

A List of Plant Species Collected from the Krakatau Islands and Adjacent Areas, Indonesia*

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Abstract

The plant species collected from the Islands of Krakatau and adjacent areas were listed with their collection number in each collection site and island. On the islands of Sertung (Verlaten), Rakata Kecil (Lang), Rakata Besar (Krakatau) and Anak Krakatau the collection was made rather intensively than the others, however it does not always cover all of each island, as we focussed our study on the ecological study of vegetation. Comparison was made on the rate of forest formation between the islands of Anak Krakatau and Rakata Besar.

Key Words : Krakatau Islands, Flora list, Plant geography.

Introduction

Two ecological expeditions were sent from Kagoshima University to the Krakatau Islands in Sunda Strait, Indonesia in 1982 as a centennial commemoration of Krakatau eruption in 1883. The first was from 22 June to 20 August, 1982, and in this term we intended to study the recovery of ecosystems in those islands in dry season. The second was between 5 October and 4 December in wet season. Unfortunately the dry season lasted for a long time in 1982, and we did not have rain until we bade farewell to the islands.

From 1886 to 1932 plants were intensively collected from the Krakatau Islands by a number of botanists and even by geologists, but the complete collection of plant species is gradually becoming more difficult in the limited time of a small excursion or in a short-term expedition as the pyroclastic surface of the Krakatau Islands has been covered by a dense vegetation. At the same time, botanical interest

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has extended from taxonomy to ecology.

The main purpose of our expedition to the Krakatau Islands and in the adjacent areas was to clarify the dynamic change of vegetation, changing process of the animal world, and process of soil formation. Most of the results were published in various journals (YAMANE, 1983; YAMANE and TOMIYAMA, 1986; SUZUKI, 1984; YUKAWA, 1984a, b, c; ABE, 1984; YUKAWA and YAMANE, 1985; TAGAWA *et al.*, 1985; KANMIYA and YUKAWA, 1985; SHINAGAWA *et al.*, 1986a, b, c; MIYAUCHI *et al.*, 1986; YUKAWA, 1986).

Our plant collection was carried out more intensively on the following four islands; Sertung, two Rakatas and Anak Krakatau, than the other places such as Islands of Peucan (pronounced as Poechan) and Panaitan, Carita (as Charita) on the west coast of Java and Sekincau (as Skinchau) in South Sumatra, but it was smaller than that on Rakata Besar by an English team (FLENLEY and RICHARDS, eds., 1982; WHITTAKER *et al.*, 1984) made three years before our expedition.

Our collection of plants was restricted only to Spermatophyta, Pteridophyta and Bryophyta. The plants collected were placed between pages of newspapers, and a sheaf of papers was put into a nylon envelope with ethanol. The envelope was sealed with gum tape. Specimens were dried at the Herbarium Bogoriense.

The identification of Spermatophyta was primarily made by T. PARTOMIHARDJO, and secondarily counterchecked by Dr. Mitsuru HOTTA, Associate Professor at Yoshida College, Kyoto University, Pteridophyta by Dr. Shigeyuki MITSUTA, Department of Botany, Faculty of Science, Kyoto University, and Bryophyta by Dr. Taro SEKI, Department of Botany, Faculty of Science, Hiroshima University. We obtained helpful advice on the identification of Bignoniaceae from Dr. C. G. G. J. van STEENIS. The authors wish to express their sincere thanks to them.

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Dr. HOTTA advised us that some specimens of Asclepiadaceae, Meliaceae, Myrtaceae (especially of *Syzygium*), Orchidaceae and Piperaceae should be further checked because the identification was based only on steril herbaria. As reexamination may, however, take a long time, we would like to describe our collection and open the opportunity of further inspection.

One set of the collection is in the Herbarium Bogoriense, Bogor, Indonesia and the other is in the College of Liberal Arts, Kagoshima University, Korimoto 1-21-30, Kagoshima 890, Japan.

Description of Flora

All the species collected since 1883 up to 1979 from the islands of Rakata Besar and Anak Krakatau since her birth in 1930 were concisely summarised in Tables 2.2 and 2.3 of WHITTAKER and FLENLEY (in FLENLEY and RICHARDS, eds., 1982) based on a number of published papers. The species new to Rakata Besar in our 1982 collection are the following 19 ferns and 13 seed plants.

Pteridophyta

<i>Angiopteris palmiformis</i>	<i>Pleocnemia irregularis</i>
<i>Asplenium macrophyllum</i>	<i>Prosaptis alata</i>
<i>A. thunbergii</i>	<i>Pteridrys syrmatica</i>
<i>Ctenitopsis dissecta</i>	<i>Pteris pacifica</i>
<i>Davalia solida</i>	<i>Selaginella helferi</i>
<i>Dicranopteris linearis</i>	<i>Thelypteris megaphylla</i>
<i>Lycopodium carinatum</i>	<i>Trichomanes bipunctatum</i>
<i>Macrothelypteris polypodioides</i>	<i>T. humile</i>
<i>Microsorium linguiforme</i>	<i>Weatherbya accedens</i>
<i>M. rubidum</i>	

Spermatophyta

<i>Artocarpus elasticus</i>	<i>Hoya diversifolia</i> (<i>H.</i> sp.*?)
<i>Coelogyne longifolia</i>	<i>Poikilospermum</i> sp.
<i>Dendrobium acuminatissium</i>	<i>Porophyllum ruderale</i>
<i>Eria annulata</i>	<i>Saurauia nudiflora</i>
<i>Ficus glomerata</i>	<i>Tarenna dasyphylla</i>
<i>F. lepicarpa</i>	
<i>Goodyera</i> cf. <i>repens</i> (<i>G.</i> sp.*?)	

Species marked with an asterisk were in the tables by WHITTAKER and FLENLEY, we are not completely certain whether they are the same species or not.

Although our collection is far from complete, the new species may contribute to the plant geography and the cumulative increase of species in the area.

The species new to Anak Krakatau were 2 ferns and 9 seed plants. They are ;

Pteridophyta

<i>Nephrolepis cordifolia</i> (<i>N. tomentosa</i> *?)
<i>Lygodium flexuosum</i> (<i>L. circinatum</i> *?)

Spermatophyta

<i>Coccinia cordifolia</i>

Cynanchum ovalifolium

Erythrina orientalis (*E. variegata**?)

Eulophia graminea

Ipomoea gracilis (*I. sp.*?*)

Melochia umbellata

Premna corymbosa (*P. obtusifolia**?)

Timonius compressicaulis

Tylophora asthmatica.

Those species found on Anak Krakatau were all found on the other islands of Krakatau except *Lygodium flexuosum*, though it was once recorded from Rakata Besar by DOCTERS VAN LEEUWEN (1936) in 1928. This means the plants invading Anak Krakatau come from the surrounding islands more frequently than from two main islands, Java and Sumatra.

In 1932, 49 years after the great eruption, when DOCTERS VEN LEEUWEN went back to the Netherlands, Rakata Besar Island was covered with a dense forest of *Casuarina equisetifolia* on the beach, and on the inland slopes there was a young forest of *Neonauclea calycina*. While, on Anak Krakatau in 1979 after 49 years since her birth, the most advanced vegetation in the successional sense was a *Casuarina equisetifolia* forest with its canopy at about 20 m in height, judging from a photograph taken by Prof. K. YODA in 1977. Does this great difference of vegetational progress in succession between on Rakata Besar and Anak Krakatau come from only a successive activity of volcano of Anak Krakatau? We would like to consider that it may also be due to whether there was a small number of survivals in the form of seeds in the soil or not. Rakata Besar, Rakata Kecil and Sertung Islands have a fair possibility of seed survival, but no chance on Anak Krakatau.

The total number of species we collected is shown in Table 1. In the list family and species names were arranged in alphabetical order. Locality name was abridged as follows; Cr: Carita, St: Sertung, An: Anak Krakatau, Rk: Rakata Kecil, Rb: Rakata Besar, Pc: Peucan, Pn: Panaitan, Sk: Sekincau. Peucan and Panaitan Islands are in the Ujung Kulon National Park in the western end of Java. Growth form (GF) was also shown abridged in the list; Tr: tree, Sh: shrub, St: strangler, Ln: liana, He: herb, Gr: grass, Ep: epiphyte, Pr: parasite. Numbers in the list show our collection numbers, and the species with 'B' behind the collection number means

Table 1. Total species collection on each island and site

Locality	Cr	St	An	Rk	Rb	Pc	Pn	Sk
Spermatophyta	140	83	30	60	110	57	81	14
Pteridophyta	11	15	4	13	41	3	3	2
Bryophyta			1	2	18			
Total	151	98	35	75	169	60	84	16

the specimen is in the Bogor Herbarium and was not counterchecked, because we took only one specimen. ++ means no collection but recognized in the field or appeared in quadrats.

References

- ABE, T. 1984. Colonization of the Krakatau Islands by termites (Insecta : Isoptera). *Physiol. Ecol. Japan*, 21 : 63-88.
- DOCTERS VAN LEEUWEN, W.M. 1936. Krakatau, 1883 to 1933. A. Botany. *Ann. Jard. Bot. Buitenzorg*, 46-47 : 506 pp.
- FLENLEY, J.R. and RICHARDS, K., eds. 1982. The Krakatoa Centenary Expedition. Final Report. Miscellaneous Series 25, 196 pp, Department of Geography, University of Hull, Hull.
- KANMIYA, K. and YUKAWA, J. 1985. Chloropidae (Diptera) of Panaitan and the Krakatau Islands, Indonesia. *Kontyu*, Tokyo, 53 : 461-474.
- MIYAUCHI, N., HIGASHI, T., SHINAGAWA, A., DJUWANSAH, M. R. and SULE, A. 1986. The soil on the Krakatau Islands. III. Mineralogy of the soils. *Mem. Fac. Agric., Kagoshima Univ.*, 22 : 157-167.
- SHINAGAWA, A., MIYAUCHI, N., HIGASHI, T., DJUWANSAH, M. R. and SULE, A. 1986a. The soils on the Krakatau Islands. I. Field observation. *Mem. Fac. Agric., Kagoshima Univ.*, 22 : 101-130.
- SHINAGAWA, A., MIYAUCHI, N., HIGASHI, T., DJUWANSAH, M. R. and SULE, A. 1986b. The soils on the Krakatau Islands. II. particle size distribution and chemical properties of the soils. *Mem. Fac. Agric., Kagoshima Univ.*, 22, 131-155.
- SHINAGAWA, A., MIYAUCHI, N., HIGASHI, T., DJUWANSAH, M. R. and SULE, A. 1986c. The soils on the Krakatau Islands. IV. Accumulation and composition of humus. *Mem. Fac. Agric., Kagoshima Univ.*, 22 : 169-176.
- SUZUKI, E. 1984. Ecesic pattern of *Saccharum spontaneum* L. on Anak Krakatau Island, Indonesia. *Jap. J. Ecol.*, 34 : 383-387.
- TAGAWA, H., SUZUKI, E., PARTOMIHARDJO, T. and SURIADARMA, A. 1985. Vegetation and succession on the Krakatau Islands, Indonesia. *Vegetatio*, 60 : 131-145.
- TAGAWA, H. (ed.) 1984. Researches on the Ecological Succession and the Formation Process of Volcanic Ash Soils on the Krakatau Islands. Interim Report of Grant-in-Aid for Overseas Research in 1982 and 1983. 120 pp. Kagoshima Univ.
- WHITTAKER, R. J., RICHARDS, K., WIRIADINATA, H. and FLENLEY, J. R. 1984. Krakatau 1883 to 1983. *Progress in Physical Geography*, 8 : 61-81.
- YAMANE, Sk. 1983. The aculeate fauna of the Krakatau Islands (Insecta, Hymenoptera). *Rep. Fac. Sci., Kagoshima Univ. (Earth Sci. Biol.)*, 16 : 75-107.
- YAMANE, Sk. and TOMIYAMA, K. 1986. A small collection of land snails from the

- Krakatau Islands, Indonesia. *Venus*, 45 : 61-64.
- YUKAWA, J. 1984a. Fruit flies of the genus *Dacus* (Diptera : Tephritidae) on the Krakatau Islands in Indonesia, with special reference to an outbreak of *Dacus albistrigatus* De Meijere. *Jap. J. Ecol.*, 34 : 281-288.
- YUKAWA, J. 1984b. An outbreak of *Crypticerya jacobsoni* (Green) (Homoptera : Margarodidae) on Rakata Besar of the Krakatau Islands in Indonesia. *Appl. Ent. Zool.*, 19 : 175-180.
- YUKAWA, J. 1984c. Geographical ecology of the butterfly fauna of the Krakatau Islands, Indonesia. *Tyo to Ga*, 35, 47-74.
- YUKAWA, J. 1986. Moths collected from the Krakatau Islands and Panaitan Island, Indonesia. *Tyo to Ga*, 36 : 181-184.
- YUKAWA, J. and YAMANE, Sk. 1985. Odonata and Hemiptera collected from the Krakataus and surrounding islands, Indonesia. *Kontyu*, Tokyo, 53 : 690-698.

Spermatophyta

Species	GF	Cr	St	An	Rk	Rb	Pc	Pn	Sk
Acanthaceae									
<i>Acanthus ilicifolius</i> L.	Sh	.	.	.	.	.	.	2054	.
<i>Gendarussa vulgaris</i> Nees	Sh	2143B	.	.	.	.	.	.	.
Actinidiaceae									
<i>Saurauia nudiflora</i> DC.	Sh	.	.	.	509	1054	.	.	.
						1105			
						1157			
						2349			
Agavaceae									
<i>Pleomele angustifolia</i> (Roxb.) N. E. Br.	Sh	.	.	.	.	.	.	2081	.
<i>Pleomele elliptica</i> (Thunb.) N. E. Br.	Sh	.	.	.	.	.	.	2109	.
Amaryllidaceae									
<i>Crinum asiaticum</i> L.	He	.	.	.	.	1153	.	.	.
Anacardiaceae									
<i>Bouea macrophylla</i> Griff.	Tr	2141B	.	.	.	.	.	.	.
<i>Buchanania arborescens</i> (Bl.) Bl.	Sh	35	167	.	529	1011	.	.	.
			113B	.	502				
<i>Mangifera indica</i> L.	Tr	.	.	.	512	1149	.	2103?	.
					555				
Annonaceae									
<i>Annona squamosa</i> L.	Sh	57	.	.	.	.	.	.	.
<i>Orophea hexandra</i> Bl.	Tr	.	.	.	.	.	.	2019	.
<i>Orophea latifolia</i> Bl.	Tr	.	.	.	.	.	.	2072	.
								2035	.
								2024	.
Apocynaceae									
<i>Alstonia scholaris</i> (L.) R. Br.	Sh	.	128	.	.	1014	.	.	.
<i>Cerbera manghas</i> L.	Sh	.	2406	.	.	.	644	2002	.
<i>Dyera</i> sp.	Tr	.	.	.	.	.	.	2037?	.
<i>Rauvolfia javanica</i> K. & V.	Tr	.	.	.	.	.	2302	.	.

Species	GF	Cr	St	An	Rk	Rb	Pc	Pn	Sk
							674		
							608		
Araceae									
<i>Homalomena Pendula</i> (Bl.) Bakh. f.	He	.	.	.	.	.	.	2089	.
<i>Scindapsus hederaceus</i> (Z. & M.) Miq.	Ln	2135	.	.	.	.	.	.	.
Araliaceae									
<i>Arthropphyllum javanicum</i> Bl.	Sh	.	142	.	553	1071B	.	.	.
						1022			
						1080			
<i>Schefflera polybotrya</i> (Miq.) Vig.	Sh	.	.	.	.	1162	.	.	.
						1098			
Asclepiadaceae									
<i>Cynanchum</i> sp.	Ln	.	200	.	513	2367?	.	.	.
<i>Cynanchum ovalifolium</i> Wight	Ln	.	149	235	540	.	.	.	.
			112						
<i>Heterostemma acuminatum</i> Decne	Ln	.	.	.	508	1063	.	.	.
<i>Hoya diversifolia</i> Bl.	Ln	.	116	.	539	1039	.	.	.
						1043			
<i>Raphistemma</i> sp.	Ln	.	.	.	.	1106	.	.	.
<i>Tylophora asthmatica</i> (Roxb.) W. & A.	Ln	.	.	239	.	.	.	2091?	.
Bignoniaceae									
<i>Crescentia cujete</i> L.	Sh	2155	.	.	.	.	.	.	.
<i>Radermachera glandulosa</i> (Bl.) Miq.	Tr	2160	.	.	2388	2311	.	.	.
		36				2361			
						1072			
<i>Spathodea campanulata</i> Beauv.	Tr	67	.	.	.	.	.	.	.
Bombacaceae									
<i>Durio</i> sp.	Tr	93	.	.	.	.	.	.	.
Burseraceae									
<i>Canarium denticulatum</i> Bl.	Tr	.	.	.	.	.	2303?	.	.
<i>Canarium hirsutum</i> Willd.	Tr	.	.	.	2389	.	.	.	.
Campanulaceae									
<i>Laurentia longiflora</i> (L.) Peterm.	He	51	.	.	.	.	.	.	.
Capparidaceae									
<i>Capparis</i> cf. <i>micracantha</i> DC.	Tr	.	.	.	.	.	.	2098	.
								2028	
								2016	
Caricaceae									
<i>Carica papaya</i> L.	Sh	.	++	.	.	.	.	.	.
Casuarinaceae									
<i>Casuarina equisetifolia</i> J. R. & G. Forst	Tr	++	++	220	++	2363	++	++	.
Combretaceae									
<i>Lumnitzera littorea</i> (Jack) Voigt	Tr	.	.	.	.	.	.	2077	.
<i>Terminalia catappa</i> L.	Tr	++	++	219	560	1130	++	2102?	.
Commelinaceae									
<i>Pollia secundiflora</i> (Bl.) Back.	He	2112	.	.	.	.	.	.	.
Compositae									
<i>Ageratum conyzoides</i> L.	He	54	.	.	.	.	.	.	253
<i>Bidens pilosa</i> L.	He	.	.	.	.	.	.	.	257
<i>Blumea lacera</i> (Burm. f.) DC.	He	2118	.	.	.	.	.	.	.
<i>Blumea riparia</i> (Bl.) DC.	Sh	2139	.	.	.	2335	.	.	.

Species	GF	Cr	St	An	Rk	Rb	Pc	Pn	Sk
<i>Blumea sylvatica</i> (Bl.) DC.	Sh	.	.	.	.	1107B	.	.	.
						1181			
						2350			
<i>Elephantopus scaber</i> L.	He	9	.	.	.	.	.	.	.
<i>Erechtites hieracifolia</i> (L.) Rafin. ex DC.	He	.	190	.	.	.	.	.	.
<i>Eupatorium odoratum</i> L. f.	Ln	61B	121	207	++	++	635	2094	.
			161	218					
<i>Galinsoga parviflora</i> Cav.	He	.	.	.	.	.	.	.	259
<i>Gynura procumbens</i> (Lour.) Merr.	He	.	192	.	.	.	.	.	.
<i>Mikania cordata</i> (Burm. f.) B. L. Robinson	Ln	11	147	.	534	2337	.	2059	255
					545	1012			
<i>Porophyllum ruderales</i> (Jacq.) Cass.	He	62B	.	.	.	1169	.	.	.
<i>Sonchus arvensis</i> L.	He	.	.	.	.	.	.	.	261
<i>Tridax procumbens</i> L.	He	43	.	.	.	.	.	.	.
<i>Vernonia cinerea</i> (L.) Less.	He	99	.	.	.	.	.	.	.
<i>Wedelia biflora</i> (L.) DC.	Ln	++	181	.	.	1133	.	.	.
						2366			
Convolvulaceae									
<i>Ipomoea alba</i> L.	Ln	.	118	.	.	.	.	.	.
<i>Ipomoea gracilis</i> R. Br.	Ln	41	.	234	543	.	.	.	.
<i>Ipomoea obscura</i> (L.) Ker-Gawl.	Ln	2161	.	.	.	.	.	.	.
<i>Ipomoea pes-caprae</i> (L.) R. Br.	Ln	++	++	++	++	1134	.	.	.
<i>Ipomoea tuba</i> (Schlechtend.) G. Don	Ln	.	.	.	.	1125	.	.	.
<i>Merremia peltata</i> (L.) Merr.	Ln	.	.	.	.	.	.	2097	.
Cucurbitaceae									
<i>Coccinia cordifolia</i> Auct. non Cogn.	Ln	.	.	229	.	1006	.	.	.
<i>Trichosanthes</i> or <i>Bryonopsis</i> sp.	Ln	2121	.	.	.	.	.	.	.
Cycadaceae									
<i>Cycas rumphii</i> Miq.	Sh	.	.	.	.	2364	.	.	.
Cyperaceae									
<i>Cyperus pedunculatus</i> (R. Br.) Kern	Gr	44	.	.	.	.	.	.	.
<i>Scleria ciliaris</i> Nees	Gr	.	136	.	.	.	.	.	.
Dilleniaceae									
<i>Dillenia indica</i> L. (Planted)	Tr	91	.	.	.	.	.	.	.
<i>Dillenia obovata</i> (Bl.) Hoogl.	Tr	.	.	.	.	.	.	2088	.
Dioscoreaceae									
<i>Dioscorea</i> sp. 1	Ln	.	2403	.	.	.	.	.	.
<i>Dioscorea</i> sp. 2	Ln	.	.	.	.	2358	.	.	.
<i>Dioscorea alata</i> .	Ln	75	.	.	.	.	.	.	.
<i>Dioscorea hispida</i> Dennst.	Ln	.	.	.	.	.	.	2095	.
								2096	.
Dipterocarpaceae									
<i>Hopea</i> sp. (Planted)	Tr	2170	.	.	.	.	.	.	.
<i>Shorea javanica</i> K. & V. (Planted)	Tr	2166	.	.	.	.	.	.	.
		2167	.	.	.	.	.	.	.
		2174	.	.	.	.	.	.	.
<i>Shorea leprosula</i> Miq. (Planted)	Tr	94	.	.	.	.	.	.	.
		2164	.	.	.	.	.	.	.
		2165	.	.	.	.	.	.	.
		2175	.	.	.	.	.	.	.

Species	GF	Cr	St	An	Rk	Rb	Pc	Pn	Sk
<i>Shorea parvifolia</i> (Planted)	Tr	2163	.	.	.	.	.	.	.
<i>Shorea pinanga</i> (Planted)	Tr	2173	.	.	.	.	.	.	.
Ebenaceae									
<i>Diospyros</i> sp.	Tr	.	.	.	.	.	603	2017	.
							654	2023	.
								2029	.
								2034	.
								2036	.
<i>Diospyros cauliflora</i> Bl.	Tr	.	.	.	.	.	.	2021	.
								2045	.
								2069	.
								2005	.
<i>Diospyros ferrea</i> (Willd.) Bakh.	Tr	.	.	.	.	.	.	2026	.
<i>Diospyros hermaphroditica</i> (Zoll.) Bakh.	Tr	2133	.	.	.	.	.	.	.
<i>Diospyros macrophylla</i> Bl.		.	.	.	.	.	.	2025	.
								2044	.
<i>Diospyros maritima</i> Bl.		.	.	.	.	.	.	2009	.
								2065	.
<i>Diospyros sundaica</i> Bakh.	Tr	.	.	.	.	.	.	2043	.
Elaeagnaceae									
<i>Elaeagnus latifolia</i> L.	Sh	.	.	.	504	.	2306	.	.
Euphorbiaceae									
<i>Alchornea rugosa</i> (Lour.) M. A.	Tr	2116	.	.	.	.	.	2006	.
<i>Antidesma bunius</i> (L.) Spreng.	Tr	.	.	.	.	.	.	2083	.
<i>Antidesma montanum</i> Bl.	Sh	86	166	.	538	2316	605	.	.
			197	.	558	2326	643	.	.
						2313	.	.	.
						1030	.	.	.
						1077	.	.	.
<i>Antidesma stipulare</i> Bl.	Sh	2114	.	.	.	.	.	.	.
<i>Breynia cernua</i> (Poir.) M. A.	Sh	96	142	.	566	.	.	.	.
			133	.					
<i>Bridelia monoica</i> (Lour.) Merr.	Sh	.	.	.	511	2314	.	.	.
					567	1037	.	.	.
					568	1074	.	.	.
					563		.	.	.
					557		.	.	.
<i>Bridelia stipularis</i> (L.) Bl.	Sh	.	193	.	.	.	.	.	.
<i>Cleidion</i> cf. <i>javanicum</i> Bl.	Sh	.	.	.	.	.	662	.	.
<i>Drypetes longifolia</i> (Bl.) Pax & K. Hoffm.	Tr	.	.	.	.	.	604	.	.
<i>Euphorbia atoto</i> Forst. f.	Sh	.	184	.	.	.	.	.	.
<i>Glochidion</i> sp. 1	Sh	.	.	.	503	2324	665	.	.
					507		.	.	.
<i>Glochidion</i> sp. 2	Sh	.	.	.	.	.	677	.	.
<i>Glochidion borneense</i> (M. A.) Boerl.	Sh	.	.	.	.	.	621?	.	.
<i>Macaranga</i> sp.	Sh	.	.	.	548	.	.	.	.
<i>Macaranga tanarius</i> (L.) M. A.	Tr	++	180	.	547	1013	.	.	.
			111	.			.	.	.
			179	.			.	.	.
<i>Mallotus dispar</i> (Bl.) M. A.	Sh	.	.	.	.	.	607	.	.
<i>Mallotus javanica</i> M. A.	Tr	2134	.	.	.	.	.	.	.

Species	GF	Cr	St	An	Rk	Rb	Pc	Pn	Sk
<i>Mallotus moluccanus</i> Auct. non (L.) M. A.	Tr	37 38 2158	.	.	.	.	.	.	.
<i>M. maritimus</i> M. A.	Sh	85	.	.	.	.	.	.	.
<i>Mallotus</i> sp.	Tr	2146	.	.	.	.	642	.	.
<i>Omalanthus populneus</i> (Geisel) Pax	Sh	2122	.	.	.	2334 1184	.	2015	251
<i>Trigonostemon ovatifolius</i> J. J. S.	Tr	.	.	.	.	.	651?	.	.
<i>Croton</i> sp.	Sh	2172	.	.	.	.	.	.	.
Flacourtiaceae									
<i>Homalium</i> cf. <i>grandiflorum</i> Bth.	Tr	.	.	.	.	.	681	.	.
<i>Homalium foetidum</i> (Roxb.) Bth	Tr	.	.	.	.	.	645 675?	.	.
<i>Homalium tomentosum</i> (Vent.) Bth.	Tr	.	.	.	.	.	615 676	.	.
Flagellariaceae									
<i>Flagellaria indica</i> L.	Ln	.	102 139	.	526	2330 1088 1188	.	.	.
Gesneriaceae									
<i>Aeschynanthus radicans</i> Jack var. <i>pulcher</i> (Bl.) G. Don	Ep	.	.	.	.	1087 1189	.	.	.
<i>Cyrtandra sandei</i> De Vr. (<i>C. sulcata</i> Bl.)	Sh	2126	.	.	.	1057 1101	.	.	.
<i>Didymocarpus</i> sp.	Sh	.	.	.	.	2333	.	.	.
Gnetaceae									
<i>Gnetum gnemon</i> L.	Sh	.	100	.	2390	.	.	.	.
Goodeniaceae									
<i>Scaevola taccada</i> (Gaertn.) Roxb.	Sh	++	++	222	++	1129	++	++	.
Graminae									
<i>Digitaria sanguinalis</i> Back.	Gr	7	.	.	.	.	.	.	.
<i>Eleusine indica</i> (L.) Gaertn.	Gr	26	.	.	.	.	.	.	.
<i>Eragrostis amabilis</i> O. K.	Gr	53	.	.	.	.	.	.	.
<i>Gigantochloa apus</i> (Bl. ex Schult. f.) Kurz	Tr	81	.	.	.	.	.	.	.
<i>Imperata cylindrica</i> (L.) Beauv.	Gr	.	++	211 216	.	.	.	.	.
<i>Ischaemum muticum</i> L.	Gr	6	.	217	.	1141	.	.	.
<i>Oplismenus compositus</i> (L.) Beauv.	Gr	21	.	.	562 2384	1009	.	.	.
<i>Oplismenus undulatifolius</i> (Ard.) Beauv.	Gr	.	171	.	.	.	.	.	.
<i>Paspalum conjugatum</i> Berg.	Gr	8	.	.	.	.	.	.	.
<i>Pogonatherum paniceum</i> (Lamk) Hack	Gr	.	120	225 209	.	.	.	.	.
<i>Saccharum spontaneum</i> (var. <i>klugha</i> ?) L.	Gr	.	2399	215	.	1183	.	.	.
<i>Spinifex littoreus</i> (Burm. f.) Merr.	Gr	.	183	.	.	.	.	.	.
<i>Thuarea involuta</i> (Forst. f.) R. & S.	Gr	45	.	.	.	.	.	.	.
Guttiferae									
<i>Calophyllum inophyllum</i> L.	Tr	13	157	.	551	2331	.	.	.

Species	GF	Cr	St	An	Rk	Rb	Pc	Pn	Sk
<i>Garcinia dulcis</i> (Roxb.) Kurz	Tr	.	.	.	.	.	648	.	.
<i>G. salakensis</i> Pierre	Tr	.	.	.	.	.	.	2038	.
								2085	
Hernandiaceae									
<i>Hernandia peltata</i> Meissn.	Tr	.	.	.	552	.	.	.	.
Lauraceae									
<i>Actinodaphne sphaerocarpa</i> (Bl.) Nees	Tr	.	.	.	.	.	623?	.	.
<i>Cassytha filiformis</i> L.	Ln	49B	188	236	.	1147	.	.	.
<i>Cinnamomum burmanni</i> Nees ex Bl.	Tr	.	.	.	.	.	.	.	264
<i>Cryptocarya densiflora</i> Bl.	Tr	.	.	.	.	.	684?	.	.
<i>Litsea</i> sp.	Sh	76	.	.	.	.	.	.	.
<i>Phoebe</i> sp.	Tr	.	.	.	.	.	673	.	.
Lecythidaceae									
<i>Barringtonia asiatica</i> (L.) Kurz	Tr	31	++	228	.	1121	.	.	.
<i>Planchonia valida</i> (Bl.) Bl.	Sh	.	2402	.	.	.	.	2067?	.
Leguminosae									
<i>Adenanthera pavonina</i> L.	Tr	.	103	.	.	.	.	.	.
<i>Albizia lebbbeck</i> (L.) Bth.	Tr	.	.	.	527	2359	.	.	.
<i>Caesalpinia bonduc</i> (L.) Roxb. emend. Dandy & Ecell	Ln	23	178	.	.	2365	.	.	.
<i>Canavalia maritima</i> (Aubl.) Urb.	Ln	34	.	204	.	.	.	.	.
<i>Canavalia microcarpa</i> (DC.) Merr.	Ln	.	.	.	2382	2320	.	.	.
						1144	.	.	.
<i>Cassia occidentalis</i> L.	Tr	72	.	.	.	.	.	.	265
<i>Cassia siamea</i> Lmk	Tr	2136	.	.	.	.	.	.	.
<i>Dalbergia candanensis</i> (Dennst.) Prain	Ln	.	185	.	.	.	.	.	.
<i>Desmodium pulchellum</i> (L.) Bth.	Sh	97	.	.	.	.	.	.	.
<i>Desmodium triflorum</i> (L.) DC.	Ln	46	.	.	.	.	.	.	.
<i>Desmodium umbellatum</i> (L.) DC.	Sh	3B	.	224	2383	1146	.	.	.
					528	1136	.	.	.
<i>Entada phaseoloides</i> (L.) Merr.	Ln	.	.	.	.	2370	.	2010B	.
<i>Erythrina orientalis</i> (L.) Murr.	Ln	40	.	238	.	2368	.	.	.
<i>Leucaena leucocephala</i> (Lmk) De Wit	Ln	.	186	.	2391	.	.	.	.
<i>Millettia sericea</i> (Vent.) W. & A. ex Hassk.	Ln	2129	.	.	.	.	.	.	.
<i>Mimosa pigra</i> L.	He	2137	.	.	.	.	.	.	.
<i>Moghania macrophylla</i> (Willd.) O. K.	He	68	.	.	.	.	.	.	.
<i>Mucuna acuminata</i> Grath. ex Baker	Ln	.	117	.	.	.	.	.	.
<i>Mucuna gigantea</i> (Willd.) DC.	Ln	.	176	.	.	1131	.	.	.
						1132B	.	.	.
<i>Pithecellobium ellipticum</i> (Bl.) Hassk.	Tr	.	.	.	.	.	.	2087	.
<i>Pithecellobium jiringa</i> (Jack) Prain ex King	Tr	2138	.	.	.	.	.	.	.
<i>Pithecellobium umbellatum</i> (Vahl) Bth.		.	.	.	.	1145	.	2100	.
<i>Pongamia pinnata</i> (L.) Pierre	Tr	1	.	.	.	2369	.	2007	.
						2360	.	.	.
<i>Saraca indica</i> L.	Sh	90	.	.	.	.	.	.	.
<i>Sophora tomentosa</i> L.	Sh	28	.	.	.	1150	.	.	.
<i>Spatholobus</i> sp.	Ln	.	.	.	.	.	.	2104?	.
<i>Spatholobus ferrugineus</i> (Zoll.) Bth.	Ln	.	.	.	.	.	636	2042	.
							641		

Species	GF	Cr	St	An	Rk	Rb	Pc	Pn	Sk
<i>Spatholobus ferrugineus</i> (Zoll.) Bth.	Ln	.	.	.	.	.	682	.	.
<i>Tamarindus indica</i> L. (Planted)	Tr	98	.	.	.	.	.	.	.
<i>Vigna marina</i> (Burm. f.) Merr.	Ln	32	.	.	2381	1138	.	.	.
					549	1143			
						1135			
Liliaceae									
<i>Smilax zeylanica</i> L.	Ln	2111	.	.	.	2336	.	.	.
						1041			
Loranthaceae									
<i>Dendrophthoe pentandra</i> (L.) Miq.	Pr	2156	.	.	.	.	.	2014	.
<i>Scurrula atropurpurea</i> (Bl.) Dans.	Pr	2142	.	.	.	.	.	.	.
Lythraceae									
<i>Pemphis acidula</i> J. R. & G. Forst.	Sh	39	.	.	.	.	.	2011	.
Malvaceae									
<i>Hibiscus tiliaceus</i> L.	Sh	++	169	223	532	1128	++	.	.
						1075B			
<i>Abutilon</i> sp.	Sh	.	.	.	.	.	.	2015B	.
<i>Malvastrum</i> sp. ?	Sh	42B	.	.	.	.	.	.	.
<i>Sida acuta</i> Burm. f.	Sh	.	.	.	.	.	.	.	254
<i>Sida rhombifolia</i> L.	Sh	2152	.	.	.	.	.	.	.
<i>Urena lobata</i> L.	Sh	77	.	.	.	.	.	.	.
Melastomataceae									
<i>Allomorpha</i> sp.	Sh	2125	.	.	.	.	.	.	.
<i>Clidemia hirta</i> (L.) D. Don	Sh	.	.	.	.	1027	.	.	.
						1065B			
						1159B			
<i>Medinilla eximia</i>	Sh	.	.	.	.	1086	.	.	.
<i>Melastoma affine</i> D. Don	Sh	66	125	203	.	.	.	.	.
Meliaceae									
<i>Aglaiia</i> sp. 1	Tr	.	.	.	.	.	.	2020	.
<i>Aglaiia</i> sp. 2	Tr	.	.	.	.	.	620?	.	.
<i>Aglaiia</i> sp. 3	Sh	69?	.	.	.	.	.	.	.
<i>Aglaiia argentea</i> Bl.	Tr	.	.	.	.	.	2306	.	.
							614?		
							637		
<i>Aglaiia dooko</i> Griff.	Tr	.	.	.	.	.	2305	2031	.
							634	2063	
<i>Aglaiia latifolia</i> Miq.	Tr	.	.	.	.	.	640	.	.
<i>Aglaiia odoratissima</i> Bl.	Tr	.	.	.	.	.	631?	2051	.
							639		
<i>Dysoxylum arborescens</i> (Bl.) Miq.	Tr	.	.	.	.	.	611?	2001?	.
								2075?	
<i>Dysoxylum caulostachyum</i> Miq.	Tr	.	170	.	++	1008	628	.	.
			141				671		
<i>Dysoxylum gaudichaudianum</i> (Juss.) Miq.	Tr	.	.	.	.	.	.	2068	.
<i>Swietenia mahagoni</i> (L.) Jacq.	Tr	2176B	.	.	.	.	.	.	.
		14							
<i>Xylocarpus granatum</i> Koen.	Tr	.	.	.	.	.	.	2012	.
								2076?	
Menispermaceae									
<i>Cyclea barbata</i> Miers	Ln	.	.	.	531	.	.	.	.

Species	GF	Cr	St	An	Rk	Rb	Pc	Pn	Sk
<i>Pericampylus glaucus</i> (Lmk) Merr.	Ln	2144	.	.	.	.	.	.	.
Moraceae									
<i>Artocarpus elasticus</i> Reinw. ex Bl.	Tr	.	163	.	564	2356	.	.	.
<i>Artocarpus heterophyllus</i> Lmk.	Tr	2168	.	.	.	.	.	.	.
<i>Artocarpus integer</i> (Thunb.) Merr.	Tr	70	.	.	.	.	.	.	.
		2145							
<i>Ficus</i> sp. 1		.	.	.	.	2339	.	.	.
<i>Ficus ampelas</i> Burm. f.	Sh	.	173	.	2386	2342	.	.	.
			151		514				
<i>Ficus asperiuscula</i> Kunth & Bouche'	Tr	.	.	.	.	.	632	2070	.
<i>Ficus callosa</i> Willd.	Tr	.	2400	.	.	.	.	.	.
<i>Ficus fistulosa</i> Reinw. ex Bl.	Tr	82	134	.	516	1053	.	.	.
						2340			
						1052B			
						1152			
						2346			
						2353			
<i>Ficus fulva</i> Reinw. ex Bl.	Sh	.	107	205	517	1126	.	.	.
						1001			
<i>Ficus glomerata</i> Roxb.	Tr	2154?	.	.	.	1158	.	2107	.
<i>Ficus hispida</i> L. f.	Sh	.	105	.	.	.	.	.	.
<i>Ficus lepicarpa</i> Bl.	Sh	.	.	.	542	2341	.	.	.
<i>Ficus montana</i> Burm. f.	Sh	.	.	.	.	2323	.	.	.
<i>Ficus pubinervis</i> Bl.	Tr	.	104	.	559	2312	646	2099	.
						1051			
						2348			
<i>Ficus pumila</i> L.	Ln	65	.	.	.	.	.	.	.
<i>Ficus punctata</i> Thunb.	Ln	2120	.	.	.	.	.	.	.
<i>Ficus ribes</i> Reinw. ex Bl.	Tr	.	.	.	.	1058	.	.	.
						2347			
						1100			
<i>Ficus septica</i> Burm. f.	Tr	24	108	214	.	1079	609	.	.
						1127B			
<i>Ficus sumatrana</i> Miq.	Tr	.	2401	.	.	.	.	2079	.
<i>Ficus superba</i> Miq.	Tr	.	.	.	.	.	.	2060	.
<i>Ficus tinctoria</i>									
L. f. ssp. <i>gibbosa</i> (Bl.) Corner	Ep	.	114B	.	2387	2357	.	.	.
			162		574				
					506				
<i>Ficus variegata</i> Bl.	Tr	.	.	.	505	1005	.	.	.
<i>Poikilospermum</i> sp.	Tr	.	.	.	.	2339B	.	.	.
Musaceae									
<i>Musa</i> cf. <i>acuminata</i> Colla	Sh	.	.	.	.	1155	.	.	.
Myrsinaceae									
<i>Ardisia humilis</i> Vahl	Sh	2159	.	.	.	1038	638	2003	.
		5							
		50							
<i>Ardisia lanceolata</i> Roxb.	Tr	.	.	.	.	.	.	2066	.
Myrtaceae									
<i>Psidium guajava</i> L.	Sh	55	.	.	.	.	.	.	.
<i>Syzygium</i> (= <i>Eugenia</i>) sp.	Sh	73	.	.	.	.	613?	.	.

Species	GF	Cr	St	An	Rk	Rb	Pc	Pn	Sk
<i>Syzygium lineatum</i> (DC.) Merr. & Perry	Sh	2113	.	.	.	.	.	.	.
<i>Syzygium</i>									
<i>cf. lineatum</i> (DC.) Merr. & Perry	Tr	.	.	.	.	.	606	.	.
<i>Syzygium malaccense</i> (L.) Merr. & Perry	Tr	.	.	.	.	.	619	.	.
<i>Syzygium polyanthum</i> (Wight) Walp.	Sh	.	.	.	2393	1078	600	2108	.
					2394	2328	652		
							653		
<i>Syzygium zollingerianum</i> (Miq.) Amsh.	Tr	.	.	.	.	.	2301	2052	.
								2082	.
Myristicaceae									
<i>Knema</i> sp.		.	.	.	.	.	680B	.	.
Nyctaginaceae									
<i>Pisonia umbelliflora</i>									
(J. R. & G. Forst.) Seem.	Tr	.	.	.	.	.	610?	.	.
							649		
							2308		
Olacaceae									
<i>Strombosia javanica</i> Bl.	Tr	.	.	.	.	.	.	2064	.
								2030	.
Oleaceae									
<i>Jasminum sambac</i> (L.) W. Ait.	Ln	300	.	.	.	.	.	.	.
Onagraceae									
<i>Jussiaea repens</i> L.	He	302	.	.	.	.	.	.	.
Orchidaceae									
<i>Acriopsis javanica</i> Reinw.	Ep	.	.	.	.	2343	.	.	.
<i>Agrostophyllum denbergeri</i> J. J. S.	Ep	.	.	.	.	1163	.	.	.
<i>Appendicula reflexa</i> Bl.	Ep	.	.	.	.	1165	.	.	.
<i>Appendicula undulata</i> Bl.	Ep	2128	.	.	.	.	.	.	.
<i>Arundina speciosa</i> Bl.	He	.	129	.	.	.	.	.	.
<i>Calanthe angustifolia</i> (Bl.) Lindl.	He	.	.	.	522	.	.	.	.
<i>Coelogyne longifolia</i> Lindl.	He	.	.	.	.	1097	.	.	.
<i>Dendrobium</i> sp.	Ep	2127	.	.	.	.	.	.	.
<i>Dendrobium acuminatissimum</i> (Bl.) Lindl.	Ep	.	.	.	.	1176B	.	.	.
						2338			
<i>Dendrobium crumenatum</i> Swartz	Ep	18	137	.	.	1033	.	.	.
<i>Dendrobium mutabile</i> (Bl.) Lindl.	Ep	.	.	.	.	1046	.	.	.
<i>Dendrobium secundum</i> (Bl.) Lindl.	Ep	.	.	.	.	1168	.	.	.
<i>Dendrobium serra</i> Lindl.	Ep	.	.	.	.	.	669	.	.
<i>Eria annulata</i> (Bl.) Bl.	Ep	.	.	.	.	1164	.	.	.
<i>Eulophia graminea</i>	He	.	189B	227	.	.	.	.	.
<i>Eulophia squalida</i> Lindl.	He	.	.	.	.	2322	.	.	.
						1161			
<i>Goedorum purpureum</i> R. Br.	He	.	145	.	.	.	.	.	.
<i>Goodyera cf. repens</i>	Ep	.	.	.	.	1174	.	.	.
<i>Liparis cf. viridiflora</i> (Bl.) Lindl.	Ep	2132	.	.	.	.	.	.	.
<i>Nervilia aragoana</i> Gaudich.	He	.	119	.	.	1042	.	.	.
			168						
<i>Spathoglottis plicata</i> Bl.	He	.	122	.	.	.	.	.	.
			196						

Species	GF	Cr	St	An	Rk	Rb	Pc	Pn	Sk
<i>Guettarda speciosa</i> L.	Tr	4	106	.	537	2319	.	.	.
						1123			
<i>Morinda citrifolia</i> L.	Tr	12	135	230	550	++	.	.	.
<i>Mussaenda frondosa</i> L.	Sh	.	.	.	.	2321	.	.	.
<i>Mycetia javanica</i> (Bl.) Reinw. ex Korth.	Sh	.	.	.	.	1175	.	.	.
<i>Neonauclea calycina</i> (Bartl. ex DC.) Merr.	Tr	2123	140	233	500	1048	.	.	.
		33				2332			
<i>Psychotria</i> sp.	Sh	88	.	.	.	.	.	.	.
Rubiaceae sp.		80	.	.	.	.	.	.	.
<i>Tarenna dasyphylla</i> (Miq.) Valet. ex Steen.	Sh	.	.	.	.	1036	.	.	.
<i>Tarenna fragrans</i> (Bl.) K. & V.	Sh	.	.	.	.	1007	.	.	.
						1076			
						2325			
<i>Timonius compressicaulis</i> (Miq.) Boerl.	Tr	.	156	206	501	1122	.	.	.
			2397			2315			
			124						
			138						
<i>Uncaria acida</i> (Hunter) Roxb.	Ln	.	.	.	.	.	.	2057	.
Rutaceae									
<i>Evodia latifolia</i> DC.	Sh	2171	.	.	.	.	.	.	.
		71							
<i>Fagara</i> sp.	Sh	.	.	.	.	.	624?	.	.
Sapindaceae									
<i>Allophylus cobbe</i> (L.) Raeusch.	Sh	78	198	.	.	.	625	.	.
		19B	2398						
<i>Aphania sinegalensis</i> Bl.	Tr	.	.	.	.	.	.	2062	.
								2004	
<i>Dodonaea viscosa</i> Jacq.	Sh	47	2404	.	.	.	.	.	.
<i>Erioglossum rubiginosum</i> (Roxb.) Bl.	Tr	.	.	.	.	.	.	2022	.
<i>Euphoria</i> sp.	Tr	.	.	.	.	.	.	2033	.
<i>Ganophyllum falcatum</i> Bl.	Tr	.	.	.	.	.	601	.	.
<i>Lepisanthes blumeana</i> K. & V.	Tr	.	.	.	.	.	.	2105	.
Sapotaceae									
<i>Madhuca</i> sp.	Tr	.	.	.	.	.	686	.	.
<i>Planchonella duclitan</i> (Blanco) Bakh. f.	Tr	.	.	.	510	.	.	.	.
Scrophulariaceae									
<i>Scrophularia lindernia</i>	He	2130	.	.	.	.	.	.	.
Solanaceae									
<i>Capsicum frutescens</i> L.	He	.	.	.	.	1084	.	.	.
<i>Solanum melongena</i> L.	Sh	.	.	.	.	.	.	.	262
<i>Solanum torvum</i> Swartz	He	2124	.	.	.	.	.	.	.
Sterculiaceae									
<i>Heritiera littoralis</i> Dryand. ex W. Ait.	Tr	.	.	.	.	.	.	2049	.
<i>Kleinhovia hospita</i> L.	Tr	.	.	.	.	.	650	.	.
<i>Melochia umbellata</i> (Houtt.) Stapf	Sh	.	2405	232	536	2362	.	.	.
<i>Pterospermum diversifolium</i> Bl.	Tr	.	.	.	.	.	670?	.	.
							687?		
							626		
<i>Pterospermum javanicum</i> Jungh.	Tr	.	.	.	.	.	2307	.	.

Species	GF	Cr	St	An	Rk	Rb	Pc	Pn	Sk
Sterculiaceae sp.		.	.	.	.	.	672? 659	.	.
<i>Sterculia foetida</i> L.	Tr	.	201	.	.	.	.	2071?	.
<i>Sterculia macrophylla</i> Vent.	Tr	.	.	.	.	.	.	2032	.
<i>Sterculia urceolata</i> J. E. Smith	Tr	.	.	.	.	.	.	2061 2073	.
Taccaceae									
<i>Tacca leontopetaloides</i> (L.) O. K.	He	.	2395	.	.	.	.	.	.
<i>Tacca palmata</i> Bl.	He	.	.	.	.	2318 1137	.	.	.
Tiliaceae									
<i>Grewia paniculata</i> Roxb. ex DC.		2146	.	.	.	.	.	.	.
<i>Triumfetta subpalmata</i>		42	.	.	.	.	.	.	.
Turneraceae									
<i>Turnera ulmifolia</i> L.	He	52	.	.	.	.	.	.	.
Urticaceae									
<i>Leucosyke capitellata</i> (Poir.) Wedd.	Sh	.	154 199	.	541 518	1050 2355	.	.	.
<i>Pipturus argentes</i> (Forst. f.) Wedd.	Sh	.	182 155	.	.	1151	.	.	.
<i>Villebrunea rubescens</i> (Bl.) Bl.	Sh	.	.	.	.	1156B 1102 1949 1173	.	2039	.
Verbenaceae									
<i>Clerodendron</i> sp.	Sh	.	.	.	.	.	.	2074	.
<i>Clerodendron calamitosum</i> L.	Sh	2162	.	.	.	.	.	.	.
<i>Clerodendron inerme</i> (L.) Gaertn.	Sh	79 2153	.	.	.	.	.	.	.
<i>Lantana camara</i> L.	Sh	25	146B	.	544	++	.	.	.
<i>Premna corymbosa</i> (Burm. f.) Rottl. & Willd.	Sh	2 74	.	237	535	1124	.	.	.
<i>Stachytarpheta jamaicensis</i> (L.) Vahl	He	16	.	.	.	.	.	.	.
<i>Vitex pubescens</i> Vahl	Tr	.	.	.	.	.	.	2090	.
<i>Vitex trifolia</i> L.	Sh	48	.	.	.	.	.	.	.
Unknown		2147 2172	.	.	.	.	.	.	.
Violaceae									
<i>Rinorea lanceolata</i> (Wall.) O. K.	Tr	.	.	.	.	.	2304 656 647	.	.
Vitaceae									
<i>Ampelocissus arachnoidea</i>	Ln	.	.	.	.	.	.	2018?	.
<i>Cayratia trifolia</i> (L.) Domin	Ln	.	148	.	533 556	1029	.	2058 2157	.
<i>Leea sambucina</i> (L.) Willd.	Sh	.	150	.	525 569	1024 1081	.	++	.
<i>Tetrastigma lanceolarium</i> (Roxb.) Planch.	Ln	.	174	.	.	.	.	.	.
Zingiberaceae									
<i>Costus speciosus</i> (Koen.) J. E. Smith	He	.	.	.	.	1004	.	.	.

Species	GF	Cr	St	An	Rk	Rb	Pc	Pn	Sk
						2352			
<i>Languas galanga</i> (L.) Stuntz	He	.	.	.	.	.	.	2101	.

Pteridophyta

Species	GF	Cr	St	An	Rk	Rb	Pc	Pn	Sk
Angiopteridaceae									
<i>Angiopteris palmiformis</i> (Cav.) C. Chr.	He	.	.	.	.	1035	.	.	.
Aspleniaceae									
<i>Asplenium macrophyllum</i> Sw.	Ep	.	.	.	.	1020	.	.	.
						1026			
<i>Asplenium nidus</i> L.	Ep	.	.	.	.	1190	.	.	.
						1089			
<i>Asplenium thunbergii</i> Kunze	Ep	.	.	.	.	1095	.	.	.
Athyriaceae									
<i>Diplazium polypodioides</i> Blume	He	.	.	.	.	1040	.	.	.
Blechnaceae									
<i>Stenochlaena palustris</i> (Burm. f.) Bedd.	Ep	.	109	.	519	1091	.	.	.
<i>Taenitis blechnoides</i>	Ep	87	.	.	.	.	.	.	.
Cyatheaceae									
<i>Cyathea</i> sp. 1	Tr	.	.	.	.	1062	.	.	.
<i>Cyathea</i> sp. 2	Tr	.	.	.	.	1083	.	.	.
Davalliaceae									
<i>Davallia solida</i> (Forst.) Sw.	Ep	.	.	.	.	1031	.	.	.
<i>Humata heterophylla</i> (Smith) Desv.	Ep	.	.	.	.	1093	.	.	.
						1166			
<i>Humata repens</i> (L. f.) Diels	Ep	.	.	.	.	1171	.	.	.
<i>Scyphularia pentaphylla</i> F'ee	Ep	.	.	.	.	1172	.	.	.
Dennstaedtiaceae									
<i>Microlepia speluncae</i>									
L. var. <i>pubescens</i> (Hook.) Sledge	He	2115	165	.	.	.	.	.	.
<i>Pteridium aquilinum</i>									
(L.) Kuhn var. <i>wrightianum</i>	He	.	.	.	.	.	.	.	260
Dryopteridaceae									
<i>Ctenitopsis dissecta</i> (Forst.) Ching	He	.	.	.	561	1067	.	.	.
						1025			
<i>Pleocnemia conjugata</i> (Bl.) Presl	.	.	.	.	573	1023	.	.	.
<i>Pleocnemia irregularis</i> (Presl) Holtt.	.	.	.	.	.	1090	.	.	.
<i>Pteridrys syrmatica</i>									
(Willd.) C. Chr. et Ching	.	.	.	.	.	.	.	2046	.
<i>Stenosemia aurita</i> (Sw.) Presl	.	2150	177	.	.	.	.	.	.
<i>Tectaria herpetocaulos</i> Holtt.	He	.	.	.	570	1073	.	.	.
						2354			
						1069			
<i>Tectaria melanocaulis</i> (Bl.) Copel.	He	.	.	.	.	1047	.	.	.
						2344			
<i>Tectaria</i> sp. (<i>T. herpetocaulos</i> ?)	He	.	.	.	.	1068	.	.	.
Gleicheniaceae									
<i>Dicranopteris curranii</i> Copel.	He	.	.	.	.	1167	.	.	.
<i>Dicranopteris linearis</i>									
(Burm. f.) Underw.	He	.	123	.	.	.	.	.	.

Species	GF	Cr	St	An	Rk	Rb	Pc	Pn	Sk
Grammitidaceae									
<i>Prosaptia alata</i> (Bl.) Christ		.	.	.	.	1182	.	.	.
						1096			
Hymenophyllaceae									
<i>Crepidopteris humilis</i> (Forst.) Copel.	He	.	.	.	.	1070	.	.	.
<i>Trichomanes bipunctatum</i>	Ep	.	.	.	.	1177	.	.	.
						1178			
<i>Trichomanes humile</i>	Ep	.	.	.	.	1179	.	.	.
<i>Vandenboschia radicans</i> (Sw.) Copel.	He	2148	.	.	.	.	.	.	.
Lomariopsidaceae									
<i>Bolbitis appendiculata</i> (Willd.) K. Iwats.		.	.	.	.	.	.	2027	.
Lycopodiaceae									
<i>Lycopodium carinatum</i> Desv.	He	.	.	.	.	2329	.	.	.
						1044			
Oleandraceae									
<i>Nephrolepis biserrata</i> (Sw.) Schott.	He	.	191	.	524	.	.	.	.
<i>Nephrolepis cordifolia</i> (L.) Presl	He	.	.	208?	.	.	.	.	.
<i>Nephrolepis hirsutula</i> (Forst.) Presl	He	59	110	213	571	.	.	.	.
					572				
Perkeriaceae									
<i>Pityrogramma calomelanos</i> (L.) Link	Ep	2131	131	212	530	1148	.	.	.
				210					
Polypodiaceae									
<i>Crypsinus trilobus</i> (Houtt.) C. Chr.		.	.	.	.	1170	.	.	.
						1120			
<i>Drymoglossum piloselloides</i> (L.) Presl	Ep	50	.	.	2385	1032	.	.	.
<i>Drynaria quercifolia</i> (L.) J. Smith	Ep	.	.	.	546	2327	.	.	.
						1002			
<i>Drynaria</i> sp.	Ep	.	130	.	.	.	.	.	.
<i>Microsorium linguiforme</i> (Mett.) Copel.	Ep	.	.	.	.	1092	.	.	.
<i>Microsorium pteropus</i> (Bl.) Copel.	Ep	2149	.	.	.	.	.	.	.
<i>Microsorium rubidum</i> (Kunze) Copel.	Ep	.	.	.	.	2345	.	.	.
<i>Microsorium scolopendria</i> (Burm. f.) Copel.	Ep	.	195	.	.	1015	.	.	.
			132			2317			
<i>Microsorium</i> sp.	Ep	.	.	.	.	1085	.	.	.
<i>Paragramma longifolia</i> (Bl.) Moore		.	144?	.	.	.	.	.	.
<i>Pyrrisia adnascens</i> (Sw.) Ching	Ep	17	.	.	565	1034	.	.	.
<i>Pyrrisia floccigera</i> (Bl.) Ching	Ep	.	.	.	.	.	.	.	263
<i>Weatherbya accedens</i> Copel.		.	.	.	.	1160	.	.	.
Psilotaceae									
<i>Psilotum nudum</i> (L.) Beauv.	He	.	127	.	.	.	.	.	.
Pteridaceae									
<i>Pteris pacifica</i> Hieron.	He	.	.	.	.	1140	.	.	.
						1010			
<i>Pteris quadriaurita</i> Retz.	He	.	158	.	.	.	.	.	.
<i>Pteris</i> sp.	He	.	.	.	.	.	617	.	.
<i>Pteris tripartita</i> Sw.	He	.	.	.	.	.	618	.	.
<i>Pteris vittata</i> L.	He	.	.	.	.	.	.	2055	.

Species	GF	Cr	St	An	Rk	Rb	Pc	Pn	Sk
Schizaeaceae									
<i>Lygodium circinatum</i> (Burm. f.) Sw.	Ln	95	194	.	.	1003	658	.	.
<i>Lygodium flexuosum</i> (L.) Sw.	Ln	.	.	231	.	.	.	.	.
<i>Schizaea dichotoma</i> (L.) Smith	He	.	126	.	.	.	.	.	.
Selaginellaceae									
<i>Selaginella helferi</i> Warb. vel affinis	Ln	.	.	.	.	1045	.	.	.
<i>Selaginella wildenowii</i> (Desv. ex Poir) Baker	Ln	83	.	.	.	.	.	.	.
Thelypteridaceae									
<i>Macrothelypteris polypodioides</i> (Hook.) Ching	He	.	.	.	2392	1139	.	.	.
<i>Thelypteris megaphylla</i> (Mett.) K. Iwats.	He	.	.	.	.	1061	.	.	.
<i>Thelypteris sumatrana</i> (v. A. v. R.) K. Iwats.	He	.	159	.	515	.	.	.	.
			172						
Vittariaceae									
<i>Antrophyum callifolium</i> Bl.	Ep	.	.	.	.	1094	.	.	.
						1066			
<i>Vittaria angustifolia</i> Bl.	Ep	.	.	.	523	.	.	.	.
<i>Vittaria ensiformis</i> Sw.	Ep	.	.	.	.	1019	.	.	.
Unidentified			27	.	.	.	.	.	.

Bryophyta

Species	An	Rk	Rb
Hepaticae			
<i>Lejeunea</i> sp.	.	.	1111
			1113
			1116
			1119
			1189*
			1191**
			1193***
<i>Lopholejeunea</i> sp.	.	.	1111
			1116
<i>Mastigophora</i> sp.	.	.	1185
<i>Megaceros</i> sp.	.	.	1109
<i>Metzgeria</i> sp.	.	.	1189*
			1191**
			1193***
<i>Riccardia</i> sp.	.	.	1114
Musci			
<i>Aerobryopsis wallichii</i> (Brid.) Fleisch.	.	.	1120
<i>Calymperes</i> sp.			1112
			240
			241
			242
<i>Cyclodictyon blumeinum</i> C. Muell.	.	.	1115
<i>Ectropothecium</i> sp.	.	.	1186
			1188
			1189*

Species	An	Rk	Rb
<i>Fissidens</i> sp.	.	.	1193***
<i>Floribundaria</i> sp.	.	.	1112
<i>Hypnodendron</i> sp.	.	.	1190
<i>Isopterygium</i> sp.	.	575	1187
<i>Leucophanes</i> sp.	.	.	1119
<i>Orthorrhynchium philippinense</i> (Hampe) C. Muell.	.	.	1117
<i>Pelekium</i> sp.	.	.	1108
<i>Taxithelium nepalense</i> (Schwaegr.) Broth.	.	575	1110
<i>Vesicularia reticulata</i> (Dozy et Molk.) Broth.	.	.	1192

*, **, ***. These marks mean that one sample contains plural species.

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