

A List of Live Specimens from Vanuatu, Collected in 1996 and 1997

Tatsuo KONISHI¹, Tamotsu HASHIMOTO¹, Tomohisa YUKAWA¹, Sadamu MATSUMOTO¹,
Ryoji HIRAYAMA¹, Sam CHANEL² and Tsukasa IWASHINA¹

PTERIDOPHYTA

ADIANTACEAE

Adiantum aneitense Carruth. ex Seem.

ESPIRITU SANTO. Between Nokovula and Mt. Tabwemasana, on the north ridge of Mt. Tabwemasana, 1700m alt., 7, Nov. 1996 (Iwashina 3084). 2nd Camp to Mt. Vutimena, 540-1050m alt., 18, Oct. 1997 (Matsumoto 226).

Adiantum diaphanum Blume

EFATE. East foot of Mt. Bernier, 150-350m alt., 28, Oct. 1997 (Matsumoto 367).

ASPLENIACEAE

Asplenium australasicum Hook.

EFATE. East foot of Mt. Bernier, 150-350m alt., 28, Oct. 1997 (Matsumoto 118, 369 and 374).

Asplenium bipinnatifidum Baker

ESPIRITU SANTO. Along the Pialapa River, 1st Camp to 2nd Camp, 220-540m alt., 15, Oct. 1997 (Matsumoto 118). Butmas, ca. 500m alt., 23, Oct. 1997 (Matsumoto 355).

Asplenium carruthersii Baker

ESPIRITU SANTO. Along the Pialapa River, 1st Camp to 2nd Camp, 220-540m alt., 15, Oct. 1997 (Matsumoto 121).

Asplenium contiguum Kaulf.

ESPIRITU SANTO. Between Nokovula and Mt. Tabwemasana, on the north ridge of Mt. Tabwemasana, 1600m alt., 7, Nov. 1996 (Iwashina 3083).

Asplenium cuneatum Lam.

ESPIRITU SANTO. Between Nokovula and 2nd Camp, Mt. Tabwemasana range, 1000m alt., 10, Nov. 1996 (Iwashina 3132). Along the Pialapa River, Tsureviu to 1st Camp, 10-220m alt., 14, Oct. 1997 (Matsumoto 107). Ibid., 1st Camp to 2nd Camp, 220-540m alt., 15, Oct. 1997 (Matsumoto 115).

¹Tsukuba Botanical Garden, National Science Museum, Tsukuba, 305-0005 Japan.

²Department of Forestry, Port Vila, BMP 064 Republic of Vanuatu.

*Hashimoto's collection number is accorded with the accession number of Tsukuba Botanical Garden plant database system (=TBG acc. no.).

Asplenium excisum C. Presl

ESPIRITU SANTO. Nokovula, 1050m alt., 9, Nov. 1996 (Iwashina 3110). Along the Pialapa River, 1st Camp to Tsureviu, 240–10m alt., 20, Oct. 1997 (Matsumoto 291).

Asplenium horridum Kaulf.

ESPIRITU SANTO. Between 2nd Camp and 1st Camp, east ridge of Mt. Vutimele, 900m alt., 26, Nov. 1996 (Iwashina 3251).

Asplenium insiticium Brack.

ESPIRITU SANTO. Nokovula, 1200m alt., 7, Nov. 1996 (Iwashina 3100).

Note: Syn. *Asplenium lobulatum* Mett.

Asplenium laserpitiifolium Lam.

ESPIRITU SANTO. Nokovula, 1050m alt., 9, Nov. 1996 (Iwashina 3115). Point No. 3, east of Butmas, 350m alt., 8, Oct. 1997 (Matsumoto 77). Along the Pialapa River, 2nd Camp to 1st Camp, 540–240m alt., 19, Oct. 1997 (Matsumoto 278). Luganville to Tangoa, ca. 10m alt., 10, Oct. 1997 (Matsumoto 90). Butmas, ca. 500m alt., 23, Oct. 1997 (Matsumoto 328).

Asplenium nidus L.

ESPIRITU SANTO. Luganville to Tangoa, ca. 10m alt., 10, Oct. 1997 (Matsumoto 90). Matevulu, north of Luganville, 5m alt., 8, Oct. 1997 (Matsumoto 79).

Asplenium polyodon G. Forst.

ESPIRITU SANTO. Along the Kerepua River, 1st Camp, east of Kerepua, 210m alt., 4, Nov. 1996 (Iwashina 3020). Nokovula, 1050m alt., 9, Nov. 1996 (Iwashina 3107). Ibid., 1070m alt., 6, Nov. 1996 (Iwashina 3036). Luganville to Tangoa, ca. 10m alt., 10, Oct. 1997 (Matsumoto 88).

IRIRIKI. Near Port Vila, epilithic on dried calcareous rockwall of seaside with *Phymatosorus scolopendria*, 4m alt., 2, Oct. 1997 (Matsumoto 5).

Asplenium unilaterale Lam. *sensu lato*

ESPIRITU SANTO. 2nd Camp to Mt. Vutimena, 540–1050m alt., 18, Oct. 1997 (Matsumoto 259). Butmas, ca. 500m alt., 23, Oct. 1997 (Matsumoto 320).

Asplenium sp. 1

ESPIRITU SANTO. Along the Pialapa River, 2nd Camp to 1st Camp, 540–240m alt., 19, Oct. 1997 (Matsumoto 270).

Asplenium sp. 2

ESPIRITU SANTO. Butmas, ca. 500m alt., 23, Oct. 1997 (Matsumoto 318).

Loxoscaphe brachycarpum (Mett.) Kuhn

EFATE. East foot of Mt. Bernier, 150–350m alt., 28, Oct. 1997 (Matsumoto 361 and 366).

ESPIRITU SANTO. Between Nokovula and Mt. Tabwemasana, on the north ridge of Mt. Tabwemasana, 1700m alt., 7, Nov. 1996 (Iwashina 3085). Butmas, ca. 500m alt., 23, Oct. 1997 (Matsumoto 322 and 348).

ATHYRIACEAE

Deparia petersenii (Kunze) M. Kato

ESPIRITU SANTO. 2nd Camp to Mt. Vutimena, 700–1370m alt., 16, Oct. 1997 (Matsumoto 165 and 180). Butmas, ca. 500m alt., 23, Oct. 1997 (Matsumoto 329 and 360).

Diplaziopsis javanica (Blume) C. Chr.

ESPIRITU SANTO. 2nd Camp to Mt. Vutimena, 540–1050m alt., 18, Oct. 1997 (Matsumoto 260).

Diplazium proliferum (Lam.) Thouars

ESPIRITU SANTO. Along the Pialapa River, 2nd Camp to 1st Camp, 540–240m alt., 19, Oct. 1997 (Matsumoto 279).

Diplazium dilatatum Blume

ESPIRITU SANTO. Butmas, ca. 500m alt., 23, Oct. 1997 (Matsumoto 324).

Diplazium echinatum C. Chr.

ESPIRITU SANTO. Along the Pialapa River, 2nd Camp to 1st Camp, 540–240m alt., 19, Oct. 1997 (Matsumoto 273).

Diplazium harpeodes T. Moore

ESPIRITU SANTO. East of Butmas, edge of secondary lowland forest, 280m alt., 8, Oct. 1997 (Matsumoto 45).

Diplazium melanocauron Brack. var. *coriaceum* Brownlie

ESPIRITU SANTO. Nokovula, 1050m alt., 9, Nov. 1996 (Iwashina 3124). Along the Pialapa River, Tsureviu to 1st Camp, 10–220m alt., 14, Oct. 1997 (Matsumoto 104).

Diplazium oblongifolium (Hook.) Jarmy

ESPIRITU SANTO. 2nd Camp to Mt. Vutimena, 540–1050m alt., 18, Oct. 1997 (Matsumoto 251).

Diplazium sp.

ESPIRITU SANTO. 2nd Camp to Mt. Vutimena, 700–1370m alt., 16, Oct. 1997 (Matsumoto 177).

BLECHNACEAE

Blechnum norfolkianum (Heward) C. Chr.

ESPIRITU SANTO. Between Nokovula and Mt. Tabwemasana, on the north ridge of Mt. Tabwemasana, 1500m alt., 7, Nov. 1996 (Iwashina 3071). 2nd Camp to Mt. Vutimena, 540–1050m alt., 18, Oct. 1997 (Matsumoto 249).

Blechnum patersoni (R. Br.) Mett.

ESPIRITU SANTO. Between Nokovula and Mt. Tabwemasana, on the north ridge of Mt. Tabwemasana, 1600m alt., 7, Nov. 1996 (Iwashina 3074). 2nd Camp to Mt. Vutimena, 700–1370m alt., 16, Oct. 1997 (Matsumoto 178).

Blechnum vulcanicum (Blume) Kuhn

ESPIRITU SANTO. Between 2nd Camp and 1st Camp, east ridge of Mt. Vutimele, 1000m alt., 25, Nov. 1996 (Iwashina 3243). 2nd Camp to Mt. Vutimena, 700–1370m alt., 16, Oct. 1997 (Matsumoto 154).

CULCITACEAE

Culcita straminea (Labill.) Maxon

ESPIRITU SANTO. Butmas, ca. 500m alt., 23, Oct. 1997 (Matsumoto 300).

CYATHEACEAE

Cyathea sp. 1

ESPIRITU SANTO. 2nd Camp to Mt. Vutimena, 540–1050m alt., 18, Oct. 1997 (Matsumoto 222).

Cyathea sp. 2

ESPIRITU SANTO. Butmas, ca. 500m alt., 23, Oct. 1997 (Matsumoto 314).

DAVALLIACEAE

Davallia solida (G. Forst.) Sw.

EFATE. East foot of Mt. Bernier, 150–350m alt., 28, Oct. 1997 (Matsumoto 371).

ESPIRITU SANTO. Along the Pialapa River, 1st Camp to 2nd Camp, 220–540m alt., 15, Oct. 1997 (Matsumoto 122).

Davallia sp.

ESPIRITU SANTO. Point No. 2, east of Butmas, 300m alt., 8, Oct. 1997 (Matsumoto 56).

Humata brackenridgei Brownlie

ESPIRITU SANTO. 2nd Camp to Mt. Vutimena, 700–1370m alt., 16, Oct. 1997 (Matsumoto 137).

Scyphularia pycnocarpa (Brack.) Copel.

ESPIRITU SANTO. Along the Pialapa River, 1st Camp to 2nd Camp, 220–540m alt., 15, Oct. 1997 (Matsumoto 127). Butmas, ca. 500m alt., 23, Oct. 1997 (Matsumoto 336).

DENNSTAEDTIACEAE

Microlepia aff. *todayensis*

ESPIRITU SANTO. Along the Pialapa River, Tsureviu to 1st Camp, 10–220m alt., 14, Oct. 1997 (Matsumoto 108).

DRYOPTERIDACEAE

Arachniodes aristata (G. Forst.) Tindale

EFATE. East foot of Mt. Bernier, 150–350m alt., 28, Oct. 1997 (Matsumoto 364).

ESPIRITU SANTO. Between Nokovula and Mt. Tabwemasana, on the north ridge of Mt. Tabwemasana, 1600m alt., 7, Nov. 1996 (Iwashina 3082). Between 2nd Camp and 1st Camp, Mt. Tabwemasana range, 700m alt., 10, Nov. 1996 (Iwashina 3145). Along the Pialapa River, 2nd Camp to 1st Camp, 540–240m alt., 19, Oct. 1997 (Matsumoto 264).

Dryopteris hasseltii (Blume) C. Chr.

ESPIRITU SANTO. 2nd Camp to Mt. Vutimena, 540–1050m alt., 18, Oct. 1997 (Matsumoto 245 and 250). Butmas, ca. 500m alt., 23, Oct. 1997 (Matsumoto 315).

Dryopteris subarborea (Baker) C. Chr.

ESPIRITU SANTO. Butmas, ca. 500m alt., 23, Oct. 1997 (Matsumoto 325).

Lastreopsis davallioides (Brack.) Tindale

ESPIRITU SANTO. 2nd Camp to Mt. Vutimena, 700–1370m alt., 16, Oct. 1997 (Matsumoto 199).

Lastreopsis tenera (R. Br.) Tindale

EFATE. East foot of Mt. Bernier, 150–350m alt., 28, Oct. 1997 (Matsumoto 362).

Polystichum aculeatum (L.) Roth *sensu lato*

ESPIRITU SANTO. Nokovula, 1050m alt., 9, Nov. 1996 (Iwashina 3120). 2nd Camp to Mt. Vutimena, 700–1370m alt., 16, Oct. 1997 (Matsumoto 174).

Stenosemia aurita C. Presl

ESPIRITU SANTO. Butmas, ca. 500m alt., 23, Oct. 1997 (Matsumoto 357).

Tectaria crenata Cav.

ESPIRITU SANTO. 2nd Camp to Mt. Vutimena, 540–1050m alt., 18, Oct. 1997 (Matsumoto 217). Along the Pialapa River, 1st Camp to Tsureviu, 220–10m alt., 20, Oct. 1997 (Matsumoto 290). Butmas, ca. 500m alt., 23, Oct. 1997 (Matsumoto 352).

Tectaria degeneri Copel.

EFATE. Pang Pang around the Nainu River, terrestrial on bank of river, 3, Oct. 1997 (Matsumoto 13).

Tectaria dissecta (G. Forst.) Lellinger

EFATE. Pang Pang around the Nainu River, terrestrial on bank of river, 3, Oct. 1997 (Matsumoto 14 and 16).

ESPIRITU SANTO. Luganville, on calcareous rock-wall, cultivated area, ca. 20m alt., 7, Oct. 1997 (Matsumoto 28 and 29).

Tectaria hookerii Brownlie

ESPIRITU SANTO. Along the Pialapa River, 1st Camp to 2nd Camp, 220–540m alt., 15, Oct. 1997 (Matsumoto 124). Butmas, ca. 500m alt., 23, Oct. 1997 (Matsumoto 305).

Tectaria latifolia (G. Forst.) Copel.

ESPIRITU SANTO. Luganville, on calcareous rock-wall, cultivated area, ca. 20m alt., 7, Oct. 1997 (Matsumoto 31 and 32). Along the Pialapa River, 2nd Camp to 1st Camp, 540–240m alt., 19, Oct. 1997 (Matsumoto 283).

Tectaria aff. *dissecta*

EFATE. Klems Hill, north of Mele, terrestrial on mountain slope of roadside, 3, Oct. 1997 (Matsumoto 22 and 23).

ELAPHOGLOSSACEAE

Elaphoglossum aff. *milnei*

ESPIRITU SANTO. 2nd Camp to Mt. Vutimena, 540–1050m alt., 18, Oct. 1997 (Matsumoto 235).

Elaphoglossum sp.

ESPIRITU SANTO. Along the Pialapa River, 2nd Camp to 1st Camp, 540–240m alt., 19, Oct. 1997 (Matsumoto 267).

EQUISETACEAE

Equisetum ramosissimum Desf. subsp. *debile* (Roxb.) Hauke

ESPIRITU SANTO. Along the Pialapa River, Between 1st Camp and Tsureviu, west of Tsureviu, 20, Oct. 1997 (Konishi 1139).

HELMINTHOSTACHYACEAE

Helminthostachys zeylanica (L.) Hook.

ESPIRITU SANTO. Along the Pialapa River, 1st Camp to Tsureviu, 240–10m alt., 20, Oct. 1997 (Matsumoto 289).

HYMENOPHYLLACEAE

Trichomanes (Callistopteris) apiifolium C. Presl

ESPIRITU SANTO. 2nd Camp to Mt. Vutimena, 540–1050m alt., 18, Oct. 1997 (Matsumoto 247).

Trichomanes (Crepidopteris) humile G. Forst.

ESPIRITU SANTO. Along the Pialapa River, 1st Camp to 2nd Camp, 220–540m alt., 15, Oct. 1997 (Matsumoto 117).

Trichomanes (Gonocormus) saxifragoides C. Presl

EFATE. East foot of Mt. Bernier, 150–350m alt., 28, Oct. 1997 (Matsumoto 376).

HYPOLEPIDACEAE

Hypolepis elegans Carruth.

ESPIRITU SANTO. Nokovula, 1050m alt., 9, Nov. 1996 (Iwashina 3106). Butmas, ca. 500m alt., 23, Oct. 1997 (Matsumoto 310).

LINDSAEACEAE

Lindsaea herveyi Carruth. ex Seem.

ESPIRITU SANTO. 2nd Camp to Mt. Vutimena, 700–1370m alt., 16, Oct. 1997 (Matsumoto 135).

LOMARIOPSIDACEAE

Bolbitis lonchophora (Fée) C. Chr.

ESPIRITU SANTO. Butmas, ca. 500m alt., 23, Oct. 1997 (Matsumoto 308).

Bolbitis × *rivularis* (Brack.) Ching

ESPIRITU SANTO. Butmas, ca. 500m alt., 23, Oct. 1997 (Matsumoto 356).

Lomagramma polyphylla Brack.

- EFATE. Pang Pang around the Nainu River, terrestrial on bank of river, 3, Oct. 1997 (Matsumoto 15). East foot of Mt. Bernier, 150–350m alt., 28, Oct. 1997 (Matsumoto 378).
 ESPIRITU SANTO. Butmas, ca. 500m alt., 23, Oct. 1997 (Matsumoto 316).

LYCOPODIACEAE

Lycopodium foliosum Copel.

- ESPIRITU SANTO. Butmas, ca. 500m alt., 23, Oct. 1997 (Matsumoto 350).

Lycopodium nummularifolium Blume

- ESPIRITU SANTO. 2nd Camp to Mt. Vutimena, 700–1370m alt., 16, Oct. 1997 (Matsumoto 133). Along the Pialapa River, 2nd Camp to 1st Camp, 540–240m alt., 19, Oct. 1997 (Matsumoto 265).

Lycopodium phlegmaria L.

- ESPIRITU SANTO. Along the Pialapa River, 2nd Camp to 1st Camp, 540–240m alt., 19, Oct. 1997 (Matsumoto 266). Butmas, ca. 500m alt., 23, Oct. 1997 (Matsumoto 349).

Lycopodium sp. 1 aff. *phlegmaria*

- ESPIRITU SANTO. Along the Pialapa River, 1st Camp to 2nd Camp, 220–540m alt., 15, Oct. 1997 (Matsumoto 123).

Note: More stenophyll type.

Lycopodium sp. 2 aff. *phlegmaria*

- ESPIRITU SANTO. Along the Pialapa River, Tsureviu to 1st Camp, 10–220m alt., 14, Oct. 1997 (Matsumoto 110).

Note: Intermediate between *Lycopodium nummularifolium* and *L. phlegmaria*, but spores regular.

MARATTIACEAE

Marattia smithii Mett.

- ESPIRITU SANTO. Between Nokovula and 2nd Camp, Mt. Tabwemasana range, 1000m alt., 10, Nov. 1996 (Iwashina 3130). 2nd Camp to Mt. Vutimena, 700–1370m alt., 16, Oct. 1997 (Matsumoto 188). Butmas, ca. 500m alt., 23, Oct. 1997 (Matsumoto 311 and 342).

NEPHROLEPIDACEAE

Nephrolepis hirsutula (G. Forst.) C. Presl

- ESPIRITU SANTO. Point No. 3, east of Butmas, 350m alt., 8, Oct. 1997 (Matsumoto 66).

Nephrolepis lauterbachii Christ

- ESPIRITU SANTO. 2nd Camp to Mt. Vutimena, 700–1370m alt., 16, Oct. 1997 (Matsumoto 182).

OLEANDRACEAE

Oleandra neriiformis Cav.

- ESPIRITU SANTO. Along the Pialapa River, 1st Camp to 2nd Camp, 220–540m alt., 15, Oct.

1997 (Matsumoto 114). 2nd Camp to Mt. Vutimena, 700–1370m alt., 16, Oct. 1997 (Matsumoto 161).

OPHIOGLOSSACEAE

Ophioderma pendulum (L.) C. Presl

ESPIRITU SANTO. 2nd Camp to Mt. Vutimena, 540–1050m alt., 18, Oct. 1997 (Matsumoto 216).

Ophioglossum petiolatum Hook.

ESPIRITU SANTO. Point No. 3, east of Butmas, 350m alt., 8, Oct. 1997 (Matsumoto 67).

POLYPODIACEAE

Belvisia callifolia (C. Chr.) Copel.

ESPIRITU SANTO. 2nd Camp to Mt. Vutimena, 700–1370m alt., 16, Oct. 1997 (Matsumoto 162). Ibid., 540–1050m alt., 18, Oct. 1997 (Matsumoto 218). Butmas, ca. 500m alt., 23, Oct. 1997 (Matsumoto 340).

Belvisia mucronata (Fée) Copel.

ESPIRITU SANTO. Along the Pialapa River, 2nd Camp to 1st Camp, 540–240m alt., 19, Oct. 1997 (Matsumoto 281). Butmas, ca. 500m alt., 23, Oct. 1997 (Matsumoto 339).

Drynaria rigidula (Sw.) Bedd.

ESPIRITU SANTO. Luganville to Tangoa, ca. 10m alt., 10, Oct. 1997 (Matsumoto 99).

Lemmaphyllum accedens (Blume) Donk

ESPIRITU SANTO. Butmas, ca. 500m alt., 23, Oct. 1997 (Matsumoto 331).

Loxogramme parksii Copel.

ESPIRITU SANTO. Nokovula, 1150m alt., 7, Nov. 1996 (Iwashina 3093).

Microsorium punctatum (L.) Copel.

ESPIRITU SANTO. Point No. 2, east of Butmas, 300m alt., 8, Oct. 1997 (Matsumoto 58). Matevulu, north of Luganville, 5m alt., 8, Oct. 1997 (Matsumoto 80).

Phymatosorus nigrescens (Blume) Pic. Serm.

ESPIRITU SANTO. Along the Pialapa River, Tsureviu to 1st Camp, 10–220m alt., 14, Oct. 1997 (Matsumoto 106). Ibid., 1st Camp to 2nd Camp, 220–540m alt., 15, Oct. 1997 (Matsumoto 120).

Phymatosorus papuanus (Baker) S. Matsumoto com. nov.

EFATE. East foot of Mt. Bernier, 150–350m alt., 28, Oct. 1997 (Matsumoto 372).

ESPIRITU SANTO. Nokovula, 1050m alt., 9, Nov. 1996 (Iwashina 3114–2). 2nd Camp to Mt. Vutimena, 540–1050m alt., 18, Oct. 1997 (Matsumoto 219).

Note: Syn. *Polypodium papuanum* Baker in Becc., Malesia 3 (1886) 48. *Microsorium papuanum* (Baker) Parris, Kew Bull. 41 (1986) 70.

Phymatosorus powerii (Baker) Pic. Serm.

ESPIRITU SANTO. 2nd Camp, east ridge of Mt. Vutimele, 1100m alt., 22, Nov. 1996 (Iwashina 3206).

Phymatosorus scolopendria (Burm.) Pic. Serm.

EFATE. Port Vila, on roadside rockwall, ca. 20m alt., 30, Oct. 1997 (Matsumoto 501).

Pyrrhosia lanceolata (L.) Ferwell

EFATE. Port Vila, epiphyte on tree trunk, 2, Oct. 1997 (Matsumoto 12).

Selliguea feeioides Copel.

ESPIRITU SANTO. 2nd Camp to Mt. Vutimena, 700-1370m alt., 16, Oct. 1997 (Matsumoto 155 and 160).

Note: Syn. *Selliguea plantaginea* Brack.

PSILOTACEAE

Psilotum nudum (L.) P. Beauv.

ESPIRITU SANTO. Point No. 3, east of Butmas, 350m alt., 8, Oct. 1997 (Matsumoto 68).

Luganville to Tangoa, ca. 10m alt., 10, Oct. 1997 (Matsumoto 93).

PTERIDACEAE

Acrostichum aureum L.

ESPIRITU SANTO. Luganville to Tangoa, ca. 10m alt., 10, Oct. 1997 (Matsumoto 83).

Pteris ensiformis Burm.

ESPIRITU SANTO. Tsureviu, 10m alt., 21, Oct. 1997 (Matsumoto 293).

Pteris pacifica Hieron.

ESPIRITU SANTO. Point No. 2, east of Butmas, 300m alt., 8, Oct. 1997 (Matsumoto 63).

Along the Pialapa River, 1st Camp to Tsureviu, 240-10m alt., 20, Oct. 1997 (Matsumoto 285).

Tsureviu, 10m alt., 21, Oct. 1997 (Matsumoto 297).

Pteris vittata L.

EFATE. Ewor River, epilithic on mossy rock in the river, 3, Oct. 1997 (Matsumoto 20).

ESPIRITU SANTO. Along the Kerepua River, 1st Camp, east of Kerepua, 210m alt., 4, Nov.

1996 (Iwashina 3024). Luganville, terrestrial on slope of roadside, ca. 20m alt., 7, Oct. 1997 (Matsumoto 35 and 36). Butmas, ca. 500m alt., 23, Oct. 1997 (Matsumoto 298).

SCHIZAEACEAE

Lygodium circinnatum (Burm.) Sw.

ESPIRITU SANTO. Luganville to Tangoa, ca. 10m alt., 10, Oct. 1997 (Matsumoto 97).

Schizaea dichotoma (L.) Sm.

EFATE. Mt. Bernier, in the rain forest, 28, Oct. 1997 (Yukawa 97-2221).

SELAGINELLACEAE

Selaginella distans E. F. Warb.

ESPIRITU SANTO. Butmas, ca. 500m alt., 23, Oct. 1997 (Matsumoto 304).

THELYPTERIDACEAE

Chingia ferox (Blume) Holttum

ESPIRITU SANTO. East of Butmas, edge of secondary lowland forest. 280m alt., 8, Oct. 1997 (Matsumoto 41).

Christella dentata (Forssk.) Brownsey & Jermy

EFATE. East foot of Mt. Bernier, 150–350m alt., 28, Oct. 1997 (Matsumoto 377).

Christella harveyi (Mett.) Holttum

ESPIRITU SANTO. Luganville to Tangoa, ca. 10m alt., 10, Oct. 1997 (Matsumoto 100).

Christella aff. *parasitica*

ESPIRITU SANTO. Butmas, ca. 500m alt., 23, Oct. 1997 (Matsumoto 359).

Christella aff. *peekerii*

ESPIRITU SANTO. Luganville, on calcareous rock-wall, cultivated area, ca. 20m alt., 7, Oct. 1997 (Matsumoto 27).

Note: Similar to *Christella harveyi* but no glands on lower surface.

Macrothelypteris torresiana (Gaudich.) Ching

ESPIRITU SANTO. Point No. 3, east of Butmas, 350m alt., 8, Oct. 1997 (Matsumoto 72).
Butmas, ca. 500m alt., 23, Oct. 1997 (Matsumoto 354).

Plesioneuron attenuatum (Brack.) Holttum

ESPIRITU SANTO. Along the Pialapa River, 2nd Camp to 1st Camp, 540–240m alt., 19, Oct. 1997 (Matsumoto 275).

Plesioneuron hopeanum (Baker) Holttum

ESPIRITU SANTO. 2nd Camp to Mt. Vutimena, 700–1370m alt., 16, Oct. 1997 (Matsumoto 184).

Pneumatopteris costata (Brack.) Holttum

ESPIRITU SANTO. Point No. 3, east of Butmas, 350m alt., 8, Oct. 1997 (Matsumoto 69).

Pneumatopteris parksii (Ballard) Holttum

ESPIRITU SANTO. East of Butmas, edge of secondary lowland forest, 280m alt., 8, Oct. 1997 (Matsumoto 52).

Pronephrium beccarianum (Cesati) Holttum

ESPIRITU SANTO. 2nd Camp to Mt. Vutimena, 700–1370m alt., 16, Oct. 1997 (Matsumoto 176).

Pronephrium beccarianum × *Christella* sp.?

ESPIRITU SANTO. 2nd Camp to Mt. Vutimena, 700–1370m alt., 16, Oct. 1997 (Matsumoto 173).

Note: Completely abortive spores and almost immature sporangia. New hybrid.

Pronephrium rubrinerve (Mett.) Holttum

ESPIRITU SANTO. Between 1st Camp and Peavot, east ridge of Mt. Vutimele, 400m alt., 26, Nov. 1996 (Iwashina 3259). East of Butmas, edge of secondary lowland forest, 280 m alt., 8, Oct. 1997 (Matsumoto 40).

Sphaerostephanos doodioides (Copel.) Holttum

ESPIRITU SANTO. Luganville to Tangoa, ca. 10m alt., 10, Oct. 1997 (Matsumoto 91).

Sphaerostephanos invisus (G. Forst.) Holttum

EFATE. Pang Pang around the Nainu River, terrestrial on bank of river, 3, Oct. 1997 (Matsumoto 17).

ESPIRITU SANTO. Along the Kerepua River, 1st Camp, east of Kerepua, 210m alt., 4, Nov. 1996 (Iwashina 3022). Along the Pialapa River, 2nd Camp to 1st Camp, 540-240m alt., 19, Oct. 1997 (Matsumoto 276).

Sphaerostephanos unitus (L.) Holttum

ESPIRITU SANTO. 1st Camp to Tsureviu, 240-10m alt., 20, Oct. 1997 (Matsumoto 292).

TMESIPTERIDACEAE

Tmesipteris vanuatensis A. F. Braithw.

ESPIRITU SANTO. Palitaliefu, near Nokovula, Mt. Tabwemasana range, 15° S 22' 75" / 166° E 48' 66", 853m alt., 26, Oct. 1997 (TBG 118617*).

VITTARIACEAE

Antrophyum semicostatum Blume

ESPIRITU SANTO. Butmas, ca. 500m alt., 23, Oct. 1997 (Matsumoto 338).

Antrophyum alatum Brack.

EFATE. East foot of Mt. Bernier, 150-350m alt., 28, Oct. 1997 (Matsumoto 375).

ESPIRITU SANTO. Along the Pialapa River, 2nd Camp to 1st Camp, 540-240m alt., 19, Oct. 1997 (Matsumoto 277).

Vaginularia angustissima (Brack.) Mett.

ESPIRITU SANTO. Along the Pialapa River, 1st Camp to 2nd Camp, 220-540m alt., 15, Oct. 1997 (Matsumoto 119). 2nd Camp to Mt. Vutimena, 540-1050m alt., 18, Oct. 1997 (Matsumoto 244).

Vittaria elongata Sw.

EFATE. East foot of Mt. Bernier, 150-350m alt., 28, Oct. 1997 (Matsumoto 368).

ANGIOSPERMAE

ACANTHACEAE

Graptophyllum pictum (L.) Griff.

EFATE. Mt. Bernier, in the rain forest, 28, Oct. 1997 (Konishi 1282).

ESPIRITU SANTO. Butmas, in the lowland forest, 23, Oct. 1997 (Konishi 1240).

Hemigraphis reptans L.

ESPIRITU SANTO. Along the Pialapa River, between 1st Camp and 2nd Camp, 420m alt., 19, Oct. 1997 (Yukawa 97-2174). Ibid., 2nd Camp, 18, Oct. 1997 (Konishi 1127) (Local name: Biho Biho).

Pseuderanthemum aubertii Benoist

EFATE. Mt. Bernier, in the rain forest, 28, Oct. 1997 (Konishi 1304).

AGAVACEAE

Cordyline terminalis (L.) Kunth

ESPIRITU SANTO. Along the Pialapa River, 2nd Camp, 18, Oct. 1997 (Konishi 1119, Local name: Na Karia).

AIZOACEAE

Sesuvium portulacastrum (L.) L.

ESPIRITU SANTO. Luganville, 24. Oct. 1997 (Konishi 1272).

AMARANTHACEAE

Iresine herbstii Hook.

ESPIRITU SANTO. Butmas, in the lowland forest, 23, Oct. 1997 (Konishi 1207).

AMARYLLIDACEAE

Proiphis amboinensis (L.) Herb.

ESPIRITU SANTO. Kerepua Valley, ca. 200m alt., 1996 (TBG 120484 and 120485).

ARACEAE

Aglaonema pictum (Roxb.) Kunth var. *tricolor* N. E. Br.

ESPIRITU SANTO. Along the Pialapa River, between 2nd Camp and 1st Camp, 19, Oct. 1997 (Konishi 1130, Local name: Petapata). Butmas, 23, Oct. 1997 (Konishi 1245, Local name: Petapata).

Alocasia macrorrhiza (L.) G. Don f.

ESPIRITU SANTO. Between Tanafo and Matantas, 8, Oct. 1997 (Konishi 1008). Along the Pialapa River, between 1st Camp and Tsureviu, 20, Oct. 1997 (Konishi 1150, Local name: Navia) and (Konishi 1151). Tsureviu, 20, Oct. 1997 (Konishi 1174, Local name: Via Toru).

Alocasia sp.

EFATE. 3, Oct. 1997 (Konishi 1176, 1178, 1179, 1180 and 1181).

ESPIRITU SANTO. Between Tanafo and Matantas, 8, Oct. 1997 (Konishi 1011, 1012, 1013, 1016 and 1020). Viuru, 11, Oct. 1997 (Konishi 1030 and 1031). Between 2nd Camp and Mt. Vutimena, 16, Oct. 1997 (Konishi 1097). Butmas, in the lowland forest, 23. Oct. 1997 (Konishi 1198).

Colocasia esculenta Schott

EFATE. 3, Oct. 1997 (Konishi 1175 and 1177).

ESPIRITU SANTO. Kerepua, 11, Nov. 1996 (Hirayama 2001 and 2002). Peavot, 27, Nov. 1996 (Hirayama 2004, 2005 and 2006). Viuru, 11, Oct. 1997 (Konishi 1024, 1025, 1026, 1027,

1028, 1032, 1033 and 1034). Along the Pialapa River, 2nd Camp, 18, Oct. 1997 (Konishi 1105). Tsureviu, in the Taro paddy field, 21, Oct. 1997 (Konishi 1152, Local name: Wonowono Tahavuke), (Konishi 1153, Local name: Vanamako), (Konishi 1154, Local name: Potonavia), (Konishi 1155, Local name: Roroetase), (Konishi 1156, Local name: Baramo), (Konishi 1157, Local name: Betamarae), (Konishi 1158, Local name: Noekoe), (Konishi 1159, Local name: Para), (Konishi 1160, Local name: Beta Woekoe), (Konishi 1161, Local name: Tora Tahahara), (Konishi 1162, Local name: Masanaus), (Konishi 1163, Local name: Davnahoha), (Konishi 1164, Local name: Haihaya), (Konishi 1165, Local name: Hajaenohoseyo), (Konishi 1166, Local name: Taitaiesy), (Konishi 1167, Local name: Tura), (Konishi 1168, Local name: Majenae), (Konishi 1169, Local name: Masaha Have), (Konishi 1170, Local name: Xah Hasea), (Konishi 1171, Local name: Wono Wono Tahahara), (Konishi 1172, Local name: Bul Taka), (Konishi 1173, Local name: Beta Bess) and (Konishi 1176). Butmas, in the Taro garden, 23, Oct. 1997 (Konishi 1255, 1256, 1257, 1258, 1259, 1260, 1261, 1262, 1263, 1264, 1265 and 1266).

Epipremnum pinnatum (L.) Engl.

EFATE. Mt. Bernier, 28, Oct. 1997 (Konishi 1274). Along the Teouma River, 28, Oct. 1997 (Konishi 1318).

ESPIRITU SANTO. Butmas, edge of forest, 270m alt., 8, Oct. 1997 (Yukawa 97-2018 and Konishi 1003). Between 2nd Camp and Mt. Vutimena, on the east ridge of Mt. Vutimena, 16, Oct. 1997 (Konishi 1098). Butmas, in the lowland forest, 23, Oct. 1997 (Konishi 1183, Local name: Ovi Kiu Kui).

Rhaphidophora sp.

EFATE. Mt. Bernier, in the rain forest, 28, Oct. 1997 (Konishi 1278). Along the Teouma River, 28, Oct. 1997 (Konishi 1317).

ESPIRITU SANTO. Between Tanafo and Matantas, 8, Oct. 1997 (Konishi 1004, 1005 and 1018). Viuru, 11, Oct. 1997 (Konishi 1023). Between 2nd Camp and Mt. Vutimena, on the east ridge of Mt. Vutimena, 16, Oct. 1997 (Konishi 1061 and 1062). Along the Pialapa River, between 1st Camp and 2nd Camp, 15, Oct. 1997 (Konishi 1041, 1042, 1043), (Konishi 1044, Local name: Ovi Kiukiu) and (Konishi 1045). Ibid., 2nd Camp, 17, Oct. 1997 (Konishi 1096). Ibid., 2nd Camp, 18, Oct. 1997 (Konishi 1118) and (Konishi 1122, Local name: Na Havi). Butmas, in the lowland forest, 23, Oct. 1997 (Konishi 1203 and 1216).

Xanthosoma sagittifolium (L.) Schott

ESPIRITU SANTO. Between Tanafo and Butmas, 8, Oct. 1997 (Konishi 1009).

Xanthosoma violaceum Schott

ESPIRITU SANTO. Viuru, 11, Oct. 1997 (Konishi 1029).

Xanthosoma sp.

ESPIRITU SANTO. Between Tanafo and Matantas, 8, Oct. 1997 (Konishi 1014, 1015 and 1017). Along the Pialapa River, 2nd Camp, 16, Oct. 1997 (Konishi 1106). Butmas, in the lowland forest, 23, Oct. 1997 (Konishi 1267 and 1268).

ARALIACEAE

Schefflera neo-ebudica Guillaumin

ESPIRITU SANTO. Mt. Tabwemasana range, 15°S 13' 21"/166E 42' 15", 655m alt., 26, Oct.

1997 (TBG 118612, 118613 and 118614).

ASCLEPIADACEAE

Hoya australis R. Br.

ESPIRITU SANTO. Between Tanafo and Matantas, 8, Oct. 1997 (Konishi 1001, 1002 and 1021).

Hoya sp.

EFATE. Along the Teouma River, 28, Oct. 1997 (Konishi 1325 and 1326).

ESPIRITU SANTO. Viuru, 11, Oct. 1997 (Konishi 1022). Between 2nd Camp and Mt. Vutimena, on the east ridge of Mt. Vutimena, 16, Oct. 1997. (Konishi 1058, Local name: As Jujur Kalina), (Konishi 1063 and 1064, Local name: Na Ovi), (Konishi 1079, Local name: Va Vasa). Along the Pialapa River, between 1st Camp and 2nd Camp, 19, Oct. 1997 (Konishi 1126, Local name: As Jorkalina). Butmas, in the lowland forest, 23, Oct. 1997 (Konishi 1199 and 1219).

BEGONIACEAE

Begonia vitiensis A. C. Sm.

ESPIRITU SANTO. Butmas, in the lowland forest, 23, Oct. 1997 (Konishi 1254).

Begonia sp.

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, in the montane forest, 900m alt., 18, Oct. 1997 (Yukawa 97-2152). Along the Pialapa River, between 1st Camp and 2nd Camp, 15, Oct. 1997 (Konishi 1047, Local name: Tuma Joe Joe).

COMBRETACEAE

Terminalia sepicana Diels

ESPIRITU SANTO. Butmas, in the lowland forest, 23, Oct. 1997 (Konishi 1233).

COMMERINACEAE

Pollia secundiflora (Blume) Bak. f.

ESPIRITU SANTO. Between Tanafo and Matantas, edge of forest, 8, Oct. 1997 (Yukawa 97-2024).

CORYNOCARPACEAE

Corynocarpus similis Hemsl.

EFATE. Along the Teouma River, in the scrub, 130m alt., 28, Oct. 1997 (Yukawa 97-2230).

DIOSCOREACEAE

Dioscorea bulbifera L.

EFATE. Along the Teouma River, in the scrub, 130m alt., 28, Oct. 1997 (Yukawa 97-2229).

ERICACEAE

Vaccinium whiteanum Seem.

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, in the ridge top forest, 1360m alt., 16, Oct. 1997 (Yukawa 97-2070, Konishi 1056, Local name: Ialeale).

Vaccinium sp.

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 1310m alt., 16, Oct. 1997 (Yukawa 97-2078). Ibid., on the steep slope in montane forest, 1000-1150m alt., 16, Oct. 1997 (Yukawa 97-2082).

GUTTIFERAE

Calophyllum neo-ebudicum Guillaumin

EFATE. Mt. Bernier, in the rain forest, 28, Oct. 1997 (Yukawa 97-2220 and Konishi 1297).

Garcinia pseudoguttifera Seem.

EFATE. Mt. Bernier, in the rain forest, 28, Oct. 1997 (Yukawa 97-2217 and Konishi 1286).

Garcinia vitiensis Seem.

EFATE. Mt. Bernier, in the rain forest, 28, Oct. 1997 (Konishi 1296).

LECYTHIDACEAE

Barringtonia racemosa (L.) Spreng.

ESPIRITU SANTO. Along the Pialapa River, between 1st Camp and 2nd Camp, 15, Oct. 1997 (Konishi 1036, Local name: As Tuhukalele).

LEGUMINOSAE

Desmodium ormocarpoides DC.

EFATE. Mt. Bernier, in the rain forest, 28, Oct. 1997 (Konishi 1303).

Entada phaseoloides (L.) Merr.

ESPIRITU SANTO. Between Peavot and 1st Camp, on the ridge, west of Peavot, 20, Nov. 1996 (Hirayama 2003).

Strongylodon lucidus (Forst. f.) Seem.

EFATE. Mt. Bernier, in the rain forest, ca. 150m alt., 28, Oct. 1997 (Yukawa 97-2216). Ibid., in the rain forest, 28, Oct. 1997 (Konishi 1290).

ESPIRITU SANTO. Between Tanafo and Matantas, 8, Oct. 1997 (Konishi 1019).

LILIACEAE

Collospermum montanum (Seem.) Skottsb.

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, in the ridge top forest, 1360m alt., 16, Oct. 1997 (Yukawa 97-2068). Ibid., in the ridge top forest, 16, Oct. 1997 (Konishi 1076, Local name: Malumlum).

LORANTHACEAE

Amyema sp.

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, 16, Oct. 1997 (Konishi 1072, Local name: As Teipum).

MALVACEAE

Hibiscus aff. *vosa*

ESPIRITU SANTO. Along the Pialapa River, between 1st Camp and Tsureviu, 20, Oct. 1997 (Konishi 1147, Local name: Tarara).

MARANTACEAE

Donax cannaeformis (Forst. f.) Rolfe

EFATE. Mt. Bernier, 28, Oct. 1997 (Konishi 1277).

ESPIRITU SANTO. Along the Pialapa River, between 1st Camp and Tsureviu, 20, Oct. 1997 (Konishi 1141) and (Konishi 1146, Local name: Takipiri).

MELASTOMATACEAE

Medinilla heteromorphophylla Guillaumin

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, on the steep slope, open, 700-800m alt., 16, Oct. 1997 (Yukawa 97-2059). Along the Pialapa River, 2nd Camp, 18, Oct. 1997 (Konishi 1117, Local name: Tavar Jeje).

MORACEAE

Ficus adenosperma Miq.

ESPIRITU SANTO. Butmas, in the lowland forest, 23, Oct. 1997 (Konishi 1230).

Ficus littoralis Blume

ESPIRITU SANTO. Butmas, in the lowland forest, 23, Oct. 1997 (Konishi 1247).

Ficus subulata Blume

EFATE. Mt. Bernier, in the lowland forest, 28, Oct. 1997 (Konishi 1289).

Ficus septica Burm. f.

ESPIRITU SANTO. Butmas, 23, Oct. 1997 (Konishi 1250).

Ficus tinctoria Forst. f.

ESPIRITU SANTO. Along the Pialapa River, between 1st Camp and 2nd Camp, 15, Oct. 1997 (Konishi 1039 and 1040, Local name: As Hanakala Tahajiajia).

Ficus wassa Roxb.

ESPIRITU SANTO. Butmas, 23, Oct. 1997 (Konishi 1225).

Ficus sp.

EFATE. Mt. Bernier, in the rain forest, 28, Oct. 1997 (Konishi 1276 and 1287).

MUSACEAE

Heliconia indica Lam.

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, on the east ridge of Mt. Vutimena, 16, Oct. 1997 (Konishi 1066 and 1074, Local name: Raupulo). Along the Pialapa River, 2nd Camp, 18, Oct. 1997 (Konishi 1120, Local name: Na Laobalo).

MYRISTICACEAE

Myristica fatua Houtt. var. *papuana* Markgr.

ESPIRITU SANTO. Along the Pailapa River, between 2nd Camp and 1st Camp, 19, Oct. 1997 (Konishi 1140, Local name: Keuka). Butmas, 23, Oct. 1997 (Konishi 1253).

MYRSINACEAE

Maesa ambrymensis Guillaumin

ESPIRITU SANTO. Butmas, 23, Oct. 1997 (Konishi 1211, 1226 and 1243).

Maesa aff. *eraginensis*

ESPIRITU SANTO. Along the Pailapa River, between 1st Camp and 2nd Camp, 19, Oct. 1997 (Konishi 1123, Local name: As Hahara). Butmas, 23, Oct. 1997 (Konishi 1204).

MYRTACEAE

Syzygium nitidum Brongn. & Gris

EFATE. Mt. Bernier, in the rain forest, 28, Oct. 1997 (Konishi 1298).

Syzygium sp.

ESPIRITU SANTO. Along the Pailapa River, 2nd Camp, 18, Oct. 1997 (Konishi 1134, Local name: Haviha Talume).

ORCHIDACEAE

Acanthephippium splendidum J. J. Sm.

ESPIRITU SANTO. Along the Pialapa River, in the scrub, between Tsureviu and 1st Camp, 150m alt., 14, Oct. 1997 (Yukawa 97-2036). Ibid., in the scrub, between Tsureviu and 1st Camp, 150m alt., 20, Oct. 1997 (Yukawa 97-2183).

Agrostophyllum cf. *leucocephalum*

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, in the montane forest, 900m alt., 18, Oct. 1997 (Yukawa 97-2151).

Agrostophyllum majus Hook. f.

ESPIRITU SANTO. Butmas, in the lowland forest, 510m alt., 23, Oct. 1997 (Yukawa 97-2188).

Agrostophyllum sp.

ESPIRITU SANTO. Along the Pialapa River, on the steep slope in lower montane forest, 2nd Camp, 560m alt., 15, Oct. 1997 (Yukawa 97-2057). Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 950m alt., 16, Oct. 1997 (Yukawa 97-2087). Ibid., on the steep slope in montane forest, 610m alt., 18, Oct. 1997 (Yukawa 97-2107). Ibid., on the steep slope in montane forest, 710m alt., 18, Oct. 1997 (Yukawa 97-2134).

Appendicula sp.

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 640m alt., 18, Oct. 1997 (Yukawa 97-2108). Butmas, in the lowland forest, 560m alt., 23, Oct. 1997 (Yukawa 97-2201).

Bulbophyllum aff. *stenophyllum*

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 1000-1150m alt., 16, Oct. 1997 (Yukawa 97-2084). Butmas, in the lowland forest, 560m alt., 23, Oct. 1997 (Yukawa 97-2194).

Bulbophyllum betchei F. Muell.

ESPIRITU SANTO. Along the Pialapa River, between 1st Camp and 2nd Camp, on the steep slope in lower montane forest, 560m alt., 19, Oct. 1997 (Yukawa 97-2166).

Bulbophyllum cf. *longiscapum*

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 670m alt., 18, Oct. 1997 (Yukawa 97-2120). Butmas, in the lowland forest, 560m alt., 23, Oct. 1997 (Yukawa 97-2195).

Bulbophyllum graciliscapum Schltr.

ESPIRITU SANTO. Along the Pialapa River, between 1st Camp and 2nd Camp, 350m alt., 15, Oct. 1997 (Yukawa 97-2044). Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 710m alt., 18, Oct. 1997 (Yukawa 97-2131).

Bulbophyllum levatii Kraenzl.

ESPIRITU SANTO. Along the Pialapa River, 2nd Camp, on the steep slope in lower montane forest, 560m alt., 15, Oct. 1997 (Yukawa 97-2055). Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 800m alt., 18, Oct. 1997 (Yukawa 97-2141).

Bulbophyllum longiscapum Rolfe

ESPIRITU SANTO. Butmas, in the lowland forest, on *Syzigium malaccensis*, 560m alt., 23, Oct. 1997 (Yukawa 97-2191).

Bulbophyllum samoanum Schltr.

ESPIRITU SANTO. Along the Pialapa River, between 1st Camp and 2nd Camp, on the steep slope of lower montane forest, 490m alt., 19, Oct. 1997 (Yukawa 97-2171).

Bulbophyllum sp. sect. *Leptopus* (sp. nov.)

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, on the steep slope of montane

forest, 640m alt., 18, Oct. 1997 (Yukawa 97-2111).

Bulbophyllum sp.

ESPIRITU SANTO. Along the Pialapa River, between 1st Camp and 2nd Camp, 15, Oct. 1997 (Yukawa 97-2049 and 97-2050). Ibid., between 1st Camp and 2nd Camp, on the steep slope in lower montane forest, 490m alt., 19, Oct. 1997 (Yukawa 97-2172). Ibid., 2nd Camp, in the lower montane forest, 560m alt., 17, Oct. 1997 (Yukawa 97-2105). Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 1240m alt., 16, Oct. 1997 (Yukawa 97-2081). Ibid., on the steep slope in montane forest, 1150-1250m alt., 16, Oct. 1997 (Yukawa 97-2089). Ibid., on the steep slope in montane forest, 640m alt., 18, Oct. 1997 (Yukawa 97-2112). Ibid., on the steep slope in montane forest, 700m alt., 18, Oct. 1997 (Yukawa 97-2130). Ibid., on the steep slope in montane forest, 740m alt., 18, Oct. 1997 (Yukawa 97-2138). Ibid., on the steep slope in montane forest, 800m alt., 18, Oct. 1997 (Yukawa 97-2144 and 97-2145). Ibid., on the steep slope in montane forest, 900m alt., 18, Oct. 1997 (Yukawa 97-2149). Ibid., on the steep slope in montane forest, 670m alt., 18, Oct. 1997 (Yukawa 97-2160). Butmas, in the lowland forest, 560m alt., 23, Oct. 1997 (Yukawa 97-2203).

Calanthe triplicata (Willem.) Ames

ESPIRITU SANTO. Along the Pialapa River, between 1st Camp and 2nd Camp, on the steep slope in woodland, 380m alt., 15, Oct. 1997 (Yukawa 97-2053).

Calanthe ventilabrum Reichb. f.

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 1180m alt., 16, Oct. 1997 (Yukawa 97-2065). Ibid., in the redge top forest, 1360m alt., 16, Oct. 1997 (Yukawa 97-2095). Ibid., on the steep slope in montane forest, 670m alt., 18, Oct. 1997 (Yukawa 97-2119).

Calanthe sp.

EFATE. Mt. Bernier, in the lowland forest, 28, Oct. 1997 (Yukawa 97-2219).

Cleisostoma sp.

ESPIRITU SANTO. Tangoa, in the lowland forest, 60m alt., 12, Oct. 1997 (Yukawa 97-2030).

Coelogyne lycastoides F. Muell. & Kraenzl.

ESPIRITU SANTO. Along the Pialapa River, between 1st Camp and 2nd Camp, on the steep slope in lower montane forest, 560m alt., 19, Oct. 1997 (Yukawa 97-2168).

Coelogyne macdonaldii F. Muell.

ESPIRITU SANTO. Palitaliefu, near Nokovula, 1100m alt., 1996 (TBG 118585). Between Tanafo and Matantas, in the scrub, 8, Oct. 1997 (Yukawa 97-2022). Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 800m alt., 16, Oct. 1997 (Yukawa 97-2098). Along the Pialapa River, between 1st Camp and 2nd Camp, on the steep slope in montane forest, 560m alt., 19, Oct. 1997 (Yukawa 97-2167).

Collabium vesicatum (Reichb. f.) Schltr.

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 900m alt., 18, Oct. 1997 (Yukawa 97-2159).

Corymborkis veratrifolia (Reinw.) Blume

ESPIRITU SANTO. Along the Pialapa River, between Tsureviu and 1st Camp, in the scrub, 140m alt., 20, Oct. 1997 (Yukawa 97-2184). Ibid., between 1st Camp and 2nd Camp, 19, Oct. 1997 (Konishi 1145, Local name: Karia Plenga Talamala).

?Corymborkis sp.

ESPIRITU SANTO. Along the Pialapa River, 2nd Camp, in the lower montane forest, 560m alt., 19, Oct. 1997 (Yukawa 97-2164).

Cryptostylis cf. *arachnites*

ESPIRITU SANTO. Along the Pialapa River, in the lower montane forest, 2nd Camp, 560m alt., 18, Oct. 1997 (Yukawa 97-2106).

Dendrobium biflorum (G. Forst.) Sw.

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 640m alt., 18, Oct. 1997 (Yukawa 97-2114). Butmas, in the lowland forest, 510m alt., 23, Oct. 1997 (Yukawa 97-2207).

Dendrobium calcaratum A. Rich.

ESPIRITU SANTO. Along the Pialapa River, between 1st Camp and 2nd Camp, 160m alt., 15, Oct. 1997 (Yukawa 97-2041).

Dendrobium conanthum Schltr.

ESPIRITU SANTO. Tangoa, edge of lowland forest, 12, Oct. 1997 (Yukawa 97- 2031).

Dendrobium delicatulum F. Muell. & Kraenzl.

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, on *Rapanea laycardii*, 700m alt., 18, Oct. 1997 (Yukawa 97-2125).

Dendrobium greenianum Cribb & B. A. Lewis

ESPIRITU SANTO. Butmas, in the lowland forest, 510m alt., 23, Oct. 1997 (Yukawa 97-2189).

Dendrobium goldfinchii F. Muell.

EFATE. Klems Hill, on a deciduous tree, 3, Oct. 1997 (Yukawa 97-2008).

Dendrobium macranthum A. Rich.

EFATE. Paonangisu, on *Excoecaria agallocha*, seashore, 3, Oct. 1997 (Yukawa 97-2006).

Dendrobium mohlianum Reichb. f.

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, on *Syzgium* sp., 1000m alt., 16, Oct. 1997 (Yukawa 97-2064). Ibid., in the ridge top forest, on *Quintinia neoebudica*, 1360m alt., 16, Oct. 1997 (Yukawa 97-2073). Ibid., on the steep slope in montane forest, 1320m alt., 16, Oct. 1997 (Yukawa 97-2074). Ibid., on the steep slope in montane forest, 1250-1300m alt., 16, Oct. 1997 (Yukawa 97-2094).

Dendrobium mooreanum Lindl.

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 950m alt., 16, Oct. 1997 (Yukawa 97-2062). Ibid., on the steep slope in montane forest, 1240m alt., 16, Oct. 1997 (Yukawa 97-2080). Ibid., on the steep slope in montane forest, on *Rapanea laycardii*, 700m alt., 18, Oct. 1997 (Yukawa 97-2123).

Dendrobium morrisonii Schltr.

ESPIRITU SANTO. Near Palitaliefu, near Nokovula, Mt. Tabwemasana range, ca. 800m alt., 1996 (TBG 118608). Along the Pialapa River, between 1st Camp and 2nd Camp, 350m alt., 15, Oct. 1997 (Yukawa 97-2045). Ibid., between Tsureviu and 1st Camp, 170m alt., 20, Oct. 1997 (Yukawa 97-2182).

Dendrobium polysema Schltr.

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, on the steep slope in montane

forest, on *Rapanea laycardii*, 700m alt., 18, Oct. 1997 (Yukawa 97-2122).

***Dendrobium rarum* Schltr.**

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, on *Timonius affinis*, 780m alt., 18, Oct. 1997 (Yukawa 97-2139). Ibid., on the steep slope in montane forest, 900m alt., 18, Oct. 1997 (Yukawa 97-2147). Along the Pialapa River, between 1st Camp and 2nd Camp, on the steep slope in lower montane forest, 560m alt., 19, Oct. 1997 (Yukawa 97-2165). Butmas, in the lowland forest, 560m alt., 23, Oct. 1997 (Yukawa 97-2192). Ibid., in the lowland forest, 500m alt., 23, Oct. 1997 (Yukawa 97-2208).

***Dendrobium sladei* J. J. Wood & Cribb**

ESPIRITU SANTO. Tangoa, in the lowland forest, 12, Oct. 1997 (Yukawa 97-2032). Butmas, in the lowland forest, 510m alt., 23, Oct. 1997 (Yukawa 97-2206).

Dendrobium* sp. sect. *Grastidium

ESPIRITU SANTO. Along the Pialapa River, between 1st Camp and 2nd Camp, 160m alt., 15, Oct. 1997 (Yukawa 97-2040). Ibid., between 1st Camp and 2nd Camp, on the sunny cliff, 340m alt., 15, Oct. 1997 (Yukawa 97-2052). Ibid., between 1st Camp and 2nd Camp, on the sunny cliff, 420m alt., 19, Oct. 1997 (Yukawa 97-2173). Ibid., between 1st Camp and 2nd Camp, 400m alt., 19, Oct. 1997 (Yukawa 97-2176). Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 670m alt., 18, Oct. 1997 (Yukawa 97-2115 and 97-2117). Ibid., on the steep slope in montane forest, 800m alt., 18, Oct. 1997 (Yukawa 97-2142 and 97-2143). Butmas, in the lowland forest, 560m alt., 23, Oct. 1997 (Yukawa 97-2196, 97-2197 and 97-2198).

Dendrobium* sp. sect. *Pedilonum

ESPIRITU SANTO. Along the Pialapa River, between 1st Camp and 2nd Camp, 350m alt., 15, Oct. 1997 (Yukawa 97-2043). Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 670m alt., 18, Oct. 1997 (Yukawa 97-2118). Ibid., on the steep slope in montane forest, 800m alt., 18, Oct. 1997 (Yukawa 97-2140).

***Dendrobium* sp.**

ESPIRITU SANTO. Mt. Tabwemasana range, 1996 (TBG 118609 and 118610). Along the Kerepua River, east of Kerepua, ca. 100m alt., 1996 (TBG 118611). Along the Pialapa River, between 1st Camp and 2nd Camp, 15, Oct. 1997 (Yukawa 97-2051). Ibid., 2nd Camp, on the steep slope in lower montane forest, 560m alt., 17, Oct. 1997 (Yukawa 97-2100). Between 2nd Camp and Mt. Vutimena, in the montane forest, 900m alt., 18, Oct. 1997 (Yukawa 97-2154).

Diplocaulobium* cf. *ouhinnae

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, on *Rapanea laycardii*, 700m alt., 18, Oct. 1997 (Yukawa 97-2124).

***Earina sigmoidea* T. Hashimoto**

ESPIRITU SANTO. Mt. Tabwemasana range, 15°S 22' 75"/166°E 48' 66", 853m alt., 26, Oct. 1997 (TBG 118615 and 118616).

***Earina valida* Reichb. f.**

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 710m alt., 18, Oct. 1997 (Yukawa 97-2133 and 97-2135).

***Epiblastus sciadanthus* (F. Muell.) Schltr.**

ESPIRITU SANTO. Mt. Tabwemasana range, 1996 (TBG 118583 and 118584). Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 740m alt., 18, Oct. 1997 (Yukawa

97-2137).

Eria sp.

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, on *Rapanea laycardii*, 700m alt., 18, Oct. 1997 (Yukawa 97-2126).

Glomera montana Reichb. f.

ESPIRITU SANTO. Along the Pialapa River, 2nd Camp, on the steep slope in lower montane forest, 560m alt., 17, Oct. 1997 (Yukawa 97-2103).

Glomera sp.

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 1310m alt., 16, Oct. 1997 (Yukawa 97-2076). Ibid., on the steep slope in montane forest, 1250-1300m alt., 16, Oct. 1997 (Yukawa 97-2091). Ibid., on the steep slope in montane forest, 700m alt., 18, Oct. 1997 (Yukawa 97-2129).

Glossorhyncha macdonaldii Schltr.

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, in the ridge top forest, on *Spiraeanthemum macgillivrayi*, 1360m alt., 16, Oct. 1997 (Yukawa 97-2067).

Glossorhyncha sp.

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, 1250-1300m alt., 16, Oct. 1997 (Yukawa 97-2092).

Goodyera viridiflora Blume

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 900-950m alt., 16, Oct. 1997 (Yukawa 97-2061). Ibid., on the steep slope in montane forest, 900m alt., 18, Oct. 1997 (Yukawa 97-2158).

Goodyera sp.

ESPIRITU SANTO. Palitaliefu, near Nokovula, Mt. Tabwemasana range, 1996 (TBG 118600). Between 2nd Camp and Mt. Vutimena, in the montane forest, 900m alt., 18, Oct. 1997 (Yukawa 97-2156). Along the Pialapa River, 2nd Camp, on the steep slope in lower montane forest, 560m alt., 19, Oct. 1997 (Yukawa 97-2163). Butmas, in the lowland forest, 510m alt., 23, Oct. 1997 (Yukawa 97-2187).

Gunnarella robertsii (Schltr.) Senghas

ESPIRITU SANTO. Along the Pialapa River, between Tsureviu and 1st Camp, 160m alt., 14, Oct. 1997 (Yukawa 97-2038).

Habenaria aff. *cruciata*

ESPIRITU SANTO. Along the Pialapa River, 2nd Camp, on the steep slope in lower montane forest, 560m alt., 17, Oct. 1997 (Yukawa 97-2099). Ibid., between 1st Camp and 2nd Camp, 400m alt., 19, Oct. 1997 (Yukawa 97-2175).

Habenaria sp.

EFATE. Mt. Bernier, in the rain forest, 28, Oct. 1997 (Yukawa 97-2224).

ESPIRITU SANTO. Butmas, in the grassland, 270m alt., 8, Oct. 1997 (Yukawa 97-2014). Along the Pialapa River, between 1st Camp and 2nd Camp, 160m alt., 15, Oct. 1997 (Yukawa 97-2039).

Liparis condylobulbon Reichb. f.

ESPIRITU SANTO. Along the Pialapa River, between 1st Camp and 2nd Camp, 380m alt., 19, Oct. 1997 (Yukawa 97-2178).

Liparis gibbosa Finet

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 700m alt., 18, Oct. 1997 (Yukawa 97-2132).

Liparis pedicellaris Schltr.

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 900m alt., 18, Oct. 1997 (Yukawa 97-2146).

Liparis sp.

ESPIRITU SANTO. Palitaliefu, near Nokovula, Mt. Tabwemasana range, 1996 (TBG 118594). Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 710m alt., 18, Oct. 1997 (Yukawa 97-2136).

Luisia teretifolia Gaudich.

ESPIRITU SANTO. Luganville, seashore, on *Glochidion* sp., 5m alt., 24, Oct. 1997 (Yukawa 97-2213).

Macodes sp.

ESPIRITU SANTO. Along the Pialapa River, between 1st Camp and 2nd Camp, on the steep slope in woodland, 500m alt., 15, Oct. 1997 (Yukawa 97-2054). Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 900m alt., 16, Oct. 1997 (Yukawa 97-2097).

Malaxis aff. *brevidentata*

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 1240m alt., 16, Oct. 1997 (Yukawa 97-2066).

Malaxis aff. *vitiensis*

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, in the montane forest, 900m alt., 18, Oct. 1997 (Yukawa 97-2155).

Malaxis taurina (Reichb. f.) Kuntze

ESPIRITU SANTO. Palitaliefu, near Nokovula, Mt. Tabwemasana range, 1996 (TBG 118601).

Malaxis xanthochila (Schltr.) Ames & C. Schweinf.

ESPIRITU SANTO. Between 1st Camp and 2nd Camp, in the lowland forest, on a trunk, 160m alt., 15, Oct. 1997 (Yukawa 97-2042). Butmas, in the lowland forest, 510m alt., 23, Oct. 1997 (Yukawa 97-2190).

Malaxis sp.

ESPIRITU SANTO. Mt. Tabwemasana range, 1996 (TBG 118606). Between 2nd Camp and Mt. Vutimena, in the montane forest, 900m alt., 18, Oct. 1997 (Yukawa 97-2157). Along the Pialapa River, in the lower montane forest, 2nd Camp, 560m alt., 19, Oct. 1997 (Yukawa 97-2162).

Mediocalcar paradoxum Schltr.

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 900-950m alt., 16, Oct. 1997 (Yukawa 97-2060). Ibid., on the steep slope in montane forest, 1000m alt., 16, Oct. 1997 (Yukawa 97-2063). Ibid., on the ridge top forest, 1360m alt., 16, Oct. 1997 (Yukawa 97-2069).

Mediocalcar versteegii J. J. Sm. subsp. *intermedium* Schuit.

ESPIRITU SANTO. Mt. Tabwemasana range, 1996 (TBG 118595).

Mediocalcar sp.

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, on the steep slope in montane

forest, 1000–1150m alt., 16, Oct. 1997 (Yukawa 97–2083). *Ibid.*, on the steep slope in montane forest, 1250–1300m alt., 16, Oct. 1997 (Yukawa 97–2093).

Oberonia bifida Schltr.

ESPIRITU SANTO. Palitaliefu, near Nokovula, Mt. Tabwemasana range, 15° S 20' 66" / 166° E 44' 68", 853m alt., 26, Oct. 1997 (TBG 118624, 118625, 118626 and 118627).

Oberonia imbricata (Blume) Lindl.

ESPIRITU SANTO. Palitaliefu, near Nokovula, Mt. Tabwemasana range, 1996 (TBG 118635). *Ibid.*, near Nokovula, Mt. Tabwemasana range, 15° S 20' 66" / 166° E 44' 68", 853m alt., 26, Oct. 1997 (TBG 118620, 118621, 118622 and 118623).

Oberonia cf. imbricata

ESPIRITU SANTO. Butmas, in the lowland forest, on *Ficus storkii*, 560m alt., 23, Oct. 1997 (Yukawa 97–2193).

Oberonia heliophila (Reichb. f.) Reichb. f.

ESPIRITU SANTO. Tangoa, in the coconut palm plantation, on *Cocos nucifera* trunks, 60m alt., 12, Oct. 1997 (Yukawa 97–2028).

***Oberonia* sp.**

ESPIRITU SANTO. Mt. Tabwemasana range, 1996 (TBG 118596). Tangoa, in the coconut palm plantation, on *Cocos nucifera* trunks, 60m alt., 12, Oct. 1997 (Yukawa 97–2026). Along the Pialapa River, on the steep slope in lower montane forest, 2nd Camp, 560m alt., 17, Oct. 1997 (Yukawa 97–2102).

***Octarrhena* sp.**

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 640m alt., 18, Oct. 1997 (Yukawa 97–2109).

Phaius graeffei Reichb. f.

ESPIRITU SANTO. Along the Pialapa River, 2nd Camp, on the steep slope in lower montane forest, 560m alt., 17, Oct. 1997 (Yukawa 97–2101).

Pholidota imbricata Lindl.

ESPIRITU SANTO. Along the Pialapa River, between 1st Camp and 2nd Camp, 350m alt., 15, Oct. 1997 (Yukawa 97–2047).

Phreatia cf. paleata

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 670m alt., 18, Oct. 1997 (Yukawa 97–2116).

Phreatia hypsorhynchos Schltr.

ESPIRITU SANTO. Palitaliefu, near Nokovula, Mt. Tabwemasana range, 15° S 20' 66" / 166° E 44' 68", 26, Oct. 1997 (TBG 118628). Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 1000–1150m alt., 16, Oct. 1997 (Yukawa 97–2086).

Phreatia micrantha Schltr.

ESPIRITU SANTO. Along the Pialapa River, between 1st Camp and 2nd Camp, 350m alt., 15, Oct. 1997 (Yukawa 97–2046). Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 1000–1150m alt., 16, Oct. 1997 (Yukawa 97–2085).

Phreatia myosurus (G. Forst.) Ames

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 640m alt., 18, Oct. 1997 (Yukawa 97–2110A).

Phreatia aff. *stenostachya*

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 640m alt., 18, Oct. 1997 (Yukawa 97-2110B). Butmas, in the lowland forest, 510m alt., 23, Oct. 1997 (Yukawa 97-2185).

Phreatia sp.

ESPIRITU SANTO. Tangoa, in the lowland forest, 12, Oct. 1997 (Yukawa 97-2033). Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 1150-1250m alt., 16, Oct. 1997 (Yukawa 97-2090). Ibid., on the steep slope in montane forest, 640m alt., 18, Oct. 1997 (Yukawa 97-2113). Ibid., on the steep slope in montane forest, 900m alt., 18, Oct. 1997 (Yukawa 97-2150).

Pristiglottis longiflora (Reichb. f.) Kores

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 900m alt., 18, Oct. 1997 (Yukawa 97-2148).

Pseuderia cf. *smithiana*

ESPIRITU SANTO. Along the Pialapa River, 2nd Camp, on the steep slope in lower montane forest, 560m alt., 17, Oct. 1997 (Yukawa 97-2104).

Robiquetia bertholdii Schltr.

EFATE. Paonangisu, seashore, on *Excoecaria agallocha*, 3, Oct. 1997 (Yukawa 97-2004). Lekenasua, in the mangrove forest, on *Garuga floribunda*, 3, Oct. 1997 (Yukawa 97-2007).
ESPIRITU SANTO. Luganville, roadside, on *Mangifera indica*, 5m alt., 24, Oct. 1997 (Yukawa 97-2214).

Robiquetia aff. *gracilistipes*

ESPIRITU SANTO. Mt. Tabwemasana range, 1996 (TBG 118586).

Robiquetia sp.

ESPIRITU SANTO. Along the Pialapa River, 2nd Camp, on the steep slope in lower montane forest, 560m alt., 15, Oct. 1997 (Yukawa 97-2056). Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 700m alt., 18, Oct. 1997 (Yukawa 97-2128).

Sarcanthopsis nagarensis (Reichb. f.) Garay

EFATE. Paonangisu, seashore, on *Excoecaria agallocha*, 3, Oct. 1997 (Yukawa 97-2005).
ESPIRITU SANTO. Tangoa, in the lowland forest, 12, Oct. 1997 (Yukawa 97-2029).

Spathoglottis pacifica Reichb. f.

ESPIRITU SANTO. Butmas, in the grassland, ca. 270m alt., 8, Oct. 1997 (Yukawa 97-2021). Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 670m alt., 18, Oct. 1997 (Yukawa 97-2161).

Spathoglottis petri Reichb. f.

EFATE. Port Vila, cultivated, 29, Oct. 1997 (Yukawa 97-2232).

Spathoglottis plicata Blume

ESPIRITU SANTO. Butmas, in the grassland, ca. 500m alt., 23, Oct. 1997 (Yukawa 97-2209).

Spathoglottis sp.

ESPIRITU SANTO. Mt. Tabwemasana range, 1996 (TBG 118598 and 118599).

Taeniophyllum hirtum Blume

ESPIRITU SANTO. Palitaliefu, near Nokovula, Mt. Tabwemasana range, 15° S 20' 66" / 166° E 44' 68", 853m alt., 28, Oct. 1997 (TBG 118629).

Taeniophyllum fasciola (G. Forst.) Reichb. f.

ESPIRITU SANTO. Luganville, seashore, on *Cocos nucifera* trunks, 5m alt., 24, Oct. 1997 (Yukawa 97-2212).

Taeniophyllum sp.

ESPIRITU SANTO. Mt. Tabwemasana range, 1996 (TBG 118597).

Trichotosia vulpina Kraenzl.

ESPIRITU SANTO. Butmas, 12, Oct. 1997 (Yukawa 97-2034).

Vrydagzenia argyrotaenia Schltr.

ESPIRITU SANTO. Palitaliefu, near Nokovula, Mt. Tabwemasana range, 15° S 20' 66" / 166° E 44' 68", 853m alt., 28, Oct. 1997 (TBG 118630). Between 2nd Camp and Mt. Vutimena, in the montane forest, 900m alt., 18, Oct. 1997 (Yukawa 97-2153).

Zeuxine stenophylla Benth. & Hook. f. ex Drake.

ESPIRITU SANTO. Mt. Tabwemasana range, 1996 (TBG 118607).

PALMAE

Calamus vanuatuensis

ESPIRITU SANTO. Along the Pialapa River, between 1st Camp and 2nd Camp, 400m alt., 19, Oct. 1997 (Yukawa 97-2177).

Licuala grandis H. Wendl.

ESPIRITU SANTO. Along the Pialapa River, 2nd Camp, 18, Oct. 1997 (Konishi 1131, Local name: Na Buni Buni).

Veitchia sp.

ESPIRITU SANTO. Butmas, 23, Oct. 1997 (Konishi 1224 and 1236).

PANDANACEAE

Freycinetia cf. *flavida*

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, in the ridge top forest, 1360m alt., 16, Oct. 1997 (Yukawa 97-2071).

Freycinetia tannaensis Martelli

ESPIRITU SANTO. Palitaliefu, near Nokovula, Mt. Tabwemasana range, 15° S 20' 66" / 166° E 44' 68", 853m alt., 28, Oct. 1997 (TBG 118631, 118632 and 118633). Between 2nd Camp and Mt. Vutimena, in the ridge top forest, 1360m alt., 16, Oct. 1997 (Yukawa 97-2072).

PIPERACEAE

Macropiper latifolium Miq.

EFATE. Along the Teouma River, 28, Oct. 1997 (Konishi 1322).

ESPIRITU SANTO. Along the Pialapa River, between 2nd Camp and Tsureviu, 20, Oct. 1997 (Konishi 1138). Butmas, 23, Oct. 1997 (Konishi 1191 and 1196).

Peperomia pallidinervis C. DC.

ESPIRITU SANTO. Along the Pialapa River, between 1st Camp and 2nd Camp, 15, Oct. 1997

(Konishi 1035 and 1037, Local name: Malumlum Tahajiajia).

Peperomia sp.

ESPIRITU SANTO. Between Tanafo and Matantas, 8, Oct. 1997 (Konishi 1010). Between 2nd Camp and Mt. Vutimena, 16, Oct. 1997 (Konishi 1067, Local name: Malumlum Hanara), (Konishi 1068, Local name: Malumlum Woke), (Konishi 1085, Local name: Tavar Jeijej) and (Konishi 1104). Along the Pialapa River, 2nd Camp, 18, Oct. 1997 (Konishi 1112). Butmas, in the lowland forest, 23, Oct. 1997 (Konishi 1182, Local name: Malulum Taha Jia Jia) and (Konishi 1208).

Piper austro-caledonicum C. DC.

ESPIRITU SANTO. Butmas, in the lowland forest, 23, Oct. 1997 (Konishi 1215).

Piper macropiper Pennant.

EFATE. Mt. Bernier, in the lowland forest, 28, Oct. 1997 (Konishi 1294).

Piper methysticum Forst. f.

ESPIRITU SANTO. Palitaliefu, near Nokovula, Mt. Tabwemasana range, 15° S 20' 66" / 166° E 44' 68", 853m alt., 28, Oct. 1997 (TBG 118634). Butmas, 23, Oct. 1997 (Konishi 1195).

Piper sp.

ESPIRITU SANTO. Along the Pialapa River, between 1st Camp and 2nd Camp, 15, Oct. 1997 (Konishi 1038, Local name: As Hanakala). Between 2nd Camp and Mt. Vutimena, on the east ridge of Mt. Vutimena, 16, Oct. 1997 (Konishi 1060 and 1065, Local name: As Hanakala).

ROSACEAE

Rubus roseifolius J. E. Smith ex Baker

EFATE. Mt. Bernier, in the rain forest, 28, Oct. 1997 (Konishi 1292)

RUBIACEAE

Geophila repens (L.) I. M. Johnst.

ESPIRITU SANTO. Butmas, in the lowland forest, 560m alt., 23, Oct. 1997 (Yukawa 97-2199).

Hydnophytum sp.

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, on the steep slope of montane forest, 700m alt., 18, Oct. 1997 (Yukawa 97-2127).

Psychotria aneityensis Guillaumin

EFATE. Mt. Bernier, in the rain forest, 28, Oct. 1997 (Konishi 1308).

Psychotria forsteriana A. Gray

EFATE. Mt. Bernier, in the rain forest, 28, Oct. 1997 (Konishi 1291 and 1300).

Psychotria cf. *milnei*

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, on the steep slope of montane forest, 1310m alt., 16, Oct. 1997 (Yukawa 97-2075).

SAPINDACEAE

Elatostachys fulcata Radlk.

EFATE. Mt. Bernier, in the rain forest, 28, Oct. 1997 (Konishi 1302).

THEACEAE

Eurya japonica Thunb.

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, on the steep slope in montane forest, 1310m alt., 16, Oct. 1997 (Yukawa 97-2077).

URTICACEAE

Elatostema beccari H. E. Schroet.

EFATE. Along the Teouma River, 28, Oct. 1997 (Konishi 1320).

ESPIRITU SANTO. Between 2nd Camp and Mt. Vutimena, 16, Oct. 1997 (Konishi 1092, 1100 and 1101). Butmas, in the lowland forest, 23, Oct. 1997 (Konishi 1221).

Elatostema macrophylla Brongn.

ESPIRITU SANTO. Butmas, in the lowland forest, 23, Oct. 1997 (Konishi 1186, 1189 and 1192).

Elatostema novae-britanniae Lauterb.

ESPIRITU SANTO. Along the Pialapa River, 2nd Camp, 18, Oct. 1997 (Konishi 1103).

Procris pedunculata (J. R. & G. Forst.) Wedd.

ESPIRITU SANTO. Along the Pialapa River, 2nd Camp, 18, Oct. 1997 (Konishi 1102).
Butmas, 23, Oct. 1997 (Konishi 1184, Local name: Pau Pau (Wind Wind)) and (Konishi 1187).

VERBENACEAE

Lantana camara L.

EFATE. Mt. Bernier, in the rain forest, 28, Oct. 1997 (Konishi 1301).

ZINGIBERACEAE

Alpinia oceanica Burkill

ESPIRITU SANTO. Butmas, 23, Oct. 1997 (Konishi 1217).

Hornstedtia lycostoma K. Schum. & Lauterb.

ESPIRITU SANTO. Butmas, edge of forest, 270m alt., 8, Oct. 1997 (Yukawa 97-2015).

Tapeinochilos sp.

EFATE. Mt. Bernier, in the rain forest, 28, Oct. 1997 (Konishi 1310).

Zingiber zerumbet Rosc. ex Sm.

EFATE. Mt. Bernier, in the rain forest, 28, Oct. 1997 (Konishi 1312).

ERRATA in Annals of the Tsukuba Botanical Garden No.17 (1998)

Frontispiece p. 1

Mt. Tabwemasana (1979 m), → Mt. Tabwemasana (1879 m),

p.31

Lygodium circinnatum (Burm.) Sw. → Transfer to Lygodiaceae from Schizaeaceae

p.31 and p.94

Note: Syn. *Selliguea plantaginea* Brack. → Elimination

p.75 and p.94

Adiantum pubescens Schkuhr → *Adiantum hispidulum* Swartz

p.85

Histiopteris incisa (Thunb.) J. Sm. → Transfer to Hypolepidaceae from Hymenophyllaceae

p.90 and p.114

Angiopteris evecta (G. Forst.) Hoff. → Transfer to Angiopteridaceae from Marattiaceae

p.94

Selliguea lanceolata (Mett.) Fourn. → *Selliguea plantaginea* Brack.

p.105

Adiantum pubescens Schkuhr → *Adiantum fournieri* Copel.

p.110

Tectaria deculens (C. Presl) Copel. → *Tectaria decurrens* (C. Presl) Copel.

p.113

Shenomeris deltoidea (C. Chr.) Copel. → *Sphenomeris deltoidea* (C. Chr.) Copel.