 m., Sept. 25, 1939, Wacker 9235; on lava cliff behind Luna, alt. 45 m., July 24, 1938, W. Harris 826.
Otu: on trees and rocks, slope back of Otu village, alt. 20 m., Nov. 25, 1939, Wacker 9471. Native name, fos var.

Tui: on old lava rock wall, slope south of Sisufaga, alt. 150 m., Oct. 4, 1939, Wacker 9235.

**Genus Puaepaia** Preal

**Puaepaia contigua** (Forster) Preal, Tent. Fert., 164, 1836.
Tui: epiphytic on trees in dense, wet forest on west slope of Mt. Yasainia, alt. 450 m., Oct. 5, 1939, Wacker 9260.

**Genus Astrophyrun** Katius

Otu: on rotten log in thicket near Sisufaga, alt. 4 m., Oct. 7, 1938, Wacker 9256; epiphytic on trees in moist ravine along Filitum trail, Sept. 26, 1939, Wacker 9256; in damp, rocky soil under light forest cover, inside, Falena valley, alt. 210 m., July 27, 1938, W. Harris 262, 882X.

Otu: on rocks in damp forest on central ridge, alt. 300 m., Nov. 27, 1939, Wacker 9339. Native name, lau nolalo.

**Genus Vaginulita** Fée

Tui: epiphytic on trees in moist ravine south of Sisufaga, alt. 150 m., Sept. 27, 1939, Wacker 9270; on damp, dead wood, in woodland, Falena valley, alt. 210 m., July 27, 1938, W. Harris 465; on trunks of living trees, light forest, Falena valley, alt. 210 m., July 27, 1938, A. Harris 188; on lava rock, cliff back of Luna village, alt. 39 m., July 24, 1938, W. Harris 183.

**SPERMATOPHYTA**

**MONOCOTYLEDONEAE**

**FAMILY PANDANACEAE**

**Genus Faguscula** Cavendish

**Faguscula Hombronii** Martelli. in Rechinger, Wiss. Forschungsreise nach Samoa, 56, 1910.
Tui: on lava boulder in talus at foot of cliff, cliffs behind Luna village,
July 13, 1938, W. Harris 259. This specimen is sterile but it agrees well with specimens of this species in the Bishop Museum herbarium.

Freylinia reinickii Warburg, in Reinecke, Fl. Samoa-Inseln, 578, pl. 8, fig. B, 1898.
   Tau: climbing in trees on ravine on slope south of Sitaga, alt. 200 m., Sept. 27, 1939, Yawchee 9092; near top of penak back of Tau; alt. 600 m., fruit, Jan. 26, 1922, Garber 795. Native names, 'ie'a, lau 'ie'a.3

Genus Pandanus Linnæus

   Otu: in old coconut grove, old village site of Mafasi, alt. 4-5 m., May 26, 1925, Garber 984.

   Tau: on sandy beach at Faga, alt. 3-4 m., Sept. 11, 1921, Garber 665. Guest reports it as scarce on Otu. Native name, lau pagoa.

   Tau: near dwelling, Luma, cultivated, Dec. 15, 1921, Garber 662 (apparently this is the specimen cited by Martelli as Garber 665). Native names, 'ie tapa, lau fado.

FAMILY GRAMINEAE

Genus Schizostachyum Nees

Schizostachyum glaucifolium (Ruprecht) Munro, Linn. Soc., Trans. 26: 137, 1866.
   Tau: small clump near the trail on west slope of Mt. Veitaimata, alt. 120 m., Oct. 5, 1939, Yawchee 9268.
   Otu: small clump in ridge forest above Otu village, alt. 350 m., Nov. 27, 1939, Yawchee 9521.

Genus Ergretis Beauv.

   Tau: on old coral rock about dwellings, Sept. 2, 1939, Yawchee 9169; Luma, near swampy area, Aug. 5, 1938, W. Harris 5; Luma, in sandy soil near the beach, July 20, 1938, W. Harris 339. Native name, fa'a fenua.

3 Lau (1938) is now often used before the specific name of a plant.
Genus Costetheca Desvaux

Costetheca attilia (Linnæus) Trinomi, Pand. Agrost. 141, 1830.

Tatt: in marshy area south of Sualaga, alt. 3 m, Sept. 29, 1939, Winacker 9100; along Lume-Paleaoa trail, alt. 20 m, Sept. 30, 1939, Winacker 9135; Sani Ridge, back of Phitaua, alt. 125 m, Aug. 9, 1921, Garber 599; in coconut, breadfruit, and banana plantation, Paleaul, alt. 180 m, July 27, 1938, W. Harris 220; Paleauli Valley, open woods, alt. 204 m, July 27, 1938, W. Harris 211, 220.

Oloega: trail back of Oloegasta, alt. 300 m, June 17, 1925, Garber 1035.

Native name: ase, va ai fai, lau de sfa.

Genus Lepturus R. Brown


Oloa: in soil pockets, basaltic rocks along northwestern shore, alt. 5 m, Nov. 28, 1939, Winacker 9468.

Genus Eleusine Gerstner

Eleusine indica (Linnæus) Gerstner, Fruct. et Sem. 1: 8, 1768.

Tatt: in sandy soil near the beach, Sept. 29, 1939, Winacker 9115; along Lume-Paleaoa trail, alt. 50 m, Sept. 30, 1939, Winacker 9125; sandy soil along trail behind Lotua, Aug. 5, 1938, W. Harris 2; in coconut, breadfruit, and banana plantation, Paleaul, alt. 180 m, July 27, 1939, W. Harris 251; on calcaneous beach, Pupuha, July 15, 1938, A. Harris 72.

Olopa: in sandy soil near the beach, Nov. 25, 1939, Winacker 9487; in sandy soil along southeastern shore trail, alt. 5 m, Nov. 26, 1939, Winacker 9499.

Native name: ase, lau a ior.

Genus Cyssenum L. Richard


Tatt: under coconut trees in bower, medium-dry beach sand, Lume, July 20, 1938, W. Harris 356.

Genus Digitaria Heister

Digitaria chiapensi Horneman, Hort. Hain., Suppl., 8, 1815.

Tatt: along Lume-Paleaoa trail, alt. 50 m, Sept. 30, 1939, Winacker 9125; Lume, on lava cliff, alt. 45 m, July 24, 1938, W. Harris 56; in talus, foot of cliff, alt. 7-8 m, July 13, 1938, W. Harris 353; south side of South Cove, Papatea, on tuff at beach, July 15, 1938, W. Harris 317.

Oloa: in sandy soil near the beach, alt. 2 m, Nov. 25, 1939, Winacker 9488.


Tatt: Pauata, in sand near the beach, July 15, 1938, W. Harris 71.

Oloa: along rocky shore, northwestern side of island, alt. 5 m, Nov. 28, 1939, Winacker 9550.
Genus *Stenotaphrum* Trininius


**Tuu:** in low marshy area south of Siufaga, Sept. 29, 1939, *Yuncker 9109*.

Genus *Paspalum* Linnaeus


**Tuu:** weed in banana plantation on mountain slope south of Siufaga, alt. 300 m., Oct. 4, 1939, *Yuncker 9233*; Papata, sandy soil near the beach, July 15, 1938, *W. Harris 95*; Luna, in talus, foot of cliff, alt. 7-8 m., July 13, 1938, *W. Harris 354*.

**Oifu:** in sandy soil near the beach, Nov. 25, 1939, *Yuncker 9489*. Native names: *vuilina*, *vuilina matafoa*.

*P. vaginatum* Swartz, Prodr. Veg. Ind. Oce., 21, 1788.

**Tuu:** Luna, in sandy soil near the beach, July 20, 1938, *W. Harris 355*; Papatae, in sandy soil near the beach, July 15, 1938, *A. Harris 73*.

Genus * Panicum* Linnaeus


**Tuu:** in sandy soil near the beach south of Siufaga, Sept. 29, 1939, *Yuncker 9114*; sandy soil, Luna, July 20, 1938, *W. Harris 334*.

**Oifu:** in sandy soil near the beach back of Oifu village, Nov. 25, 1939, *Yuncker 9486*.


**Tuu:** Faleolui, weed in coconut plantation, alt. 180 m., July 27, 1938, *W. Harris 166*.

**Oifu:** plantation, Fesiaia Point, alt. 90 m., May 25, 1925, *Garber 975*.

Genus *Oplismenus* Beauvois


**Tuu:** Luna, on lava cliff, alt. 45 m., July 24, 1938, *W. Harris 31*.


**Oifu:** in sandy soil along the southeastern shore trail alt. 5 m., Nov. 26, 1939, *Yuncker 9501A*.

Genus *Pennisetum* L., Richard


**Tuu:** cultivated ornamental, Siufaga, Oct. 3, 1939, *Yuncker 9214*.

Genus *Cenchrus* Linnaeus


**Tuu:** in sandy soil near the shore, Sept. 29, 1939, *Yuncker 9110*; on cal...
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careen beach, Papatea, July 15, 1938, A. Harris 70; under coconut trees in loose, medium-dry beach sand, Luma, July 20, 1938, W. Harris 307, 335.
Oft: in sandy soil near the beach back of Ola village, Nov. 23, 1939, Yuncker 9843. Native name, nito twaiw, nito papalapi.

Genus Thunus Parsonson
Thunus involuta (Furuster) Roemer and Schulten, Syst. 2: 808 1817.
Oft: in sandy soil near the beach, Nov. 25, 1939, Yuncker 9491.

Genus Miscanthus Andersson
Tsn: along trail, Luma, January 11, 1922, Garber 735. Native names, w, fob.

Genus Saccharum Linnaeus
Saccharum officinarum Linnaeus, Sp. Pl., 54, 1753.
Tsn: small patch noted near Luma, but not collected (Yuncker). Native name, talo.

Genus Coix Linnaeus
Tsn: in nearby area near Luma, Oct. 6, 1939, Yuncker 9283. Native name, sopangi.

Family Cyperaceae

Genus Cyperus Linnaeus
Tsn: weed in taro patch, Luma, Oct. 6, 1939, Yuncker 9276; in moist soil on plateau back of Sinlaga, alt. 42 m., Oct. 2, 1939, Yuncker 9185; on lava dill behind Luma, alt. 45 m., July 24, 1938, W. Harris 91. Native name, taoe.

Tsn: plateau back of Luma, alt. 100 m., Dec. 15, 1921, Garber 659; in sand dill trail behind Luma, Aug. 5, 1938, W. Harris 4.
Oft: in sandy soil near the beach, Nov. 28, 1939, Yuncker 9546.

Tsn: along the Luma-Faleasao trail, alt. 50 m., Sept. 20, 1939, Yuncker 9172; plateau back of Luma, alt. 125 m., Dec. 15, 1921, Garber 647. Native name, kakoa.

Tsn: plateau back of Luma, alt. 125 m., Dec. 15, 1921, Garber 649; in coconut, breadfruit, and banana plantation, Faleutu, alt. 180 m., July 27, 1938,
W. Harris 121; on lava cliffs behind Luma, alt. 45 m., July 24, 1938, W. Harris 33.

Taua: in low marshy area, Oct. 6, 1939, Yunker 9235.
Ohu: on talus slope along the northwest shore, Nov. 28, 1939, Yunker 9549; in low ground near the beach, Nov. 25, 1939, Yunker 9484. Native name, relaele.

Taua: south side of South Cove, Papatesa, on tuft rock at lower edge of strand forest near the shore, July 15, 1938, W. Harris 318.

Taua: Fileho Valley, rocky soil on silicate, alt. 295 m., July 27, 1938, W. Harris 199.

Cyperus Seemannianus Boeckeler var. montanacystis (Boeckeler) Kükelenthal, B. P. Bishop Mus., Bull. 128: 18, 1935.
Taua: Sani Ridge back of Pikiwai, alt. 125 m., Sept. 8, 1921, Garber 590; plateau back of Luma, alt. 150 m., Dec. 15, 1921, Garber 637.

Cyperus Seemannianus Boeckeler aff. var. perennis Kükelenthal, B. P. Bishop Mus., Bull. 128: 18, fig. 2, 1935.
Taua: south side of South Cove, Papatesa, on tuft at lower edge of strand forest, July 15, 1938, W. Harris 318.

Genus Eleocharis R. Brown
Eleocharis dulcis (Burman f.) Trinumius, ex Heuckel, Vita Rumph., 186, 1833.

Genus Filimbristylis Vahl
Filimbristylis annua (Allioni) Roemer and Schultes, Syst. 2: 95, 1817.


Filimbristylis diphylla (Retzius) Vahl, Enum. 2: 289, 1806.
Taua: plateau back of Luma, alt. 125 m., Dec. 15, 1921, Garber 648.
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**Genus Rynchospora Vahl**


*Ta'u*: in low marshy area, Oct. 6, 1939, Yuncker 9286; in low marshy area south of Sisufaga. Sept. 29, 1939, *Yuncker 9102*.


**Genus Mapania Aublet**

*Mapania longifolia* (Boeckeler) C. B. Clarke, Kew Bull., add. ser. 8:54, 1908.

*Ta'u*: below peak back of Ta'u, alt. 600 m., Jan. 20, 1922, *Garber 739*. Native name, *lae fala toe*.


*Ta'u*: in moist ravine south of Sisufaga, alt. 100 m., Sept. 27, 1939, *Yuncker 9284*.

**Genus Scleria Bergius**

*Scleria lithosperma* (Linnaeus) Swartz, Prodr. Veg. Ind. Occ., 18, 1788.

*Ta'u*: in moist shady ravine on slope about two miles south of Sisufaga, alt. 150 m., Sept. 27, 1939, *Yuncker 9080*; Luna-Faleasao trail, alt. 40 m., Jan. 8, 1922, *Garber 690*; in coconut, breadfruit, and banana plantation, Faleulu, alt. 180 m., July 27, 1938, *W. Harris 214*.

*Oufu*: along the ridge trail back of Oufu village, alt. 150 m., Nov. 25, 1939, *Yuncker 9470*. Native name, *pi po toe*.

*Scleria scrobiculata* Nees, Wight, Contrib., 117, 1834.

*Ta'u*: in low marshy area south of Sisufaga, Sept. 29, 1939, *Yuncker 9106*; along the trail near the shore south of Sisufaga, Sept. 25, 1939, *Yuncker 9004*; plantation back of Luna, alt. 100 m., Dec. 15, 1921, *Garber 644*.

*Oufu*: on rocky slope behind Oufu village, alt. 180 m., Nov. 25, 1939, *Yuncker 9465*. Native name, *fofci tolu*.

**Family Palmae**

**Genus Brachystachys O. Kuntze**

*Brachystachys pachica* (Seemann and Wendland) O. Kuntze, Rev. Gen. 3:2 : 323, 1898.

*Ta'u*: cultivated, Aofafao, alt. 8 m., June 6, 1925, *Garber 1012*. Native name, *na na piu*.

**Genus Cocis Linnaeus**


*Ta'u*: cultivated, Luna, Jan. 10, 1922, *Garber 703*. Extensively cultivated in several varieties on all islands (*Yuncker*). Native name, *nis*. 
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FAMILY ARACACEAE

Genus Epipremnum Schott

Epipremnum pinatifolium (Linnaneus) Engler, Pflanzenw. 37 (IV, 23 B): 60, fig. 25, 1928.

T: Chewing in trees in thicket near the shore south of Sifasage (specimen sterile), Oct. 7, 1939, Yacke 9288; on the ground and scrambling over rocks, Fagamalo beach, Jan. 7, 1922, Garber 677. Native name, lom monomana.

Genus Anomoraphellus Blume


T: in bush near Sifasage, alt. 3 m., Sept. 21, 1922, Garber 774. Native name, trex.

Genus Coecasia Schott

Coecasia esculenta (Linnaneus) Schott, Meles Bot. 1: 15, 1832.

O: cultivated, Ofa village, alt. 8 m., June 22, 1925, Garber 1100; cultivated on all the islands in a number of varieties (Yacke). Native name, tala.

FAMILY BRONNIELIACEAE

Genus Ananas Adanson


Large plantations on Tauf. Genet. Native name, fala sama.

FAMILY CORMELINACEAE

Genus Commelina Plinier

Commelina diffusa Bartram 1, Fl. Ind., 18, pl. 7, fig. 2, 1768.

T: in moist soil, along trail on west slope of Mt. Vasaianenu, alt. 300 m., Oct. 5, 1939, Yacke 9273.

O: grown as plantations, June 25, 1925, Garber 1088. Native name, ma\'a\'a tupa.

Genus Anselema R. Brown

Anselema vitifolius Seemman, Fl. Ve., 314, pl. 96, 1868.

T: along the trail in moist soil, west slope of Mt. Vasaianenu, Oct. 5, 1939, Yacke 9274; on old lava wall, south of Sifasage, alt. 300 m., Oct. 4, 1939, Yacke 9237; Salu Ridge back of Fiitula, alt. 100 m., Aug. 9, 1921, Garber 588. Native name, ma\'a\'a tupa.

FAMILY LILIACEAE

Genus Cardyline Comberston


T: along the trail thickest near Fiitula, alt. 50 m., Sept. 20, 1939, Yacke 9047; along the Luma-Faluama trail, alt. 50 m., Sept. 30, 1939,
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Yuncker 9128: Fijius trail, alt. 80 m., Aug. 4, 1921, Garber 554; in coconut, breadfruit, and banana plantation, Fareatu, alt. 180 m., July 27, 1938, W. Hours 130. Native name, it.

Genus Asparagus Linnæus

Tus: cultivated ornamental, Siufaga, Oct. 5, 1939, Yuncker 9221. Native name, lou fili'.

Family Amaryllidaceae

Genus Zephyranthes Kerber

Tus: cultivated ornamental, Siufaga, Oct. 5, 1939, Yuncker 9220. Also observed occasionally as an escape.

Genus Crinum Linnæus


Family Taccaceae

Genus Tacca Forster

Tacca pinnatifida Forster, Chevron. Gen. Pl. 70, pl. 25, 1776.
Tus: in sandy soil near the shore, Sept. 25, 1939, Yuncker 9077; plateau at Puna, alt. 125 m., Dec. 15, 1921, Garber 633.
Otu: in sandy soil near the shore, along southeastern trail, Nov. 26, 1939, Yuncker 9205. Native name, maro, tu.

Family Dioscoreaceae

Genus Dioscorea Poirier

Tus: climbing in thicket on plateau back of Siufaga, alt. 45 m., Oct. 2, 1939, Yuncker 9181.
Otu: climbing in thicket on main ridge, alt. 300 m., Nov. 27, 1939, Yuncker 9326. Native name, se'i.

Dioscorea pestophylla Linnæus, Sp. Pl. 1033, 1737.
Tus: climbing in thicket two miles south of Siufaga, alt. 150 m., Oct. 1, 1939, Yuncker 9136. Native name, puia.

Family Musaceae

Genus Musa Linnæus

Musa paradisiaca Linnæus, Sp. Pl., 1643, 1753.

The banana is extensively cultivated on all of the islands in a number of varieties as an important item of food. Native name, ju'i.
FAMILY ZINGIBERACEAE

Genus Alpinia Roxburgh

Alpinia purpurata (Vieillard) K. Schumann, Pflanzenr. 20(IV.46) : 323, 1904.
Tai: on plateau near Siufaga, alt. 45 m., Oct. 2, 1939, Yencer 9177.
Otu: weed in coconut plantation near Otu village, alt. 100 m., Nov. 25, 1939, Yencer 9460. Native name, teulea.

Genus Curcuma Linnæus

Curcuma longa Linnæus, Sp. Pl. 2, 1753.
Otu: Akaheo, alt. 8 m., June 6, 1921, Garber 1999. Native name, anoa.

Genus Zingiber Adanson

Tai: Luma-Faleasao trail, alt. 40 m., Jan. 8, 1922, Garber 689.
Otu: along ridge trail above Otu village, alt. 300 m., Nov. 27, 1939, Yencer 9544. Native name, 'onaopa'i.

FAMILY CANNACEAE

Genus Canna Linnæus

Canna humilis Bouché, Linnæa 8 : 153, 1833.
Tai: plateau back of Siufaga, alt. 100 m., Sept. 27, 1922, Garber 781; margin of wet taro patch near Siufaga, Oct. 6, 1939, Yencer 9282. Native name, fagamaua.

FAMILY ORCHIDACEAE

Genus Habenaria Willdenow

Habenaria tradescantifolia Reichenebach f., in Seemann, Fl. Vit., 293, 1866.
Tai: terrestrial, in dense wet forest on slope two miles south of Siufaga, alt. 300 m., Oct. 1, 1939, Yencer 8150; in deep, shady ravine about one mile south of Siufaga, alt. 50 m., Sept. 27, 1939, Yencer 9090A.

Genus Platylepis Blume

Olosaga: terrestrial herb, Olosaga-Piumau ridge, alt. 550 m., June 17, 1925, Garber 1073.

Genus Erythrodax Blume

Erythrodax species.
Tai: terrestrial herb, in dense rain forest on west slope of Mt. Vaoaimata, alt. 500 m., Oct. 5, 1939, Yencer 9269.
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Genus Chlorestyliella Blume

Tau: terrestrial herb, in dense rain forest on western slope of Mt. Vaoisimau, alt. 400 m., Oct. 5, 1939, Yuncker 9255.

Genus Vrydagynae Blume

Taru: herb, on mossy rock, Amouli trail, sit., 173 m., Sept. 16, 1921, Gerber 639.

Genus Malaxis Solander

Malaxis repinata (Forster) O. Kuntze, Rev. Gen., 65:3, 1891.

Olu: in rich soil, forest floor on ridge back of Olu village, alt. 400 m., Nov. 27, 1939, Yuncker 9522.

Genus Microstyla Nuttall

Taru: epiphyte, top of peak back of Tau, alt. 700 m., Jan. 28, 1922, Gerber 755.

Genus Liparis L. C. Richard

Taru: terrestrial herb, in dense rain forest on west slope of Mt. Vaoismun, alt. 500 m., Oct. 5, 1939, Yuncker 9260.

Genus Agrostophyllum Blume


Taru: epiphyte, in dense rain forest on west slope of Mt. Vaoismun, alt. 450 m., Oct. 5, 1939, Yuncker 9246.

Genus Appendicula Blume


Taru: epiphyte, in dense rain forest on west slope of Mt. Vaoismun, alt. 500 m., Oct. 5, 1939, Yuncker 9267; epiphyte, on damp tree trunk, below peak back of Tau, alt. 600 m., Jan. 28, 1922, Gerber 730; epiphyte on trunk of tree fern in gulch, trail to peak back of Lasa, alt. 300 m., Jan. 28, 1922, Gerber 714.

Genus Glionea Blume


Taru: epiphyte, top of peak back of Tau, on fallen tree trunk alt. 650 m., Jan. 28, 1922, Gerber 748.

Genus Pahia Loiseleur


Taru: terrestrial, in dense rain forest on western slope of Mt. Vaoismun, alt. 300 m., Oct. 5, 1939, Yuncker 9261.
Bernice P. Bishop Museum—Bulletin 184

Genus Calanthe R. Brown

Taru: terrestrial, in dense, wet forest on slope two miles south of Siufaga, alt. 300 m., Oct. 30, 1939, Vancher 9749.

Closega: Olomaua-Puanunu ridge, alt. 500 m., June 17, 1923, Garber 1036, 1077.

Calanthe species.
Taru: terrestrial, in dense rain forest on west slope of Mt. Vaainamu, alt. 600 m., Oct. 4, 1939, Vancher 9248.

Genus Spathaglottis Blume

Spathaglottis pliacea Blume, Bijdr. Fl. Java, 401, fig. 26, 1825.
Taru: terrestrial, in thicket one mile south of Siufaga, alt. 5 m., Sept. 25, 1939, Vancher 9007 A; in open grassy area south of Siufaga, alt. 50 m., Sept. 25, 1939, Vancher 9007 B; bush trail back of Luma, alt. 200 m., Jan. 28, 1922, Garber 710, 712.

Ofu: in open grassy area on ridge back of Ofu village, alt. 400 m., Nov. 27, 1939, Vancher 9587.
Closega: Olomaua-Puanunu ridge, alt. 500-600 m., June 17, 1923, Garber 1054. Native name, mua.aa.

Genus Dendrobium Swartz

Taru: on fallen tree trunk, plateau back of Faleasao, alt. 150 m., Aug. 4, 1921, Garber 575.

Dendrobium tippulifolium Reichenbach f., Gard. Chron. 1: 72, 1877.
Taru: epiphyte, in dense rain forest on western slope of Mt. Vaainamu, alt. 450 m., Oct. 5, 1939, Vancher 9064.

Taru: epiphyte, dark damp ravine two miles south of Siufaga, alt. 150 m., Sept. 27, 1939, Vancher 9065; on dead tree, Anoili trail, alt. 150 m., Sept. 16, 1921, Garber 619. Native name, lauaafa'a.

Taru: epiphyte, in dense forest on slope about two miles south of Siufaga, alt. 150 m., Oct. 1, 1939, Vancher 9067, 7120; on branch of tree in dark damp ravine on slope between one and two miles south of Siufaga, alt. 150 m., Sept. 27, 1939, Vancher 9067; on breadfruit tree, Fitiitia trail, Aug. 4, 1921, Garber 557; on breadfruit tree, plateau back of Luma, alt. 150 m., Dec. 15, 1921, Garber 655. Native name, lauaafa'a.
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Genus *Pseudaria* Schlechter

Tsu: epiphyte, in dense rain forest on west slope of Mt. Vaosimau, alt. 300 m., Oct. 5, 1939, *Yuncker 9251.*

*Pseudaria* species.
Tsu: epiphyte, trail to peak back of Tsu, alt. 400 m., Jan. 28, 1922, * Gardner 7147.*

Genus *Bulbophyllum* Thouars

Tsu: epiphyte, in deep wet forest on slope two miles south of Sinuaga, alt. 300 m., Oct. 1, 1939, *Yuncker 9153:* epiphyte, in damp forest on west slope of Mt. Vaosimau, alt. 300 m., Oct. 5, 1939, *Yuncker 9219.*

Tsu: epiphyte, in dark damp ravine two miles south of Sinuaga, alt. 150 m., Sept. 27, 1939, *Yuncker 9075.*

*Bulbophyllum* species.
Tsu: epiphyte, in dense moist forest on west slope of Mt. Vaosimau, alt. 450 m., Oct. 5, 1939, *Yuncker 9272.*

*Bulbophyllum* species.
Tsu: epiphyte, in dense rain forest on west slope of Mt. Vaosimau, alt. 450 m., Oct. 5, 1939, *Yuncker 9250.*

Genus *Phratria* Lindley

Tsu: epiphyte, on dead limb of tree, Amooli trail, alt. 175 m., Sept. 16, 1921, *Gardner 629.*

Tsu: epiphyte, on tree trunk, slope of peak back of Tsu, alt. 650 m., Jan. 28, 1922, *Gardner 743.*

Tsu: epiphyte, in open forest along the trail one mile south of Sinuaga, alt. 10 m., Sept. 28, 1939, *Yuncker 9069.*

Genus *Trithyspernum* Loureiro

*Trithyspernum* species.
Tsu: epiphyte, in dense moist forest on west slope of Mt. Vaosimau, alt. 450 m., Oct. 5, 1939, *Yuncker 9271.*
Genus *Taaniothyllum* Blume

*Taaniothyllum* species.

Tau: epiphyte, near South Point, Fitiuta trail, alt. 150 m., Oct. 12, 1921, "Garber 641."

**DICOTYLEDONEAE**

**FAMILY CASARINACEAE**

Genus *Casarina* Linnaeus

*Casarina eustaetifolia* Linnaeus, Amoen. Acad. 4: 143, 1759.

A few trees on Tau and Otu, Guest. Native name, "tea."

**FAMILY PIPERACEAE**

Genus *Piper* Linnaeus


Tau: climbing on trees along Fitiuta trail, Sept. 26, 1939, "Yancker 9040, 9042, 9046."

Otu: clinging on tree along southeastern shore trail, Nov. 26, 1939, "Yancker 9516. Native name, "fua monagi."


Tau: clinging on tree in rocky ravine on slope south of Sufaga, alt. 300 m., Sept. 25, 1939, "Yancker 9073; clinging on trees along bush trail near Luma village, alt. 225 m., Jan. 28, 1922, "Garber 711 (.?). Native name, "ou'ou aitu."

*Piper Graeffei* Warburg var. (?). Otu: clinging on trees, leaves broadly ovate, glabrous, 7-9-nerved, slope back of Otu village, alt. 180 m., Nov. 25, 1939, "Yancker 9447."


Tau: clinging on tree south of Sufaga, Sept. 29, 1939, "Yancker 9118; along Amed village, Sept. 16, 1921, "Garber 638. Native names, "ou'ou, "ou'ou aitu.

*Piper methysticum* Forster f., De Plant. Excult., 76, 1786.

Tau: near dwelling, Sufaga, Oct. 3, 1939, "Yancker 9295; plateau back of Luma village, alt. 150 m., Dec. 15, 1921, "Garber 654."

Otu: edge of plantation on ridge behind Otu village, alt. 20 m., Nov. 27, 1939, "Yancker 9538. Native names, "ou, "ou ou."
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Genus Peperomia Ruiz and Pavon
Peperomia tunuiaza Yuncker. B. P. Bishop Mus., Bul. 143 : 33, fig. 18, 1932.
Tao: on rocks along the Flistita trail, Sept. 26, 1939, Yuncker 9031. Native name, lo'a avilo 'a la mo'e.

FAMILY ULMACOPT

Genus Trema Loureiro
Tao: along Flistita trail, Sept. 26, 1939, Yuncker 9046, Flistita trail back of Lena, alt. 100 m., Dec. 16, 1971, Garber 070.
Otu: in forest on main ridge, alt. 100 m., Nov. 25, 1939, Yuncker 9461. Abundant on all islands. Guest. Native name, ma'pēkē.

FAMILY MORACEAE

Genus Brassaonietia L'Héritier
Brassaonietia papyrifera (Linnæus) Ventenat, Tahl, Regn. Veg. 3 : 547, 1794.

Genus Artocarpus Forster
Otu: cultivated, June 1925, Garber 1003, 1004, 1005, 1006, 1007, 1016, 1017, 1018. The breadfruit is cultivated in all of the villages. The natives recognize a number of varieties on the basis of the shape and size of the leaves or shape and quality of the fruit. Native name, 'ulu.

Genus Ficus Linnæus

Otu: in forest on ridge behind Otu village, alt. 500 m., Nov. 27, 1939, Yuncker 9442; Nau Islet, June 4, 1925, Garber 992.
Figs: in thicket on plateau above Siduaga, alt. 45 m., Oct. 2, 1939, Yawcher 9180. Moderate on Tau, Ouf and Olouseg, Guerst.

Figs: in thicket on slope behind Ouf village, Nov. 25, 1939, Yawcher 9477. Native name, mafi.

Figs: in open forest along trail near Fitiuta, Sept. 29, 1939, Yawcher 9052; trail back of Luna, alt. 30 m., Aug. 21, 1921, Garber 544. Guerst: Alastinu (Alastinu), June 7, 1925, Garber 996. Abundant on all the islands. Native name, mafi.

Family Urticaceae

Genus Fleuria Gaertn.-ichaid

Fleuria: plateau back of Faleamoo, alt. 150 m., Aug. 4, 1921, Garber 576; south side of South Cove, Papata, on tuft near the beach, July 15, 1938, W. Harris 320; Papata, in sand near the beach, July 15, 1938, W. Harris 261. Ouf: at plantation house, Tau, June 3, 1925, Garber 1001; Aloaho, June 6, 1925, Garber 731. Native name, roiroyo, sau magan.

Genus Elastomema Forster

Elastomema: in stream bed, guich on side of Palupala Hill, damp forest, alt. 300 m., July 10, 1938, W. Harris 199.

Elastomema: on rocks in moist ravine, alt. 200 m., Sept. 27, 1939, Yawcher 9931.

Genus Propria Commissum

Propria pedunculata (Forster) Wedde, DC Prodrr. 16(1): 191, 1869.
Elastomema: in moist thicket along Fitiuta trail, Sept. 26, 1939, Yawcher 9053; Fitiuta trail, Aug. 10, 1921, Garber 607; on lava cliff behind Luna, alt. 45 m., July 24, 1938, W. Harris 349; south side of South Cove, Papata, on tuft at beach, July 15, 1938, W. Harris 320; in sand near the beach, Papata, July 15, 1938, W. Harris 261. Native name, sau leche, leche eua, sau leche.

Genus Pipitus Weddei

Pipitus aff. argenteus (Forster) Wedde, DC Prodrr. 16(1): 233, 19, 1869.
Pipitus: in thicket on plateau back of Siduaga, alt. 45 m., Oct. 2, 1939, Yawcher 9185; beach at Fitiuta, Aug. 8, 1921, Garber 585; Faleamoo, Jan. 8, 1926, Garber 606. Ouf: in thicket along northwest shore, Nov. 28, 1939, Yawcher 9547; in thicket on ridge back of Ouf village, alt. 120 m., Nov. 25, 1939, Yawcher 9472.
in sandy soil along the northwest shore, alt. 5 m., Nov. 28, 1939, Yunker 9564, 9550; Nuu Ilet, July 4, 1925, Garber 1192. Abundant on all the islands, Guam. Native name, voga.

Genus *Maosia* Woddell


**Family ANARANTHACEAE**

**Genus Amaranthus Linnæus**


Täu: weed in taro patch near Sinajana, Oct. 3, 1939, Yunker 9197; along trail behind Luma, Aug. 5, 1938, W. Harris 97; in sand near the beach, Papauta, July 15, 1938, W. Harris 562.

Oloseg: Oloseg-Goseguta trail, June 17, 1925, Garber 1009. Native name, maaii.

Genus *Cynathia* Loureiro

*Cynathia prostrata* (Linnæus) Blume, Blidr. Pl. jav., 549, 1825.

Täu: weed, common in sandy soil, Sinajana, Oct. 2, 1939, Yunker 9170; Sasi Ridge back of Pitina, alt. 150 m., Aug. 9, 1921, Garber 592; Pitina trail, alt. 100 m., Dec. 16, 1921, Garber 669; in coconut, breadfruit, red banana plantation, Paleu, alt. 180 m., July 27, 1938, W. Harris 215. Native names, monaueq, lau talatoo.

Genus *Achyranthes* Linnæus

*Achyranthes aspera* Linnæus, Sp. Pl. 204, 1753.

Täu: Pitina trail, alt. 125 m., Aug. 4, 1921, Garber 565, 568; south side of South Cove, Papauta, on tuff near beach, July 15, 1938, W. Harris 322. Native names, feea naqatama, fia'e naqatama.

Genus *Alternanthera* Forskål

*Alternanthera sessilis* (Linnæus) R. Brown, ex Roemer and Schultes, Syst. 5: 554, 1819.

Täu: weed in sandy soil, Sinajana, Oct. 2, 1939, Yunker 9172; in shallow water of taro patch near Sinajana, Oct. 6, 1939, Yunker 9275; south side of South Cove, Papauta, on tuff at beach, July 15, 1928, W. Harris 321; along trail behind Luma, Aug. 5, 1938, W. Harris 8; in coconut, breadfruit, and banana plantation, Fālānū, alt. 180 m., July 27, 1939, W. Harris 255.

Ofo: Alsafon, June 4, 1925, Garber 1010. Native name, sau soolo.

Genus *Comphrena* Linnæus

*Comphrena globosa* Linnæus, Sp. Pl. 224, 1753.

FAMILY NYCTAGINACEAE

Genus Boerhaavia Linnaeus


Tsu: in sandy soil, Sinifaga, Oct. 6, 1939, Yunker 9281; roadside, Filitista, Aug. 8, 1921, Garber 586; in sand along trail behind Luna, Aug. 1938, W. Harris 10; in sand near the beach. Papatesa, July 15, 1938, W. Harris 70, 95.

Ouf: on old lava along northwestern shore, Nov. 28, 1939, Yunker 8551.

Genus Pisonia Linnaeus


Ouf: on rocky talus slope at base of cliff along northwestern shore, Nov. 28, 1939, Yunker 9556. Abundant on all the islands. Guest. Native name, pa'a kikou.

Pisonia umbellata (Forster) Seemann, Bonplandia 10:154, 1862.

Tsu: in moist ravine south of Sinifaga, alt. 100 m., Sept. 25, 1939, Yunker 9002; between one and two miles south of Sinifaga, in dark ravine, alt. 100 m., Sept. 27, 1939, Yunker 9064; plateau back of Palaso, alt. 150 m., Aug. 4, 1921, Garber 574; Palaso-Piliti trail, April 19, 1922, Garber 701.

FAMILY AIROACEAE

Genus Sesuvium Linnaeus


Ouf: on spray-swept lava rocks along the northwestern shore, Nov. 28, 1939, Yunker 9558; rock crevices on spray-swept cliff. Ouf-Sano trail, June 7, 1925, Garber 1024.

FAMILY PORTULACACEAE

Genus Portulaca Linnaeus

Portulaca lutea Solander, Forast. f., De Pl. Else., 72, 1786.

Ouf: on old lava along the shore, Nov. 28, 1939, Yunker 9559 (this specimen is sterile but agrees well with this species in its vegetative characters); rocky cliff, Pela'ita Point, June 7, 1925, Garber 1022. Native name, tamaioa.


Tsu: weed in two patches, near Luna, Oct. 6, 1939, Yunker 9279; Papatesa, in sand near the beach, July 15, 1938, W. Harris 79, 99. Native name, tamaioa.


Tsu: on lava rocks near the shore along the Luna-Palaso trail, Sept. 20, 1939, Yunker 9122; Faasamete spring near Palaso, Jan. 8, 1922, Garber 697; Papatesa, in sandy soil near the beach, July 15, 1938, W. Harris 77, 78, 80, 97, 99.
Oufu: In sandy soil near the beach along the southeastern shore, Nov. 26, 1939, Yunque 9218; along the Oufu-Samoan trail on exposed wind-swept rocky cliffs, June 7, 1925, Garber 1025. Native name, tamote.

**Family Annonaceae**

Genus *Cananga* Hooker f. and Thomson

*Cananga odorata* (Lam.) Hooker f. and Thomson, Fl. Ind. 1: 130, 1855.

Oufu: In thicket on plateau above Luma, alt. 45 m., Oct. 2, 1939, Yunque 9218; on plateau back of Luma, alt. 125 m., Garber 650. Abundant on all the islands, Guest. Native name, *mepi'o'e*.

**Family Myristicaceae**

Genus *Myristica* Linnæus


Oufu: in thicket on plateau behind Sisilaga, alt. 45 m., Oct. 2, 1939, Yunque 9262; in forest on slope two miles south of Sisilaga, alt. 150 m., Oct. 1, 1939, Yunque 9161; Plitua trail back of Palaosao, Aug. 11, 1931, Garber 609.

Oufu: in forest on main ridge, Nov. 27, 1939, Yunque 9541. Abundant on all the islands, Guest. Native name, *ā'o'lē*.

**Family Monimiaceae**

Genus *Hedyosmum* Forster


Oufu: on central ridge, alt. 230 m., Nov. 27, 1939, Yunque 9521. Native name, *lo'au fa'i vaoa'i*.

**Family Lauraceae**

Genus *Clainomum* Linnæus

*Clainomum pallidum* Gillespie, B. P. Bishop Mus., Bull. 91: 6, fig. 5, 1932.

Oufu: a few trees at Plitua, Guest. Native name, *tipaumei*.

Genus *Litsea* Lamark


**Family Hernandiaceae**

Genus *Gyrocaryus* Jaquin

*Gyrocaryus americanus* Jaquin, Stirp. Am., 322, pl. 178, 1763.

Oufu: Nun Ilet, July 4, 1925, Garber 1198.
Genus Hernandia Plumier
Tas.: abundant, Gueat. Native name, Ppi.
Hernandia ovigera Linnaces, in Stickman Herb., Amh., 14, 1734.
Tas.: Anmoli beach trail, Jan. 7, 1922, Garber 676.
Otu.: in thicket along southeastern shore, Nov. 26, 1939, Vanacker 9511.
Abundant on all islands, Gueat. Native name, pu'a.

FAMILY CRUCIFERAE

Genus Nasturtium E. Brown
Tas.: weed in sandy soil, Siufaga, Oct. 2, 1930, Vanacker 9771; on beach, Palesano-Faga [Faga] trail, Apr. 19, 1922, Garber 762; south side of South Cove, Papena, on tuft at beach, July 15, 1938, W. Harris 325; in sand near the beach, Papava, July 15, 1938, W. Harris 81, 110.
Olosea: taro patch, back of Olosea village, June 23, 1925, Garber 1689.
Native name, loa taliga.

FAMILY CAPPARIDACEAE

Genus Castea Linnaces
Otu.: exposed coast near Mafal, alt. 40 m., May 26, 1925, Garber 963.

FAMILY CUSONIAEAE

Genus Weinmannia Linnaces
Weinmannia nanuanana Christophersen, B. P. Bishop Mus., Bull. 154 : 10, fig. 2, 1938.
Tas.: old taro dearing on trail to peak, alt. 530 m., Jan. 26, 1922, Garber 729.
Olosea: top of Plumadus mountain, alt. 630 m., June 17, 1925, Garber 1071; Plumadus ridge, alt. 480 m., June 17, 1925, Garber 1060. Native name, lepoalii.

FAMILY ROSEAEAE

Genus Parabarium Ashtlet
Parabarium glaberrimum Haukari, Flora 27: 583, 1844.
Tas.: abundant at Fifita, Gueat.

Scarce on Tas and Olosea, Gueat. Native name, see.
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**Family Leguminosae**

**Genus Leucasena** Bentham


**Genus Adenanthera** Breyen

Abundant on all of the islands, Gués. Native name, *lopa*.

**Genus Cassia** Linnæus


*Cassia* pulcherrima (Linnæus) Swartz, Obserr. Bot. 156, 1791.

**Genus Sophora** Linnæus

*Sophora toxocarpa* Linnæus, Sp. Pl. 373, 1773.

**Genus Indigofera** Linnæus


**Genus Tephrosia** Persoon


**Genus Desmodium** Desvaux

*Desmodium heterocarpum* (Linnæus) De Candolle, Prod. 2: 337, 1825.

Desmosium unballastum (Linn.). De Candolle, Prod. 2: 325, 1825.
Tas: in thicket along Luma-Faleaso trail, alt. 45-50 m., Sept. 30, 1939, Yancher 9130; on lava cliff near the sea, Luma-Faleaso trail, alt. 45-50 m., Sept. 30, 1939, Yancher 9121; Luma-Faleaso trail, Jan. 8, 1922, Garber 652. Native name, Lolu, Lau Lolo.

Genus Utaria Desvaux

Utaria lagopodioides (Linn.) Desvaux, Soc. Linn. Paris, Mem. 4: 300, 1826.
Tas: plateau back of Luma, alt. 100 m., Dec. 15, 1921, Garber 6459. Native name, Talo.

Genus Levetia Neck

Levetia vespertilionis (Linn.) Desvaux, Jour. Bot. 1: 122, pl. 5, fig. 18, 1813.
Tas: cultivated ornamental, Luma, Oct. 5, 1939, Yancher 9267.

Genus Incarvillea Foster

Incarvillea faggieri (Parks.) Fosberg, Washington Acad. Sci., Jour. 31: 95, 1941.
Tas: in open woods along Luma-Faleaso trail, alt. 45-50 m., Sept. 30, 1939, Yancher 9130; Luma, Dec. 15, 1921, Garber 661. Abundant on all of the islands. Guest. Native name, Ili.

Genus Abies Lindl

A. prectorius Linn., Syse. ed. 12, 472, 1767.
Ota: Nava Islet, July 4, 1945, Garber 1111. Native name, loulihi.

Genus Erythrina Linn.

Tas: in thicket near the shore two miles south of Skilafag, Oct. 1, 1939, Yancher 9131; plateau back of Luma, alt. 100-125 m., Aug. 4, 1921, Garber 581.
Ota: along the southeastern shore, Nov. 26, 1939, Yancher 9302; at water's edge, Togaga (Tonga), June 21, 1925, Garber 2694. Moderately on Olosega. Guest. Native name, giri.

Genus Mucuna Adison

Mucuna gigas (Willdenov) De Candolle, Prodr. 2: 405, 1823.
Ota: clothing in trees along the southeastern shore, Nov. 26, 1939, Yancher 9332. Native name, loulihi.

Genus Phusoria De Candolle

Phusoria Thunbergiana (Siebold and Zuccarin) Bentham, Linn. Soc. Bot., Jour. 9: 142, 1865.
Tas: plateau back of Luma, alt. 125 m., Dec. 15, 1921, Garber 651.
Genus Canavalia D'Orb. 


Otu: plantation, June 5, 1925, Garber 1000; beach, Akoalfo, July 5, 1925, Garber 1111. Native names, wo's, su'fofo sai wo's. 

Genus Vigna Savi 


Otu: on sandy soil near the beach south of Suiluga, Sept. 29, 1939, Yuencher 9101; sandy beach, Fagalamae, Aprp. 19, 1922, Garber 753. 

Family Oxalidaceae 

Genus Ozaea Linn. 


Otu: on rocks near the beach, Papa'aua, July 15, 1938, W. Harris 82; on lava cliff behind Luma, alt. 45 m., July 26, 1938, W. Harris 34. 

Family Rutaceae 

Genus Evodia Forster 


Otu: cultivated ornamental, Otu village, Nov. 25, 1939, Yuencher 9446. 

Abundant on all the islands, Guet. Native name, wa. 


Otu: in thicket on plateau behind Suiluga, Oct. 2, 1939, Yuencher 9193; Amo'xai trail, alt. 200 m., Sept. 16, 1921, Garber 617. 

Otu: in open forest on central ridge, alt. 180-200 m., Nov. 25, 1939, Yuencher 9448. 

Oto'ufa: top of Piuma'u mountain, June 17, 1925, Garber 1026. Native name, so'rei. 

Genus Micromelum Blume 

Micromelum minutum (Forster f.) Stearns, Viti, Gard. Mission, 434, 1862. 

Otu: Fita-tuta trail, Dec. 16, 1921, Garber 668. 

Otu: Nu'u Islet, June 4, 1925, Garber 990. On all the islands, Guet. Native name, taidafai.
Genus Citrus Linnaeus

Ofu: Alaoafo, alt. 5 m., June 6, 1925, Garber 1015. Found in all villages in the islands, Guest. Native name, moli tipolo.

A few seedling trees are found around every village, Guest. Native name, moli aina.

Citrus hystrix De Candolle, Cat. Hort. Monsp., 97, 1833.
Ofu: Fitoatu trail, Aug. 4, 1921, Garber 569. Found in or around almost every village, Guest. Native name, moli ni'a.

Ofu: a few trees at Fitoatu, Guest. Native name, moli ni'a-ulu.

A few trees in almost every village, Guest. Native names, moli patapatu, tipolo.

FAMILY BURSERACEAE

Genus Canarium Linnaeus

Canarium samoense Engler, DC Monog. Phanerog. 4: 134, 1883.
On all of the islands, Guest. Native name, ma'ali.

Canarium species.
Ofu: abundant at village of Tau, Guest. Native name, o'amati'e.

FAMILY MELIACEAE

Genus Dysoxylum Blume

Ofu: in open forest on plateau behind Sufaga, alt. 45 m., Oct. 4, 1939, Yancher 9183. Native name, ma'oli.

Genus Aglaia Loureiro

Ofu: plantation at Tuaga, June 22, 1925, Garber 1098. Abundant on all of the islands, Guest. Native name, tapi'ali.

FAMILY POLYGALACEAE

Genus Polygala Linnaeus

Polygala paniculata Linnaeus, Amoen. Acad. 5: 402, 1759.
Ofu: along trail on plateau behind Sufaga, Oct. 2, 1939, Yancher 9173. Native names, fa'a fampae, fa'a lit'i.
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**Family Euphorbiaceae**

**Genus Glocidion**


Ofu: in forest on central ridge, alt. 200 m., Nov. 25, 1939, *Yuncker 9463*; in forest on ridge back of Ofu village, alt. 150 m., Nov. 25, 1939, *Yuncker 9459*; in forest on ridge above Ofu village, alt. 350 m., Nov. 27, 1939, *Yuncker 9319*.

Olosega: top of Piumafua mountain, alt. 625 m., June 17, 1925, *Garber 1038*. Abundant on all of the islands, Guest. Native name, *mazwon*.

**Genus Bryonia**


**Genus Phyllanthus**


*Phyllanthus simplex* Retz., Obs. 3:29, 1789.

Tai: among fers on moist bank along Luma-Falesaso trail, alt. 50 m., Sept. 30, 1939, *Yuncker 9131*; Luma-Falesaso trail, alt. 40 m., Jan. 8, 1922, *Garber 693*.

Olosega: along the trail at Olosegata, alt. 250 m., June 17, 1925, *Garber 1074*.

**Genus Securinaga** A. L. dejustieu

*Securinaga samana* Croizat, new species.


Arbor parva, ligno durisimo tracta, incolationibus flexuosa. Folius cum petiolis glandulis, in sedo distichis 0.8-1.8 cm. longis, 0.7 cm. latis, tenuulibus charadiis in sicco olivaceis subcoloreolibus, obtusangulato-cuspatis vel oblanceolato-ellipticis, margini integerrimis, venis ca. 6-7 inguis, petiolis canaliculatis via 1-3 mm. longis. Floribus in glomerulis axillaribus congestis saut ù, pollinium vis 1-2 cm. longum afferentiis. Perianthio ù ca. 2 mm. longo, latissio, lobis ovato-cordatis ù stami- nibus ù oppositos, cum glandulis magnitudine formaque varia afferentiis, fila- mento ca. 1 mm. longo, antheris ù 0.25 mm. longo, pollinello ca. 3 mm. longo, gracili ù pistillodo carnoso ù-petali. Perianthio ù illi ù subemili, ovario globoso-truncate glaberrimo ca. 1-2 mm. magno, stylis ù et basi libris apice renae frondis, semine bruno levisscolo ad 1.5 mm. longo.

Tai: Siufaga, Oct. 3, 1939, "Tree 6 m. tall, 20 cm. diam." *Yuncker 9196*. 

Uposa: Vaalima “Slopes and rocky woods alt. 100 m. Tree 10-25 m. high, diam. 14-20 cm.”, Feb. 1921, A.J. Bowes 85; Falalegga, 1931, Christopherson 2794; Saluafeta, “Poumouli, fruit blue black”, 1929, Christopherson 943.

Without locality, Y. Powell 1880.

Christopherson doubts that this plant is native to Samoa and it must be admitted that its characters bring it close to S. flexuosa Mueller-Agru, endemic to the Philippine Islands. As a matter of fact, it would prove impossible to separate the Samoa plant specifically from that of the Philippines if the races were in common. A careful comparison of representative sets of S. flexuosa and S. samoana of both sexes and in every stage of growth shows, however, that (1) the Samoa plant has foliage which tends to be more broadly oblong and short-ovateolate than that of the Philippines; (2) the pedicel of the female flower near the young fruit stage reaches 6-8 mm. in S. flexuosa, while it does not exceed 4-5 mm. in S. samoana; (3) the style of S. flexuosa is more or less stipitate, instead of sessile, as in S. samoana; (4) the seed is slightly longer and manifestly more voluminous in S. flexuosa than it is in S. samoana. All these differences, taken severally, would be trifling, but together, with the different races, suggest that the description of a new species is advisable. The specific characters of Securinega are seldom strongly marked among species of the same affinity.

With the final addition of S. samoana, Securinega becomes one of the most widespread genera, its range including Oceania, Australasia, Asia proper, Africa, Europe, and America. Native name, poumouli.

Genus Bachofia Blume


Tauf: plantation back of Luma, Sept. 13, 1921, Garber 613; plateau back of Luma, alt. 105 m., May 29, 1917, W. Harris 289. Abundant on all of the islands, Guzest. Native name, 'a'a.

Genus Alasites Forster

Alasites moluccana (Linnaeus) Willdenow, Sp. Fl. 4: 500, 1805.

Tauf: plateau back of Lupa, alt. 100 m., Sept. 21, 1926, Garber 777.

Ofo: on ridge back of Ofo village, alt. 100 m., Nov. 27, 1939, Warcker 6540.

Guzesta: abundant, Guzest. Native name, lana.

Genus Macaranga Thouars


Tauf: along the Fitiuva trail, alt. 30 m., Sept. 20, 1939, Warcker 9037; Anouli trail, alt. 75 m., Sept. 16, 1921, Garber 614.
Ota: in forest on main ridge, alt. 150 m., Nov. 25, 1939, Yatsker 9467; Pesia Point, alt. 75 m., May 25, 1945, Garber 972. Native name, pata, pata lomino.


Taa: dundã, trail, alt. 200 m., Sept. 16, 1921, Garber 636.

Olosoga: Olosogega-Princepa Ridge, alt. 500 m., June 17, 1925, Garber 1072. Abundant on all of the islands, Guzat. Native name pase.

Genus Anahyphra Linnæus


Taa: dundã, trail, Sisula, Oct. 6, 1939, Yatsker 9280; along the trail behind Luma, Aug. 5, 1938, W. Harris 7; in sand near the beach, Panapaes, July 15, 1938, W. Harris 74.

Ota: Asean, June 6, 1925, Garber 1314. Native name agaga.


Anályphra halepina Borr. pl. Ind. 304 pl. 61, fig. 1, 1768.


Genus Codiasium (Rumphius) Jussieu


Taa: on platea back of Luma, alt. 105 m., Aug. 4, 1922, Garber 769 (form apiculata) Celastrin). A number of different forms cultivated for ornamental about dwellings on the islands of Taa and Ota were noted but not collected. Native name, mawa, sinau.

Genus Manihot Miller

Manihot esculenta Crantz, Inst. Rei Herb. 1: 107, 1766.


Genus Homalanthus Jussieu


Abundant on all of the islands, Garce. Native name, mawala.

Homalanthus nutans (Forster) Pax, in Engler and Prantl, Nat. Pflanzenfam. 3 (5): 96, 1890.

Taa: in thickets along Fitaia trail, alt. 50 m., Sept. 26, 1939, Yatsker 9045; Fitaia trail back of Luma, alt. 45 m., Aug. 4, 1921, Garber 283.
Ofu: in thicket on ridge back of Ofu village, alt. 300 m., Nov. 27, 1939, Wyman 9534.
Chosea: Chosea—Pumafus Ridge, alt. 475 m., June 17, 1925, Garber 1029. Native names, masala, fiamcanila.

Genus Euphorbia Linnaeus

Ofu: in sandy soil near the shore, Sept. 29, 1939, Wyman 9112; in sandy soil, Luma, July 20, 1938, W. Harris 346; in sand near the beach, Papatua, July 15, 1938, W. Harris 84.
Ofu: coral beach, Muulu, May 26, 1925, Garber 986. Native names, palualu, d'aitai.

Ofu: at base of Luma—Palaeasoi trail, Sept. 30, 1939, Wyman 9120; Luma—Palaeasoi trail, alt. 40 m., Jan. 8, 1922, Garber 691; Luma, in sand near the beach, July 20, 1938, W. Harris 15, 14, 23, 341; Papatua, in sand near the beach, July 15, 1938, W. Harris 65, 103; Palaolu, in plantation, alt. 180 m., July 27, 1938, W. Harris 237. Native name, hau lai mo'oi.

Ofu: in sandy soil near the beach, Oct. 2, 1939, Wyman 9115; Luma, in sand near the beach, July 20, 1938, W. Harris 342; Papatua, in sand near the beach, July 15, 1938, W. Harris 65. Native name, au lalii.

Family ANACARDIACEAE

Genus Buchanania Roxburgh

Ofu: abundant in the mountains and at Pilaula, Guest. Native name, noa.

Genus Mangifera Linnaeus

Ofu: Sifaga, Oct. 1, 1939, Wyman 9158. Seedling trees found about almost every village on the islands, Guest. Native name, ma'ape.

Genus Spandias Linnaeus

Ofu: cultivated, Sifaga, Jan. 11, 1922, Garber 786. Common on all of the islands, Guest. Native name, vi.

Genus Rhiz Linnaeus

Ofu: in forest on west slope of Mt. Vua'umana, alt. 450 m., Oct. 5, 1939, Wyman 9245.
Oirs: in forest on central ridge, alt. 300 m., Nov. 27, 1939, Young 9333. Abundant on all of the islands, Goyt. This is a common forest tree. The above cited specimen agrees well with those from Upolu and Savaii as reported by Christophersen, which he doubtfully refers to this species. Native name, utui.

**FAMILY ICAICACEAE**

*Genus Chastea* Miguel


Abundant on all of the islands, Goyt. Native name, ahu, ahu toa.

**FAMILY SAPINDACEAE**

*Genus Pometia* Forster


Abundant on all of the islands, Goyt. Native name, auau.

*Genus Alhagiya* Gaertner

*Alhagiya samoensis* Christophersen, B. P. Bishop Mus., Bull. 128: 130, fig. 16, 1935.

Moderate on all of the islands, Goyt. Native name, tapuau.

**FAMILY ABUTILONACEAE**

*Genus Calobriza* L. C. Richard


**Taa**: In thicket along Luma-Palaitane trail, alt. 50 m., Sept. 30, 1939, Young 9264; Luma-Palaitane trail, alt. 40 m., Jan. 8, 1922, Garber 387.

**Oirs**: Nuu Islet, June 4, 1925, Garber 929. Native name, sioa.

*Genus Alhagiya* Reissek


**Taa**: Finuata trail, alt. 100 m., Aug. 4, 1921, Garber 559.

**Oirs**: Nuu Islet, alt. 75 m., July 4, 1925, Garber 1104. Abundant on all of the islands, Goyt. Native name, utai.

**FAMILY TILIAEAE**

*Genus Trichospermum* Blume

*Trichospermum richii* (A. Gray) Seemann, Bonplandia 9: 254, 1861.

**Taa**: In forest on slope south of Sinjaga, alt. 300 m., Oct. 4, 1939, Young 9297.
Genus Grewia Linnaeus


Genus Triumfetta Linnaeus


FAMILY MALVACEAE

Genus Sida Linnaeus


Genus Urena Linnaeus


Genus Hibiscus Linnaeus

Hibiscus Abelmoschus Linnaeus, Sp. Pl., 696, 1753. Tae: in swampy area back of Siodaga, Oct. 7, 1939, Yunker 9297; in clearing along trail to Fititua, Sept. 26, 1939, Yunker 9035; Sani Ridge above
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Ficus auct, alt. 150 m., Aug. 9, 1921, Garber 691; Luma-Talanao trail, Oct. 1930, Judd.


Oloa: native bush of Manus, alt. 310 m., June 17, 1925, Garber 1045. Native name, vahna.

Casia Thapsia Waltzeiger


Genus Gossypium Linnaeus

Gossypium scopulare MacClayden, Fl. Jam. 1: 72, 1827.


Family Bomacaceae

Genus Celba Matius

Celba pes-tandra (Linnaeus) Gaertner, Fruct. et Semin. 2: 254, 133, fig. 1, 1791.


Family Sterculiaceae

Genus Melochia Linnaeus

Melochia adora Linnar, Suppl. 302, 1781.

Bernice P. Bishop Museum—Bulletin 184

Genus Theobroma Linnaeus

A few trees near the village of Tau on the island of Tau and also on Ofu, Guest. Native name, koko (toco).

Genus Kleinioda Linnaeus

Tau: Fitiuta trail, alt. 125 m., Aug. 4, 1921, Garber 555. Abundant on all of the islands, Guest. Native name, jwafjwa.

Genus Sterculia Linnaeus

Tau: plateau back of Luma, alt. 100 m., Sept. 21, 1921, Garber 775.
Ofu: in open woods along the southeastern shore, Nov. 26, 1939, Yunker 9513; Nuu Ialet, July 4, 1925, Garber 1112. Abundant on all of the islands, Guest. Native name, jwadjo.

Family OUTFERAE

Genus Caloprygium Linnaeus

Tau: near the beach, Siufaga, Oct. 2, 1929, Yunker 9194; in forest back of Luma, alt. 3 m., Jan. 11, 1922, Garber 704.
Ofu: in forest on the main ridge, alt. 250 m., Nov. 25, 1939, Yunker 9468. Native name, jitosu.

Caloprygium samoense Christophersen, B. P. Bishop Mus., Bull. 128:147, fig. 20, 1935.
Abundant on all of the islands, Guest. Native name, tamosu.

Family BIXACEAE

Genus Bixa Linnaeus


Family FLACCOURTIAEAE

Genus Flacourtia L'Héritier

Flacourtia Rukam Zollinger and Morren, Syst. Verr., 33, 1854.
Tau: in forest on mountain slope south of Siufaga, alt. 200 m., Sept. 27, 1939, Yunker 9063; same locality, alt. 150 m., Sept. 27, 1939, Yunker 9062; in forest two miles south of Siufaga, alt. 180 m., Oct. 1, 1939, Yunker 9163;
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plateau back of Luma, alt. 125 m., Dec. 15, 1921, Garber 564; plateau back of Luma, alt. 100 m., Sept. 21, 1922, Garber 176.

Ofu: in open forest along ridge trail, alt. 200 m., Nov. 27, 1939, Yunker 9230; in open forest on ridge back of Ofu village, alt. 100 m., Nov. 25, 1939, Yunker 9464. Abundant on all of the islands, Guest. Native name, simalo.

FAMILY CARICACEAE

Genus Carica Linnaeus


Occurs on all of the islands both cultivated and spontaneously. Native name, andi.

FAMILY BEGONIACEAE

Genus Begonia Linnaeus

Begonia species.


FAMILY THYMELABACEAE

Genus Phaleria Jack


Abundant on all of the islands, Guest. Native name, simi.


Tuu: exposed cliff, Siumaga Point, alt. 75 m., Aug. 26, 1922, Garber 772. Abundant on all of the islands, Guest. Native name, simi.

FAMILY LYTHRACEAE

Genus Lagerstroemia Linnaeus

Lagerstroemia indica Linnaeus, Syst. ed. 10, 1076, 1759.

Tuu, near dwelling, cultivated, Siumaga, Oct. 3, 1939, Yunker 9201.

FAMILY LECYTHIDACEAE

Genus Barringtonia Forster


Tuu: abundant along the shore south of Siumaga, Sept. 29, 1939, Yunker 9098; Fitiuta trail, alt. 125 m., Aug. 4, 1921, Garber 564. Abundant along the seacoast around all the islands, Guest. Native name, faiw.
Tusii: near the shore, Sept. 27, 1939, Yarcker 9082; edge of thicket on pla-
tea behind Sifafa, alt. 45 m., Oct. 2, 1939, Yarcker 9173; along trail back
of Luna, alt. 30 m., Aug. 8, 1921, Garber 541. Moderate to abundant on all of
the islands. Guest. Native name, futage.

**Family Combretaceae**

Genus Terminalia Linnaeus

Terminalia Catappa Linnaeus, Mant., 128, 1767.
Ot: slope of mountain at Asafo, alt. 15 m., May 26, 1925, Garber 980.
Abundant on all of the islands, Guest. Native name, tala.

**Family Myrtaceae**

Genus Pelidium Linnaeus

Tusii: in thicket near Sifafa, Oct. 7, 1939, Yarcker 9292. Native name,
ヌオヌ [ヌオヌ].

Genus Decaspernum Forster

Decaspernum frutescens Forster, chract. Gen. Pl., 74, pl. 37, 1776.
Abundant on the island of Olosega, Guest. Native name, ws'amisi.

Genus Eugenia Micheli

Eugenia boroncarpium A. Gray, U. S. Expl. Exped., Bot. 15(1): 528, 1854,
Aitutaki, pl. 65, 1857.
Tusii: plateau back of Luna, alt. 150 m., Dec. 15, 1921, Garber 652, 658.
Native name, seara.

Tusii: Ameodi trail, alt. 200 m., Sept. 1, 1921, Garber 657. Abundant on
all of the islands, Guest. Native names, aisi, aisi suu.

Found in and around most every village, Guest. Native name, nusa fafa.

Aitutaki, pl. 29, 1857.
On all of the islands, Guest. Native name, fema.

Olosega: Olosega-Piumafo ridge, alt. 500 m., June 17, 1925, Garber
1030; top of Piumafo mountain, alt. 655 m., June 17, 1925, Garber 1028.
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FAMILY MELASTOMACEAE

Genus Melastoma Linnaeus

Melastoma dentatum Labillardière, Sert. Austro-Caled. 2: 65, pl. 64, 1825.
Tāu: in thicket along trail near Fiteitu, alt. 50 m., Sept. 26, 1939, Yuncker 9658; edge of forest on slope south of Sinuaga, alt. 240 m., Oct. 4, 1939, Yuncker 9232; Anauui trail, alt. 175 m., Sept. 16, 1921, Garber 622.
Oloega: Choosugatu-Plusmau ridge, alt. 500 m., June 17, 1925, Garber 1037. Native names, tū aile, meegu, olive tree.

Genus Asclepias A. Gray

Tāu: in forest on west slope of Mt. Vaialamau, alt. 360 m., Oct. 5, 1939, Yuncker 9232; on slopes of peak back of Sinuaga, alt. 600 m., Jan. 28, 1922, Garber 746; in old tāu clearing, below peak at back of Sinuaga, alt. 530 m., Jan. 28, 1922, Garber 721.
Oloega: Choosugatu-Plusmau ridge, alt. 550 m., June 17, 1925, Garber 1032. Native name, matou.

FAMILY GNAGIRAE

Genus Jussieuana Linnaeus

Tāu: in swampy area behind Sinuaga, Oct. 7, 1929, Yuncker 9294.
Oloega: tāu swamp back of Choosga village, June 23, 1925, Garber 1097. Native names, tū aile, meegu samoense, mastoufou tū.

FAMILY ARALEACEAE

Genus Reynoldisia A. Gray

Reynoldisia species.
Tāu: top of peak back of Tāu village, alt. 600-700 m., Jan. 25, 1922, Garber 722. Abundant on all of the islands, Guti. Native name, tū aile.

Genus Meruya Forster

Meruya capitata Christophersen, B. P. Bishop Mus., Bull. 128: 161, fig. 23, 1936.
Tāu: on ridge on slope two miles south of Sinuaga, alt. 100 m., Oct. 1, 1929, Yuncker 9262.
Oloega: in forest on ridge above Oloega village, alt. 300 m., Nov. 27, 1929, Yuncker 9545. Native name, fanojua.
**Meryta aff macrophylla** (Rich.) Seemann, Bonplandia 19: 204, 1862.
- **Tsu**: Anzua trail, alt. 180 m., Sept. 16, 1921, Garber 622.
- **Oluoega**: Oioega-flato-Pumaha Ridge, alt. 510 m., June 17, 1925, Garber 1879. Native name, fapbaya.

**Genus Polyosma** Forster

**Polyosma Guifetela** (Bull.) L. H. Bailey, Rhodora 18: 153, 1916. var. (?).
- **Tsu**: ornamental shrub with coarsely toothed, rounded leaflets, Sixfagga village, Oct. 3, 1939, Yunker 9217. Native name, liokami.


**Family Umbelliferae**

**Genus Centella** Linnaeus

- **Tsu**: in sandy soil near the shore south of Sixfagga, Sept. 29, 1939, Yunker 9113; in sandy soil, Luma, July 20, 1938, W. Harris 344.
- **Oluoega**: sandy soil along the southeastern shore, Nov. 26, 1939, Yunker 9504. Native name, tega.

**Family Myrsinaceae**

**Genus Massa** Forskål

**Massa samoon** Mac, Pflanzen 9(IV, 236): 53–5902.
- **Tsu**: in thickest south of Sixfagga, alt. 150 m., Sept. 20, 1939, Yunker 9105; Luma-Falosso trail, alt. 40 m., Jan. 4, 1922, Garber 656.
- **Oluoega**: beach at Yacto, June 23, 1925, Garber 1097.

**Family Plumaginaceae**

**Genus Plumago** Linnaeus

**Plumago zeypolica** Linnaeus, Sp. Pl., 1: 753.
- **Oioega**: along rocky shore, Lofuaeg by Sii, May 29, 1925, Garber 987. Native name, kuafuka.

**Family Sapindaceae**

**Genus Planouchersia** Pierre

**Planouchersia garberi** Christophersen, B. P. Bishop Mus., Bull. 128: 170, fig. 24, 1935.
- **Oluoega**: top of Nuu Islet, alt. 75 m., July 4, 1925, Garber 1107. Native name, sifao.

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FAMILY EBERNAEACEAE

Genus Diospyros Linnaeus


Diospyros samoensis A. Gray, Am. Acad., Proc. 5: 326, 1862.

Ou: in thicket along southeastern shore, Nov. 26, 1939, Yuncker 9514, 9216; along beach at Taoga, June 23, 1925, Garber 1957; Nuu Islet, July 4, 1925, Garber 1101. Abundant on all of the islands, Guest. Native name, a'auaile.

FAMILY OLEACEAE

Genus Jasminum Linnaeus


Ou: Nuu Islet, July 4, 1925, Garber 1107. Native name, fefu'e.


Ta: in thicket near the sea two miles south of Siufaga (as escape?), Oct. 1, 1939, Yuncker 9141. Native name, paa soaolo.

FAMILY LOGANIACEAE

Genus Geniostoma Forster

Geniostoma rupestr Forster, Charact. Gen. Pl. 24, pl. 12, 1776.

Ta: in thicket on plateaus behind Siufaga, alt. 45 m., Oct. 2, 1939, Yuncker 9192; in thicket, ravine south of Siufaga, alt. 50 m., Sept. 23, 1939, Yuncker 9095; peak back of Siufaga, alt. 650 m., Jan. 26, 1922, Garber 735.

Ou: in thicket on slope behind Ou village, alt. 45 m., Nov. 24, 1939, Yuncker 9077; in thicket on ridge back of Ou village, alt. 200 m., Nov. 15, 1939, Yuncker 9453. Native name, taitai ipo.

Genus Fagraea Thunberg


Ta: in open woods on plateau behind Siufaga, alt. 45 m., Oct. 2, 1939, Yuncker 9176; on west slope of Mt. Vausaaim, alt. 300 m., Oct. 5, 1939, Yuncker 9263; on plateau back of Luma, alt. 125 m., Aug. 4, 1921, Garber 589.

Ou: in open forest on ridge above Ou village, alt. 200 m., Nov. 27, 1939, Yuncker 9555. Moderate on all of the islands, Guest. Native name, paa i'ulu.
Family Apocynaceae

Genus Plumeria Linnaeus

Cultivated as an ornamental in most villages. Native name poa faii.

Lechena toos (Linnaeus) Reichenbach, Conspect. 134, 1828.

Genus Alyxia R. Brown

Tuai: Climbing in trees in ravine on slope south of Situfaga, alt. 100 m., Sept. 25, 1939, Yuenker 9027; plateau back of Faleasau, alt. 200 m., Aug. 4, 1921, Garber 377.
Ofo: Climbing in trees on ridge back of Ofo village, alt. 300 m., Nov. 27, 1939, Yuenker 9556. Native names, goa, lau ma’ali, ma’ali.

Alyxia heliata (Forster) Roemer and Schultes, Syst. Veg. 4:439, 1819.
Ofo: Feaia Point, alt. 90 m., May 25, 1925, Garber 977. Native names, goa, goa 871, lava, lau ma’ali, ma’ali.

Genus Gerbera Linnaeus

Tuai: In open forest along Luma-Faleasau trail, alt. 45-50 m., Sept. 30, 1939, Yuenker 9154; plateau back of Luma, alt. 60 m., Aug. 2, 1921, Garber 546. Native name, leva.

Family Asclepiadaceae

Genus Hoya R. Brown

Hoya bicaudata A. Gray, Am. Acad., Proc. 5:335, 1862.
Tuai: Climbing in thicket in ravine on slope south of Situfaga, alt. 150 m., Sept. 25, 1939, Yuenker 9012; Fitiuta trail, alt. 100-125 m., Aug. 4, 1921, Garber 526, 566; Amouli trail, alt. 100 m., Sept. 16, 1921, Garber 615.
Ofo: Climbing in trees in thicket on ridge back of Ofo village, alt. 250 m., Nov. 25, 1939, Yuenker 9449; climbing in trees along the southeastern shore, Nov. 26, 1939, Yuenker 9209. Native names, fua ce le le, olivi naa.

Ofo: Climbing in thicket on ridge behind Ofo village, alt. 350 m., Nov. 27, 1939, Yuenker 8528.

Hoya samoensis Seemann, Fl. Vit., 163, 1866.
Ofo: Top of Tumu mountain, alt. 450 m., Sept. 3, 1925, Garber 1116.
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FAMILY CONVOLVULACEAE

Genus Ipomoea Linnæus


Ofu: Tau, in plantation, June 5, 1925, Yuncker 999. Native name, tumamimi.


Tau: climbing in thicket south of Sinifaga, Sept. 25, 1939, Yuncker 9005; weed in banana plantation above Sinifaga, alt. 50 m., Oct. 4, 1939, Yuncker 9231; Luma-Falesaas trail, alt. 50 m., Jan. 8, 1922, Garber 658; south side of South Cove, Papatea, on tuft at beach, July 15, 1938, W. Harris 327, on lava cliff behind Luma, alt. 45 m., July 24, 1938, W. Harris 35, 108.

Otu: climbing in thicket near the northwestern shore, Nov. 28, 1939, Yuncker 9561; in thicket along the southeastern shore, Nov. 26, 1939, Yuncker 9568. Native names, tumamimi tau, tau tumamimi.


Tau: in sandy soil near the beach, south of Sinifaga, Sept. 25, 1939, Yuncker 9024; sandy beach at Fagu, April 30, 1922, Garber 765. Native names, feafas tai, fea moa, feafas tai tuaotua.

Ipomoea Quamoclit Linnæus, Sp. Pl., 159, 1753.

Tau: near dwelling, Sinifaga, Oct. 3, 1939, Yuncker 9103; on lava rock soil, Filiteta, alt. 30 m., Oct. 12, 1921, Garber 642.


Tau: in thicket, low marshy area near Sinifaga, Oct. 7, 1939, Yuncker 9208; climbing in thicket near the shore, south of Sinifaga, Sept. 29, 1938, Yuncker 9097; in coconut, breadfruit, and banana plantation, Fale tendu, alt. 280 m., July 27, 1938, W. Harris 135.

Otu: Toaga, climbing on tree at Nuava, alt. 5 m., June 22, 1925, Garber 1099. Native name, fea ena.

FAMILY BORAGINACEAE

Genus Cordia Linnæus


Moderate on the islands of Tau and Olonga. None on Ofu. Guést. Native name, taumangan.


Tau: rocky shore at Amouli, Sept. 16, 1921, Garber 639.

Ofu: in thicket near the shore along the southsoutheastern trail, Nov. 26, 1939, Yuncker 9507. Abundant on all of the islands, Guést. Native name, tumamimi.
FAMILY VERBENACEAE

Genus *Stachytarpheta* Vahl

*Stachytarpheta articulata* (Salisbury) Sims, Curtiss, Bot. Mag. 43: pl. 1848, as *S. articulata*, 1816.


Genus *Tectona* Linnaeus f.

*Tectona grandis* Linnaeus f., Suppl., 151, 1781.

A few introduced specimens on Tau, Guet. Native name, *titi*.

Genus *Prema* Linnaeus

*Prema taitensis* Schauer, DC Prodr. 11: 638, 1847.


*Ouf*: in thicket on slope back of Ouf village, alt. 100 m., Nov. 25, 1939, *Yuncker 9452*. Abundant on all of the islands, Guet. Native name, *ainala*.

Genus *Vitex* Linnaeus


*Tau*: in thicket near the shore, Sept. 29, 1939, *Yuncker 9104*; Luma, Sept. 6, 1921, *Garber 615*.


Genus *Farradya* F. Mueller


*Ouf*: climbing in trees on ridge back of Ouf village, alt. 250 m., Nov. 25, 1939, *Yuncker 9445*. Native name, *manuafuga*.

Genus *Clerodendrum* Linnaeus

*Clerodendrum speciosissimum* Van Geet ex Moreen, Hort. Belg. 3: 322-323, pl. 68 [as "Clerodendron"], 1836.


*Ouf*: in open weedy area along southeastern shore, Nov. 26, 1939, *Yuncker 9494*.

*Identified by Dr. H. K. Maloomo.*
Clerodendrum insulm (Linnæus) Gutierrez, Fruct. et Semin. 1: 271, 1788.
Tau: in thicket near the shore, Sept. 29, 1939, Yunker 9099; beach at Fitiata, Aug. 8, 1921, Garber 394; Luma-Palaea island trail, alt. 30 m., Jan. 8, 1922, Garber 694.
Ofu: in thicket near the shore, Nov. 28, 1939, Yunker 9567. Native name, aloalo tai.

Clerodendrum nutans Wallich, Num. List Dried Spec., etc., no. 1793, 1828.

FAMILY LAMIACEA

Genus Leucas R. Brown
Tau: weed in sandy soil near the beach, Sept. 25, 1939, Yunker 9028; on lava cliff, Luma, alt. 45 m., July 24, 1938, W. Harris 378; Sali Ridge back of Fitiuta, alt. 150 m., Aug. 9, 1921, Garber 594; on lava cliff behind Luma, alt. 45 m., July 24, 1938, W. Harris 36, 93.

Genus Coleus Loureiro
Coleus Buxsi Bentham, Lab. Gen. et Sp., 56, 1832, var.? 7
Tau: along the beach trail south of Sinuaga, Sept. 29, 1939, Yunker 9099; coconut, breadfruit, and banana plantation, Palau, alt. 180 m., July 27, 1938, W. Harris 239. Native name, ti'a tai sei.

Genus Ocimum Linnaeus
Ocimum sanctum Linnaeus, Mant., 85, 1767.

FAMILY SOLANACEAE

Genus Capiscum Linnaeus
Ofu: cultivated, Aloafao, alt. 7 to 8 m., June 6, 1925, Garber 1011. Native name, polo papalagi.

Ofu: in sandy soil near the shore, Nov. 28, 1939, Yunker 9568; cultivated, Aloafao, June 5, 1925, Garber 149, 994. Native names, polo vao, polo papalagi, polo aif.
Solanum nigrae Linnæus
Tax.: Sani Ridge back of Friiza, alt. 150 m., Aug. 9, 1921, Garber 907.
Cits.: Fajala Point, alt. 75 to 100 m., May 25, 1925, Garber 976. Native names, maguqaiqei, magaplo, pala evo.

Genus Cestrum Linnæus
Tax.: cultivated, Sinfaga, Oct. 6, 1939, Yunker 9277.

Family Scrophulariaceae
Genus Russelia Jacquin
Genus Angelonia Hubeolt and Bonpland
Tax.: cultivated, Sinfaga, Oct. 1, 1939, Yunker 9225.

Genus Lindernia Allioni
Lindernia crassipes (Linnæus) F. Mueller, Census, 97, 1862.
Tax.: in wet soil along the trail two miles south of Sinfaga, alt. 50 m., Oct. 1, 1939, Yunker 9247; Sani Ridge back of Friiza, alt. 150 m., Aug. 9, 1921, Garber 907; wet rocks, Amoudi trail, alt. 175 m., Sept. 16, 1921, Garber 623; south side of South Cove, Papana, on nuff at beach, July 15, 1938, W. Harris 224. Native names, bu tuufu, bua limana.

Family Gesneriaceae
Genus Cyrtandra Forster
Olosega: Olosegaa-Plumafus ridge, alt. 450 m., June 17, 1925, Garber 1067. Native name, xa laqiai.

Olosega: Olosegaa-Plumafus ridge, alt. 450 m., June 17, 1925, Garber 1067. Native name, bua loulou, bua va.

Tax.: in forest on the west slope of Mt. Veninam, alt. 500 m., Oct. 5, 1939, Yunker 9257; Amoudi trail by a stream, alt. 180 m., Sept. 16, 1921, Garber 633.
Olosega: Olosegaa-Plumafus ridge, alt. 500 m., June 17, 1925, Garber 1067. Native names, ma lo, pae fiafa, pae bala evo.
Tas.: in thicket, dark ravine, lower slope of mountain south of Sisufaga, alt. 50 m., Sept. 25, 1939, Ymcker 9015; trail to plateau at back of Luma, alt. 50 m., Aug. 2, 1921, Garber 551.
Olosega: Oloseguta-Pitumaufua ridge, alt. 530 m., June 17, 1925, Garber 1034. Native name, mofe.

Genus Gloxinia L’Heritier
Tas.: cultivated, Sisufaga, Oct. 3, 1939, Ymcker 9202.

FAMILY ACANTHACEAE
Genus Thunbergia Linnæus
Tas.: cultivated, near dwelling, Sisufaga, Oct. 3, 1939, Ymcker 9203.

Genus Hemigraphis Nees
Tas.: near dwellings, Sisufaga, Oct. 3, 1939, Ymcker 9215.

Genus Pseudanthemum Radkofer
Pseudanthemum species.
Tas.: naturalized on slope south of Sisufaga, alt. 240 m., Oct. 4, 1939, Ymcker 9241; Pitutu, Aug. 9, 1921, Garber 606.

FAMILY RUBIACEAE
Genus Hedycrro Linnæus
Hedycrro bifora (Linnæus) Lamarck, Tabl. Encycl. 1: 272, 1791.
Tas.: in sand near the beach south of Sisufaga, Sept. 20, 1930, Ymcker 9119; cliff crevices near Faleasao, Jan. 8, 1922, Garber 608; south side of South Cove, Papatea, on tuff at beach, July 15, 1938, W. Harris 328.
Oufa: on old lava flow along northwest shore, Nov. 28, 1939, Ymcker 9555; at beach, Tas., June 17, 1925, Garber 1019.
Olosega: taro plantation, back of Oloseguta, alt. 350 m., June 17, 1925, Garber 1084.

Hedycrro foetida (Forster) J. E. Smith, in Rees Cyclop. 17(2), 1811.
Tas.: cliff crevices, Faleasao-Pitutu trail, alt. 15 m., Jan. 8, 1922, Garber 797.
Oufa: on broken lava near the shore, Nov. 27, 1939, Ymcker 9553; on exposed cliff by the sea, Oufa-Samol, June 7, 1925, Garber 1022.
Genus *Neosacaean* Merrill


**Taa:** in thicket on plateau behind Sisefaga, alt. 45 m., Oct. 2, 1939, *Yunker* 9179; back of Luma, alt. 75 m., Dec. 17, 1921, *Garber* 672.
**Ofo:** along southeastern shore trail, Nov. 26, 1939, *Yunker* 9580; Sina, Akafo, alt. 15 m., June 9, 1925, *Garber* 897. Abundant on all of the islands. Native name, ofo.

**Genus Mussanga* Linnaeus


**Taa:** in thicket along Fitiuta trail, Sept, 26, 1939, *Yunker* 9043; Fitiuta trail, alt. 125 m., Aug, 4, 1921, *Garber* 862; Fitiuta trail back of Luma, alt. 175 m., Aug. 11, 1921, *Garber* 850.
**Ofo:** along southeastern shore trail Nov. 26, 1939, *Yunker* 9515. Native name, whol sb tao.

**Genus Tarenna* Guettard

*Tarenna* amboina* (Forster.) Durand, in Drake, Ill. F. Mar. Pac. 6: 190, 1890.

**Taa:** on plateau back of Sisefaga, alt. 45 m., Oct. 2, 1939, *Yunker* 9184; Amoudi forest trail, alt. 150 m., Sept. 22, 1922, *Garber* 776.
**Ofo:** in forest on ridge back of Ofo village, alt. 240 m., Nov. 25, 1939, *Yunker* 9451; in thicket on central ridge, alt. 300 m., Nov. 27, 1939, *Yunker* 9542. Moderate to abundant on all of the islands. Native name, ma'o-name.

**Genus Caithium* Lamark


**Taa:** on the plateau on all of the islands, Guat. Native name, oto, oto sina.

**Genus Guettarda* Linnaeus


**Genus Ixora* Linnaeus


**Taa:** cultivated, Sisefaga, Oct. 3, 1939, *Yunker* 9222.

**Ixora** species.

Small to medium-sized tree with very hard wood. Moderate on all of the islands, Guat. Native name, fololu.
Yuncker—Plants of Manus Islands

Genus Psychotria Linnæus

Psychotria Garbeniana Christophersen, B. P. Bishop Mus., Bull. 184: 51, fig. 12, 1938.
Tas: below top of peak, alt. 680 m., Jan. 28, 1922, Garber 554.
Olosega: Olosegatus-Piannafu ridge, alt. 500 m., June 17, 1925, Garber 1062.

Tas: Fifiuta trail, in thicket, Sept. 26, 1939, Yuncker 9660; in thicket along trail south of Sisifaga, alt. 20 m., Sept. 25, 1939, Yuncker 6068; Fifiuta trail, alt. 75 m., Aug. 4, 1921, Garber 535; along stream bed on plateau back of Palensso, alt. 140 m., Aug. 4, 1921, Garber 573; old village site near Lauduti, alt. 41 m., May 4, 1922, Garber 708.
Ofu: in thicket on slope back of Ofu village, alt. 60 m., Nov. 25, 1939, Yuncker 9475; alt. 290 m., Yuncker 9444. Abundant on Olosega, Guest. Native name, maitolaf. Genus Geophila D. Don

Geophila teresacea (Jacquin) O. Kuntze, Rev. Gen., 300, 1891.
Tas: on moist soil along trail, two miles south of Sisifaga, alt. 50 m., Oct. 1, 1939, Yuncker 9146; on moist soil near Sisifaga, Oct. 7, 1939, Yuncker 9091; Fifiuta trail, alt. 125 m., Aug. 4, 1921, Garber 567; in coconut, breadfruit, and banana plantation, Falehu, alt. 180 m., July 27, 1938, W. Harris 257. Native names, olia'a, ibu'a.

Genus Marinda Linnæus

Marinda cairdii (Linnæus) Linnæus, Sp. Pl., 176, 1753.
Tas: in thicket along Fifiuta trail, Sept. 26, 1939, Yuncker 9032; plateau back of Luma, alt. 90 m., Aug. 4, 1922, Garber 771.
Ofu: in thicket on ridge near Ofu village, alt. 100 m., Nov. 25, 1939, Yuncker 9466. Abundant on all of the islands, Guest. Native names, nacu, noui. Genus Sarcoxytium Setchell and Christophersen

Tas: in forest on west slope of Mt. Vakikanau, alt. 350 m., Oct. 5, 1939, Yuncker 9254; trail back of Luma, alt. 450 m., Jan. 28, 1922, Garber 766. Native names, w'jum, 'ulu tao, japjafu.

Family Cucurbitaceae

Genus Melothria Linnæus

Tas: climbing in thicket near Sisifaga, Oct. 7, 1939, Yuncker 9387; in thicket near the beach, Sept. 29, 1939, Yuncker 9091; south side of South Cove,
Papaya, lower edge of strand forest at beach, on buff, July 19, 1938, W. Harris 329. Native name, meloni tuo.

**Genus Luffa** Thoum. ex. Thunb.


Obs.: in waste area near the shore, Nov. 28, 1939, *Yunker* 9560; along the beach at north end of Aitutaki, Sept. 1925, *Garber* 1119. Native name, meloni tuo.

**Genus Citrullus** Forskål

*Citrullus vulgaris* Schrader, Linnæea 12: 412, 1898.

Obs.: in sandy soil near the beach, Nov. 28, 1939, *Yunker* 9569. Native name, meloni.

**Genus Cucumis** Linnæus


**Family CUCURBITACEAE**

**Genus Scyaroë** Linnæus

*Scyaroë frutescens* (Miller) Kranz, Ziegler Phylacc. 54(17.277): 123, fig. 25, 1912.

Obs.: in thickets along the strand south of Siufaga, Sept. 25, 1939, *Yunker* 9035.

**Family COMPOSITAE**

**Genus Vernonia** Schrader

*Vernonia eversa* (Linnæus) Lessing, Linnæea 4: 20, 1826.

Obs.: in sandy soil near the shore south of Siufaga, Sept. 29, 1939, *Yunker* 9156; in sand, Luma, July 19, 1938, W. Harris 25, 455; along the trail behind Luma, Aug. 5, 1938, W. *Harris* 17; in sand near the beach, Papatoa, July 15, 1938, W. *Harris* 89, 105; in coconut, breadfruit, and banana plantation, Fakatavo, alt. 180 m., July 27, 1938, W. *Harris* 235; on lava cliff, behind Luma, alt. 45 m., July 27, 1938, W. *Harris* 125.

**Genus Adenostemma** Forster

*Adenostemma lavina* (Linnæus) O. Kuntze, Rev. Gen. 1: 304, 1891.

Obs.: in coconut groves, Morona, alt. 150 m., Aug. 9, 1921, *Garber* 594.
Yuencher—Plants of Manus Islands

Genus Ageratum Linnaeus

Ageratum conyzoides Linnaeus, Sp. Pl. 839, 1753.

Tsn.: in open ground along Sisfaga-Paleasao trail, alt. 50 m., Sept. 30, 1938, Yuencher 924; south side of South Cove, Papetae, near the beach, July 15, 1938, W. Harris 330; Luma, face of lava cliff, July 24, 1938, W. Harris 397; in coconut, broadfruit, and banana plantation. Faleulu, alt. 180 m., July 27, 1938, W. Harris 194.

Oto.: along trail at beach, June 7, 1925, Garber 1021. Native name, law taiotei.

Genus Zinnia Linnaeus

Zinnia elegans Jacq., Coll. 3: 152, 1789.

Tsn.: cultivated, Luma, Yuencher; Luma, in sand near the beach, July 26, 1938, W. Harris 386.

Genus Siegesbeckia Linnaeus

Siegesbeckia orientalis Linnaeus, Sp. Pl. 300, 1753.

Tsn.: Sani Ridge, back of Filitua, alt. 150 m., Aug. 9, 1921, Garber 604.

Genus Wedelia Jacqin


Tsn.: weed in coconut plantation, along trail to village of Filitua, Sept. 26, 1939, Yuencher 954; plateau back of Luma, alt. 60 m., Aug. 2, 1921, Garber 567. Native name, atoitei.

Genus Synadrella Gaertner

Synadrella quadrifora (Linnaeus) Gaertner, Frukt. et Semin. 2: 436, pl. 171, fig. 7, 1791.

Tsn.: in sandy soil near the shore south of Sisfaga, Sept. 29, 1939, Yuencher 917; plateau back of Luma, alt. 60 m., Aug. 2, 1921, Garber 567; in sand, Luma, July 19, 1938, W. Harris 27; south side of South Cove, Papetae, on soft near the shore, July 15, 1938, W. Harris 381; along trail behind Luma, Aug. 5, 1938, W. Harris 387; in sand near the beach, Papetae, July 15, 1938, W. Harris 416; in coconut, broadfruit, and banana plantation, Faleulu, alt. 180 m., July 27, 1938, W. Harris 241; on lava cliff behind Luma, alt. 45 m., July 27, 1938, W. Harris 37.

Native names, taiotei, law atoitei.

Genus Bidens Linnaeus

Bidens pilosa Linnaeus, Sp. Pl. 832, 1753.

Genus *Erectites* Rafinesque

*Erectites vexarianeae* (Wolf) DeCandolle, Prodr. 6: 295, 1837.


Genus *Emilia* Cassini

*Emilia soochifolia* (Linnaeus) DeCandolle, Prodr. 6: 302, 1837.

**Tsau:** on old lava flow near the sea, along Luma-Yaleaau trail, alt. 40-45 m., Sept. 30, 1939, *Yuncker* 9131; along trail south of Soufaga, Sept. 9, 1939, *Yuncker* 9107; weed in coconut, breadfruit, and banana plantation, Faleulu, alt. 180 m., July 27, 1938, *W. Harris* 242.

**Olo:** in clearing on main ridge, alt. 250 m., Nov. 27, 1939. *Yuncker* 9529. Native name, *fua le'au*.
Native names are in italic.
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