

New Plant Records from the Eastern Caroline Islands, with a Comparative Study of the Native Plant Names¹

S. F. GLASSMAN²

FROM A BOTANICAL STANDPOINT, the Eastern Caroline Islands (Fig. 1) are poorly known. The floras of the high islands of this group—Ponape, Kusaie, and Truk—have been studied to a reasonable degree. However, the low coral islands, about 22 in number, have received little botanical attention. Only five of these low islands—Pingelap, Kapingamarangi, Satawan, Nomwin, and Nukuoro—have been reported on in any detail. For the remaining islands, there are either only a few scanty records of plant collections or no known records at all.

During the summer of 1949, the writer spent 3 months collecting plants on several islands in the Eastern Carolines. Most of the time was devoted to Ponape, the flora of which I have treated in two previous papers (Glassman, 1952; in press). Approximately 1 day was spent on each of the following low islands or atolls: Mokil, July 21; Pingelap, July 22; and Ant, August 10. This study is based principally on these three islands. Most of the records listed here are new, as previous plant collections from these islands have been so sparse. This paper, therefore, is a list of new records of species with their accompanying native names, new records of native names, and changes in nomenclature of species previously collected from Mokil, Pingelap, and Ant.

Specimens of vascular plants collected were deposited in the United States National Herbarium, Bernice P. Bishop Museum, and Bebb Herbarium, University of Oklahoma. Nonvascular plants have been placed in the Cryptogamic Herbarium of the Chicago Natural History Museum.

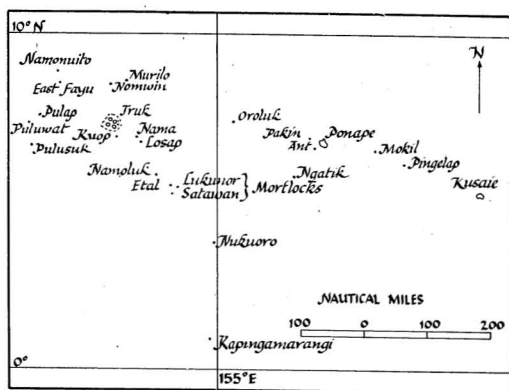


FIG. 1. Map of Eastern Caroline Islands.

Each island is treated separately with a brief geographical and historical description followed by a catalogue of species for that island. Each entry in the catalogue of species is based on specimens collected or observed by the writer or on names of species published in taxonomic articles. Synonyms which pertain to each particular island are also listed. Specimens cited have been either verified personally or determined by specialists in certain groups as follows: Dr. H. N. Moldenke, New York Botanical Garden, Verbenaceae; Dr. W. H. Wagner, Jr., University of Michigan, ferns; Dr. F. Drouet, Chicago Natural History Museum, algae; Mr. E. B. Bartram, Bushkill, Pennsylvania, mosses; and Dr. M. Fulford, University of Cincinnati, liverworts. Native

¹ The writer is grateful to the Pacific Science Board of the National Research Council for the fellowship grant which enabled him to make this trip; to the Office of Naval Research for financing the trip; to the University of Oklahoma for supplementary financial assistance; and to the specialists mentioned below for determination of specimens.

² Division of Biological Sciences, University of Illinois, Chicago, Illinois. Manuscript received April 14, 1952.

names are shown in quotation marks and are spelled exactly as they sounded to the writer. Economic uses for some of the species are also mentioned.

It is interesting to note that each island in the Eastern Carolines has its own language. As a matter of fact, on Ponape there are distinct language differences between different districts (e.g., Kiti and Net) of the island. Following the catalogue of species for Mokil, Pingelap, and Ant, native names mentioned in this paper are tabulated for comparison with those of the high islands in the Eastern Carolines—Ponape, Kusaie, and Truk. Inspection of the table reveals striking differences as well as similarities in the languages of these islands.

MOKIL

Mokil Atoll is located approximately $6^{\circ}40'N$ and $159^{\circ}47'E$. It is about 2 miles long and 1 mile wide and is about 88 miles southeast of Ponape, 60 miles northwest of Pingelap, and 180 miles northwest of Kusaie. Mokil comprises three individual islets—Manton, Kalap, and Urak. The writer visited only Manton and Kalap.

Mokil, formerly known as Duperrey Island and Wellington Island, was discovered by Duperrey on the corvette "La Coquille" in 1824 (U. S., 1944). In 1838, Lesson wrote an account of this voyage. Andersson (1854), botanist with the frigate "Eugénie," and Skogman (1856), also with the same ship, visited the island in 1852 and subsequently wrote summaries of the voyage in which the vegetation and economic plants are mentioned. In 1854, Hammet included some notes on the vegetation in his narrative of the voyage of the "Serpent." Moss (1889) gave a brief account of the vegetation of the island, which he visited while touring Micronesia in 1886; and Christian (1899*a*, *b*) mentioned Mokil plants briefly in his accounts of the Caroline Islands. Thilenius (1927) and Eilers (1934) included some information on the vegetation and listed a number of plants from a general

survey of the Caroline Islands made by the Germans between 1908 and 1910.

It appears that the only known previous collection of plants from Mokil was made by Ohba in the 1930's. Several specimens of this collection were cited by Kanehira (1935). Murphy, who included Mokil in his geographical account of the Eastern Carolines (1949), sent St. John a list of some 25 native names of plants recorded from the island. From these names, St. John compiled a tentative list of species (unpublished), most of which have been corroborated by the present writer. Both Weckler (1949) and Murphy (1950) have reported on the agriculture of Mokil.

A total of 73 species of vascular plants, 5 species of algae, and 2 species of bryophytes were either collected or observed by the writer. Numbers 2595 to 2601 inclusive were collected on Manton islet, numbers 2602 to 2633 were taken from Kalap islet. Of the vascular plants, 34 are indigenous, 12 are crop plants, 16 are ornamentals, and 11 are adventive weeds. Vernacular names were obtained from a native guide named Loren.

NONVASCULAR PLANTS

Algae

- Collinsiella tuberculata* Setch. & Gardn.
2587. On seashore and in shallow water.
- Dictyosphaeria favulosa* (Ag.) Dcne.
2597*a*. In shallow sea water.
- Halimeda opuntia* (L.) Lamx.
2597. In shallow sea water.
- Microdictyon okamurai* Setch.
2597*b*. In shallow sea water.
- Scytonema figuratum* Born. & Flah.
2588. On coral soil, common.

Bryophytes

- Microlejeunea bullata* (Tayl.) Evans.
2586. On coconut tree, frequent.
- Splachnobryum luzonense* Broth.
"Lim," 2612. Terrestrial in coconut grove, common.

This species was previously thought to be endemic to the island of Luzon.

VASCULAR PLANTS

Polypodiaceae

1. *Microsorium scolopendria* (Burm.) Copel., Univ. Calif., Publ. Bot. 16: 112. 1929.
"Kamkam," 2626. Epiphyte in coconut grove, common.
2. *Nephrolepis* sp.
"Boh," 2611. In coconut grove, terrestrial and epiphytic, common (sterile).
3. *Pteris tripartita* Sw., Schrad. Jour. Bot. 67. 1801.
"Papa-ni," 2624. In coconut grove, terrestrial, common.

Cycadaceae

4. *Cycas circinalis* L., Sp. Pl., 1188. 1753.
Observed as an ornamental; introduced from Ponape.



FIG. 2. Mokil. *Cassytha filiformis*, a climbing parasitic plant, on *Guettarda speciosa*.

Annonaceae

5. *Annona muricata* L., *ibid.*, 536.
"Truka shai." Observed as a cultivated plant; probably introduced from Ponape.

Lauraceae

6. *Cassytha filiformis* L., *ibid.*, 35. (Fig. 2.)
"Cossagos," 2599. Climbing parasite, along strand, common.

Hernandiaceae

7. *Hernandia sonora* L., *ibid.*, 981.
"Pingaping." Observed as a strand plant; only one medium-size tree was seen.

Crassulaceae

8. *Bryophyllum pinnatum* (Lam.) Kurz, Jour. As. Soc. Beng. 40: 52. 1871.
"Lamalam." Observed as a cultivated plant.

Portulacaceae

9. *Portulaca oleracea* L., Sp. Pl., 445. 1753.
"Ubijon," 2618. Weed in waste places, flowers yellow.
10. *Portulaca samoensis* v. Poelln., Fedde Repert Sp. Nov. 33: 163. 1933.
"Ubijon," 2616. Common along strand, prostrate, flowers yellow.

Amaranthaceae

11. *Achyranthes aspera* L., Sp. Pl., 204. 1753.
"Suga-dugodok," 2629. Weed in coconut grove, common.
12. *Gomphrena globosa* L., *ibid.*, 224.
"Pahwis," 2615. Planted, bracts pink.

Lythraceae

13. *Pemphis acidula* Forst., Char. Gen. Pl., 68, pl. 34. 1776.
"Kahengy." Observed as a common strand plant.

Onagraceae

14. *Jussiaea suffruticosa* L., Sp. Pl., 388. 1753.
"Kiree." Observed in *Cyrtosperma* swamp.

Nyctaginaceae

15. *Pisonia* sp.
"Mehs." Observed as tree along the strand.
Murphy (1949) states that the leaves of this plant are used as a green manure in the *Cyrtosperma* swamp.
16. *Mirabilis jalapa* L., Sp. Pl., 177. 1753.
"Four o'clock." Observed as an ornamental plant.

Caricaceae

17. *Carica papaya* L., *ibid.*, 1036.
"Mamiyap." Observed as cultivated plant.

Combretaceae

18. *Terminalia litoralis* Seem., Fl. Vit., 94. 1865.
"Win." 2602. Along strand, tree 20 feet high, fruit red, flowers white, common.

Guttiferae

19. *Calophyllum inophyllum* L., Sp. Pl., 513. 1753.
"Isho." Observed as a tree 50 to 60 feet high along the seashore.

Tiliaceae

20. *Triumfetta procumbens* Forst. f., Prodr., 35. 1786. (Fig. 3.)
"Konup," 2601. Along strand, procumbent, flowers yellow, common.

Malvaceae

21. *Hibiscus tiliaceus* L., Sp. Pl., 694. 1753.
"Pah." One small tree seen; probably introduced from Ponape.
22. *Sida fallax* Walp., Nov. Act. Nat. Cur. 19, suppl. 1: 306. 1843.
"Kau," 2610. Planted, flowers orange.



FIG. 3. Mokil. *Triumfetta procumbens*, a decumbent plant along the beach.

23. *Thespesia populnea* (L.) Soland. ex Correa, Ann. Mus. Paris 9: 290. 1807.
"Peneh." Observed as a frequent tree along the strand.

Euphorbiaceae

24. *Euphorbia heterophylla* L., Sp. Pl., 453. 1753.
2608. Planted in garden.
25. *Phyllanthus niruri* L., *ibid.*, 981.
"Limar-mah-pom." Observed as a weed.

Leguminosae

26. *Bauhinia monandra* Kurz, Jour. As. Soc. Beng. 42: 73. 1873.
"Flamboyant." Observed as an ornamental tree with pink flowers.
27. *Cassia occidentalis* L., Sp. Pl., 377. 1753.
"Apschoh," 2632. Waste places, uncommon.

28. *Poinciana pulcherrima* L., *ibid.*, 380.
"Shimatada," 2633. Planted, tree 10 feet high, flowers yellow.
29. *Vigna marina* (Burm.) Merr., Interpret. Herb. Amb., 285. 1917.
"Taut-tul," 2591. Along strand, decumbent, flowers yellow, common.

Casuarinaceae

30. *Casuarina equisetifolia* L., Amoen. Acad. 4: 143. 1759.
Observed as an ornamental tree; probably introduced from Ponape.

Moraceae

31. *Artocarpus altilis* (Parkinson) Fosb., Wash. Acad. Sci., Jour. 31: 95. 1941.
"Mai." "Maipah" is a seeded variety with serrate leaves, whereas "moshaborok" is seedless with deeply incised leaves. Breadfruit is very common on Mokil and is one of the most important food crops. According to Christian (1899a), the wood of one variety, "mairmat," is highly prized for house building; and the wood of other varieties is used in the construction of canoes.
32. *Ficus tinctoria* Forst. f., Prodr., 76. 1786.
"Coain," 2594. Tree 30 feet high, frequent.

Urticaceae

33. *Fleurya ruderalis* (Forst.) Gaudich., Freyc. Voy. Bot., 497. 1830.
"Nin-kotokot," 2628. In coconut grove, frequent.
34. *Pilea microphylla* (L.) Liebm., Vidensk. Selsk. Skr. 5: 302. 1851.
"Reh," 2619. On stone ledge and in coral soil, common.
35. *Pipturus argenteus* (Forst. f.) Wedd., DC. Prodr. 16: 235. 1869.
"Ormuh," 2620. Tree 20 feet high, in coconut grove, frequent.

Sapindaceae

36. *Allophylus timorensis* (DC.) Bl., Rumphia 3: 130. 1847.

"Kitak," 2621. Along strand, tree 15 feet high, flowers white, frequent.

Araliaceae

37. *Nothopanax fruticosum* (L.) Miq., Fl. Ind. Bat. 1: 765. 1856.
Observed as an ornamental shrub.

Apocynaceae

38. *Nerium oleander* L., Sp. Pl., 209. 1753.
"Uilianter." Observed as an ornamental tree.
39. *Plumeria rubra* L., *ibid.*, 209.
"Po maria." Observed as an ornamental tree.

Asclepiadaceae

40. *Asclepias curassavica* L., *ibid.*, 215.
"Truka-keree," 2607. Near native dwelling, uncommon.

Rubiaceae

41. *Guettarda speciosa* L., *ibid.*, 991. (Fig. 2.)



FIG. 4. Mokil. Flowers of *Scaevola frutescens*, an abundant shrub along the beach.

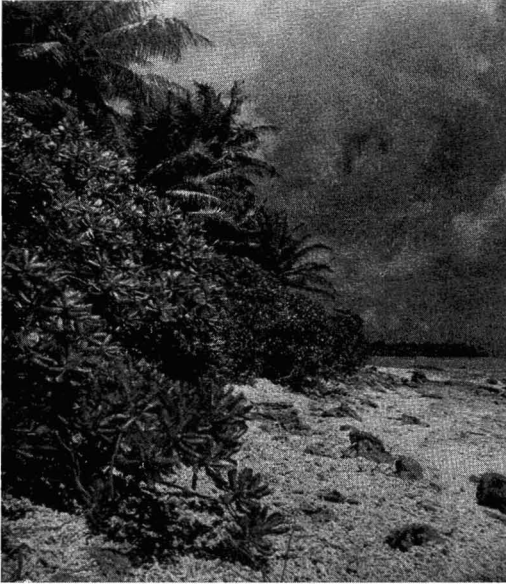


FIG. 5. Mokil. Pure stands of *Scaevola frutescens* with *Cocos nucifera* in background.

"Eet," 2598. Along strand, tree 30 feet high, flowers white, common.

42. *Hedyotis biflora* (L.) Lam., Tabl. Encycl. 1: 272. 1791.
 "Mussen-buel," 2622. At base of coconut tree, flowers white, uncommon.
43. *Ixora casei* Hance, Walp. Ann. Bot. Syst. 2: 754. 1852.
 "Kasaw," 2603. Cultivated tree, uncommon.
44. *Morinda citrifolia* L., Sp. Pl., 176. 1753.
 "Wehmpul." Observed as a tree along the strand.

Compositae

45. *Vernonia cinerea* (L.) Less., Linnaea 4: 291. 1829.
 "Mussen-buel," 2623. Weed in waste places, flowers blue.
46. *Wedelia biflora* (L.) DC. ex Wight, Contrib. Bot. Ind., 18. 1834.
 "Morishish," 2593. Along strand, subsucculent, flowers yellow, uncommon.

Campanulaceae

47. *Hippobroma longiflora* (L.) G. Don, Gen. Hist. Dichl. Pl. 3: 717. 1834.

"Ehmah." Observed as an ornamental herb.

Goodeniaceae

48. *Scaevola frutescens* (Mill.) Krause, Pflanzenr. 4 (277): 125. 1912. (Figs. 4, 5.)
 "Romok," 2595. Dominant shrub along strand, flowers white.

Boraginaceae

49. *Cordia subcordata* Lam., Tabl. Encycl. 1: 421. 1791.
 "Kanaw." Observed as a small tree along the strand. The trunk is used in making canoes.
50. *Messerschmidia argentea* (L.) Johnston, Jour. Arn. Arb. 16: 164. 1935. (Fig. 6.)
 "Sisin," 2596. Along strand, tree 30 feet high, flowers white, frequent.

Solanaceae

51. *Capsicum frutescens* L., Sp. Pl., 189. 1753.
 "Chilee." Observed as an ornamental.



FIG. 6. Mokil. Flowering branch of *Messerschmidia argentea*, a frequent beach tree.

Convolvulaceae

52. *Ipomoea gracilis* R. Br., Prodr., 484. 1810.
"Ohlop," 2606. Trailing along strand, milky juice, frequent.

Verbenaceae

53. *Premna gaudichaudii* Schau., DC. Prodr. 11: 631. 1847.
"Subuk," 2592. Tree 30 feet high, flowers white, along strand, frequent.

Hydrocharitaceae

54. *Thalassia hemprichii* (Ehrb.) Aschers., Naturl. Pflzfam. 2 (1): 254. 1889. (Fig. 7.)
"Walap," 2627. In shallow water, common.

Musaceae

55. *Musa paradisiaca* L., Sp. Pl., 1043. 1753.
"Wus." A few banana trees were seen near a native dwelling. (Fig. 8.)

Araceae

56. *Alocasia macrorrhiza* (L.) Schott ex Schott & Endl., Melet. Bot. 1: 18. 1832.
"Wut"; "wut-en-mokil" is a poisonous variety.

This species and the following one were



FIG. 7. Mokil. *Thalassia hemprichii*, a common aquatic flowering plant growing in shallow salt water.

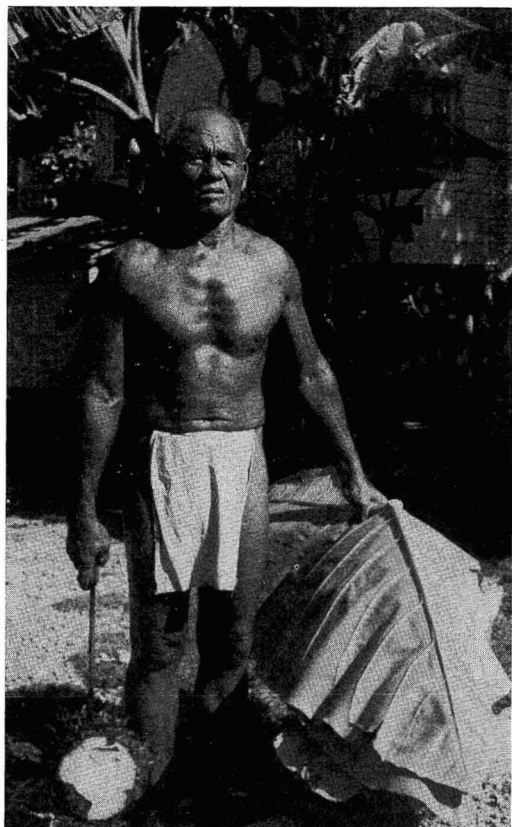


FIG. 8. Mokil. Native inhabitant with rhizome and leaf of *Cyrtosperma chamissonis*, one of the most important food plants, banana plants in background.

found scattered along the edges of the *Cyrtosperma* swamp and are not a major source of food on Mokil.

57. *Colocasia esculenta* (L.) Schott ex Schott & Endl., *ibid.*, 18.
"Chawa." Five varieties are recognized by the natives: "chawasa," "peeter," "tawah," "pehmeru," and "chawa-n-jaban."
58. *Cyrtosperma chamissonis* (Schott) Merr., Phil. Jour. Sci., Bot. 9: 65. 1914. (Fig. 8.)
"Muen." The following varieties were recorded: "chaleng welek," "shimeetenmalou," "shumbung-unu," "shigogi," and "shirieh."

This species is probably the most important food plant on Mokil.

Amaryllidaceae

59. *Crinum* sp.
"Kiup." Observed as an ornamental with purple flowers and leaves.
60. *Zephyranthes rosea* Lindl., Bot. Reg., pl. 821. 1824.
"Kiup." Observed as an ornamental.

Palmae

61. *Cocos nucifera* L., Sp. Pl., 1188. 1753. (Figs. 5, 10.)
"Ni." Two varieties were recorded by the writer: "ni-sikisik" and "atoll." Murphy has also recorded the following varieties: "nerium," "nikarus," and "sukabish." He also obtained the following names for various stages of development of the coconut fruit: "pen," green nut; "arng," ripe nut; and "par," sprouted nut. Coconut is undoubtedly the most abundant and most useful tree on the island, all parts of the plant being used. Most of these trees were planted by the early inhabitants. According to Christian (1899) the consumption of coconut toddy on Mokil was prohibited by the American missionaries.

Pandanaeae

62. *Pandanus* sp.
Pandanus cylindricus Kanehira, Bot. Mag. Tokyo 49: 63, fig. 3. 1935.
P. hosinoi Kanehira, *ibid.*, 103, fig. 8.
P. jaluitensis Kanehira, *ibid.*, 103, fig. 9.
P. macrocephalus Kanehira, *ibid.*, 428.
"Keban." The natives recognize 19 different varieties which are as follows: "toboh-tin," "luaram," "unmang," "schwai-pue-ep," "arawan-en-mehluh," "meh-kilikil," "seepwerik," "shoni-meneyoh," "pen-bashu," "musikel," "tope," "ninikeh-tahk," "mokusokos," "shaleh-show-wushuh," "ruboh," "uhnbesch," "enaidah-erewehn," "shoh-muinshong," and "shee-lahweh." *Pandanus* is a very important plant on Mokil. Nuts of

some of the varieties are edible, and leaves of most of the varieties are used in thatching. According to Christian (1899a), leaves of *Pandanus* are also used for canoe sails.

For reasons discussed elsewhere (Glassman, 1952), the present writer does not accept the names of species of *Pandanus* described by Kanehira which are listed in synonymy above.

Taccaceae

63. *Tacca leontopetaloides* (L.) O. K., Rev. Gen. Pl., 704. 1891.
"Mokomok." Observed as a cultivated and escaped plant in the coconut grove. The tubers are an important source of food.
64. *Cyperus javanicus* Houtt., Nat. II Hist. 13: Aanwyz. Plaat. (1), pl. 88, fig. 1. 1782.
"Mordong," 2609. Along strand and in coconut grove, common.
65. *Fimbristylis atollensis* St. John, Pacific Sci. 6: 145. 1952.
"Puror-en-toge," 2601. Along strand, frequent.

Gramineae

66. *Digitaria pruriens* Büse, Miq. Pl. Jungh., 379. 1854.
"Muhkarak," 2625. In coconut grove, common.
67. *Eleusine indica* (L.) Gaertn., Fruct. Sem. Pl. 1: 8. 1788.
"Puror-en-tuke," 2617. Weed in waste places.
68. *Eragrostis amabilis* (L.) Wight & Arn., ex Hook. & Arn., Bot. Beech. Voy., 251. 1841.
"Reh," 2613. Weed in coconut grove, common.
69. *Lepturus repens* (Forst. f.) R. Br., Prodr., 207. 1810.
"Limon-gisek," 2600. Along strand, common.
2631. Frequent in coconut grove.

70. *Oplismenus compositus* (L.) Beauv.,
Ess. Agrost., 54. 1812.
"Moh-long," 2605. In coconut grove,
common.
71. *Paspalum vaginatum* Sw., Prodr. Veg.
Ind. Occ., 21. 1788.
"Olee-sakai," 2630. In coconut grove,
common.
72. *Saccharum officinarum* L., Sp. Pl., 54.
1753.
"Tuh." Observed as a cultivated plant.
73. *Thuarea involuta* (Forst. f.) R. Br.,
Prodr., 197. 1810.
"Muhkarak," 2590. In coconut grove,
common.

Additional species, not collected or observed by the writer, for which tentative names are given by St. John from native names recorded by Murphy:

Barringtonia asiatica (L.) Kurz. "We."
Barringtonia racemosa (L.) Bl. "Kange."

Intsia bijuga (Colebr.) O. K. "Kebuk."
Ochrosia oppositifolia (Lam.) K. Schum. "Kacshpar."

PINGELAP

Pingelap Atoll (Fig. 1) is situated at 6°13'N, 160°E, and is about 60 miles southeast of Mokil and 144 miles northwest of Kusaie. It is 2 miles in length and 1.5 miles in width. The atoll consists of three islets, Tugulo, Takai, and Pingelap. Only the last islet was visited by the writer.

Pingelap, also referred to as Musgrave, MacAskill, Pelelep, and Pingoulap, was discovered by Musgrave with the ship "Sugar Cane" in 1793 (U. S., 1944). Moss (1889) gave a brief account of the vegetation of Pingelap which he visited while touring Micronesia in 1886; and in 1899 Christian mentioned Pingelap plants in his account of the Caroline Islands. Thilenius (1927) and Eilers (1934) included some information on the vegetation and listed a number of plants based on a general survey of the Caroline Islands made by the Germans between 1908 and 1910. In 1949 Murphy reported on the agriculture of the island. The first detailed paper on the vascular plants of Pingelap was written by St. John (1948) who listed 57 spe-



FIG. 9. Pingelap. Mangrove swamp showing seedlings of *Rhizophora mucronata* and surface roots of *Sonneratia caseolaris*.

cies for the island. In the present treatment, the writer has added 21 new records of vascular plants, several additional native names, and some nomenclatural changes. In addition, one species of algae and two species of mosses are recorded. Native names were obtained from Soas, who served as a guide for both the writer and St. John.

NONVASCULAR PLANTS

Algae

Cladophora membranacea (Ag.) Harv.

"Lim," 2638. Along shore and in shallow water.

Mosses

Ectropothecium monumentorum (Duby) Jaeg.

2639. On trunk of coconut tree, common.

Leucophanes glauculum C. M.

2643. On coconut tree, common.

VASCULAR PLANTS

Polypodiaceae

1. **Pteris tripartita** Sw., Schrad. Jour. Bot., 67. 1801.

"Peypey-eni," 2651. Coconut grove, terrestrial, abundant.

Lauraceae

2. **Cassytha filiformis** L., Sp. Pl., 35. 1753.

"Cossagos," 2644. Along strand, climbing parasite, common.

Hernandiaceae

3. **Hernandia sonora** L., *ibid.*, 981.

"Pingapin," 2654. Along strand, tree 15 feet high by 2.5 feet in diameter, common. Many seedlings were found beneath the parent plants. The tree trunks are used for canoes by the natives.

Rhizophoraceae

4. **Bruguiera conjugata** (L.) Merr., Phil. Jour. Sci., Bot. 9: 118. 1914.

"Sol," 2622. Back of mangrove swamp, tree 40 feet high by 1 foot in diameter. Only one tree was seen, but the writer was informed that this species is fairly common on other parts of the island. The wood is used in construction of houses, and a dye from the fruits is utilized for blackboards. This is the third species of mangrove recorded for Pingelap, the others being *Rhizophora mucronata* Lam. and *Sonneratia caseolaris* (L.) Engl. (*S. alba* Sm.). (Fig. 9.)

Malvaceae

5. **Hibiscus tiliaceus** L., Sp. Pl., 694. 1753. "Kalau," 2653. Along strand, tree 50 feet high, common. Fibers from the bark are used in making rope, fish line, hats, and baskets, and the leaves are often utilized in washing clothes.

Euphorbiaceae

6. **Codiaeum variegatum** (L.) Bl. var. **picatum** (Lodd.) Muell.-Arg., DC. Prodr. 15: 1119. 1866. "Kurotong." Observed as an ornamental plant; introduced from Kusaie.

Leguminosae

7. **Canavalia microcarpa** (DC.) Piper, Biol. Soc. Wash., Proc. 30: 177. 1917. "Nimelitop," 2646. Along strand, trailing, flowers pink, common. Plant parts are used as medicine to aid in childbirth.
8. **Inocarpus fagiferus** (Parkinson) Fosb., Wash. Acad. Sci., Jour. 31: 95. 1941. "Marrup," 2657. Planted, tree 15 feet high, introduced from Ponape.
9. **Peltophorum** sp. "Seh-muatah," 2658. Planted, tree 8 feet high, flowers yellowish orange; introduced from Kusaie.
10. **Vigna marina** (Burm.) Merr., Interpret. Herb. Amb., 285. 1917. "Sau-tul." St. John recorded the native name of this species as "nimelitop,"

which should refer to *Canavalia microcarpa* listed above.

Moraceae

11. *Ficus tinctoria* Forst. f., Prodr. 76. 1786. "Kawain." St. John listed this entry as *Ficus* sp.

Urticaceae

12. *Fleurya ruderalis* (Forst.) Gaudich., Freyc. Voy. Bot., 497. 1830. "Ne-kirrir-ir," 2640. In coconut grove, flowers reddish brown, common.
13. *Pilea microphylla* (L.) Liebm., Vidensk. Skr. 5: 302. 1851. "Re" (St. John); "wahpul."

Rubiaceae

14. *Hedyotis biflora* (L.) Lam., Tabl. Encycl. 1: 272. 1791. "Musenibuil," 2655. Base of coconut tree, flowers white, uncommon.
15. *Ixora casei* Hance, Walp. Ann. Bot. Syst. 2: 754. 1852. *Ixora carolinensis* (Val.) Hosokawa aff. var. *typica* Fosb., Bish. Mus. Occ. Pap. 15: 221. 1940; St. John, Pacific Sci. 2: 112. 1948.

Compositae

16. *Ageratum conyzoides* L., Sp. Pl., 839. 1753. "Pokaniko," 2660. Weed in waste places, frequent. Leaves of this species are combined with those of *Ocimum sanctum* L. and coconut oil and used as a skin lotion.
17. *Vernonia cinerea* (L.) Less., Linnaea 4: 291. 1829. "Musenibuil," 2656. Weed in coconut grove and waste places, flowers blue, common.

Boraginaceae

18. *Cordia subcordata* Lam., Tabl. Encycl. 1: 421. 1791. "Ikoh-ik," 2645. Along strand, tree 50 feet high, flowers orange, frequent.

Convolvulaceae

19. *Ipomoea* aff. *gracilis* R. Br., Prodr., 484. 1810. "Wahlap," 2648. Along strand, milky juice, frequent (sterile).

Verbenaceae

20. *Premna gaudichaudii* Schau., DC. Prodr. 11: 631. 1847. *Premna integrifolia* L., Mant. Pl. 2: 252. 1771; St. John, Pacific Sci. 2: 112. 1948. "Sokuk" (St. John); "sobuk."

Labiatae

21. *Ocimum sanctum* L., Mant. Pl. 1: 85. 1767. "Teeko," 2661. In front of dwelling, uncommon.

Musaceae

22. *Musa paradisiaca* L., Sp. Pl., 1043. 1753. In addition to the native names recorded by St. John, the following were obtained by the present writer: "Saipan" and "Tirian."

Araceae

23. *Alocasia macrorrhiza* (L.) Schott ex Schott & Endl., Melet. Bot. 1: 18. 1932. A number of specimens were seen in the *Cyrtosperma* swamp. Of the two varieties recognized, "wut" is edible and "seh-buken" is poisonous.

Palmae

24. *Cocos nucifera* L., Sp. Pl., 1188. 1753. (Fig. 12.) "Ni" (St. John). Three varieties are recognized by the natives: "ni-wi-sahsah," "ni-mah-uwah," and "ni-sol."

Pandanaeae

25. *Pandanus* sp. (Fig. 10.) In addition to the native names obtained by St. John, the following have been recorded: "eisesieu-el," "nanagaisak," and "sonomuneyah." The latter two are prob-



FIG. 10. Pingelap. Native market place showing construction of house. Roof exterior consists of coconut leaves, posts and cross timbers are from breadfruit wood, lashing is coconut fiber, and thatching of roof interior and mats in foreground are made from *Pandanus* leaves.

ably the same as "nanagaisal" and "so-numei" of St. John.

Gramineae

26. *Centotheca lappacea* Desv., Nouv. Bul. Soc. Philom. Paris 2: 189. 1810.
"Moh-lung," 2652. Coconut grove, frequent.
27. *Digitaria pruriens* Büse, Miq. Pl. Jungh., 379. 1854.
"Reh," 2641. In coconut grove, common.
28. *Eleusine indica* (L.) Gaertn., Fruct. Sem. Pl. 1: 8. 1788.
"Rosakai," 2642. Waste places, common.
29. *Paspalum vaginatum* Sw., Prodr. Veg. Ind. Occ. 21. 1788.
"Unenekisekik," 2649. In coconut grove, common. The leaves of this species and those of *Pisonia* are used in the *Cyrtosperma* swamp as a fertilizer.

ANT

Ant Atoll (Fig. 1) is located at approximately 6°47'N and 158°1'E, and is 6 miles

long by 3.5 miles wide. It is about 8 miles southwest of Ponape and about 300 miles east of Truk. Ant comprises 12 individual islets, only the largest of which, Nikalap, was visited by the writer.

Ant Atoll, also known as Andema, Fraser, and Hand, was discovered by Quiros in 1591 (U. S., 1944). Of the few botanical papers dealing with the island, Meinicke (1876) and Hambruch (1929) briefly discuss the vegetation and food plants. There are no known detailed accounts of the vascular flora of Ant; however, a few papers concerning the algae of the island have been published by Yamada (1944a, b).

A total of 58 species of vascular plants, 3 species of algae, and 1 species of moss were either collected or observed by the writer. Of the vascular plants, 42 are indigenous, 11 are crop plants, 1 is an ornamental, and 4 are adventive weeds. Vernacular names were obtained from Shokeen, a native guide.

NONVASCULAR PLANTS

Algae

Enteromorpha prolifera (O. F. Muell.) J. Ag.

"Muh-so-pweeset," 2834. Along beach and in shallow water.

Laurencia mariannensis Yamada.

"Moo-nos," 2821. On shore and in water, common.

Scytonema hofmannii Born. & Flah.

"Karan-ahl," 2822. Coconut grove, on stones and logs, common.

Mosses

Ectropothecium monumentorum (Duby) Jaeg.

"Limalim," 2831. On dead coconuts, common.

VASCULAR PLANTS

Polypodiaceae

1. *Microsorium scolopendria* (Burm.) Copel., Univ. Calif. Publ. Bot. 16: 112. 1929.

"See-see." Observed as an epiphyte.

2. *Nephrolepis exaltata* (L.) Schott, Gen. Fil., pl. 3. 1834.

"Ahmeh," 2828. Terrestrial, abundant in coconut grove.

Lauraceae

3. *Cassytha filiformis* L., Sp. Pl., 35. 1753. "Wahlee-mah," 2809. Climbing along beach, common.

Hernandiaceae

4. *Hernandia sonora* L., *ibid.*, 981.

"Ahkaran." Observed along the beach.

Piperaceae

5. *Piper ponapense* C. DC., Engl. Bot. Jahrb. 56: 502. 1921.

"Ahnuck." Observed as an epiphyte.

Capparidaceae

6. *Crataeva speciosa* Volken, Engl. Bot. Jahrb. 31: 463. 1902.

"Afoosh," 2824. Tree 30 feet high, flowers cream, fruit edible, introduced from the Mortlocks.

Lythraceae

7. *Pemphis acidula* Forst., Char. Gen. Pl., 68, pl. 34. 1776.

"Truh-kees," 2810. Along beach, shrub 10 feet high, flowers white, common.

Onagraceae

8. *Jussiaea suffruticosa* L., Sp. Pl., 388. 1753.

"Ayah." Observed in moist places.

Nyctaginaceae

9. *Pisonia* sp.

"Muk," 2833. Coconut grove, tree 30 feet high, uncommon (sterile).

Caricaceae

10. *Carica papaya* L., Sp. Pl., 1036. 1753.

"Mohmiyap." Observed as a cultivated plant.

Barringtoniaceae

11. *Barringtonia asiatica* (L.) Kurz, Jour. As. Soc. Beng. 45: 70. 1876.

"Ool." A few trees were observed along the seashore.

Combretaceae

12. *Terminalia catappa* L., Mant. Pl. 1: 128. 1767.

"Uhsass." Observed along the beach.

13. *Terminalia litoralis* Seem., Fl. Vit., 94. 1865.

"Kin," 2818. Along beach, tree 20 feet high, flowers white, fruit red, common.

Guttiferae

14. *Calophyllum inophyllum* L., Sp. Pl., 513. 1753.

"Ruckiss." Observed along the strand.

Malvaceae

15. *Hibiscus tiliaceus* L., *ibid.*, 694.

"Kileefah." Observed along the beach.

16. *Thespesia populnea* (L.) Soland. ex Correa, Ann. Mus. Paris 9: 290. 1807. "Puhneh." Observed along the strand.

Leguminosae

17. *Canavalia microcarpa* (DC.) Piper, Biol. Soc. Wash., Proc. 30: 177. 1917. "Fin-kalau," 2812. Along beach, trailing, flowers purple, frequent.
18. *Derris trifoliata* Lour., Fl. Cochinch., 433. 1790. "Up," 2819. Liana on beach and in coconut grove, flowers white, abundant.
19. *Intsia bijuga* (Colebr.) O. K., Rev. Gen. Pl. 1: 192. 1891. "Choyo," 2829. Tree 50 feet high, along beach, uncommon.
20. *Vigna marina* (Burm.) Merr., Interpret. Herb. Amb., 285. 1917. "Ohloo," 2804. Trailing along beach, flowers yellow, common.

Moraceae

21. *Artocarpus altilis* (Parkinson) Fosb., Wash. Acad. Sci., Jour. 31: 95. 1941. "Mey," "lukuwol," "mey-tahit," "mey-tee," "mey-n-patak," and "mey-os" are the varieties recognized by the natives. Breadfruit is a very important food plant on this island.
22. *Ficus carolinensis* Warb. apud Schum. & Lauterb., Fl. Deutsch. Schutzg. Südsee, 242. 1905. "Kilee-ant," 2832. In coconut grove, tree 25 feet high by 4 inches in diameter, frequent.
23. *Ficus tinctoria* Forst. f., Prodr., 76. 1786. "Ahwahn," 2825. Common in coconut grove, tree 50 feet high, fruit orange.

Urticaceae

24. *Fleurya ruderalis* (Forst.) Gaudich., Freyc. Voy. Bot., 497. 1830. "Ani-gusgus," 2815. In coconut grove, frequent.
25. *Pipturus argenteus* (Forst. f.) Wedd., DC. Prodr. 16: 235. 1869.

- "Orohmah," 2811. In coconut grove, tree 40 feet high, flowers green, common.
26. *Procris pedunculata* (Forst. f.) Wedd. *ibid.*, 14: 191. 1869.

"Koo-mit." Observed as a liana in coconut grove.

Rutaceae

27. *Citrus aurantifolia* (Christm.) Swingle, Jour. Wash. Acad. Sci. 3: 465. 1913. "Kuruhkur." Observed near a native dwelling.

Sapindaceae

28. *Allophylus timorensis* (DC.) Bl., Rumphia 3: 130. 1847. "Nghuh," 2813. Shrub along beach and in coconut grove, flowers white, berries red, common.

Apocynaceae

29. *Ochrosia oppositifolia* (Lam.) K. Schum., Natürl. Pflzfam. 4 (2): 156. 1895. "Oomah." Observed as a strand plant.

Rubiaceae

30. *Guettarda speciosa* L., Sp. Pl., 991. 1753. "Mohsor," 2807. Along beach, flowers white, common.
31. *Morinda citrifolia* L., *ibid.*, 176. "Nen." Observed along the beach.

Compositae

32. *Vernonia cinerea* (L.) Less., Linnaea 4: 291. 1829. Observed as a weed in waste places.
33. *Wedelia biflora* (L.) DC. ex Wight, Contrib. Bot. Ind., 18. 1834. "Ahtu-guaht." Observed as a semi-scandent shrub along the strand.

Goodeniaceae

34. *Scaevola frutescens* (Mill.) Krause, Pflanzenr. 4, 277: 125. 1912. "Eenut." Observed as a common shrub along the strand.

Boraginaceae

35. *Cordia subcordata* Lam., Tabl. Encycl. 1: 421. 1791.
"Ahlew," 2820. Along beach, tree 50 feet high by 2 feet in diameter, flowers orange, common.
36. *Messerschmidia argentea* (L.) Johnston, Jour. Arn. Arb. 16: 164. 1935.
"Amunusut," 2823. Along beach, tree 10 feet high, flowers white, frequent.

Solanaceae

37. *Capsicum frutescens* L., Sp. Pl., 189. 1753.
"Mwik," 2805. Planted, flowers greenish yellow.
38. *Nicotiana tabacum* L., *ibid.*, 180.
"Tamak," 2817. Planted, flowers pink.
39. *Physalis minima* L., *ibid.*, 183.
"Ti," 2803. Weed in coconut grove, flowers greenish yellow, common.

Convolvulaceae

40. *Ipomoea* aff. *gracilis* R. Br., Prodr., 484. 1810.
"Ahfahmus." Sterile plants were observed along the beach.

Verbenaceae

41. *Clerodendrum inerme* (L.) Gaertn., Fruct. Sem. Pl. 1: 271. 1788.
"Oolah." Observed along the seashore.
42. *Premna gaudichaudii* Schau., DC. Prodr. 11: 631. 1847.
"Orr." Observed in coconut grove.

Araceae

43. *Alocasia macrorrhiza* (L.) Schott ex Schott & Endl.; Melet. Bot. 1: 18. 1832.
"Keh." This species and the following were of frequent occurrence in the *Cyrtosperma* swamp.
44. *Colocasia esculenta* (L.) Schott ex Schott & Endl., *ibid.*, 18.
"Oht." "Ohtinyap" and "ohton kusaie" are varieties distinguished by the natives.

45. *Cyrtosperma chamissonis* (Schott) Merr., Phil. Jour. Sci., Bot. 9: 65. 1914.
"Fulah." The following varieties are recognized: "onokokung," "simetun," "ponon," and "sinaitah." This is a very important starch plant.

Amaryllidaceae

46. *Crinum* sp.
"Kiup," 2835. Along beach, flowers pink-purple, leaves purple on underside.

Palmae

47. *Cocos nucifera* L., Sp. Pl., 1188. 1753.
"Nu." The following varieties are distinguished: "nu-garaw," "nu-shah," "nu-saesael," and "nu-mow." The coconut plantations on this island are operated by Oliver of Nanpei from Ponape.

Pandanaeae

48. *Pandanus* sp.
"Fahss." "Fah-sheh-rah," "fah-tin-wahl," "sil-lau," and "lubush" are some of the varieties, 2816. Frequent along beach, tree 30 feet high, trunk branched, male inflorescence, flowers cream, musky odor.

Taccaceae

49. *Tacca leontopetaloides* (L.) O. K., Rev. Gen. Pl., 704. 1891.
"Mokomok." This plant is very abundant in the coconut groves and is probably the most important starch crop on the island.

Cyperaceae

50. *Cyperus* sp.
"Pukahret." Observed along the beach and in the coconut grove.
51. *Cyperus javanicus* Houtt., Nat. II Hist. 13: Aanwyz. Plaat. (1), pl. 88, fig. 1. 1782.
"Kusakus," 2814. Along beach and in coconut grove, common.

52. *Fimbristylis atollensis* St. John, Pacific Sci. 6: 145. 1952.
"Apuson," 2830. In coconut grove, common.

Gramineae

53. *Digitaria pruriens* Büse, Miq. Pl. Jungh., 379. 1854.
"Fahtil-muahn," 2806. In coconut grove, common.
54. *Eleusine indica* (L.) Gaertn., Fruct. Sem. Pl. 1: 8. 1788.
"Puhkahr." Observed as weed in waste places.
55. *Eragrostis amabilis* (L.) Wight & Arn. ex Hook. & Arn., Bot. Beech. Voy., 251. 1841.
"Fahtil." Observed as a common weed.
56. *Lepturus repens* (Forst. f.) R. Br., Prodr., 207. 1810.
"Fahtil-muahn," 2827. Common in coconut grove.
57. *Paspalum conjugatum* Berg., Act. Helv. Phys. Math. 7: 129, pl. 8. 1762.
"Fahtil-rawfut," 2808. In coconut grove, frequent.
58. *Thuarea involuta* (Forst. f.) R. Br., Prodr., 197. 1810.
"Fahtil," 2826. Common in coconut grove.

ETHNOBOTANY

Species and native names of plants occurring on Mokil, Pingelap, and Ant are tabulated for comparison with those of the high islands in the Eastern Carolines—Kusaie, Ponape, and Truk (Table 1). The islands are listed in geographical order with the southernmost island, Kusaie, listed first, and the northernmost, Truk, listed last. Most of the vernacular names were recorded by the present

writer during visits to the various islands (except Truk); however, some names for Truk, Mokil, and Pingelap were taken from St. John (1948); some from Truk, Kusaie, and Ponape were derived from Fosberg (1946); and some others from Truk were extracted from Elbert (1947), Hosokawa (1937), and Kramer (1932). Asterisks preceding certain vernacular names (e.g., "po maria" and "chilee") indicate the name is of foreign origin. Omission of native names in some columns indicates one of three things: there is no record for the species, there is no record for the native name, or there is no known native name for the species. An analysis of Table 1 as to similarity or identicalness of vernacular names reveals linguistic affinities between the islands.

Table 2 shows the number of similar or identical native names of the total names recorded for the two islands being compared in each instance; the percentage of similarity and the number of native and exotic plants are also indicated. Ant appears to show the greatest linguistic affinity with Truk. Of 50 vernacular names recorded, 30 are identical or similar. Ponape, with 14 similar or identical names out of 45, shows the next most important relationship with Ant. Pingelap (9 of 44), Mokil (8 of 42), and Kusaie (4 of 38), follow in decreasing order of importance. Most of the present-day inhabitants of Ant are descendents of people who came from the Mortlock Islands (Fig. 1) at the beginning of the present century.

As would be expected, Mokil shows the greatest linguistic affinity with Pingelap because of their proximity. Of 56 native names in common, 39 are the same or modified. For both Mokil and Pingelap, linguistic relationships for the remaining islands are in the following order: Ponape (24 of 46 and 26 of 48), Kusaie (12 of 40 and 10 of 44), and Truk (14 of 50 and 13 of 53).

TABLE 1
 VERNACULAR PLANT NAMES FROM SIX ISLANDS IN THE EASTERN CAROLINES

PLANT SPECIES	ISLANDS AND VERNACULAR PLANT NAMES					
	KUSAIE	PINGELAP	MOKIL	PONAPE	ANT	TRUK
<i>Microsorium scolopendria</i>	kaim-kaim, kemkem	kiteu	kamakam	kitieu	see-see	chichi, onnum
<i>Nephrolepis</i> spp.	fah, fuah	pues, pue	boh	rahtil, rawtil	ahmerek	amare, emere, amere
<i>Pteris tripartita</i>		peypey-eni	papa-ni			
<i>Annona muricata</i>			truka shai	sae		sasaf
<i>Cassytha filiformis</i>		cossagos	cossagos	kohtokot-shau	wahlee-mah	anau
<i>Hernandia sonora</i>	pung-pung	pingapin	pingaping	pingapin	ahkaran	aguran, agran, akurang, mosul
<i>Piper ponapense</i>				konok	ahnuck	eresi
<i>Crataeva speciosa</i>				apoot	afoosh	abut, abuts, afuts, afuch, apuch
<i>Bryophyllum pinnatum</i>		lamalam	lamalam			
<i>Pemphis acidula</i>	kasugel	kai-i-ni	kahengy	ngi	truh-kees	engi, eegi
<i>Jussiaea</i> sp.	tener-aak	kuri	kiree	telurik	ayah	aunenipuun, nigaulen, likeinenpul
<i>Pisonia</i> sp.		mas	mehs		muk	nok, mok, makku
<i>Carica papaya</i>	hiss, es	kaineap	mamiyap	momiap	mohmiyap	kipau
<i>Barringtonia asiatica</i>	bus-bus	wi	we	we	ool	kun, azan, kuun
<i>Barringtonia racemosa</i>	kaiengal		kange	winmarr		sun, guon, kun
<i>Terminalia catappa</i>	shufehf, sarf	tepop		tipop	uhsass	as, asas
<i>Terminalia litoralis</i>		sin	win		kin	sin
<i>Bruguiera conjugata</i>	shrahl, alol	sol		shom, rhom		buru bun, on, ong, oon, wong
<i>Calophyllum inophyllum</i>	eetuh, eet	sepang	isho	isyo	ruckiss	rakich, ijau, mosur, wangu, legitu, fregits, kiuin, liodot
<i>Triumfetta procumbens</i>		konop	konup			
<i>Hibiscus tiliaceus</i>	lo	kalau	pah	kalau	kileefah	sapuo, silfa, sinifo, syapo, shirifa
<i>Sida fallax</i>		kao	kau			sioi le
<i>Thespesia populnea</i>	panu, pehnuh, pakeena	penne	peneh	pone	puhneh	pona, okuran, likokon
<i>Codiaeum variegatum</i>		kurotong		kurutun		
<i>Phyllanthus niruri</i>			limar-mah-pom	limair-poh		negamaur, nikammour
<i>Canavalia microcarpa</i>	shoh-tul-muet	nimelitop			fin-kalau	chochon, wonuka

TABLE 1—continued

PLANT SPECIES	ISLANDS AND VERNACULAR PLANT NAMES					
	KUSAIE	PINGELAP	MOKIL	PONAPE	ANT	TRUK
<i>Derris trifoliata</i> and <i>D. elliptica</i> (Ponape, Kusaie)	ohsheh, op			keh-ohror, up	up	pis-uenipot
<i>Inocarpus fagiferus</i> <i>Intsia bijuga</i>	clark	marrup		marrup choyo, show sem-tah	choyo	annilla, kurrak kuren, tuamis, nityanmis simmata
<i>Poinciana pulcherrima</i> <i>Vigna marina</i>	repawtin, rapotin sratol, shroh-tulah	sautul	shimatada	tansilituh	ohloo	wonuka
<i>Artocarpus altilis</i> <i>Ficus carolinense</i> <i>Ficus tinctoria</i>	mos she, shra sheh, konyah	mai	mai	mai ayau neen	mey kilee-ant ahwahn	mai au awan, aon, apuris, eplis, mouk ansifichnu, en ugotnu
<i>Fleurya ruderalis</i>		ne-kirririr	nin-kotokot	sau mwal	ani-gusgus	
<i>Pilea microphylla</i> <i>Pipturus argenteus</i> <i>Procris pedunculata</i>	halkoh	re, wahpul oroma	reh ormuh	pahkeh	oromah koo-mit	arome atatagur, gumudj, kimuit, kemmet, nitatagul, adatagul, ngo, nga
<i>Allophylus timorensis</i> (<i>A. ternatus</i> for Ku- saie and Ponape)	lah	kitak	kitak	ungeh	nguh	
<i>Citrus</i> sp. <i>Asclepias curassavica</i> <i>Ochrosia oppositifolia</i>	muh	kimeme	truka-keree	karrer kitee	kuruhkur oomah	kurukur uma, uwa
<i>Plumeria rubra</i> <i>Guettarda speciosa</i> <i>Hedyotis biflora</i>	fohr koin-lahk	*po maria eles musenibuil	*po maria eet mussen- buel	*po maria eet, ith	mohsor	sour mosor sing, nisarfonu atiu, achen
<i>Ixora casei</i>	kalsru, galusa, kahl-shuh ee	kalesu	kasaw	kartieu		
<i>Morinda citrifolia</i> <i>Ageratum conyzoides</i>		obul pokaniko	wehmpul	weypul, wumpul pusen-koh	nen	nen, nobur, arin amshiiip, opoloapon, oponupon anachuko, troboasu, ennetoku
<i>Vernonia cinerea</i>		musenibuil	mussen- buel			atuat, eadiat, adudud not, amolokset, fremes
<i>Wedelia biflora</i> <i>Scaevola frutescens</i>	eekeh, agaia kushosh	kisuwel ramek	morishish romok	ingkah, ungkeh eenut	ahtu-guaht eenut	
<i>Cordia subcordata</i>	eekwahk	ikoh-ik	kanaw	eekoh-eek	ahlew	anau, alau, anna

TABLE 1—continued

PLANT SPECIES	ISLANDS AND VERNACULAR PLANT NAMES					
	KUSAIE	PINGELAP	MOKIL	PONAPE	ANT	TRUK
<i>Messerschmidia argentea</i>	shuhshun	sesen	sisin	titin	amunusut	amoneset, emolose, chen, amarashet
<i>Capsicum frutescens</i>	*pepper		*chilee	*sele	mwik	muik, moek
<i>Nicotiana tabacum</i>					*tamak	pis-suba
<i>Ipomoea gracilis</i>	oah	wahlap	ohlop	sul-oomp	ahfahmus	ruk, frugrug
<i>Clerodendrum inerme</i>	kyawak	ilau		ilau	oolah	ulo, apuoch, etiu, pucherik, edin, abot
<i>Premna gaudichaudii</i> (<i>P. corymbosa</i> for Ponape)	fienkeek, fienket	sobuk, sokuk	subuk	tubuk, orr	orr	lior, nior, umukau, umgau, niyol
<i>Ocimum sanctum</i>	harlin, oarin	teeko		kahterin		
<i>Thalassia hemprichii</i>	kahp	walat	walap	olot, ohlot		mut
<i>Musa paradisiaca</i>	ush, oune	wis	wus	ut		uch
<i>Alocasia macrorrhiza</i>	unog, wunock	wut	wut	oht	keh	ka, ke, puna
<i>Colocasia esculenta</i>	kohtahk, taka	sawa	chawa	sawah	oht	sawa, onni
<i>Cyrtosperma chamissonis</i>	pashok	muiang	muen	muahng	fulah	pula, pashon, bura
<i>Crinum</i> sp.	kief-fashfash	kiep	kiup	kiup	kiup	kiop, kiaup, kiyop
<i>Zephyranthes rosea</i>	kief-shuck	kiep	kiup	pileep		
<i>Cocos nucifera</i>	nu	ni	ni	ni	nu	nu
<i>Pandanus</i> sp.	muen	kipai	kebar	kipar	fahss	kepar, fadj
<i>Tacca leontopetaloides</i>	mokmok, mukmuk	mugamuk	mokomok	mokmok	mokomok	mokomok
<i>Cyperus javanicus</i>	mahtok	sapasap (this is name for large sedge on Ponape)	mordong	use	kusakus	amana, moirer, nikaunoun
<i>Fimbristylis</i> sp.		rosakai	puror-entoge		apuson	fedil, puker, fetin, umula
<i>Centotheca lappacea</i>	masha-shruck	moh-lung				
<i>Digitaria pruriens</i>		reh	muhkarak		fahtil-muahn	
<i>Eleusine indica</i>		rosakai	puror-entoke	reh-takai, rea takai	puhkah	
<i>Eragrostis amabilis</i>		rosakai	reh	shoh-maleh	fahtil	
<i>Lepturus repens</i>		rosakai	limon-gisek		fahtil-muahn	
<i>Paspalum vaginatum</i>		olee-sakai	uneneki-sekik	timoor		
<i>Saccharum officinarum</i>	tuh	seu	tuh	seu		wou
<i>Thuarea involuta</i>		mokarak	muhkarak		fahtil	unom

TABLE 2
SIMILAR OR IDENTICAL NATIVE NAMES OF THE TOTAL NAMES RECORDED
BETWEEN ISLANDS AND PERCENTAGES OF SIMILARITY.

	ANT	MOKIL	PINGELAP
Kusaie.	4 of 38 (11 per cent) (native 1, food 2, ornament- tal 1)	12 of 40 (30 per cent) (native 6, food 4, ornament- tal 2)	10 of 44 (22.7 per cent) (native 6, food 2, ornament- tal 2)
Pingelap.	9 of 44 (20.5 per cent) (native 3, food 4, economic 1, ornamental 1)	39 of 56 (70 per cent) (native 19, food 8, adventive 6, economic 1, ornamental 5)
Mokil.	8 of 42 (19 per cent) (native 2, food 4, economic 1, ornamental 1)
Ponape.	14 of 45 (31 per cent) (native 7, food 5, economic 1, ornamental 1)	24 of 46 (52 per cent) (native 11, food 9, adventive 1, ornamental 3)	26 of 48 (54 per cent) (native 15, food 8, adventive 1, ornamental 2)
Ant.
Truk.	30 of 50 (60 per cent) (native 21, food 7, economic 1, ornamental 1)	14 of 50 (28 per cent) (native 6, food 5, economic 1, ornamental 2)	13 of 53 (24.5 per cent) (native 6, food 5, economic 1, ornamental 1)

REFERENCES

- ANDERSSON, N. J. 1854. *Eine Weltumsegelung mit der Schwedischen Kriegsfregatte "Eugenie" 1851-1853*. 384 pp. Leipzig.
- CHRISTIAN, F. W. 1899a. *The Caroline Islands*. 412 pp. Methuen & Co., London.
- 1899b. Exploration in the Caroline Islands. *Geogr. Jour.* 13: 105-136.
- EILERS, A. 1934. Inseln um Ponape: In *Ergebnisse der Südsee-Expedition 1908-1910*. II(B) 8: 1-464. Friederichsen, de Gruyter & Co., Hamburg.
- ELBERT, S. H. 1947. *Trukese-English and English-Trukese Dictionary*. 337 pp. U. S. Naval Military Government, Pearl Harbor.
- FOSBERG, F. R. Ms. *Botanical report on Micronesia*. Economic Survey of Micronesia. U. S. Commercial Co., Honolulu.
- GLASSMAN, S. F. 1952. The flora of Ponape. *Bernice P. Bishop Mus., Bul.* 209: 1-152.
- 1952. List of nonvascular plants from Ponape, Caroline Islands. *Amer. Midland Nat.* 48: 735-740.
- HAMBRUCH, P. [Ed.] 1929. *Elf Jahre in Australien und auf der Insel Ponape*. 240 pp. Berlin. [A free translation of O'Connell, J. F. A residence of 11 years in New Holland and the Caroline Islands. 265 pp. Boston. 1836.]
- HAMMET, L. U. 1854. Narrative of the voyage of H.M.S. "Serpent." *Naut. Mag.* 23: 57-67, 188-194.
- HOSOKAWA, T. A. 1937. A preliminary account of the phytogeographical study on Truk, Caroline. *Biogeogr. Soc. Jap., Bul.* 7: 171-255.
- KANEHIRA, R. 1935. An enumeration of Micronesian plants. *Kyushu Imp. Univ., Dept. Agr., Jour.* 4: 237-464.
- KRÄMER, A. 1932. Truk. In *Ergebnisse Südsee-Expedition II(B)* 5: 417-428. Friederichsen, de Gruyter & Co., Hamburg.
- LESSON, R. P. 1838. *Voyage autour du monde entrepris par ordre du Gouvernement sur la Corvette "La Coquille"*. 2 vols. 510 pp., 549 pp. P. Pourrat Frères, Paris.
- MEINICKE, K. E. 1876. *Die Inseln des Stillen Oceans*. . . . Vol. 2. Polynesien und Mi-

- kronesien. 487 pp. E. Baldamus, Leipzig.
- MOSS, F. J. 1889. *Through atolls and islands in the Great South Sea*. 317 pp. S. Low, Marston, Searle, & Rivington, London.
- MURPHY, R. E. 1949. "High" and "low" islands in the Eastern Carolines. *Geogr. Rev.* 39: 425-439.
- 1950. The economic geography of a Micronesian atoll. *Assoc. Amer. Geogr., Ann.* 40: 58-83.
- ST. JOHN, H. 1948. Report on the flora of Pingelap Atoll, Caroline Islands, Micronesia, and observations on the vocabulary of the native inhabitants. *Pacific Sci.* 2: 96-113.
- SKOGMAN, C. 1856. *Erdumsegelung der Königl. Schwedischen Fregatte "Eugenie" 1851-1853*. 2 vols. 240 pp. Berlin.
- THILENIUS, G., and F. E. HELLWIG. 1927. Allgemeines. In *Ergebnisse Südsee-Expedition I*: 1-489. L. Friederichsen & Co., Hamburg.
- UNITED STATES. 1944. *East Caroline Islands*. Civil Affairs Handbook. OPNAV 50E-5 Office of the Chief of Naval Operations, Navy Department.
- WECKLER, J. E. 1949. *Land and livelihood on Mokil*. Part I. Final Report CIMA 1947-1949. 188 pp. Pacific Science Board, National Research Council, Washington.
- YAMADA, Y. 1944a. New Caulerpas and Halimedes from Micronesia. *Hokkaido, Inst. Algol., Sci. Papers* 3: 27-29.
- 1944b. A list of marine algae from the atoll of Ant. *Hokkaido, Inst. Algol., Sci. Papers* 3: 31-35.