Kagoshima Univ. Res. Center S. Pac., Occasional Papers, No. 26, 23 - 24, 1995 Survey Team I, Report 5. The Progress Report of the 1994 Survey of the Research Project, "Man and the Environment in Micronesia"

INTRODUCTION OF TROPICAL PLANTS FROM POHNPEI ISLAND

Michio ONJO, Shigeto TOMINAGA and Mitsuru HAYASHI

The island of Pohnpei is located about 770 km north of the equator in the Eastern Calorin Islands of the Western Pacific Ocean and 320 km west of the International Date Line. The island is on the point where latitude 6° 54′ N meets longitude 158° 14′ E. The island is a nearly indented circle in shape, 19 km at its narrowest and 23 km at widest point. The island is surrounded by barrier reefs and has a total area of 334 km². The terrain consists of mountains covered with tropical rain forest extending from northwest to southeast, having the highest peak of 773m. The climate of Pohnpei characterized by high temperatures and a large amount of precipitation, that is, a typical oceanian tropical climate. The average rainfall is 4,000-5,000 mm per year and the temperature is rather constant, about 27°C throughout the year.

Plants species in tropics especially in rain forests areas are known to be abundant and

Family name	Code No.	Scientific name	Common name	Materials	No. of strains
Dioscoreaceae	1	Dioscorea alata LINN.	Yams	Tuber	20
	2	Dioscorea bulbifera LINN.		Bulbil	1
Euphorbiaceae	3	Manihot esculenta CRANTZ.	Cassava	Stem	1
Flacourtiaceae	4	Flacourtia inermis RoxB.	Governor plum	Seed	1
	5	Pangium edule REINW. ex BL	Pangi	Seed	1
Hypericaceae	6	Gracinia xanthochymus HOOK f.	Egg tree	Seed	1
Leguminosae	7	Inocarpus edulis FORST.	Tahiti chsetnut	Seed	1
Malpighiaceae	8	Malpighia emerginata Dc.	Acerora	Seed	1
Malvaceae	9	Hibiscus manihot LINN.	Sunset hibiscus	Stem	4
	10	Hibiscus spp.		Stem	5
Myrtaceae	11	Syzygium aqueum ALSTON	Water rose apple	Seed	3
	12	Syzygium samarangense MERRILL et PERRY	Samarang rose apple	Stem	1
	13	Syzygium malaccensis MERRILL et PERRY	Malay apple	Seed	1
	14	Psidium guajava LINN.	Guava	Seed	1
Oxalidaceae	15	Averrhoa carambora LINN.	Carambola	Seed	1
	16	Averrhoa bilmbi LINN.	Bilimbi	Stem	1
Palmae	17	Clinostigma ponapensis MOORE et FOSBERG		Seed	1
	18	Cocos nucifera LINN.	Coconat palm	Seed	1
	19	Metroxylon amicarum WARB.	lvory nut palm	Seed	1
Passifloraceae	20	Passiflora edulis SIMS.	Passion fruit	Stem	1
Rubitaceae	21	Morinda citrifolia LINN.	Indian mulberry	Seed	1

Table 1. List of the plants introduced from Pohnpei Island

precious as genetic resources, however today some of plants in tropics are on the verge of extinction because of human activities. Therefore, it is important for us to employ some effective measures to protect them now.

The objective of this project was to take an inventory of tropical plants as a first step to preserve the resources. In this particular study, plants in the island of Pohnpei were surveyed and some were introduced to Japan for identification and multiplication. All operations were done at Kagoshima University. Taxonomically, collected materials were found to consist of 48 strains, 21 species and 12 families. Table 1 shows the result of the classification of the collected materials.