

Expedition of Kagoshima University into Papua New Guinea

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This is an initial report from an expedition of Kagoshima University into Papua New Guinea (PNG) from Oct. 16 to Dec. 6, 1979. The expedition and research was greatly aided by the Grant-in-Aid for Overseas Research (No. 404146) from the Ministry of Education and Culture given to Prof. Dr. Kenichi Arisumi, the leader of the present project, "Researches for Malaysian Rhododendrons."

Members of the expedition and their itinerary are as shown below.

MEMBERS

Dr. Hideo TAGAWA, Professor of plant ecology, College of Liberal Arts, Kagoshima University,

Dr. Kenji UESATO, Assist. Professor of ornamental horticulture, Faculty of Agriculture, Ryukyu University, Okinawa,

Mr. Yusuke SAKATA, Assist. in the Laboratory of Ornamental Horticulture, Faculty of Agriculture, Kagoshima University,

Mr. Tadamasa KUNIMOTO, Research Officer, Oita Research Station for Agricultural Utilization of Hotspring, Oita,

Mr. Takayuki TANAKA, Research Student in Faculty of Agriculture, Kyushu University, Fukuoka,

Mrs. Andr  e MILLAR, Director of National Capital Botanic Gardens, Department of Primary Industries, Port Moresby.

ITINERARY

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| Oct. 16 | Five Japanese members left Kagoshima Air Port at 14:27 by PX 012, and landed at Jackson Air Port at 21:42. Stayed in Port Moresby. |
| 17 | Visited Japanese Embassy and Botanic Gardens. Stayed in Port Moresby. |
| 18 | Visited Botanic Gardens. Stayed in Port Moresby. |

* 1 田 川 日出夫 (鹿児島大学教授教養部)

* 2 上 里 健 次 (琉球大学助教授農学部)

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* 4 國 本 忠 正 (大分県温泉熱利用農業研究所技師)

* 5 田 中 孝 幸 (九州大学大学院農学研究科博士課程学生)

- Oct. 19 Left Port Moresby by GV 630 for Wapenamanda, and arrived at Mt. Kaiap by cars. Stayed on Mt. Kaiap.
- 20 General collection of plants in the forests and on the roadside. Stayed on Mt. Kaiap.
- 21 Discussed the survey method for describing the flowering features of rhododendrons in the grasslands. Stayed on Mt. Kaiap.
- 22 Survey in the *Miscanthus* grassland (Quadrat no. 1). Stayed on Mt. Kaiap.
- 23 Small excursion around Lake Ivae, Laiagam, Sirunki where Quadrat no. 2 was placed, Tanbitanis and Kakas. Stayed on Mt. Kaiap.
- 24 Quadrat no. 3 was placed at Sirunki. Stayed on Mt. Kaiap.
- 25 Surveys on the northeastern slope of Mt. Kaiap and on the garden. Stayed on Mt. Kaiap.
- 26 Quadrat no. 4 on the roadside and 5 in *Nothofagus* forest. Stayed on Mt. Kaiap.
- 27 Tagawa, Sakata and Kunimoto surveyed rhododendrons in the grassland on the slope, and Uesato and Tanaka collected the epiphytic rhododendrons. Stayed on Mt. Kaiap.
- 28 Uesato and Kunimoto went to Laiagam. Stayed on Mt. Kaiap.
- 29 Left Kaiap by cars for Mt. Hagen. Stayed at Mt. Hagen.
- 30 Left Mt. Hagen by cars for Baiyer River. Walked about in the sanctuary for bird of paradise. Stayed at Baiyer River.
- 31 Survey was made in the lower montane rain forest. Stayed at Baiyer River.
- Nov. 1 Survey in the gallery forest. Stayed at Baiyer River.
- 2 Left Baiyer River by cars and arrived at Mt. Hagen. Stayed at Mt. Hagen.
- 3 Left Mt. Hagen by cars and arrived at Goroka. Stayed at Goroka.
- 4 Free time all day. Stayed at Goroka.
- 5 Sent plant cuttings by aircargo to Port Moresby. Quadrat no. 6 in the abandoned garden. Stayed at Goroka.
- 6 Excursion to Lufa, Mt. Michael and Furigano. Stayed at Goroka.
- 7 Excursion to Kainantu. Tagawa was ill in bed. Stayed at Goroka.
- 8 Excursion to Marafunga. Stayed at Goroka.
- 9 Survey in *Castanopsis* forest at Dauro Pass. Sakata prepared plant cuttings to be sent. Stayed at Goroka.
- 10 Sent plant cuttings to Port Moresby by air cargo. Sakata and Kunimoto left Goroka by PX 871 for Port Moresby. Stayed at Goroka (Tagawa, Uesato and Tanaka) and in Port Moresby (Sakata and Kunimoto).
- 11 Tagawa party had free time all day, stayed at Goroka. Sakata party stayed in Port Moresby.
- 12 Tagawa party left Goroka by car and arrived at Lae through Kainantu, Kassam Pass, Mahkam terrace. Stayed at Lae. Sakata party went to the Botanic Garden to arrange the plant cuttings and stayed in Port Moresby.
- 13 Tagawa party visited National Herbarium to fix the schedule. Excursion to Nazab grassland, stayed at Lae. Sakata party visited Botanic Gardens and stayed in Port Moresby.
- 14 Tagawa party left Lae by car for Wau, and visited Wau Ecology Institute. Stayed at Wau. Sakata party sent plant cuttings to Japan by air cargo,

- and stayed in Port Moresby.
- Nov. 15 Tagawa party made a survey in *Nothofagus* mossy forest, and collected several epiphytic rhododendrons. Stayed at Wau. Kunimoto left Port Moresby for Japan by PX 011. Sakata stayed in Port Moresby.
- 16 Tagawa party had small excursion to Aseki, and stayed at Wau. Prof. Arisumi arrived at Port Moresby by PX 012 from Japan. Arisumi and Sakata stayed in Port Moresby.
- 17 Tagawa party left Wau for a summit of Owen Stanley Mountains along Bulldog Road on foot. Camped. Arisumi party had free time all day, and stayed in Port Moresby.
- 18 Tagawa party placed Quadrats no. 8 and 9 in land slide areas. Camped. Arisumi party had excursion in savanna forest near Port Moresby, and stayed in Port Moresby.
- 19 Tagawa party walked up to 2810m in altitude and camped. Arisumi Visited Japanese Embassy and Botanic Gardens to see Mrs. Andrée Millar. Stayed in Port Moresby.
- 20 Uesato and Tanaka collected plants, and Tagawa arranged plants and materials to be sent to Japan. Camped. Arisumi party visited Japanese Embassy. Stayed in Port Moresby.
- 21 Tagawa party left the camping place for Wau, and stayed at Wau. Arisumi party left Port Moresby for Sydney by PX 001, and stayed in Sydney.
- 22 Quadrat no. 10 in the grassland at Kaisinik. Tagawa gave a talk on the vegetation of Japan in a seminar held at Wau Ecology Institute. Stayed at Wau.
- 23 Sent plant cuttings to Port Moresby by air cargo. Visited Bulolo Entomology Institute. Stayed at Wau.
- 24 Left Wau for Lae by car. Stayed at Lae.
- 25 Arranged plants, data, camping tools. Free time. Stayed at Lae.
- 26 Visited National Herbarium at Lae to arrange the plant specimens and to make herbarium. Stayed at Lae.
- 27 Identification in Herbarium. Stayed at Lae.
- 28 Excursion to Buso and Buop to survey lowland rain forest. Stayed at Lae.
- 29 Excursion to Wagan to see tropical mangrove forest. Stayed at Lae.
- 30 Small excursion to Mahkam terrace, and identification in Herbarium. Stayed at Lae.
- Dec. 1 Left Lae for Port Moresby by PX 853. Stayed in Port Moresby.
- 2 Excursion to Sogeri. Arrangement of live plants, dry plants and parcels. Stayed in Port Moresby.
- 3 Visited Japanese Embassy and Botanic Gardens to take procedure necessary to export herbarium and live plants. Stayed in Port Moresby.
- 4 Excursion to Kapakapa to see savanna forest near seashore. Visit the Ministry of Land Use and Nature Resources to receive maps.
- 5 Received the inspection by quarantine. Stayed the last night in Port Moresby.
- 6 Left Port Moresby at 11:25 by PX 011, and arrived at Kagoshima Air Port at 20:05 via Naha.

Our research team for Malaysian Rhododendrons obtained the hearty co-operation of Mrs. Andrée MILLAR in PNG, who kindly gave us a clever suggestion and plan for our researches in the field and gave us every facility. Mr. Michael GALORE, Director of National Herbarium at Lae offered every facility for us and gave us a chance to identify the collected plants. Mr. Karl KERENGA, Junior Botanist at the Herbarium, helped us while we were at Lae and Wau. Mr. Dike KALI, Chief Officer, Mr. Ataia ANDREW, Officer, and the staff of the Provincial Office of Forestry, EHP, gave us precise information on rhododendrons and guided us every day in Goroka. Dr. J. L. GRESSITT, Director, and Dr. Allen ALLISON, Vice-director of Wau Ecology Institute, kindly offered lodge facilities for us and showed us a good field to collect rhododendrons. Prof. T. SHIN helped us to identify bryophyte species. Farmers groups who were led by Mr. Peter PIAOEN helped us in transplantation programme of rhododendrons which are indigenous to Japan and hybrids. Our research in PNG would not have succeeded but for their invaluable help.

We also appreciate the assistance of Mr. Koichiro YAMAGUCHI, Japanese Ambassador in PNG and the staff of the Embassy who helped us in collecting plants, and for Dr. Eisuke MATSUO, Assist. Professor, and Miss Kiyoko TOKUNAGA, Secretary in the Laboratory of Ornamental Horticulture who helped us in troublesome business arrangements.

LIST OF PLANTS COLLECTED FROM PAPUA NEW GUINEA IN 1979

Compiled by H. TAGAWA

Coll. no.	Species name	Date	Locality	Habitat	Form
1	<i>Eurya tigang</i> Sch. et Laut.	Oct. 20	Mt. Kaiap	Secondary	Shrub
			Enga Prov.	<i>Castanopsis</i>	
2	<i>Eurya dolichostyla</i> Barker		2500 m alt.	forest	Shrub
3	<i>Weimannia</i>			Forest-grass-	Arbour
4	<i>Pteridium aquilinum</i>			land junction	Herb
5	<i>Piper bolanicum</i> Chew				Shrub
6	<i>Lithocarpus rufovillosus</i> (Markgr.) Rehd.				Arbour
7	<i>Lycopodium</i>				Herb
8	<i>Gleichenia</i>				Herb
9	<i>Dimorphantha</i>				Shrub, Climber
10	<i>Nastus</i>				Climber
11	<i>Carpodetus</i>				Shrub
12	<i>Planchonella</i>				Arbour
13	<i>Miscanthus floridulus</i> Warb.				Herb
14	<i>Euodia</i>				Arbour
15					Herb
16	<i>Olearia</i>				Shrub

Coll. no.	Species name	Date	Locality	Habitat	Form
17	Finschia	Oct. 20	Mt. Kaiap	Secondary	Shrub
18	Setaria		Enga Prov.	Castanopsis	Herb
19	Dodonaea viscosa		2500 m alt.	forest	Shrub
20	Sloanea				Arbour
21	Helichrysum bracteatum				Herb
22	Piper gibbilimbium C. DC.				Shrub
23	Freicinetia				Climber
24	Calanthe				Herb
25	Piper				Shrub
26	Piper				Shrub
27	Schefflera				Arbour
28	Ficus				Arbour
29	Phododendron				Shrub, Epiphyte
30	Rhododendron inconspicuum				
	J. J. S.				Shrub
31	Rhododendron macgregoriae F. v. M.				Shrub
32	Dendrobium				Herb, Epiphyte
33	Syzygium				Shrub
34					Arbour
35	Mediocarcha				Epiphyte
36	Bulbophyllum				Epiphyte
37	Astilbe			On the cliff	Herb
38	Lycopodium				Herb
39	Bulbophyllum			Secondary	Epiphyte
40	Glossorrhyncha			Nothofagus	Epiphyte
41	Glossorrhyncha			forest	Epiphyte
42	Dipteris			On the cliff	Herb
43	Coleus			Roadside	Herb
44	Dendrobium			Tall grassl.	Epiphyte
45	Castanopsis acuminatissima (B1.) A. DC.			Castanopsis f.	Arbour
46	Viola				Herb
47	Spathogrottis				
48	Astronea				Arbour
49	Schefflera				Arbour
50	Cyrtandra				Arbour
51	Glomerra			Castanopsis f.	Epiphyte
52	Dimorphanthera				Shrub, Climber
53	Phychotria valetonii Sohney (in ed.)				Shrub
54	Glomerra				Herb
55	Kibara				Arbour
56	Hedyotis				Shrub
57	Giulianettia				Epiphyte
58	Goodyera				Herb

Coll. no.	Species name	Date	Locality	Habitat	Form
59	<i>Rhododendron</i>	Oct. 20	Mt. Kaiap	<i>Castanopsis</i> f.	Shrub
60	<i>Phododendron stevensianum</i> Sleum. (?)		Enga Prov. 2500 m alt.		Epiphyte
61	<i>Planchonella</i>				Shrub
62	<i>Ficus</i>				Climber
63	<i>Eria</i>				Epiphyte
64	<i>Sphenomeris</i>			On the cliff	Herb
65	<i>Epiblastus basilis</i>			<i>Castanopsis</i> f.	Epiphyte
66	<i>Olearia</i>				Shrub
67	<i>Blumea</i>				Shrub
68	<i>Rapanaea</i>				Shrub
69	<i>Bulbophyllum</i>				Epiphyte
70	<i>Hymenophyllum</i>				Climber
71	<i>Begonia</i>				Herb
72	<i>Elaeocarpus</i>				Shrub
73	<i>Lycopodium</i>				Herb, Epiph.
74	<i>Bulbophyllum</i>	Oct. 20	Mt. Kaiap	<i>Castanopsis</i> f.	Epiphyte
75	<i>Alyxia</i>		Enga Prov.		Climber
76	<i>Trimenia</i>		2700 m alt.		Shrub
77	<i>Dendrobium</i>				Epiphyte
78	<i>Polypodium</i>				Herb
79	<i>Plagiogyria</i>				Herb
80	<i>Glossorrhyncha</i>				Herb
81	<i>Glossorrhyncha</i>				Herb
82	<i>Polypodium</i>				Herb
83	<i>Agrostyphyllum</i>				Herb
84	<i>Psychotria</i>				Climber
85	<i>Bulbophyllum</i>				Epiphyte
86	<i>Nothofagus grandis</i> Steen.				Arbour
87	<i>Phreatea</i>				Epiphyte
88	<i>Adiantum</i>				Herb, Epiph.
89	<i>Vaccinium</i>				Epiphyte
90	<i>Dimorphanthera</i>				Shrub
91	<i>Syzygium</i>				Shrub
92	<i>Nothofagus grandis</i> Steen.				Arbour
93	<i>Syzygium</i>				Arbour
94					Epiphyte
95	<i>Rhododendron konori</i> Becc.	Oct. 21	Mt. Kaiap	<i>Miscanthus</i>	Shrub
96	<i>Rhododendron phaeochitum</i> F. v. M.		Enga Prov. 2800 m alt.	grassland	Shrub
97	<i>Rhododendron</i>				Shrub
98	<i>Rhododendron macgregoriae</i> F. Muell.				Shrub
99	<i>Rhododendron konori</i>				Shrub
100	<i>Phododendron macgregoriae</i> F. Muell.				Shrub

Coll. no.	Species name	Date	Locality	Habitat	Form
101	<i>Rhododendron phaeochitum</i> F. v. M.				Shrub
102	<i>Rhododendron</i>				Shrub
103	<i>Rhododendron</i>				Shrub
104	<i>Poikilogyne</i>				Herb
105	<i>Hoya</i>				Climber
106	<i>Macaranga</i>	Oct. 21	Mt. Kaiap	<i>Miscanthus</i>	Arbour
107	<i>Dimorphandra</i>		2500 m alt.	grassland	Shrub, Climber
108	<i>Medinilla</i>				Herb
109	<i>Rapanaea</i>				Shrub
110	<i>Lycopodium</i>				Herb
111	<i>Nothofagus pullei</i> Steen.			Secondary	Arbour
112				forest	Herb
113	<i>Dryopteris</i>				Herb
114		Pterid.			Herb
115		Pterid.			Herb
116	<i>Lycopodium</i>				Herb
117	<i>Osmunda</i>				Herb
118		Pterid.			Herb
119	<i>Epiblastus</i>			<i>Nothofagus</i>	Epiphyte
120	<i>Dendrobium</i>			forest	Epiphyte
121	<i>Phreatia</i>				Epiphyte
122	<i>Phreatia</i>				Epiphyte
123	<i>Glossorrhyncha</i>				Epiphyte
124	<i>Malaxis</i>				Herb
125	<i>Oberonia</i>				Epiphyte
126	<i>Glomera</i>				Epiphyte
127	<i>Polypodium</i>				Epilithic
128		Pterid.			Shrub
129		Pterid.			Epiphyte
130		Pterid.			Epiphyte
131	<i>Carpodetus</i>	Oct. 22	Mt. Kaiap	<i>Miscanthus</i>	Shrub
132	<i>Dodonaea viscosa</i>		2550 m alt.	grassland	Shrub
133	<i>Polyscias</i>				Shrub
134		Pterid.			Epiphyte
135	<i>Dendrobium</i>				Epiphyte
136		Pterid.			Epiphyte
137	<i>Pleomele</i> (<i>Dracaena</i> ?)				Liane
138		Gleich.			Herb
139	<i>Bulbophyllum</i>				Epiphyte
140	<i>Psychotria dolichosepala</i> Merrill et Perry				Shrub
141	<i>Homaranthus</i>				Shrub
142	<i>Phododendron macgregoriae</i> F. Muell.				Shrub

Coll. no.	Species name	Date	Locality	Habitat	Form
143	<i>Calanthe</i>	Oct. 22	Mt. Kaiap	<i>Miscanthus</i>	Herb
144	<i>Cordyline</i>		2550 m alt.	grassland	Shrub
145	<i>Rhododendron commonae</i> Foerst.	Oct. 23	Kakas	<i>Nothofagus</i>	Shrub
146	<i>Rhododendron</i> sp.		2700 m alt.	forest	Epiphyte
147	<i>Rubus</i>		Enga Prov.	<i>Themeda</i>	Shrub
148	<i>Imperata cylindrica</i> (L.) Beauv.			grassland	Herb
149	<i>Anaphalis</i> ?				Herb
150	<i>Anaphalis</i> ?				Herb
151	<i>Carex</i>				Herb
152					Herb
153	<i>Breynia</i>				Shrub
154	<i>Viola</i>				Herb
155					
156					Herb
157	<i>Saurauia</i>				Shrub
158	(VACANT)				
159	<i>Vaccinium</i>	Oct. 24	Pumas	<i>Miscanthus</i>	Shrub
160	<i>Dodonaea viscosa</i>		2500 m alt.	grassland	Shrub
161		Pterid.	Enga Prov.		Epiphyte
162		Pterid.			Epiphyte
163	<i>Juncus</i>				Herb
164					Herb
166					Herb
166	<i>Cadetia</i>				Herb
167					Herb
168	<i>Cyperus</i>				Herb
169	<i>Spathogrottis</i>				Herb
170	<i>Dendrobium</i>				Herb
171	<i>Daphniphyllum</i>	Oct. 25	Mt. Kaiap	Secondary	Shrub
172	<i>Nothofagus pullei</i> Steen.		2700 m alt.	scrub	Arbour
173	<i>Themeda australis</i>		Enga Prov.		Herb
174	<i>Ardisia</i>				Shrub
175	<i>Piper bolanicum</i> Chew				Shrub
176	<i>Vaccinium</i>				Shrub
177	<i>Pilea</i>				Herb
178	<i>Cryptocarya</i>				Shrub
179					Shrub
180					Climber
181	<i>Cryptocarya</i>				Shrub
182	<i>Prunus</i>				Shrub
183	<i>Acronychia</i>				Shrub
184	<i>Streblus</i>				Shrub
185	<i>Palmeria</i>				Shrub
186	<i>Psychotria valetonii</i> Schner.	Oct. 26		<i>Nothofagus</i>	

Coll. no.	Species name	Date	Locality	Habitat	Form
	(in ed.)			forest	Shrub
187	Levieria				Shrub
188	Helicia				Shrub
189	Saurauia				Shrub
190	Streblus				Shrub
191	Prunus				Arbour
192	Syzygium				Arbour
193	Levieria				Shrub
194	Levieria				Shrub
195	Cryptocaya				Shrub
196	Mischocarpus				Arbour
197	Palmeria				Liane
198	Ascarina				Shrub
199	Eurya tigang Sch. et Laut.				Shrub
200	Nothofagus grandis Steen.				Arbour
201	Nothofagus grandis Steen.				Arbour
202	Ascarina				Shrub
203	Macaranga				Shrub
204	(VACANT)				
205	Planchonella				Shrub
206	Saurauia				Shrub
207	Saurauia				Shrub
208	Alstonia				Shrub
209	Olearia				Arbour
210	Cryptocarya				Arbour
211	Xanthomyrtus				Shrub
212	Polyosma				Arbour
213	Freycinetia				Climber
214	Rapanaea				Arbour
215	Timonius				Arbour
216	Cypholophus				Herb
217	Memecylon				Shrub
218					Herb
219	Ficus				Shrub
220	Sphenostemon				Arbour
221	Macaranga				Arbour
222	Medinilla				Shrub
223	Daphniphyllum				Arbour
224	Sloanea				Arbour
225	Eurya				Shrub
226	Pittosporum				Shrub
227	Symplocos				Shrub
228	Saurauia				Shrub
229	Saurauia				Shrub
230	Saurauia				Shrub

Coll. no.	Species name	Date	Locality	Habitat	Form
231	<i>Cryptocarya</i>	Oct. 26	Mt. Kaiap	<i>Nothofagus</i> forest	Arbour
232	<i>Pittosporum</i>				Shrub
233	<i>Ascarina</i>				Shrub
234	<i>Nothofagus grandis</i> Steen.				Arbour
235	<i>Schizomeria</i>				Arbour
236	<i>Trimenia</i>				Arbour
237	<i>Vaccinium</i>				Shrub
238	<i>Pittosporum</i>				Shrub
239	<i>Polyosma</i>				Shrub
240	<i>Nothofagus grandis</i> Steen.				Arbour
241	<i>Planchonella</i>	Oct. 27	Mr. Kaiap	<i>Ipomoea</i> garden	Arbour
242	<i>Mischocarpus</i>				Shrub
243	<i>Ficus</i>				Arbour
244	<i>Cyathea</i>				Shrub
245					Shrub
246	<i>Cyperus</i>				Herb
247	<i>Begonia</i>				Herb
248					Herb
249	<i>Pilea</i>				Herb
250	<i>Coleus</i>				Herb
251					Herb
252	<i>Polytrichum</i> sp.				Terrest.
253	<i>Polytrichum</i> sp.				Terrest.
254	<i>Lycopodium</i>				Herb
255	<i>Goodyera</i>				Herb
256					Herb
257	(Bryophyte)				Herb
258	<i>Lactuca laevigata</i>				Herb
259	<i>Myosotis</i>				Herb
260	<i>Erigeron sumatrensis</i> Retz.				Herb
261	<i>Rubus</i>				Shrub
262					Herb
263					Herb
264	<i>Wahlenbergia</i>				Herb
265					Herb
266	<i>Anaphalis mariae</i>				Herb
267	<i>Polygonum nepalense</i> Meissn.				Herb
268	<i>Viola</i>				Herb
269	<i>Oenanthe javanica</i>				Herb
270	<i>Crassocephalum crepidioides</i> (Benth.) S. Moore				Herb
271	<i>Galinsoga parviflora</i> Cav.				Herb
272	<i>Oxalis corniculata</i> L.				Herb
273	<i>Erigeron</i>				Herb
274	<i>Bidens parviflora</i> Willd.				Herb
275	<i>Hypericum papuana</i>				Herb

Coll. no.	Species name	Date	Locality	Habitat	Form
276	Lithocarpus				Arbour
277	Eria javanica	Oct. 26	Mt. Kaiap	<i>Nothofagus</i>	Herb
278	Agrostophyllum majus		2700 m alt.	forest	Epiphyte
279	Phreatia		Enga Prov.		Epiphyte
280	Bulbophyllum				Epiphyte
281	Glossorhyncha				Epiphyte
282		Pterid.			Epiphyte
283		Pterid.			Herb
284	Dryopteris				Herb
285	Glossorhyncha				Epiphyte
286	Glossorhyncha				Epiphyte
287		Pterid.			Epiphyte
288		Pterid.			Herb
289		Pterid.			Epiphyte
290	Viola				Herb
291		Pterid.			Epiphyte
292		Pterid.			Herb
293		Pterid.			Herb
294		Pterid.			Epiphyte
295	Phreatia				Epiphyte
296	Ceratostylis				Epiphyte
297	Agrostophyllum				Epiphyte
298	Bulbophyllum				Epiphyte
299	Bulbophyllum				Epiphyte
300	Phreatia				Epiphyte
301	Glomera				Epiphyte
302	Dendrobium				Epiphyte
303	Ceratostylis				Epiphyte
304	Calanthe				Herb
305		Pterid.			Herb
306	Liparis				Herb
307	Glomera				Epiphyte
308	Glossorhyncha				Epiphyte
309		Pterid.			Herb
310	Dendrobium				Epiphyte
311	Glomera				Epiphyte
312		Pterid.			Herb
313		Pterid.			Herb
314		Pterid.			Herb
315	Dicksonia				Herb
316		Pterid.			Herb
317		Pterid.			Climber
318	Angiopteris				Herb
319	Bulbophyllum				Epiphyte
320	Agrostophyllum				Epiphyte

Coll. no.	Species name	Date	Locality	Habitat	Form
321	Mediocalcar	Oct. 26	Mt. Kaiap 2700 m alt. Enga Prov.	<i>Nothofagus</i> forest	Epiphyte
322	Giulianettia				Epiphyte
323	Dendrobium				Epiphyte
324	Nertera granadense				Epiphyte
325					Epiphyte
326	Dendrobium	Pterid.			Epiphyte
327	Hymenophyllum				Climber
328	Phreatia				Epiphyte
329					Epiphyte
330	Lithocarpus lauterbachii Markgr.	Oct. 28	Mt. Kaiap 2500 m alt.	Roadside	Arbour
331	Sloania				Arbour
332	Rhododendron sp.	Oct. 31	Baiyer R. 1700- 1200 m alt. WHP	Montane Rain forest	Shrub
333	Rhododendron				Shrub
334	Poikilogyne				Shrub
335	Alphitonia ferruginea				Shrub
336	Trema orientalis				Shrub
337	Timonius	Orch.		Cliff	Shrub
338	Trema orientalis				Shrub
339	Desmodium				Shrub
340	Dianella				Herb
341	Dianella				Herb
342	Dichrotrichum				Climber
343	Nepenthes				Herb
344	Spassogrottis				Herb
345					Herb
346	Liparis				Herb
347	Dendrochilum				Herb
348	Ceratostylis				Epiphyte
349	Ceratostylis				Epiphyte
350	Grossorhyncha				Epiphyte
351	Bulbophyllum				Epiphyte
352	Bulbophyllum				Epiphyte
353	Bulbophyllum				Epiphyte
354	Glomera	Pterid.			Epiphyte
355					Climber
356	Piper				Epiphyte
356-2	Freicinetia				Climber
357	Helicia				Arbour
358	Nothofagus grandis Steen.				Arbour
359	Casearia				Arbour
360	Guioa				Shrub
361	Schizomeria				Shrub
362	Nothofagus grandis Steen.				Arbour
363	Procris				Shrub

Coll. no.	Species name	Date	Locality	Habitat	Form
364	Lasianthus				Climber
365	Malaxis				Herb, Epiph.
366		Pterid.			Herb, Epiph.
367-2		Pterid.			Herb, Epiph.
368	Pennisetum				Herb
369	Saurauia				Arbour
370	Ficus pungens				Shrub
371	Callicarpa				Shrub
372	Ficus				Arbour
373	Macaranga				Arbour
374	Crotalaria				Vine
375	Legium				Vine
376	Pittosporum				Shrub
377		Gramin.			Herb
378	Mikania cordata				Climber
379	Apocunonia				Shrub
380	Schuurmansia				Shrub
381	Homalanthus				Shrub
382	Proclis				Herb
383	Macaranga				Shrub
384	Macaranga				Shrub
385	Ficus				Arbour
386	Saurauia				Arbour
387	Dendrobium muciferum	Nov. 1	Baiyer R.	Gallary forest	Epiphyte
388	Legium		1500 m alt.	and	Vine
389			WHP	grassland edge	Arbour
390	Syzygium				Shrub
391	Usnea				Epiphyte
392	Xanthomyrtus				Shrub
393	Symplocos				Shrub
394	Medinilla				Shrub
395		Pterid.			Epiphyte
396	Drymis				Shrub
397	Symplocos				Arbour
398		Pterid.	Nov. 6	Lufa	Castanopsis
399	Geniostoma			2200 m alt.	forest
400	Podocarpus			EHP	Shrub
401	Timonius timon				Shrub
402	Rhododendron herzogii Warb.				Shrub
403	Rhododendron				Shrub
404	Castanopsis acuminatissima (B1.) A. DC.				Arbour
405	Castanopsis acuminatissima (B1.) A. DC.				Arbour
406		Pterid.			Herb, Climber

Coll. no.	Species name	Date	Locality	Habitat	Form
407	Cryptocaya	Nov. 6	Lufa	Castanopsis	Shrub
408		Euphor.	2200 m alt.	forest	Shrub
409	Finschia		EHP		Shrub
410	Dodonaea viscosa				Shrub
411	Eurya tigang Sch. et Laut.				Shrub
412	Aeschynanthus				Epiphyte
413	Casuarina origodon (in ed.)				Arbour
414	Araucaria cunninghamii Ait.				Arbour
415					Shrub
415-2		Orchid.			Herb
416	Liparis				Herb
417	Bulbophyllum				Epiph., Herb
418	Dendrobium				Epiphyte
419	Bulbophyllum				Epiphyte
420	Bulbophyllum				Epiphyte
421	Dendrobium				Epiphyte
422	Bulbophyllum	Nov. 7	Kassam Pass		Epiphyte
423	Cyrtandra		1400 m alt.		Shrub
424	Castanopsis acuminatissima (B1.) A. DC.	Nov. 8	Marafunga	Roadside	
425	Sporoborus		EHP		Arbour
426					Herb
427	Sida				Herb
428	Blumea				Herb
429	Impatiens				Herb
430	Impatiens				Herb
431	Rhododendron phaeochitum F. v. M.				Shrub
432	Saurauia				Shrub
433	Saurauia				Arbour
434	Saurauia				Arbour
435	Tacsonia mollissima				Shrub
436		Urtic.			Climber
437		Pterid.			Epiphyte
438	Vaccinium				Shrub
439		Pterid.	Nov. 9	Dauro Pass	Herb
440		Pterid.		2380	Herb
441		Pterid.		EHP	Herb
442		Pterid.			Herb
443		Pterid.			Herb
444	Hymenophyllum				Climber
445	Angiopteris				Herb
446		Pterid.			Herb
447	Mackinlaya schlechteri				Shrub
448	Cyrtandra				Herb

Coll. no.	Species name	Date	Locality	Habitat	Form
449	Rubus	Nov. 9	Dauro Pass 2380 m alt.	Mossy forest	Shrub
450	Rubus				Shrub
451	Amaracarpus				Shrub
452	Ficus				Arbour
453	Ficus				Arbour
454					Arbour
455	Coleus				Herb
456					Herb
457					Shrub
458	Ardisia				Shrub
459	Lithocarpus				Arbour
460					Shrub
461					Shrub
462	Psychotria nanus-frutex Sohnner? (in ed.)				Shrub
463					Shrub
464					Shrub
465	Cyrtandra				Shrub
466	Amaracarpus				Herb
467	Lithocarpus				Arbour
468	Piper triangulare Chew	Nov. 15	Mt. Kaindi 2400 m alt.	Nothofagus- Castanopsis mossy forests transition	Climber
469	Lejeunea sp.				Epiphyte
470	Dendrobium				Epiphyte
471					Climber
472					Climber
473					Shrub
474	Ficus				Shrub
475					Shrub
476					Herb
477					Herb, Epiph.
478	Lycopodium				Herb, Climber
479	Polypodium				Herb
480					Climber, Epiph.
481					Climber, Epiph.
482					Herb
483	Phyllocladus				Shrub
484					Shrub
485					Shrub
486					Shrub
487	Alphitonia ferruginea				Shrub
488	Bazzania levieri				Epiphyte
489	(Bryophyte)				Epiphyte
490	(Bryophyte)				Epiphyte
491	Bazzania levieri				Epiphyte
492	(Bryophyte)				Epiphyte

Coll. no.	Species name	Date	Locality	Habitat	Form
493	(Bryophyte)	Nov. 15	Mt. Kaindi 2400 m alt.	<i>Castanopsis</i> -	Epiphyte
494	<i>Bazzania erosa</i>			<i>Nothofagus</i>	Epiphyte
495	(Bryophyte)			forest	Epiphyte
496	(Bryophyte)			transition	Epiphyte
497	(Bryophyte)				Epiphyte
498	(Bryophyte)				Epiphyte
499	<i>Leucobryum</i> sp.				Epiphyte
500	<i>Leucobryum</i> sp.				Epiphyte
501	<i>Bazzania morokensis</i>				Epiphyte
502	(Bryophyte)				Epiphyte
503	<i>Vaccinium</i>	Nov. 16	Aseki 2100 m alt. MP	<i>Castanopsis</i> mossy forest	Shrub
504					Shrub
505	<i>Ficus</i>				Shrub
506	<i>Rhododendron</i>				Shrub
507	<i>Rhododendron</i>				Shrub
508	<i>Rhododendron</i>				Shrub
509					Vine
510					Herb
511					Vine
512					Shrub
513					Vine
514					Shrub
515					Shrub
516					Shrub
517					Herb
518					Vine
519					Shrub
520					Herb
521					
522					Herb
523					Herb
524	(Bryophyte)				Epiphyte
525	(Bryophyte)				Epiphyte
526	(Bryophyte)				Epiphyte
527	<i>Bazzania erosa</i>				Epiphyte
528	(Bryophyte)				Epiphyte
529	(Bryophyte)				Epiphyte
530	<i>Vaccinium</i>				Shrub
531					Shrub
532	(Bryophyte)				Epiphyte
533					Herb
534	<i>Bulbophyllum</i>				Epiphyte
535	<i>Dicksonia</i>				Shrub
536	<i>Pittosporum</i>				Shrub
537					Herb

Coll. no.	Species name	Date	Locality	Habitat	Form
538		Pterid.			Epiphyte
539		Pterid.			Epiphyte
540	Mallotus			Roadside	Shrub
541	Mallotus				Shrub
542	Mallotus				Shrub
543	Musenda			Castanopsis	Shrub
544	Carex			mossy forest	Herb
545		Pterid.			Epiphyte
546		Pterid.			Epiphyte
547		Pterid.			Epiphyte
547-2		Pterid.			Epiphyte
548	Adiantum				Epiphyte
549	Hymenophyllum				Epiphyte
550		Pterid.			Epiphyte
551	Hymenophyllum				Climber
552	Hymenophyllum				Climber
553					Herb
554					Herb
555	Banksia dentata			Themeda gr.	Shrub
556	Solanum torvum Sw.				Shrub
557	Solanum verbascifolium L.				Shrub
558	(Vacant)				
559	(Vacant)				
560	Papuacedrus papuana F. Muell.	Nov. 18	Bulldog Rd.	Castanopsis	Arbour
561	Solanum		2400 m \pm	mossy forest	Herb
562	Evodia elleryana F. Muell.		200 m alt.		Shrub
563	Dacrydium imbricatus (Bl.) de Laub.				Shrub
564		Pterid.			Herb
565		Pterid.			Herb
565-2	Rubus				Herb
566	Medinilla				Shrub
567	Vaccinium				Shrub
568	Medinilla				Shrub
569	Alpinia				Herb
570					Herb
571	(Bryophyte)				Epiphyte
572	(Bryophyte)				Epiphyte
573	(Bryophyte)				Epiphyte
574	(Bryophyte)				Epiphyte
575	(Bryophyte)				Epiphyte
576	Hypnum sp.				Epiphyte
577	(Bryophyte)				Epiphyte
578	(Bryophyte)				Epiphyte
579	Pogonatum sp.				Epiphyte
580	Rhacomitrium sp.				Epiphyte

Coll. no.	Species name	Date	Locality	Habitat	Form
581	(Bryophyte)	Nov. 18	Bulldog Rd.	<i>Castanopsis</i>	Epiphyte
582	Pterid.		2500 m alt.	Mossy forest	Herb
583	<i>Lycopodium</i>		MP	Landslide mark	Herb
584	<i>Lycopodium</i>				Herb
585	<i>Lycopodium</i>				Herb
586	<i>Vaccinium</i>				Shrub
587	Gramin.				Herb
588	<i>Vaccinium</i>				Shrub
589	<i>Phlox</i>				Herb
590	<i>Syzygium</i>				Shrub
591					Shrub
592					Shrub
593	<i>Schefflera</i>				Shrub
594	<i>Gouldia</i>				Shrub
595					Arbour
596	<i>Liparis</i>				Herb
597	<i>Adiantum</i>				Herb
598	Pterid.				Herb
599	<i>Agrostophyllum</i>				Herb
600	<i>Dendrobium</i>				Herb
601	<i>Phleatia</i>	Nov. 18	Bulldog Rd.	Landslide mark	Herb
602	Pterid.		2500 m alt.		Herb
603			MP		Shrub
604	<i>Dendrobium</i>				Herb
605	<i>Dendrobium</i>				Herb
606	Pterid.				Herb
607	Pterid.				Herb
608	<i>Frullania subdentata</i>				Epiphyte
609	(Bryophyte)				Epiphyte
610	(Bryophyte)				Epiphyte
611	(Bryophyte)				Epiphyte
612	(Bryophyte)				Epiphyte
613	<i>Rhododendron inconspicuum</i> J. J. S.				Shrub
614	<i>Rhododendron vitis-idaea</i> Sleum.				Shrub
615	<i>Rhododendron scabridibracteum</i> Sleum.				Shrub
616	<i>Rhododendron gracilentum</i> F. v. M.				Shrub
617	<i>Rhododendron cruttwellii</i> Sleum.				Shrub
618	<i>Rhododendron culminicolum</i> F. v. M.				Shrub
619	<i>Rhododendron nummatum</i> J. J. S.				Shrub
620	Urtic.	Nov. 19	Bulldog Rd.	<i>Nothofagus</i>	Shrub
621	Urtic.		2600 m alt	mossy forest	Shrub
622	Urtic.		MP		Shrub
623					Herb
624					Shrub
625					Shrub

Coll. no.	Species name	Date	Locality	Habitat	Form
626	Pittosporum				Shrub
627					Herb
628					Herb
629	Alpinia				Herb
630					Shrub
631					Herb
632					Shrub
633	Gentiana				Herb
634					Liane
635	Dacrycarpus				Arbour
636	Dacrycarpus				Arbour
637					Shrub
638					Shrub
639	Syzygium				Shrub
640					Shrub
641					Shrub
642	Schefflera				Shrub
643					Shrub
644					Shrub
645					Shrub
646	(Bryophyte)				Terrest.
647	Sphagnum sp.				Terrest.
648	(Bryophyte)				Terrest.
649	Fissidens sp.				Terrest.
650	(Bryophyte)				Terrest.
651	Timonius timon (Spreng.) Merr.	Nov. 22	Kaisinik	Themeda gr.	Shrub
652			1440 m alt.		Herb
653	Spathogrottis		MP		Herb
654	Lycopodium				Herb
655	Vaccinium				Shrub
656	Dendrobium				Herb
657					Herb
658					Herb
659	Coelogyne cristata				Herb
660					Herb
661					Herb
662	Rhododendron konori Becc.				Shrub
663	Rhododendron superbum Sleum.				Shrub
664	Rhododendron zoelleri (hybrid) Warb.				Shrub
665	Rhododendron aurigeranum Sleum.				Shrub
666	Rhododendron aurigeranum Sleum.				Shrub
667	Rhododendron culmicolum F. v. M.	Nov. 18	Bulldog Rd.	Nothofagus	Shrub
668			2800 m alt.	forest	Herb
669			MP		Shrub
670			2400 m alt.		Arbour

Coll. no.	Species name	Date	Locality	Habitat	Form
671	Macaranga	Nov. 18	Bulldog Rd.		Arbour
672			2400 m alt.		Shrub
673	Mora.		MP		Shrub
674	Euphor.				Arbour
675					Shrub
676	Podoc.				Arbour
677			2300 m alt.		Shrub
678					Shrub
679					Liane
680	Lithocarpus				Arbour
681	Eurya				Shrub
682					Arbour
683	Rubia.				Shrub
684	Dawsonia superba Grev.				Herb
685	Urtic.				Climber
686	Rhododendron herzogii (hybrid) Warb.			Roadside	Shrub
687	Rhododendron			openning	Shrub
688	Rhododendron cruttwellii Sleum.				Shrub
689	Rhododendron sp.				Shrub
690	Rhododendron superbum Sleum.				Shrub
691	Rhododendron				Shrub
692	Pteris				Herb
693	Rhododendron beyerinianum Koord.				Shrub
694	Comp.				Herb
695	Pterid.				Herb
696	Vaccinium				Shrub
697	Dendrobium				Herb
698	Dendrobium				Herb
699	Rhododendron aurigeranum Sleum.				Shrub
700	Rhododendron aurigeranum Sleum.				Shrub
701	Passiflora foetida L.	Oct. 17	Port Moresby	Eucalyptus savanna	Vine
702	(Bryophyte)	Nov. 18	Bulldog Rd.	Nothofagus forest	Epiphyte
703	Campylopus sp.		2800 m alt.		Epiphyte
704	Conocephallum sp.		MP		Epiphyte
705	Conocephallum sp.				Epiphyte
706	Mediocalcar				Herb
707	Liparis				Herb
708					
709					
710					
711	Begonia	Nov. 1	Baiyer River	Secondary vege-	Herb
712	Ara.		1500 m alt.	tation	Herb
713	Cyperus		WHP		Herb
714	Cyrtandra				Shrub
715	Melastoma				Shrub

Coll. no.	Species name	Date	Locality	Habitat	Form
716	Ludwigia				Herb
717	Costus				Shrub
718	Ivodia				Shrub
719					Shrub
720	Crataeva				Shrub
721		Pterid.			Epiphyte
722		Pterid.			Epiphyte
723		Pterid.			Herb
724	Piper macropiper Penn.				Liane
725		Gramin.			Herb
726		Gramin.			Herb
727	Ficus				Shrub
728	Calanthe				Herb
729	Eria				Epiphyte
730	Liparis				Herb
731	Dendrobium				Epiphyte
732	Clematis				Vine
733	Dendrobium	Nov. 2	Mt. Hagen	Roadside	Epiphyte
734	Bulbophyllum		1500 m alt.		Epiphyte
735	Wendrandia	Nov. 5	Goroka	Themeda gr.	Shrub
736	Wendrandia		2000 m alt.		Shrub
737	Cassytha filiformis L.		EHP		Vine
738	Leucosyke				Herb
739		Pterid.			Herb
740	Ilex				Shrub
741	Dendrobium				Epiphyte
742	Glochidion				Climber
743	Pittosporum				Shrub
744	Rhododendron zoelleri Warb.				Shrub
745	Rhododendron leptanthum F. v. M.				Shrub
746	Themeda australis				Herb
747	Vaccinium				Shrub
748		Pterid.			Herb
749	Rhododendron leptanthum (hybrid) F. v. M.				Shrub
450	Coelogyne				Herb
751	Acalypha				Shrub
752	(Bryophyte)				Terrest.
753	Castanopsis acuminatissima (B1.) A. DC.	Nov. 6	Lufa	Castanopsis 2200 m alt. forest	Arbour
754	Castanopsis acuminatissima (B1.) A. DC.		EHP		Arbour
755	Adiantum				Epiphyte
756					Arbour
757					Shrub
758	Pittosporum				Shrub

Coll. no.	Species name	Date	Locality	Habitat	Form	
759	Kibara	Nov. 6	Lufa	<i>Castanopsis</i> forest	Shrub	
760	Opocunonia		2200 m alt.		Shrub	
761	Rumohra		EHP		Herb	
762	Begonia				Herb, Shrub	
763	Grossorhyncha				Herb	
764	Pyrrosia				Climber	
765					Arbourn	
766						
767		Urtic.	Nov. 18	Bulldog Rd.	Roadside	Herb
768		Acant.	Nov. 5	Goroka 2200 m	Roadside	Herb
769	<i>Acriopsis javanicum</i>		Oct. 31	Baiyer River	Secondary forest	Epiphyte
770				1700 m alt.		
771			Nov. 22	Kaisinik 1440 m alt.		
772			Nov. 28	Buso 200 m alt.	Lowland rain forest	Arbourn
773						Arbourn
774					Arbourn	
775					Shrub	
776					Shrub	
777	<i>Selaginella</i>					Herb
778						Shrub
779						Shrub
780						Shrub
781						Shrub
782						Arbourn
783						Arbourn
784						Arbourn
785		<i>Pometia pinnata</i> Forst.				Arbourn
786		<i>Pometia pinnata</i>				Arbourn
787	<i>Tectona grandis</i> L.				Arbourn	
788	<i>Celtis salicifolia</i>				Arbourn	
789	<i>Acacia crassicarpa</i> A. Cunn.				Arbourn	
790					Shrub	
791		Urtic.			Lumbered area	Shrub
792	<i>Ficus</i>					Shrub
793		Urtic.				Shrub
794	<i>Macaranga</i>					Shrub
795	<i>Macaranga</i>					Shrub
796	<i>Crassocephalum crepidioides</i> (Benth.) S. Moore					Herb
797	<i>Rhododendron</i>		Nov. 20	Bulldog Rd.		Shrub
798		Pterid.	Oct. 26	Kaiap	<i>Nothofagus</i> f.	Herb