

**VEGETATION OF FLINT ISLAND,
CENTRAL PACIFIC**

By

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Flint Island is a tiny coral island, 2.5 miles long and 0.5 miles wide, in the south central Pacific, lat. $11^{\circ} 25' 43''$ S., long. $151^{\circ} 48'$ W. It is extremely isolated, its only close neighbors being Vostok Island, about 90 miles northwest, and Caroline Island, about 140 miles northeast. It is apparently a rather old island, as only a brackish pool is left near the center which may be what is left of a lagoon, and the reef rock of the north end shows concentric layers which have been elevated and by some means truncated.

The original vegetation of this island has been practically destroyed, and the island is now an intensively cultivated copra plantation. Introduced weeds are abundant around the houses and in the plantation under the coconut trees. *Carica papaya* grows, apparently spontaneously, here and there in the plantation. Around the houses several edible and ornamental plants are cultivated. *Morinda citrifolia*, growing here and there over the island, possibly arrived with some prehistoric Polynesian visit. A few tiny, struggling *Cordia subcordata* trees on the windward side seem to have been recently planted. No old ones were noticed.

Traces of the original flora still exist here and there. Several apparently indigenous species persist in the copra plantation as weeds. Among these *Lepturus repens* and *Boerhaavia diffusa* are abundant and *Lepidium bidentatum* is remarkable in that it here possesses both entire and serrate leaves. *Portulaca Fosbergii* is abundant in one small area. Around the brackish pool in the center are *Cyperus pen-natus* and *Lepturus repens*, the latter sending out lateral runners or stolons on the surface of the water. At the south end is a small patch of *Pandanus* and one *Pisonia* tree. Along the windward side is a fringe of *Messerschmidia* and occasional plants of *Ipomoea glaberrima*. One patch of *Scaevola* was observed here. On the bare broken rock surface of the north end a few stunted *Messerschmidia* bushes and tiny tufts of *Lepturus repens* have gained a foothold.

It seems impossible to reconstruct from the remnants still existing any picture of the vegetation as it was before the island was planted to coconuts.

List of the vascular plants

- Psilotum nudum* (L.) Griseb. 17475. Indigenous.
Polypodium scolopendrium Burm. f. 17466. Indigenous.
Pandanus odoratissimus L. f. 17463. Indigenous.
Lepturus repens R. Br. 17458. Indigenous.
Eragrostis amabilis (L.) W. and A. 17443. Recently introduced weed.
Kyllinga cephalotes (Jacq.) Druce 17456. Recently introduced weed.
Cyperus pennatus Lam. 17468. Indigenous.
Cocos nucifera L. 17441. Cultivated at present.
Crinum asiaticum L. 17452. Cultivated at present.
Musa sapientum L. 17455. Cultivated at present.
Artocarpus incisa L. f. 17451. Cultivated at present.
Ficus carica L. 17448. Cultivated at present.
Fleurya ruderalis (Forst.) Gaud. 17464. Indigenous.
Pisonia grandis R. Br. 17465. Indigenous.
Boerhaavia diffusa L. variety *tetrandra* (Forst.) Heim. 17435, 17436, 17439, 17462. Indigenous.
Portulaca Fosbergii Von Poell. 17434. Indigenous.
Brassica campestris L. 17445. Recently introduced weed.
Lepidium bidentatum Mont. 17442, 17446, 17467. Indigenous.
Citrus aurantium L. 17454. Cultivated at present.
Euphorbia hypericifolia L. 17470. Recently introduced weed.
Phyllanthus niruri L. 17459. Recently introduced weed.
Malvastrum coromandelianum (L.) Garcke 17457. Recently introduced weed.
Hibiscus rosa-sinensis L. 17449. (Possibly a hybrid.) Cultivated at present.
Thespesia populnea (L.) Corr. 17472. Cultivated at present.
Calophyllum inophyllum L. 17444. Cultivated at present.
Carica papaya L. 17471. Cultivated at present.
Ipomoea glaberrima Boj. 17438. Indigenous.
Cordia subcordata Lam. 17437. Cultivated at present.
Messerschmidia argentea (L.) Johnston 17469. Indigenous.
Lycopersicum esculentum Mill. 17447. Cultivated at present.
Capsicum frutescens L. 17473. Cultivated at present.
Guettarda speciosa L. 17460. Indigenous.
Morinda citrifolia L. 17450. Probably of ancient Polynesian introduction.
Vernonia cinerea Less. 17461. Recently introduced weed.
Synedrella nodiflora Gaertn. 17474. Recently introduced weed.
Bidens pilosa L. 17453. Recently introduced weed.

Numbers refer to St. John & Fosberg
 collections, Oct. 16, 1934, Mangarevan
 Expedition, Bishop Museum.