

- 203.5.1 **Nothocissus spicifera** (Griff.) Latiff, **L07** 71; *Vitis macrostachya* Miq., **FMP1** 472; climber; lowland forest margins, often on river banks; Kd, Pn, Pk, Kl, Tg, Ph, Sl, Ml, Sp.
- 203.6.1 **Parthenocissus semicordata** (Wall.) Planch., **L08** 81; *Vitis semicordata* Wall., **FMP1** 475; climber; Pk.
- 203.7.1 **Pterisanthes cissoides** Blume, **FMP1** 482, **L09** 48; vine; lowland forest; Pk, Ph, Sl, Sp.
- 203.7.2 **Pterisanthes cordigera** (Griff.) Planch., **L09** 61; vine; lowland forest; Sl, NS, Ml, Jh.
- 203.7.3 **Pterisanthes dalhousiae** Planch., **FMP1** 481, **L09** 59; vine; Pn; endemic.
- 203.7.4 **Pterisanthes eriopoda** (Miq.) Planch., **FMP1** 481, **L09** 57; vine; lowland forest; Pk, Tg, Ph, Sl, NS, Ml, Jh, Sp.
- 203.7.5 **Pterisanthes glabra** Ridl., **FMP1** 481, **L09** 51; climber; only known from type; Sg Tahan, Ph; endemic.
- 203.7.6 **Pterisanthes heterantha** (Griff.) Lawson, **L09** 52; *Pterisanthes rufula* auct. non (Miq.) Planch., **FMP1** 482 in part; vine; NS, Ml, Jh.
- 203.7.7 **Pterisanthes miquelii** Planch., **L09** 56; vine; Pn.
- 203.7.8 **Pterisanthes pedata** Lawson, **FMP1** 482, **L09** 63; climber; Pk, Ml.
- 203.7.9 **Pterisanthes polita** (Miq.) Lawson, **L09** 53; *Pterisanthes coriacea* Korth. ex King, **FMP1** 480; vine; lowland forest; Pk, Ph, Sl, Jh, Sp.
- 203.7.10 **Pterisanthes pulchra** Ridl., **FMP1** 482, **L09** 58; vine with beautiful leaves; Ph; endemic.
- 203.7.11 **Pterisanthes rufula** (Miq.) Planch., **FMP1** 482 in part, **L09** 59; vine; Pk, Sl.
- 203.7.12 **Pterisanthes stonei** Latiff, **L09** 51; vine; lowland forest; NS, Jh; endemic.
- 203.8.1 **Tetrastigma cruciatum** Craib & Gagnep., **L11** 219; climber; lowland forest margins; Ps, Kd, Ml.
- 203.8.2 **Tetrastigma curtisii** (Ridl.) Suess., **L11** 223; *Vitis curtisii* Ridl., **FMP1** 474; liana; forest margins in lowlands and hills; Pn, Ph, Sl, NS; endemic.
- 203.8.3 **Tetrastigma dichotomum** (Blume) Planch., **L11** 221; climber; edges of hill and montane forest; Pk, Ph.
- 203.8.4 **Tetrastigma dubium** (Lawson) Planch., **L11** 219; *Vitis wrayi* auct. non King, **FMP1** 475 in part; climber; forest margins from lowlands to mountains; Kd, Pk, Pn, Kl, Sl, Jh.

- 203.8.5 **Tetrastigma godefroyanum** Planch., **L11** 224; liana; lowland forest; Kd, Sl.
- 203.8.6 **Tetrastigma hookeri** (Lawson) Planch., **L11** 223; climber; hill forest; P, Langkawi, Pn, Sl.
- 203.8.7 **Tetrastigma lawsoni** (King) Burkill *ex* A.W. Hill, **L11** 220; *Vitis lawsoni* King, **FMP1** 474; liana; lowland forest margins; Kd, Pk, Pn, Sl, Sp; endemic.
- 203.8.8 **Tetrastigma leucostaphylum** (Dennst.) Alston *ex* Mabb., **M02** 539; *Vitis kunstleri* King, **FMP1** 475; *Vitis lanceolarium* (Roxb.) Wall., **FMP1** 475; *Tetrastigma lanceolarium* (Roxb.) Planch., **L11** 222; stout climber; forest margins: lowlands, hills and limestone; Kd, Kl, Pk, Pn, Tg, Ph, Sl, NS, Jh, Sp.
- 203.8.9 **Tetrastigma papillosum** (Blume) Planch., **L11** 226; climber; hill and montane forest; Ph, Sl.
- 203.8.10 **Tetrastigma pedunculare** (Wall. *ex* Lawson) Planch., **L11** 225; *Vitis peduncularis* Wall. *ex* Lawson, **FMP1** 474; climber; lowland and hill forest; Kd, Pk, Kl, Ph, Sl, NS, Ml, Jh.
- 203.8.11 **Tetrastigma pyriforme** Gagnep., **L11** 226; climber; hill forest; Tg, Ph.
- 203.8.12 **Tetrastigma scortechinii** (King) Gagnep., **L11** 218; *Vitis scortechinii* King, **FMP1** 474; liana; lowland forest edges, including limestone; Pk, Ph; endemic.

204. ALISMATACEAE

- 204.1.1 **Echinodorus ridleyi** Steenis, **FMI5** 325; *Ranalisma rostrata* Stapf, **FMP4** 362; stoloniferous herb to 20 cm tall; muddy places in lowland forest; only known from Gua Batu, Sl (probably not on limestone).
- 204.2.1 **Sagittaria guayanensis** H.B.K. ssp. **lappula** (D. Don) Bogin, **FMP4** 363, **FMI5** 328, **M47** 30; submerged laticiferous herb with floating leaves; ditches and wet rice-fields; widespread.

205. AMARYLLIDACEAE

- 205.1.1 **Crinum asiaticum** L., **FMP4** 301, **FMI11** 359; *Crinum northianum* Baker, **FMP4** 301; *Crinum deflexum auct. non* Ker Gawl., **FMP4** 301; herb to 2 m tall; sandy places, coastal and riverine forest; widespread.
- 205.2.1 **Proiphys amboinensis** (L.) Herb., **FMI11** 366; *Eurycles sylvestris* Salisb. *ex* Schult., **FMP4** 303; bulbous herb to 30 cm tall; sandy and rocky places near the sea; north of Malaya.

206. ANTHERICACEAE

- 206.1.1 **Chlorophytum laxum** R.Br., **FMI9** 205; stemless herb to 60 cm tall; usually in shady places.
- 206.1.2 **Chlorophytum malayense** Ridl., **FMP5** 341, **FMI9** 206; *Chlorophytum orchidastrum* auct. non Lindl., **FMP4** 327; herb to 60 cm tall; lowland forest, including that on limestone; Ps, Pk.

207. ARACEAE

- 207.1.1 **Aglaodorum griffithii** (Schott) Schott, **N08** 61, **H28** 3; *Aglaonema griffithii* Schott, **FMP5** 100; creeping herb to 40 cm tall; in tidal swamps, often among nypah palms; Ml, Sp.
- 207.2.1 **Aglaonema costatum** N.E.Br., **FMP5** 100 incl. var. *immaculatum* Ridl., **N08** 23, **C15** 178, **H28** 4; creeping herb to 40 cm tall; on limestone rocks; P. Langkawi.
- 207.2.2 **Aglaonema nebulosum** N.E.Br., **N08** 30, **H28** 7; *Aglaonema pictum* auct. non Kunth, **FMP5** 102 incl. vars. *nanum* Ridl. and *scortechinii* (Hook.f.) Ridl.; erect herb 10–60 cm tall; peat and freshwater swamp forest, occasionally in the hills; widespread.
- 207.2.3 **Aglaonema nitidum** (Jack) Kunth, **N08** 33, **H28** 7; *Aglaonema oblongifolium* Schott, **FMP5** 100 incl. var. *curtisii* N.E.Br.; erect herb to 1 m tall; damp lowland forest; widespread.
- 207.2.4 **Aglaonema simplex** Blume, **N08** 39, **H28** 10; *Aglaonema schottianum* Miq., **FMP5** 101; *Aglaonema angustifolium* N.E.Br., **FMP5** 101 incl. var. *undulatum* Ridl.; erect herb to 120 cm tall; damp places in lowland forest; widespread.
- 207.3.1 **Alocasia beccarrii** Engl., **FMP5** 97, **H28** 12; creeping herb about 30 cm tall; on rocks in hill forest streams.
- 207.3.2 **Alocasia curtisii** N.E. Br., **H28** 13; herb; endemic.
- 207.3.3a **Alocasia denudata** Endl. var. **denudata**, **FMP5** 97, **H28** 14; herb to 1 m tall; forest margins; widespread.
- 207.3.3b **Alocasia denudata** Endl. var. **elongata** Engl., **H28** 14; herb; Sp; endemic variety.
- 207.3.4 **Alocasia longiloba** Miq., **H28** 16; *Alocasia eminens* N.E. Br.; herb.
- 207.3.5 **Alocasia lowii** Hook., **FMP5** 98, **H28** 16; herb to 1 m tall; on limestone.

- 207.3.6 ***Alocasia macrorrhizos* (L.) G. Don, N09 58, H28 17**; huge-leaved herb to 2 m tall; frequent escape or relic of cultivation; widespread.
- 207.3.7 ***Alocasia ovalifolia* Ridl., FMP5 99, H28 18**; herb to 75 cm tall; hill forest; widespread.
- 207.3.8 ***Alocasia pubera* (Hassk.) Schott, FMP5 99, H28 19**; herb to 60 cm tall; Pk.
- 207.4.1 ***Amorphophallus bufo* Ridl., FMP5 93, H28 23**; tuberous herb to 1.5 m tall; montane forests; endemic.
- 207.4.2 ***Amorphophallus carneus* Ridl., FMP5 94 ‘*carnosus*’, C15 179, H28 23**; tuberous herb to 50 cm tall; on limestone; north of Peninsula; endemic.
- 207.4.3 ***Amorphophallus elatus* Hook.f., H28 24**; tuberous herb; endemic.
- 207.4.4 ***Amorphophallus elegans* Ridl., FMP5 95, H28 24**; tuberous herb to 1 m tall; montane forests; endemic.
- 207.4.5 ***Amorphophallus haematospadix* Hook.f., FMP5 94, C15 179, H28 25**; tuberous herb to 60 cm tall; on limestone; northern Malaya.
- 207.4.6 ***Amorphophallus longituberosus* (Engl.) Engl. & Gehrm., H28 26**; *Amorphophallus viridis* Ridl., FMP5 93; tuberous herb to 50 cm tall; [There must be some doubt as to whether this species occurs with Malaya. Ridley cites P. Adang (Thailand) as the only locality].
- 207.4.7 ***Amorphophallus malaccensis* Ridl., H28 26**; tuberous herb; endemic.
- 207.4.8 ***Amorphophallus minor* Ridl., FMP5 93, H28 27**; tuberous herb to 30 cm tall; lowland forests; endemic.
- 207.4.9 ***Amorphophallus paeoniifolius* (Dennst.) Nicolson, N09 37, H28 27**; *Amorphophallus campanulatus* Decne., FMP5 92; tuberous herb to 2 m tall; open sites and forest margins.
- 207.4.10 ***Amorphophallus perakensis* Engl., FMP5 94, H28 28**; tuberous herb to 60 cm tall; endemic.
- 207.4.11 ***Amorphophallus prainii* Hook.f., FMP5 94, H28 28**; tuberous herb to 2 m tall; lowland forests.
- 207.4.12 ***Amorphophallus sparsiflorus* Hook.f., FMP5 93, H28 30**; montane forests; endemic.
- 207.4.13 ***Amorphophallus variabilis* Blume, FMP5 95, H28 30**; tuberous herb to 1.5 m tall; cracks in limestone; [Identity of this plant in Malaya may be incorrect].
- 207.5.1 ***Amydrium humile* Schott, FMP5 118, N07 124, H28 31**; creeping herb, sometimes climbing; on rocks and banks at 1200–1800 m; Pn, Pk, Ph.

- 207.5.2 **Amydrium medium** (Zoll. & Moritzi) Nicolson, **N07** 124, **H28** 31; *Epipremnopsis media* (Zoll. & Moritzi) Engl., **FMP5** 120; root climber; climbing boles of trees in lowland forest; widespread.
- 207.6.1 **Anadendrum latifolium** Hook.f., **FMP5** 115, **H28** 32; epiphytic root climber to 2 m or more long; on tree trunks in lowland and hill forest; Kl, Tg, Pk, NS, Jh; endemic.
- 207.6.2 **Anadendrum marginatum** Schott, **FMP5** 116, **H28** 32; root climber; on trees and rocks in the lowlands and hills; Pk, Ph, Sl; endemic.
- 207.6.3a **Anadendrum montanum** (Blume) Schott var. **cordatum** Ridl., **FMP5** 116, **H28** 33; creeper; on rocks including limestone; Sl; endemic.
- 207.6.3b **Anadendrum montanum** (Blume) Schott var. **longirostre** Hook.f., **FMP5** 116, **H28** 33; creeper.
- 207.6.3c **Anadendrum montanum** (Blume) Schott var. **montanum**, **FMP5** 115, **H28** 33; epiphytic root climber to 2 m or more long; on tree trunks in lowland forest, occasionally at higher altitudes; Kd, Kl, Tg, Pn, Pk, Ph, Sl, NS, Ml, Jh, Sp.
- 207.7.1 **Arisaema anomalum** Hemsl., **FMP5** 89, **H28** 35; tuberous herb to 50 cm tall; hill and montane forest; endemic.
- 207.7.2 **Arisaema filiforme** Blume, **FMP5** 89, **H28** 36; tuberous herb to 30–75 cm tall; montane forest.
- 207.7.3 **Arisaema fimbriatum** Mast., **FMP5** 89, **C15** 179, **H28** 36; tuberous herb to 30 cm tall; on limestone; in the north.
- 207.7.4 **Arisaema kunstleri** Hook.f., **H28** 37; *Arisaema roxburghii* Kunth var. *kunstleri* (Hook.f.) Ridl., **FMP5** 88; tuberous herb to 30 cm tall; lowland and hill forest; endemic.
- 207.7.5 **Arisaema laminatum** Blume, **V12** 452, **H28** 37; *Arisaema roxburghii* Kunth, **FMP5** 88; tuberous herb to 30 cm tall; lowland and hill forest.
- 207.7.6 **Arisaema scortechinii** Hook.f., **FMP5** 89, **H28** 38; tuberous herb to 30 cm tall; montane forests.
- 207.7.7 **Arisaema wrayi** Hemsl., **FMP5** 89, **H28** 38; herb to 50 cm tall; montane forest, also on limestone; endemic.
- 207.8.1 **Colocasia esculenta** (L.) Schott, **N09** 54, **H28** 45; *Colocasia antiquorum* Schott, **FMP5** 96; herb to 40 cm tall; relic of cultivation in damp open spots; origin obscure.
- 207.8.2 **Colocasia gigantea** (Blume) Hook.f., **FMP5** 96, **H28** 45; herb to 2 m tall; forest margins, limestone rocks; widespread.

- 207.9.1 **Cryptocoryne affinis** N.E.Br., **FMP5** 87, **H28** 48; submerged herb; shallow gravelly forest streams; widespread; endemic.
- 207.9.2 **Cryptocoryne ciliata** (Roxb.) Schott, **FMP5** 86, **J02** 38, **H28** 49; stoloniferous tuberous herb; on tidal mud and in rivers and ditches near the sea; widespread.
- 207.9.3 **Cryptocoryne cordata** Griff., **FMP5** 86, **F21** 146 in part, **H28** 49; submerged herb; forest streams.
- 207.9.4 **Cryptocoryne decus-silvae** de Wit, **H28** 49; aquatic herb; endemic.
- 207.9.5 **Cryptocoryne elliptica** N.E.Br., **FMP5** 87, **H28** 50; aquatic herb; Pk; endemic.
- 207.9.6 **Cryptocoryne griffithii** Schott, **FMP5** 87, **H28** 51; aquatic herb; slow forest streams; south of Peninsula; endemic.
- 207.9.7 **Cryptocoryne longicauda** Engl., **J02** 40, **H28** 52; *Cryptocoryne pontederiifolia* auct. non Schott, **FMP5** 87; *Cryptocoryne johorensis* Engl., **F21** 147; rhizomatous herb; forest streams and pools; base of Gg Pulai, Jh.
- 207.9.8 **Cryptocoryne minima** Ridl., **FMP5** 88, **H28** 52; rhizomatous herb; muddy places; Gua Batu Boh, Kl and Tapah, Pk.
- 207.9.9 **Cryptocoryne nurii** Furtado, **F21** 147, **H28** 52; aquatic herb; endemic.
- 207.9.10 **Cryptocoryne purpurea** Ridl., **FMP5** 87, **H28** 53; stoloniferous aquatic herb; slow forest streams; Kl, Jh; endemic.
- Cryptocoryne schulzei* de Wit [**H28** 54] and *Cryptocoryne zukalii* Rataj [**H28** 56] may also occur in Malaya.
- 207.10.1 **Cyrtosperma merkusii** (Hassk.) Schott, **H27** 430, **H28** 59; *Cyrtosperma lasioides* Griff., **FMP5** 127; herb to 4 m tall; open or shaded swampy places; Tg, Pk, Ph, Sl, NS, Ml, Jh, Sp.
- 207.11.1 **Epipremnum giganteum** (Roxb.) Schott, **FMP5** 110, **H28** 62; stout epiphytic root climber to 20 m long; on rocks and trees in the lowlands and hills; widespread.
- 207.11.2 **Epipremnum pinnatum** (L.) Engl., **N09** 32, **H28** 65; *Epipremnum mirabile* Schott, **FMP5** 119; large climber; lowland forests; (cv. Aureum is a frequent escape from cultivation).
- 207.12.1 **Furtadoa mixta** (Ridl.) M. Hotta, **H49** 53, **H28** 66; *Homalomena mixta* Ridl., **FMP5** 110, **F21** 209; herb; lowland forest; only known from the Gg Tahan area, Ph; endemic.

- 207.13.1 **Hapaline brownii** Hook.f., **FMP5** 96, **C15** 180, **H28** 67, **B23** 72; tuberous herb to 30 cm tall; on limestone; P. Langkawi, Kd, Kl.
- 207.14.1a **Homalomena angustifolia** (Jack) Hook.f. var. **angustifolia**, **FMP5** 108, **H28** 70; *Homalomena humilis* (Jack) Hook.f. var. *pumila* (Hook.f.) Furtado, *nom. illeg.*, **F22** 203; creeping herb; on rocks in montane streams; widespread; endemic.
- 207.14.1b **Homalomena angustifolia** (Jack) Hook.f. var. **parvula** Ridl., **FMP5** 109, **H28** 70; creeping herb; Sg Teku, Gg Tahan, Ph; endemic.
- 207.14.2a **Homalomena argentea** Ridl. var. **argentea**, **FMP5** 107, **F22** 186, **H28** 70; herb; hills and mountains; Tg, NS, Ml.
- 207.14.2b **Homalomena argentea** Ridl. var. **purpurascens** Furtado, **F22** 188, **H28** 70; herb; among rocks in stream at 700 m; Gg Angsi, NS; endemic variety.
- 207.14.3 **Homalomena brevispatha** Engl., **H28** 72; herb.
- 207.14.4 **Homalomena confusa** Furtado, **F22** 189, **H28** 72; herb.
- 207.14.5 **Homalomena corneri** Furtado, **F22** 191, **H28** 73; creeping herb; on rocks above water; Sg Pelepa Kiri, Jh; endemic.
- 207.14.6 **Homalomena crassa** Ridl., **FMP5** 109, **H28** 73; fleshy herb; hill forest; Sl; endemic.
- 207.14.7 **Homalomena curtisii** Ridl., **FMP5** 108, **F22** 191, **H28** 73; erect herb; montane forest; endemic.
- 207.14.8 **Homalomena curvata** Engl., **H28** 74; herb; endemic.
- 207.14.9 **Homalomena deltoidea** Hook.f., **FMP5** 105, **F22** 192, **H28** 74; erect herb about 30 cm tall; hill and montane forest; Kd, Pn, Pk, Sl, NS, Jh; endemic.
- 207.14.10 **Homalomena elliptica** Hook.f., **FMP5** 108, **F22** 192, **H28** 74; creeping herb; lowlands and hills; Kd, Kl, Pn, Pk, Ph, Sl, NS, Ml.
- 207.14.11 **Homalomena falcata** Ridl., **FMP5** 107, **H28** 75; rhizomatous herb; on rocks in streams; Kd; endemic.
- 207.14.12a **Homalomena griffithii** (Schott) Hook.f. var. **griffithii**, **FMP5** 106, **F22** 194, **H28** 76; erect herb; lowland forest; widespread.
- 207.14.12b **Homalomena griffithii** (Schott) Hook.f. var. **obliquata** (Schott) Ridl., **H28** 76; *Homalomena obliquata* (Schott) Hook.f., **FMP5** 107; rhizomatous herb; Pn.
- 207.14.12c **Homalomena griffithii** (Schott) Hook.f. var. **ovata** (Schott) Engl., **FMP5** 107, **H28** 76; herb; lowland forest; endemic variety.

- 207.14.13 **Homalomena hendersonii** Furtado, **F22** 198, **H28** 77; erect herb; Sg Menggiri, Kl; endemic.
- 207.14.14a **Homalomena humilis** (Jack) Hook.f. var. **humilis**, **FMP5** 105, **F22** 199, **H28** 77; erect herb about 15 cm tall; hill and montane forest; widespread.
- 207.14.14b **Homalomena humilis** (Jack) Hook.f. var. **ophirensis** (Ridl.) Furtado, **F22** 203, **H28** 78; *Homalomena angustifolia* (Jack) Hook.f. var. *ophirensis* Ridl., **FMP5** 109; long creeping herb; rocky places on mountains; Kd, Ml, Jh; endemic variety.
- 207.14.14c **Homalomena humilis** (Jack) Hook.f. var. **undulata** Ridl., **FMP5** 105, **F22** 207, **H28** 78; herb; lowlands, hills and mountains; Ph.
- 207.14.15 **Homalomena johorensis** Engl., **FMP5** 106 'yohorensis', **H28** 79; herb; Gg Panti, Jh; endemic.
- 207.14.16 **Homalomena kiahii** Furtado, **F22** 207, **H28** 79; erect herb about 30 cm tall; hills and swamps; Sg Kayu and Sg Pelepah Kiri, Jh; endemic.
- 207.14.17 **Homalomena kingii** Hook.f., **H28** 79; herb.
- 207.14.18 **Homalomena lancifolia** Hook.f., **FMP5** 109, **F22** 208, **H28** 80; creeping herb; hill and montane forest; Pk, Ph, Sl; endemic.
- 207.14.19 **Homalomena major** Griff., **H28** 81; herb; endemic.
- 207.14.20 **Homalomena minor** Griff., **H28** 81; herb; endemic.
- 207.14.21 **Homalomena montana** Furtado, **F22** 210, **H28** 82; herb; Endemic.
- 207.14.22 **Homalomena multinervia** Ridl., **FMP5** 109, **H28** 82; *Homalomena elliptica* Hook.f. var. *paucinervia* Furtado, **F22** 193; creeping herb; montane forest; endemic.
- 207.14.23 **Homalomena nutans** Hook.f., **FMP5** 108, **F22** 211, **H28** 83; creeping herb; lowlands; Kl, Pk, Ph; endemic.
- 207.14.24 **Homalomena paludosa** Hook.f., **FMP5** 104, **H28** 84; herb; wet lowland forest; widespread.
- 207.14.25 **Homalomena pendula** (Blume) Bakh.f., **H28** 84; *Homalomena rubra* Hassk., **F22** 217; erect herb to 60 cm tall; lowland forest; Kl, Pn, Pk, Ph, Sl, NS, Ml, Jh, Sp.
- 207.14.26 **Homalomena pontederiifolia** Griff. ex Hook.f., **H28** 85; *Homalomena coerulescens* Jungh. ex Miq. var. *pontederiifolia* (Griff. ex Hook.f.) Ridl., **FMP5** 104; herb; lowland forest; Ml, Sp; endemic.
- 207.14.27a **Homalomena pygmaea** (Hassk.) Engl. var. **latifolia** (Engl.) Engl., **H28** 86; herb.

- 207.14.27b **Homalomena pygmaea** (Hassk.) Engl. var. **pumila** (Hook.f.) Engl., **H28** 86; herb; endemic.
- 207.14.27c **Homalomena pygmaea** (Hassk.) Engl. var. **purpurascens** (Hook.f.) Engl., **H28** 86; *Homalomena purpurascens* (Schott) Hook.f., **FMP5** 105 incl. var. *pumila* (Hook.f.) Ridl.; herb.
- 207.14.27d **Homalomena pygmaea** (Hassk.) Engl. var. **pygmaea**, **H28** 86; herb.
- 207.14.28 **Homalomena repens** Ridl., **FMP5** 106, **H28** 87; long creeping herb; on rocks; Gg Inas, Pk; endemic.
- 207.14.29 **Homalomena rostrata** Griff., **FMP5** 103, **F22** 225, **H28** 87; herb to 1 m tall; damp places in lowland forest; widespread; endemic.
- 207.14.30a **Homalomena sagittifolia** Jungh. ex Schott var. **angustifolia** Furtado, **F22** 228, **H28** 88; herb.
- 207.14.30b **Homalomena sagittifolia** Jungh. ex Schott var. **sagittifolia**, **FMP5** 103, **F22** 226, **H28** 88; herb to 1 m tall; lowland forest; Tg, Pk, Ph, Sl, NS, Jh, Sp.
- 207.14.31 **Homalomena scortechinii** Hook.f., **FMP5** 109 in part, **F22** 213, **H28** 89; herb; forest; Kl, Pk, Ph, Sl, NS, Jh; endemic.
- 207.14.32 **Homalomena trapezifolia** Hook.f., **FMP5** 107, **H28** 91; creeping herb; Pk, Ml; endemic.
- 207.14.33 **Homalomena undulatifolia** Ridl., **FMP5** 106, **H28** 91; small herb; lowland forest; Pk; endemic.
- 207.14.34 **Homalomena wallichii** Schott, **H28** 91; herb; endemic.
- 207.15.1 **Lasia spinosa** (L.) Thw., **H27** 459, **H28** 93; *Lasia aculeata* Lour., **FMP5** 125; clumping herb to 1.5 m tall; open wet places in the lowlands; Ps, Kd, Pn, Pk, Ph, Sl, Jh, Sp.
- 207.16.1 **Piptospatha elongata** (Engl.) N.E. Br., **H28** 96; herb.
- 207.16.2 **Piptospatha perakensis** (Engl.) Engl., **FMP5** 114, **H28** 97; herb to 50 cm tall; on rocks in flowing rivers and streams; widespread.
- 207.16.3a **Piptospatha ridleyi** N.E. Br. var. **lanceolata** Ridl., **FMP5** 114, **H28** 97; herb to 50 cm tall; on rocks in forest streams; Ulu Kahang, Jh; endemic.
- 207.16.3b **Piptospatha ridleyi** N.E. Br. var. **ridleyi**, **FMP5** 114, **H28** 97; herb to 50 cm tall; on rocks in forest streams; Sl, Jh; endemic.
- 207.17.1 **Pistia stratiotes** L., **FMP5** 85, **M47** 52, **H28** 98; stoloniferous floating herb; ponds, ditches and rivers; widespread; origin uncertain.

- 207.18.1 **Podolasia stipitata** N.E.Br., **FMP5** 125, **H27** 463, **H28** 99; rhizomatous herb; peaty sites in the lowlands and mountains; Kl, Pk, Jh.
- 207.19.1 **Pothos barberianus** Schott, **FMP5** 129 incl. var. **wallichii** (Hook.f.) Ridl., **H28** 100; *Pothos ellipticus* (non Moon ex Miq.) Ridl., **FMP5** 129; *Pothos ridleyanus* Furtado, **F21** 150; slender root climber; lowland forest; Pk, Ph.
- 207.19.2 **Pothos grandispathus** Ridl., **FMP5** 131, **H28** 103; root-climber; hill forest; Penang Hill; endemic.
- 207.19.3 **Pothos inaequalis** Ridl., **FMP5** 130, **H28** 103; slender root climber; river banks; Ph; endemic.
- 207.19.4 **Pothos junghuhnii** de Vriese, **H28** 104; climbing herb.
- 207.19.5 **Pothos kingii** Hook.f., **FMP5** 131, **H28** 104; large root climber; montane forest; Taiping Hills, Pk; endemic.
- 207.19.6 **Pothos lancifolius** Hook.f., **H28** 104; root climber.
- 207.19.7 **Pothos lorispatha** Ridl., **FMP5** 130, **C15** 181, **H28** 106; slender root climber; only known from Gua Batu, Sl; endemic.
- 207.19.8 **Pothos macrocephalus** Scort. ex Hook.f., **FMP5** 128, **C15** 182, **H28** 106; slender root climber; rocks (including limestone) and trees in lowland forest; widespread.
- 207.19.9 **Pothos peninsularis** Alderw., **H28** 108; *Pothos latifolius* (non L.) Hook.f., **FMP5** 129; slender root climber; trees in lowland and hill forest; widespread; endemic.
- 207.19.10 **Pothos rumphii** Schott, **F21** 150, **H28** 109; creeper; on rocks; P. Tioman. [the identity of this species seems unlikely given the East Malesian distribution of this species].
- 207.19.11 **Pothos salicifolius** Ridl., **FMP5** 130, **H28** 109; root-climber; montane forest; Fraser's Hill, Ph; endemic.
- 207.19.12 **Pothos scandens** L., **FMP5** 127, **N09** 25, **H28** 109; root climber; on trees and rocks including limestone; north of Peninsula.
- 207.20.1 **Rhaphidophora beccarii** (Engl.) Engl., **FMP5** 124, **H28** 112; short-creeping herb; on rocks in lowland streams, or low on tree trunks; Pk, Ph, Sl.
- 207.20.2 **Rhaphidophora burkilliana** Ridl., **FMP5** 121, **H28** 112; creeping herb; on rocks (?limestone); Batu Caves, Sl; endemic.
- 207.20.3 **Rhaphidophora caudata** (Roxb.) Schott, **H28** 113; herb; endemic.
- 207.20.4 **Rhaphidophora crassifolia** Hook.f., **FMP5** 122, **H28** 113; large root-climber; lowland forest; Pk, Ph; endemic.

- 207.20.5 **Rhaphidophora foraminifera** (Engl.) Engl., **FMP5** 123, **H28** 115; stout climber; hill and montane forest; Pk.
- 207.20.6 **Rhaphidophora gracilipes** Hook.f., **FMP5** 121, **H28** 116; large climber; lowland forest; Pk; endemic.
- 207.20.7 **Rhaphidophora korthalsii** Schott, **FMP5** 124 incl. var. **angustiloba** Ridl. ex Engl. & K. Krause, **H28** 117; long climber; lowland and hill forest; widespread.
- 207.20.8 **Rhaphidophora kunstleri** Hook.f., **FMP5** 123, **C15** 183, **H28** 118; thick-stemmed root climber; on limestone; Pk; endemic.
- 207.20.9 **Rhaphidophora lobbii** Schott, **FMP5** 122, **H28** 119; long slender climber; on rocks and trees in lowland forest; Ml, Jh, Sp.
- 207.20.10 **Rhaphidophora maingayi** Hook.f., **FMP5** 123, **F21** 153, **H28** 119; root-climber; on rocks and trees in lowland forest; Pn, Sl, Ml, Sp.
- 207.20.11 **Rhaphidophora minor** Hook.f., **FMP5** 121, **H28** 119; slender climber; on trees along tidal rivers; Ph, Jh, Sp.
- 207.20.12 **Rhaphidophora pteropoda** (Teijsm. & Binn.) Engl., **FMP5** 123, **H28** 123; root-climber; lowland and hill forest; Pn, Pk, Sl.
- 207.20.13 **Rhaphidophora scortechinii** Hook.f., **FMP5** 122, **H28** 124; slender creeper; on rocks; Pk; endemic.
- 207.20.14 **Rhaphidophora tetrasperma** Hook.f., **FMP5** 124, **H28** 126; root climber; hill forest; Pk, Ph.
- 207.20.15 **Rhaphidophora wrayi** Hook.f., **FMP5** 122, **H28** 127; large woody root-climber; hill forest; Pn, Pk, Ph, Sl.
- 207.21.1 **Schismatoglottis brevicuspis** Hook.f., **FMP5** 113, **H28** 130; creeping herb; hill forest; widespread; endemic.
- 207.21.2 **Schismatoglottis brevipes** Hook.f., **H28** 130; *Schismatoglottis minor* Hook.f., **FMP5** 113; long-creeping herb; Pk.
- 207.21.3 **Schismatoglottis calyptrata** (Roxb.) Zoll. & Moritzi, **FMP5** 111 incl. vars *concolor* Hallier f. var. *picta* auct. non (Schott) Hallier f. and *ornata* Ridl. ex Engl., **H28** 130; *Schismatoglottis cordifolia* Ridl., **FMP5** 111, **H28** 130; herb to 60 cm tall; rocky places in lowland forest; widespread.
- 207.21.4 **Schismatoglottis longifolia** Ridl., **FMP5** 114, **H28** 138; herb to 1 m tall; hill forests; Pk; endemic.

- 207.21.5 **Schismatoglottis mutata** Scort. ex Hook.f., **FMP5** 111, **H28** 140; *Schismatoglottis linguiformis* Engl., **FMP5** 112, **H28** 138; *Schismatoglottis ridleyana* Engl., **FMP5** 112, **H28** 143; herb to 1 m tall; lowland and hill forest and limestone rocks; Pk, Ph, Sl; endemic.
- 207.21.6 **Schismatoglottis scortechinii** Hook.f., **FMP5** 113, **H28** 145; *Schismatoglottis marginata* (non Engl.) Ridl., **FMP5** 113, **H28** 139; *Schismatoglottis kingii* Engl., **H28** 136; herb to 30 cm tall; lowland and hill forest; Pk, Ph, Sl, Jh; endemic.
- 207.21.7 **Schismatoglottis wallichii** Hook.f., **FMP5** 112 incl. vars. *fasciata* Ridl. and *oblongata* Hook.f., **H28** 147; herb about 20 cm tall; lowland and hill forest; widespread.
- 207.22.1 **Scindapsus beccarii** Engl., **FMP5** 116, **H28** 149; climber; on rocks above tidal rivers; Pn, Tg, Pk.
- 207.22.2 **Scindapsus hederaceus** Miq., **FMP5** 117, **H28** 151; climber to 10 m tall; on rocks and trees in the lowlands; widespread.
- 207.22.3 **Scindapsus perakensis** Hook.f., **FMP5** 118, **H28** 153; climber to 15 m; hill forest; Pk, Sl, Ml.
- 207.22.4 **Scindapsus pictus** Hassk., **FMP5** 117, **H28** 153; slender climber reaching canopy; lowland forests; widespread.
- 207.22.5 **Scindapsus rupestris** Ridl., **FMP5** 118, **H28** 154; climber; on rocks; Pk, Ml. [var. *siamensis* (Engl.) Engl. may occur in our area as well as var. *rupestris*].
- 207.22.6 **Scindapsus scortechinii** Hook.f., **FMP5** 117, **H28** 155; slender creeper; climbing over rocks and trees in hill forest; Kd, Pk, Ph, Sl.
- 207.22.7 **Scindapsus treubii** Engl., **H28** 155; creeping herb.
- 207.23.1 **Typhonium filiforme** Ridl., **FMP5** 91, **S35** 300, **H28** 158; tuberous herb to 20 cm tall; on limestone; Bt Lagi, Ps; Kuah, P. Langkawi; Kuala Dipang, Pk.
- 207.23.2 **Typhonium flagelliforme** (Lodd.) Blume, **N10** 489, **S35** 303, **H28** 158; *Typhonium cuspidatum* (Blume) Blume, **FMP5** 91 incl. var. *angustissimum* (Ridl.) Ridl.; tuberous herb to 20 cm tall; grassy places, waste ground; Pn, Ml, Sp.
- 207.23.3 **Typhonium fultum** Ridl., **FMP5** 91, **C15** 183, **S35** 304, **H28** 158; small herb to 10 cm tall; damp shady spots on limestone; P. Langkawi, Ph, Sl.
- 207.23.4 **Typhonium roxburghii** Schott, **FMP5** 90, **N10** 492, **S35** 305, **H28** 160; tuberous herb to 30 cm tall; open weedy places; Pn, Ml, Sp.

- 207.23.5 **Typhonium trilobatum** (L.) Schott, **FMP5** 90, **N10** 488, **S35** 306, **M47** 54, **H28** 160; tuberous herb to 40 cm tall; waste places; Ps, Kl, Pk, Ph, (Sp introduced).

208. ASPARAGACEAE

- 208.1.1 **Asparagus racemosus** Willd., **FMP4** 331, **FMi9** 216; scandent thorny shrub; on limestone; collected once on P. Langkawi.

209. BURMANNIACEAE

- 209.1.1 **Burmattia championii** Thwaites, **FMP4** 306, **FMi4** 17, **C15** 184; *Burmattia tuberosa* Becc., **FMP4** 306; small saprophytic herb; shady hollows in forest, including on limestone; widespread.

- 209.1.2 **Burmattia caelestis** Don, **FMP4** 304, **FMi4** 17; herb to 30 cm tall; grassy places; widespread.

- 209.1.3 **Burmattia disticha** L., **FMP4** 304, **FMi4** 16; herb to 75 cm tall; high mountains; widespread.

- 209.1.4 **Burmattia longifolia** Becc., **FMP4** 304, **FMi4** 16; herb 12–50 cm tall; damp places in montane forest; widespread.

- 209.1.5 **Burmattia lutescens** Becc., **FMi4** 19; *Burmattia gracilis* Ridl., **FMP4** 305; saprophytic herb to 23 cm tall.

- 209.1.6 **Burmattia oblonga** Ridl., **FMP4** 305, **FMi4** 18; saprophytic herb 7–15 cm tall; montane forest to 1300 m; Pn, Sl.

- 209.1.7 **Burmattia sphagnoides** Becc., **FMi4** 17; saprophytic herb 4–12 cm tall; forest.

- 209.1.8 **Burmattia wallichii** (Miers) Hook.f., **FMP4** 305, **S75** 333; saprophytic herb; lowland forest; Sp.
Saunders has recently confirmed the occurrence of this species in Singapore, increasing the number of Malayan species of *Burmattia* to eight.

- 209.2.1 **Gymnosiphon aphyllus** Blume, **FMP4** 306, **FMi4** 20; achlorophyllous saprophytic herb to 17 cm tall; damp lowland forest; widespread.

- 209.3.1 **Thismia alba** Holttum ex Jonker, **FMi4** 23; saprophytic herb to 10 cm tall; Ph; endemic.

- 209.3.2 **Thismia arachnites** Ridl., **FMP4** 307, **FMi4** 24; saprophytic herb to 10 cm tall; hill forest; Pk, Ph; endemic.

- 209.3.3 ***Thismia aseroe*** Becc., **FMP4** 308, **FM14** 23; saprophytic herb to 10 cm tall; lowland forest; Pk, Sp; endemic.
- 209.3.4 ***Thismia chrysops*** Ridl., **FMP4** 308, **FM14** 22; saprophytic herb to 15 cm tall; on rotten logs in hill forest at 900 m; collected once on Gg Ledang, MI; endemic.
- 209.3.5 ***Thismia clavigera*** (Becc.) F. Muell., **S69** 211, **S51** 420, **FM19** 555; saprophytic herb to 10 cm tall; lowland secondary forest; once from the base of Gg Raya, P. Langkawi.
- 209.3.6 ***Thismia fumida*** Ridl., **FMP4** 307, **FM14** 23; saprophytic herb to 10 cm tall; among dead leaves in dense forest; SI, Sp; endemic.
- 209.3.7 ***Thismia grandiflora*** Ridl., **FMP4** 308, **FM14** 22; saprophytic herb to 3 cm tall; once from Bt Tana Abang, Jh; endemic.
- 209.3.8 ***Thismia racemosa*** Ridl., **FMP4** 308, **FM14** 22; tufted saprophytic herb about 5 cm tall; low ground near swamp; once from near Temerloh, Ph; endemic.

210. CANNACEAE

- 210.1.1 ***Canna indica*** L., **M01** 6; herb to 150 cm tall; waste places; common escape; naturalized.

211. COMMELINACEAE

- 211.1.1 ***Amischotolype glabrata*** Hassk.; **H24** 392; *Forrestia glabrata* (Hassk.) Hassk., **FMP4** 360; herb; montane forest.
- 211.1.2 ***Amischotolype gracilis*** (Ridl.) I.M. Turner, **T18** 53; *Forrestia gracilis* Ridl., **FMP4** 359; slender herb to 1 m tall; lowland forest; widespread.
- 211.1.3 ***Amischotolype griffithii*** (C.B. Clarke) I.M. Turner, **T24** 221; *Forrestia griffithii* C.B. Clarke, **FMP4** 360; herb to 1 m tall; lowland forest; widespread.
- 211.1.4 ***Amischotolype irritans*** (Ridl.) I.M. Turner, **T24** 221; *Forrestia irritans* Ridl., **FMP4** 361; herb with red spiny hairs; montane forest; Pk, SI; ? Endemic.
- 211.1.5 ***Amischotolype marginata*** Hassk.; **H24** 392, **T18** 53; *Forrestia marginata* (Hassk.) Hassk., **FMP4** 360; creeping herb to 2 m long; wet rocky lowland forest; widespread.
- 211.1.6 ***Amischotolype mollissima*** (Blume) Hassk.; **H24** 392; *Forrestia mollis* Hassk., **FMP4** 360; herb; lowland and hill forest.

- 211.1.7 **Amischotolype monosperma** (C.B. Clarke) I.M. Turner, **T24** 221; *Forrestia monosperma* C.B. Clarke, **FMP4** 360; herb to over 1 m tall; damp rocky forest including on limestone; Kl, Ph; endemic.
- 211.2.1 **Belosynapsis ciliata** (Blume) R.S. Rao, **R06** 187; *Cyanotis capitata* (Blume) C.B. Clarke, **FMP4** 358; creeping herb; grassy forest margins; widespread.
- 211.3.1 **Commelina attenuata** J. König, **FMP4** 352; tufted creeping herb; sandy shores; Sp.
- 211.3.2 **Commelina benghalensis** L., **FMP4** 353, **M47** 128; creeping herb reaching 30 cm tall; common weed; widespread.
- 211.3.3 **Commelina caroliniana** Walter, **F04** 50; *Commelina hasskarlii* C.B. Clarke, **FMP4** 352; herb; Tg.
- 211.3.4 **Commelina clavata** C.B. Clarke, **FMP4** 353; creeping herb; damp open spots.
- 211.3.5 **Commelina diffusa** Burm.f., **B04** 21, **M47** 130; *Commelina nudiflora auct. non* L., **FMP4** 350; slender long-creeping herb; common in grassy places; throughout.
- 211.3.6 **Commelina longifolia** Lam., **B04** 20; *Commelina salicifolia* Roxb., **FMP4** 353; slender herb; fallow rice-fields; Ps.
- 211.3.7 **Commelina paludosa** Blume, **R06** 181; *Commelina obliqua* (non Vahl) Buch.-Ham. ex D. Don, **FMP4** 354; herb about 30 cm tall; lowland and hill forest; widespread.
- 211.3.8 **Commelina sikkimensis** C.B. Clarke, **FMP4** 352; slender creeping herb; open places; north of Malaya.
- 211.3.9 **Commelina suffruticosa** Blume, **FMP4** 353; rhizomatous herb to 30 cm tall; Kl.
- 211.4.1 **Cyanotis axillaris** (L.) Sweet, **FMP4** 358, **F03** 295, **M47** 132; red-stemmed herb to 60 cm tall; rice-fields; Ps, Kl.
- 211.4.2 **Cyanotis cristata** (L.) D. Don, **FMP4** 358, **M47** 134; *Cyanotis barbata* D. Don, **FMP4** 358; tufted creeping herb to 30 cm tall; sandy or grassy spots; widespread.
- 211.5.1 **Dictyospermum conspicuum** (Blume) Hassk., **F05** 152; *Aneilema conspicuum* (Blume) Kunth, **FMP4** 357; erect herb to 50 cm tall; lowland forest; widespread.
- 211.5.2 **Dictyospermum ovatum** Hassk., **F05** 155; *Aneilema subovatum* Ridl., **FMP4** 357; creeping herb to 20 cm tall; Ps, P. Langkawi.

- 211.6.1 **Floscopa scandens** Lour., **FMP4** 359; creeping herb to 30 cm tall; common in muddy ditches; widespread.
- 211.7.1 **Murdannia clandestina** (Ridl.) Faden, **F05** 152; *Aneilema clandestinum* Ridl., **FMP4** 255; creeping herb about 30 cm long; swampy place; Temengoh, Pk; endemic.
- 211.7.2 **Murdannia gigantea** (Vahl) Brückner, **F05** 153; *Aneilema giganteum* (Vahl) R.Br., **FMP4** 356; herb to 60 cm tall; dry rocky and sandy spots; Ps, Kd, Jh.
- 211.7.3 **Murdannia japonica** (Thunb.) Faden, **F02** 142, **F05** 154; *Aneilema lineolatum* (Blume) Kunth, **FMP4** 354; herb to 60 cm tall; lowland forest; north of Malaya.
- 211.7.4 **Murdannia nudiflora** (L.) Brenan, **F05** 154; *Aneilema nudiflorum* (L.) Sweet, **FMP4** 355; slender creeping herb to about 30 cm long; weed of dry sandy ground; throughout.
- 211.7.5 **Murdannia vaginata** (L.) Brückner, **F05** 155; *Aneilema giganteum* (L.) Wall., **FMP4** 356; tufted herb to 25 cm tall; open sandy places; widespread.
- 211.7.6 **Murdannia wightii** R.S. Rao & Kammaty, **R06** 184; *Aneilema pauciflorum* (*non* Dalzell) Wight, **FMP4** 355; small herb; once from Kuah, P. Langkawi.
- 211.8.1 **Pollia secundiflora** (Blume) Backer, **B04** 17; *Pollia sorzogonensis* (E.Mey.) Steud., **FMP4** 351; herb to 1.5 m tall; lowland and hill forest; widespread.
- 211.8.2 **Pollia subumbellata** C.B. Clarke, **FMP4** 350, **C15** 185; slender herb to 1 m tall; on limestone; Ps, Kd, ?Ph.
- 211.8.3 **Pollia sumatrana** Hassk., **FMP4** 350; herb to 30 cm tall; lowland forest, including over limestone; Pk.
- 211.8.4 **Pollia thyrsoflora** (Blume) Steud., **FMP4** 350; herb to 60 cm tall; damp hill forest; Ph, Pk, Sl.
- 211.9.1 **Rhopalephora scaberrima** (Blume) Faden, **F01** 480; *Aneilema protensum* (Wight) Wall. *ex* C.B. Clarke, **FMP4** 357; herb to 60 cm tall; damp places in forest; Ph.
- 211.10.1 **Spatholirion ornatum** Ridl., **FMP4** 362; succulent herb; lowland forest; once from Pergau Dam, Kl.
- 211.11.1 **Tradescantia spathacea** Sw., **H56** 402; *Rhoeo spathacea* (Sw.) W.T. Stearn, **C15** 185; herb 30–60 cm tall; limestone cliff faces; Pk; naturalized from Central America.

212. CONVALLARIACEAE

212.1.1 **Disporum cantoniense** (Lour.) Merr., **FMI9** 218; *Disporum pullum* Salisb., **FMP4** 338; rhizomatous herb reaching 80 cm tall; hill forest; Pk, Ph.

212.2.1 **Ophiopogon caulescens** (Blume) Backer, **FMI9** 226; *Ophiopogon intermedius* D. Don var. *macranthus* Ridl., **FMP4** 327; *Ophiopogon malayanus* Ridl., **FMP4** 327; *Ophiopogon prolifera* Lindl., **FMP4** 327; grassy-leaved rhizomatous herb; montane forest; several locations but rare.

212.3.1a **Peliosanthes teta** Andrews ssp. *humilis* (Andrews) Jessop, **FMI9** 229; *Peliosanthes violacea* Wall. ex Baker, **FMP4** 324; *Peliosanthes albida* Baker, **FMP4** 325; *Peliosanthes lurida* Ridl., **FMP4** 325; *Peliosanthes monticola* Ridl., **FMP4** 325; *Peliosanthes viridis* Ridl., **FMP4** 325; *Peliosanthes grandifolia* Ridl., **FMP4** 326; *Peliosanthes parviflora* Ridl., **FMP4** 326; *Peliosanthes stellaris* Ridl., **FMP4** 326; stemless herb with short rhizome, about 50 cm tall; lowland and montane forest; throughout.

212.3.1b **Peliosanthes teta** Andrews ssp. *teta*, **FMI9** 228; *Peliosanthes teta* Andrews var. *angustifolia* Ridl., **FMP4** 323; stemless herb with short rhizome, about 50 cm tall; lowland and montane forest; P. Langkawi, Pn, Ph, Sl.

212.4.1 **Tricalistra ochracea** Ridl., **FMP4** 331, **FMI9** 221; stemless plant to 40 cm tall with woody rhizome; dense montane forest; known only from the Cameron Highlands, Ph; endemic monospecific genus.

212.5.1 **Tupistra grandis** Ridl., **FMP4** 330, **FMI9** 223; stemless herb to 50 cm tall; wet rocky places on limestone; P. Langkawi, Kl, Pk, Ph, Sl.

212.5.2 **Tupistra violacea** Ridl., **FMP4** 330, **FMI9** 221; stemless herb to 60 cm tall; hill and montane forest; Penang Hill and Gg Bujong Malacca, Pk; endemic.

213. COSTACEAE

213.1.1a **Costus globosus** Blume var. *kingii* (Baker.) Holttum, **H41** 244; *Costus kingii* Bak., **FMP4** 257; herb to more than 3 m tall; lowland forests; Pn, Pk, Ph, Sl; endemic variety.

213.1.1b **Costus globosus** Blume var. *ridleyi* (K. Schum.) Holttum, **H41** 244; *Costus globosus sensu* Ridl., **FMP4** 256; herb to more than 3 m tall; damp lowland forests; Pk, Ph, Sl, NS, Jh, Sp.

213.1.1c **Costus globosus** Blume var. *velutinus* (Ridl.) Holttum, **H41** 244; *Costus velutinus* Ridl., **FMP4** 257; herb to more than 3 m tall; damp lowland forests; Pk; endemic variety.

213.1.2 **Costus oligophyllus** K. Schum., **H41** 242; *Costus kunstleri* Ridl., **FMP4** 257; herb to 50 cm tall; hill forest; poorly known; Pk; endemic.

- 213.1.3 **Costus speciosus** (J. König) Sm., **FMP4** 256, **H41** 242 incl. var. *sericeus* (Blume) K. Schum.; herb 2–3 m tall; common at margins of lowland forests; widespread.
214. CYMODOCEACEAE
- 214.1.1 **Cymodocea rotundata** Ehrenb. & Hempr., **D24** 166; sea grass; NS, Sp.
- 214.1.2 **Cymodocea serrulata** (R.Br.) Asch. & Magnus, **D24** 171; sea grass; Jh, Sp.
- 214.2.1 **Halodule pinifolia** (Miki) Hartog, **D24** 158; sea grass; Sp.
- 214.2.2 **Halodule uninervis** (Forssk.) Asch., **D24** 147; sea grass; Sp.
- 214.3.1 **Syringodium isoetifolium** (Asch.) Dandy, **D24** 177; sea grass on muddy bottoms; Sp.
215. CYPERACEAE
- 215.1.1 **Actinoschoenus thouarsii** (Kunth) Benth., **FMi7** 591 in synonymy; *Actinoschoenus filiformis* (Thwaites) Benth., **FMP5** 165; *Fimbristylis thouarsii* (Kunth) Merr., **FMi7** 591; very densely tufted herb to 75 cm; sandy or rocky places usually below 500 m; Kd, Pn, Pk, Ph, Ml, Jh.
- 215.2.1 **Actinoscirpus grossus** (L.f.) Goetghebeur & D.A. Simpson, **G09** 171; *Scirpus grossus* L.f., **FMP5** 162, **FMi7** 498, **M47** 260; *Schoenoplectus grossus* (L.f.) Palla, **K66** 154; herb to 2 m tall; swamps, lake margins, to 850 m; widespread.
- 215.3.1 **Bulbostylis barbata** (Rottb.) C.B. Clarke, **FMP5** 160, **FMi7** 539, **M47** 144; herb; sea shore; throughout Malaya.
- 215.3.2 **Bulbostylis puberula** (Poir.) C.B. Clarke, **FMP5** 160, **FMi7** 540, **M47** 146; herb; sea shore; widespread.
- 215.4.1 **Carex baccans** Nees, **FMP5** 184, **FMi9** 137; rhizomatous herb 60–150 cm tall; montane forest above 1000 m; Ph.
- 215.4.2 **Carex breviscapa** C.B. Clarke, **FMi9** 148; *Carex curtisii* Ridl., **FMP5** 183; herb 5–20 cm tall; lowland and hill forest to 1250 m; Pn, Ph, NS.
- 215.4.3a **Carex cruciata** Wahlenb. var. *cruciata*, **FMP5** 185 incl. var. *condensata* Ridl., **FMi9** 120; herb to 2 m; montane rain forest at 1100–1500 m; Pk, Ph.
- 215.4.3b **Carex cruciata** Wahlenb. var. *rafflesiana* (Boott) Noot., **FMi9** 122; *Carex clarkeana* Kük., **FMP5** 183; herb; lowland and montane forest at 500–2400 m.

- 215.4.4 **Carex cryptostachys** Brongn., **FMP5** 181, **FMi9** 148; herb 10–50 cm tall; lowland rain forest usually at 350–1200 m; Pn, Pk, Ph, Jh, Sp.
- 215.4.5 **Carex filicina** Nees, **FMi9** 122; rhizomatous herb; wet open places in the mountains above 1300 m; Ph.
- 215.4.6 **Carex gracilispica** Hayata, **FMi9** 149; *Carex ligata* auct. non Boott, **FMP5** 181; herb 10–30 cm tall; montane forest near streams at 1700 m; Gg Tahan, Ph.
- 215.4.7 **Carex indica** L., **FMP5** 185 incl. vars. *laetebrunnea* C.B. Clarke and *fissilis* (Boott) Kük., **FMi9** 126; herb to 1 m tall; damp places in forest to 1000 m; Ph, Jh.
- 215.4.8 **Carex maculata** Boott, **FMi9** 157; open wet places in mountains; above 1600 m; Ph.
- 215.4.9 **Carex malaccensis** C.B. Clarke, **FMP5** 183, **C15** 187, **FMi9** 153; tufted herb to 60 cm; sea shore and on limestone inland; P. Langkawi; endemic.
- 215.4.10a **Carex perakensis** C.B. Clarke var. **borneensis** (C.B. Clarke) Noot., **FMi9** 141; *Carex breviglumis* Ridl., **FMP5** 183; herb 40–140 cm; montane forest; Ph.
- 215.4.10b **Carex perakensis** C.B. Clarke var. **perakensis**, **FMP5** 184, **FMi9** 140; *Carex arridens* C.B. Clarke, **FMP5** 184; *Carex rivulorum* (non Dunn) Ridl., **FMP5** 184; herb to almost 2 m tall; swampy places and lowland forest; Pk, Ph, Sl.
- 215.4.11 **Carex speciosa** Kunth, **C15** 187, **FMi9** 155; tufted herb to 50 cm tall; in sheltered crevices on limestone; Kl, Ph.
- 215.4.12 **Carex verticillata** Zoll. & Moritzi, **FMi9** 143; *Carex walkeri* Arn. ex Boott, **FMP5** 184; herb 25–100 cm tall; damp, open places in montane forest; Gg Kerbau, Pk.
- 215.5.1 **Cyperus babakan** Steud., **FMi7** 613, **M47** 150; *Cyperus babakensis* Steud. ex Miq., **FMP5** 144; herb to 90 cm tall; swamps, forest and rice fields up to 100 m; Kl, Pn, Pk, Ph, Sl, Ml.
- 215.5.2 **Cyperus castaneus** Willd., **FMP5** 141, **FMi7** 630; small herb to 15 cm; sandy localities to 300 m; Kl, Pk.
- 215.5.3 **Cyperus compactus** Retz., **FMi7** 638, **M47** 156; *Mariscus microcephalus* Presl, **FMP5** 149; *Mariscus compactus* (Retz.) Bold., **K70** 228; herb usually about 50 cm tall; swamps and other wet places up to 500 m; common near rivers and the sea.
- 215.5.4 **Cyperus compressus** L., **FMP5** 144, **FMi7** 617, **M47** 158; herb up to 50 cm tall; weed of cultivation, particularly paddy fields, to 700 m; common throughout Malaya.

- 215.5.5 **Cyperus cuspidatus** Kunth, **FMi7** 629; *Cyperus uncinatus* auct. non Poir., **FMP5** 141; small herb to 15 cm; weed of dry sandy places to 1100 m; throughout.
- 215.5.6 **Cyperus cyperinus** (Retz.) J.V. Suringar, **FMi7** 641; *Mariscus cyperinus* (Retz.) Vahl, **FMP5** 149, **K70** 233; herb to about 50 cm tall; waste ground to 1300 m; common throughout.
- 215.5.7 **Cyperus cyperoides** (L.) Kuntze, **FMi7** 642, **M47** 160; *Mariscus sieberianus* Nees ex C.B. Clarke, **FMP5** 148 incl. var. *evolutior* C.B. Clarke in part, and var. *subcomposita* C.B. Clarke; *Mariscus sumatrensis* (Retz.) J. Raynal, *basionym illeg.*, **K70** 232; *Mariscus macrocarpus* Kunth, **D41** 449; herb to 75 cm; waste grassy places, often a weed, to 1800 m; throughout.
- 215.5.8 **Cyperus difformis** L., **FMP5** 142, **FMi7** 629, **M47** 162; herb about 40 cm tall; weed of ricefields; Kl.
- 215.5.9 **Cyperus digitatus** Roxb., **FMi7** 601, **M47** 164; *Mariscus sieberianus* var. *evolutior* auct. non C.B. Clarke, **FMP5** 149 in part; herb to about 150 cm; wet places in the lowlands to 800 m.
- 215.5.10 **Cyperus distans** L.f., **FMP5** 145, **FMi7** 610, **M47** 166; herb to about 50 cm; damp open places to 1800 m; common throughout.
- 215.5.11 **Cyperus dubius** Rottb., **FMi7** 643; *Mariscus dregeanus* Kunth, **FMP5** 148; *Mariscus dubius* (Rottb.) Kük., **K70** 237; small herb up to 50 cm; sandy beaches; all coasts.
- 215.5.12 **Cyperus elatus** L., **FMP5** 148, **FMi7** 601, **M47** 168; *Cyperus digitatus* auct. non Roxb., **FMP5** 147; *Cyperus radiatus* auct. non Vahl, **FMP5** 147 in part; herb about 100 cm tall; open wet places to 700 m.
- 215.5.13 **Cyperus exaltatus** Retz., **FMi7** 602; herb 100–180 cm tall; open wet places at low altitudes; Pn, Sp.
- 215.5.14a **Cyperus haspan** L. ssp. **haspan**, **FMi7** 625, **M47** 172; *Cyperus haspan* L., **FMP5** 142 in part; herb to 50 cm; wet places, frequent weed, to 1900 m; common throughout.
- 215.5.14b **Cyperus haspan** L. ssp. **juncoides** (Lam.) Kük., **FMi7** 625; *Cyperus haspan* L., **FMP5** 142 in part; herb to 100 cm; wet places to 1900 m; throughout.
- 215.5.15 **Cyperus imbricatus** Retz., **FMi7** 603, **M47** 174; *Cyperus radiatus* Vahl, **FMP5** 147 in part; herb to 100 cm tall; open wet places in the lowlands; scattered.
- 215.5.16 **Cyperus iria** L., **FMP5** 143, **FMi7** 616, **M47** 176; herb to about 50 cm; open wet places to 700 m; common throughout.

- 215.5.17 **Cyperus javanicus** Houtt., **FMi7** 635; *Mariscus albescens* Gaudich., **FMP5** 149; *Mariscus javanicus* [non (Moritzi) Kuntze] (Houtt.) Merr. & F.P. Metcalf, **K70** 227; herb to about 70 cm tall; mangrove, sea shore, occasionally inland; west coast of Peninsula.
- 215.5.18a **Cyperus laxus** Lam. var. **laxus**, **R10** 277; *Cyperus diffusus* Vahl, **FMP5** 142, **FMi7** 619; herb to about 80 cm; lowland forest and shady places to 700 m; throughout.
- 215.5.18b **Cyperus laxus** Lam. var. **macrostachyus** (Boeck.) Karth., **K02** 46; *Cyperus diffusus* Vahl var. *pubisquama* Hook.f., **FMP5** 143; *Cyperus diffusus* Vahl var. *macrostachyus* Boeck., **FMi7** 619; herb; lowland forest to 700 m; throughout Malaya.
- 215.5.19 **Cyperus malaccensis** Lam., **FMP5** 147, **FMi7** 613, **M47** 180; herb to nearly 200 cm; mostly on tidal mud; common on all coasts.
- 215.5.20 **Cyperus odoratus** L., **FMi7** 645, **M47** 182; *Mariscus sieberianus* var. *evolution* auct. non C.B. Clarke, **FMP5** 149 in part; herb to 100 cm tall; open wet places at low altitudes.
- 215.5.21 **Cyperus pilosus** Vahl, **FMP5** 144, **FMi7** 611, **M47** 184; herb to about 50 cm tall; common in open wet places to 1500 m; throughout.
- 215.5.22 **Cyperus platystylis** R.Br., **FMP5** 141, **FMi7** 618, **M47** 186; herb to 80 cm tall; very wet places in the lowlands.
- 215.5.23 **Cyperus procerus** Rottb., **FMP5** 147, **FMi7** 611, **M47** 190; *Pycneus puncticulatus* auct. non Nees, **FMP5** 140; herb to about 125 cm tall; open damp or wet places, often near the sea.
- 215.5.24 **Cyperus pulcherrimus** Willd. ex Kunth, **FMP5** 142, **FMi7** 624; tufted herb to 40 cm tall; damp spots and paddy fields to 750 m.
- 215.5.25 **Cyperus radians** Nees & Meyen, **FMP5** 143, **FMi7** 623; herb about 30 cm tall when flowering; sea shores; both coasts.
- 215.5.26 **Cyperus rotundus** L., **FMP5** 145, **FMi7** 604, **M47** 198; herb about 30 cm tall; open grassy places to 1000 m; common and widespread.
- 215.5.27 **Cyperus sphacelatus** Rottb., **FMi7** 609, **M47** 202; herb about 30 cm tall; grassy places; Pn, Jh, Sp; naturalized from ? Neotropics.
- 215.5.28 **Cyperus stoloniferus** Retz., **FMP5** 145, **FMi7** 606; creeping herb to 50 cm tall; sandy shores and tidal mud; common on both coasts.
- 215.5.29 **Cyperus tenuiculmis** Boeck., **FMi7** 608, **M47** 204; *Cyperus zollingeri* auct. non Steud., **FMP5** 144; herb to about 70 cm; open grassy places to 1600 m; common throughout.

- 215.5.30 **Cyperus tenuispica** Steud., **FMi7** 625, **M47** 206; herb to 40 cm tall; very wet, open places to 500 m.
- 215.5.31 **Cyperus trialatus** (Boeck.) Kern, **FMi7** 621; *Cyperus bancanus* Miq., **FMP5** 143; herb to 50 cm; open or lightly shaded places; Kd, Pn, Pk, Ph, Ml, Sp.
- 215.6.1 **Diplacrum caricinum** R.Br., **C36** 125; *Scleria caricina* (R.Br.) Benth., **FMP5** 178, **FMi7** 749; slender herb to 35 cm tall; open grassy places, wasteland to 1200 m; common throughout.
- 215.6.2 **Diplacrum reticulatum** Holttum; *Scleria reticulata* (Holttum) Kern, **FMi7** 751; slender herb to 35 cm tall; damp places in lallang patches; Ph.
- 215.7.1 **Eleocharis acutangula** (Roxb.) Schult., **FMi7** 525, **M47** 210; *Eleocharis fistulosa* Schult., **FMP5** 151; herb to 70 cm tall; open wet places to 800 m; Kd, Pk, Pk, Ml, Sp.
- 215.7.2 **Eleocharis congesta** D. Don, **FMi7** 532, **M47** 214; herb to 40 cm tall; in shallow water; Pn, Sl.
- 215.7.3 **Eleocharis dulcis** (Burm.f.) Hensch., **FMi7** 529, **M47** 216; *Eleocharis equisetina* Presl, **FMP5** 150; *Eleocharis plantaginea* (Retz.) Roem. & Schult., **FMP5** 150; herb to 200 cm tall; open wet places; the water chestnut.
- 215.7.4 **Eleocharis geniculata** (L.) Roem. & Schult., **FMi7** 536, **M47** 218; *Eleocharis capitata* R.Br., **FMP5** 151; herb to 40 cm; open wet places to 900 m; Tg, Pk, Ph, Jh, Sp.
- 215.7.5 **Eleocharis ochrostachys** Steud., **FMP5** 151, **FMi7** 528, **M47** 220; tufted herb to 60 cm tall; swamps, lake margins to 1400 m.
- 215.7.6 **Eleocharis philippinensis** Svenson, **FMi7** 526, **M47** 222; tufted herb to 60 cm tall; open marshy ground; Kd.
- 215.7.7 **Eleocharis retroflexa** (Poir.) Urb., **FMi7** 534, **M47** 224; *Eleocharis chaetaria* Roem. & Schult., **FMP5** 151; tufted herb to 20 cm tall; wet muddy places to 1600 m; common throughout Malaya.
- 215.7.8 **Eleocharis spiralis** (Rottb.) Roem. & Schult., **FMi7** 527; tufted herb to 60 cm tall; open wet places; Sp.
- 215.8.1 **Fimbristylis acuminata** Vahl, **FMP5** 153, **FMi7** 588, **M47** 226; *Fimbristylis acuminata auct. non* Benth., **FMP5** 153; herb to 30 cm tall; open wet muddy places; to 350 m.
- 215.8.2 **Fimbristylis alboviridis** C.B. Clarke, **FMi7** 580, **M47** 230; herb to 50 cm tall; dry grassy places; Kd, Sl.
- 215.8.3 **Fimbristylis argentea** (Rottb.) Vahl, **FMP5** 157, **FMi7** 586; small tufted herb to 10 cm; damp hollows near the sea; Kl, Tg.

- 215.8.4 **Fimbristylis calcicola** Kern, **FMi7** 572, **C15** 188; densely tufted herb to 20 cm; limestone screes; only known from type, P. Langkawi; endemic.
- 215.8.5 **Fimbristylis complanata** (Retz.) Link, **FMP5** 158, **FMi7** 548; herb to 90 cm; damp places to 1300 m; Pn, Ph, MI, Sp.
- 215.8.6 **Fimbristylis cymosa** R.Br., **FMi7** 557; *Fimbristylis spathacea* Roth, **FMP5** 156; densely tufted herb to 50 cm; on muddy, sandy or rocky shores; common on both coasts.
- 215.8.7 **Fimbristylis dichotoma** (L.) Vahl, **FMi7** 575, **M47** 236; *Fimbristylis diphylla* (Retz.) Vahl, **FMP5** 155; herb to 75 cm; open grassy places to 1500 m; common throughout.
- 215.8.8 **Fimbristylis dura** (Zoll. & Moritzi) Merr., **FMi7** 554; *Fimbristylis asperima* Boeck., **FMP5** 158 in part; herb to 75 cm tall; disturbed forest and forest margins to 1000 m.
- 215.8.9 **Fimbristylis eragrostis** (Nees) Hance, **FMi7** 567; *Fimbristylis nigrobrunnea* Thwaites, **FMP5** 159; herb to 75 cm; forest clearings; Kd, Tg.
- 215.8.10 **Fimbristylis ferruginea** (L.) Vahl, **FMP5** 156 incl. var. *arvensis* (Vahl) Ridl., **FMi7** 572; *Fimbristylis polytrichoides* auct. non R.Br., **FMP5** 154 in part; tufted herb to 80 cm; muddy wet places near the sea.
- 215.8.11 **Fimbristylis fulvescens** (Thwaites) Thwaites, **FMi7** 569; herb to 60 cm; at 750 m; collected twice on Penang Hill.
- 215.8.12 **Fimbristylis fusca** (Nees) C.B. Clarke, **FMP5** 160 in part, **FMi7** 567; *Fimbristylis rigidifolia* Ridl., **FMP5** 159; tufted herb to 50 cm; open grassy places; Kd, Kl, Sp.
- 215.8.13 **Fimbristylis fuscoides** C.B. Clarke, **FMP5** 160, **FMi7** 566; herb to 20 cm; open sandy places; Ps.
- 215.8.14 **Fimbristylis griffithii** Boeck., **FMi7** 584, **M47** 240; *Fimbristylis aestivalis* auct. non Vahl, **FMP5** 155; slender tufted herb to 20 cm tall; open wet places; Kl, Tg, Pk, Ph, MI, Sp.
- 215.8.15 **Fimbristylis insignis** Thwaites, **FMi7** 555; *Fimbristylis longispica* auct. non Steud., **FMP5** 156; herb to 40 cm; open dry places; Kd.
- 215.8.16 **Fimbristylis leptoclada** Benth., **FMP5** 159, **FMi7** 560; herb to 65 cm; dry open places at low altitudes; Pn, Ph, MI, Sp.
- 215.8.17 **Fimbristylis littoralis** Gaudich., **FMi7** 551; *Fimbristylis miliacea* auctt. plur. non (L.) Vahl, **FMP5** 158, **M47** 242; densely tufted herb to 60 cm tall; very wet open sites including rice-fields to 1000 m; common all over the Peninsula.

- 215.8.18 **Fimbristylis malayana** Ohwi, **FMi7** 571, **C15** 188; tufted herb to 40 cm; limestone screes at about 60 m; P. Langkawi; endemic.
- 215.8.19 **Fimbristylis nutans** (Retz.) Vahl, **FMP5** 154, **FMi7** 589; densely tufted herb about 40 cm tall; damp sandy spots; Kl, Tg, Ml, Jh, Sp.
- 215.8.20 **Fimbristylis obtusata** (C.B. Clarke) Ridl., **FMP5** 157, **FMi7** 559; small tufted herb to 15 cm tall; grassy places at low altitudes; P. Langkawi, Pn, Ph, Ml, Jh, Sp.
- 215.8.21 **Fimbristylis ovata** (Burm.f.) Kern, **FMi7** 565, **M47** 244; *Fimbristylis monostachyos* (L.) Hassk., **FMP5** 159 '*monostachya*'; densely tufted herb to 40 cm; dry grassy places; Ps, Kd, Sp.
- 215.8.22 **Fimbristylis pauciflora** R.Br., **FMP5** 154, **FMi7** 564; densely tufted herb to 30 cm tall; damp open or shaded sites to 800 m; widespread, not uncommon.
- 215.8.23 **Fimbristylis polytrichoides** (Retz.) R.Br., **FMP5** 154 in part, **FMi7** 586; herb to 30 cm tall; open wet places, usually near the sea; Kd, Pn, Pk, Ph, Sl.
- 215.8.24 **Fimbristylis schoenoides** (Retz.) Vahl, **FMP5** 154, **FMi7** 573, **M47** 246; densely tufted herb to 45 cm; open grassy places to 400 m.
- 215.8.25 **Fimbristylis sericea** R.Br., **FMP5** 157, **FMi7** 558; herb to 30 cm tall; sandy shores; east coast from Jh to Kl.
- 215.8.26 **Fimbristylis tetragona** R.Br., **FMP5** 153, **FMi7** 590; herb to 60 cm; open wet places at to 300 m; Ph, Sp.
- 215.8.27 **Fimbristylis thomsonii** Boeck., **FMi7** 548; *Fimbristylis asperima* auct. non Boeck., **FMP5** 158 in part; herb to 80 cm tall; Kd.
- 215.8.28 **Fimbristylis tomentosa** Vahl, **FMi7** 576, **M47** 248; herb to about 40 cm tall; open grassy places; once from Ph.
- 215.8.29a **Fimbristylis trichophylla** Ridl. var. **erecta** Holtum ex Kern, **FMi7** 581; tufted herb to 60 cm; dry, unshaded cracks in limestone; Kd, Kl, Sl.
- 215.8.29b **Fimbristylis trichophylla** Ridl. var. **trichophylla**, **FMP5** 155, **FMi7** 580; slender tufted herb to 60 cm; dry, unshaded cracks in limestone; 60–240 m; P. Langkawi; endemic variety.
- 215.8.30 **Fimbristylis tristachya** R.Br., **FMi7** 573; *Fimbristylis podocarpa* auct. non Nees, **FMP5** 155; tufted herb about 60 cm tall; open grassy places; usually below 200 m; Ps, Kd, Sl, Sp.
- 215.8.31 **Fimbristylis umbellaris** (Lam.) Vahl, **C36** 150; *Fimbristylis globulosa* (Retz.) Kunth, **FMP5** 158, **FMi7** 551, **M47** 238; tufted herb to 120 cm tall; open wet places to 1000 m; common throughout.

- 215.9.1 **Fuirena ciliaris** (L.) Roxb., **FMi7** 519, **M47** 250; *Fuirena glomerata* Lam., **FMP5** 163; herb to about 40 cm tall; wet grassy places at low altitudes; Kd, Kl, Pn, Pk.
- 215.9.2 **Fuirena umbellata** Rottb., **FMP5** 162, **FMi7** 518, **M47** 252; herb to 110 cm; open wet places and margins of water bodies; whole Peninsula.
- 215.10.1 **Gahnia baniensis** Benl, **FMi7** 707; *Gahnia javanica* Zoll. & Moritzi ex Moritzi var. *penangensis* C.B. Clarke, **FMP5** 168; tall herb to 3 m; forming thickets on hills and low mountains; usually 900–2100 m; from Penang southwards.
- 215.10.2 **Gahnia javanica** Zoll. & Moritzi ex Moritzi, **FMi7** 708; *Gahnia castanea* Ridl., **FMP5** 169; herb to 120 cm tall; forming tussocks on mountain ridges; Pk, Ph.
- 215.10.3 **Gahnia tristis** Nees, **FMP5** 168, **FMi7** 710; herb to 100 cm tall; open dry spots to 1200 m; Kd to Sp.
- 215.11.1a **Hypolytrum nemorum** (Vahl) Spreng. var. **nemorum**, **FMi7** 491; *Hypolytrum latifolium* Rich., **FMP5** 170 incl. var. *penangense* C.B. Clarke; herb to 120 cm tall; in swampy places in forests to 1200 m; common throughout.
- 215.11.1b **Hypolytrum nemorum** (Vahl) Spreng. var. **proliferum** (Boeck.) Kern, **FMi7** 492; *Hypolytrum proliferum* Boeck., **FMP5** 170; herb to 60 cm tall; damp places in forests, lake margins, up to 800 m; Pn, Ph, Jh, Sp.
- 215.12.1 **Kyllinga brevifolia** Rottb., **FMP5** 138, **K70** 248; *Cyperus brevifolius* (Rottb.) Hassk., **FMi7** 656, **M47** 152; herb to 40 cm tall; damp grassy places to 1500 m; common throughout.
- 215.12.2a **Kyllinga melanosperma** Nees ssp. **melanosperma**, **FMP5** 138; *Cyperus melanospermus* (Nees) J.V. Suringar ssp. *melanospermus*, **FMi7** 656; herb up to 200 cm tall; open wet places at 500–2000 m.
- 215.12.2b **Kyllinga melanosperma** Nees ssp. **bifolia** (Miq.) Karth., **K02** 60; *Cyperus melanospermus* (Nees) J.V. Suringar ssp. *bifolius* (Miq.) Kern, **FMi7** 656; Herb; open wet places in mountains; Ph.
- 215.12.3 **Kyllinga nemoralis** (J.R. Forst. & G. Forst.) Dandy ex Hutch. & Dalziel, **K70** 249; *Kyllinga monocephala* Rottb., *nom. illeg.*, **FMP5** 138; *Cyperus kyllingia* Endl., **FMi7** 659, **M47** 178; creeping herb to about 50 cm tall; waste places in lowlands; very common throughout.
- 215.12.4 **Kyllinga polyphylla** Willd. ex Kunth, **K70** 247; *Cyperus aromaticus* (Ridl.) Mattf. & Kük., **FMi7** 656; herb; noxious weed of pasture; Sp; naturalized from East Africa.

- 215.13.1 **Lepidosperma chinense** Nees & Meyen, **FMP5** 167, **FMi7** 668; slender herb to 120 cm tall; open wet places in the mountains; usually above 1500 m; Kl, Tg, Pk, Ph, Ml, Jh.
- 215.14.1 **Lepironia articulata** (Retz.) Domin, **FMi7** 462; *Lepironia mucronata* Rich., **FMP5** 175; herb to 150 cm tall; open wet places, mostly lowlands; Tg, Pk, Ph, Ml, Jh, Sp.
- 215.15.1 **Lipocarpa chinensis** (Osbeck) Kern, **FMi7** 521, **G10** 27, **M47** 254; *Lipocarpa argentea* (Vahl) R.Br. ex Nees, **FMP5** 163; herb to 50 cm tall; open wet places at low and medium altitudes; common throughout.
- 215.15.2 **Lipocarpa microcephala** (R.Br.) Kunth, **FMP5** 163, **FMi7** 522, **G10** 52; slender tufted herb to 30 cm; open sandy spots in the lowlands; Kl, Pn, Sp.
- 215.15.3 **Lipocarpa squarrosa** (L.) Goetghebeur, **G10** 71; *Scirpus squarrosus* L., **FMi7** 516; tufted herb to 20 cm tall; open sandy places in the lowlands; Pn, Jh, Sp.
- 215.16.1 **Machaerina maingayi** (C.B. Clarke ex Ridl.) T. Koyama, **FMi7** 693; *Cladium maingayi* C.B. Clarke ex Ridl., **FMP5** 167; tufted herb to 150 cm; open wet places in the mountains; 900–2100 m; Kl, Pk, Ph, Ml.
- 215.16.2 **Machaerina rubiginosa** (Spreng.) T. Koyama, **FMi7** 700; *Cladium glomeratum* R.Br., **FMP5** 166; herb to 180 cm tall; swampy places near the sea; Sp.
- 215.17.1 **Mapania bancana** (Miq.) Benth. & Hook. ex B.D. Jacks., **S22** 49; *Thoracostachyum bancanum* (Miq.) Kurz, **FMP5** 171, **FMi7** 465; herb to 80 cm; swamp forest; Pk, Ph, Sl, Ml, Jh, Sp.
- 215.17.2 **Mapania caudata** Kük., **S22** 120; *Mapania cuspidata* (Miq.) Uittien var. *pumila* (Uittien) Uittien, **FMi7** 475; small herb; lowland forest; Tg.
- 215.17.3a **Mapania cuspidata** (Miq.) Uittien var. **cuspidata**, **FMi7** 474, **S22** 112; *Mapania humilis* Fern.-Vill., **FMP5** 174; *Mapania triquetra* Ridl., **FMP5** 174; herb superficially like a dwarf pandan; primary lowland forest; Kl, Pk, Ph, Sl, Jh.
- 215.17.3b **Mapania cuspidata** (Miq.) Uittien var. **petiolata** (C.B. Clarke) Uittien, **FMi7** 474, **S22** 113; *Mapania humilis* Fern.-Vill. var. *petiolata* (C.B. Clarke) Ridl., **FMP5** 174; herb like dwarf pandan; primary lowland forest; Pn, Pk, Ph, Sl, Ml, Jh, Sp.
- 215.17.4 **Mapania enodis** (Miq.) C.B. Clarke, **FMi7** 480, **S22** 81; *Mapania longa* Ridl. ex C.B. Clarke, **FMP5** 173; herb like small pandan; lowland swamp forest; Jh, Sp.

- 215.17.5 **Mapania holttumii** Kern, **FMi7** 472, **S22** 108; herb to 2 m tall; lowland and hill forest at 150–1200 m; Tg, Ph, Jh; Endemic.
- 215.17.6 **Mapania kurzii** C.B. Clarke, **FMP5** 172, **FMi7** 478, **S22** 73; *Mapania longispica* Ridl., **FMP5** 172; *Mapania valida* Ridl., **FMP5** 172 in part; large tufted herb; lowland and hill forests to 950 m; Kd, Pn, Pk, Sl, NS, Ml, Sp.
- 215.17.7 **Mapania lorea** Uittien, **FMi7** 480, **S22** 84; *Mapania valida* Ridl., **FMP5** 172 in part; *Mapania tenuiscapa* auct. non C.B. Clarke, **FMP5** 173 in part; large tufted herb; lowland swamp forest; Pn, Pk, Ph, Jh, Sp.
- 215.17.8 **Mapania meditensis** D.A. Simpson, **S22** 118; herb about 40 cm tall; swamp forest; collected once from Sg Kayu Ara, Jh.
- 215.17.9 **Mapania micropandanus** Holttum, **FMi7** 482, **S22** 97; stilt-rooted tufted herb; damp lowland forest; P. Tioman, Jh; endemic.
- 215.17.10 **Mapania monostachya** Uittien, **S22** 94; herb about 50 cm tall; lowland forest; collected once at Ulu Setiu F.R., Tg.
- 215.17.11a **Mapania palustris** (Hassk. ex Steud.) Fern.-Vill. var. **andamanica** (C.B. Clarke) D.A. Simpson, **S22** 69; large tufted herb; lowland forest; collected once at Ulu Sg Terenas, Kd.
- 215.17.11b **Mapania palustris** (Hassk. ex Steud.) Fern.-Vill. var. **palustris**, **FMP5** 172, **FMi7** 477, **S22** 67; *Mapania albescens* C.B. Clarke, **FMP5** 172; large tufted herb; damp forests to 1500 m; Tg, Pk, Ph, Sl, NS, Ml, Jh, Sp.
- 215.17.12 **Mapania sessilis** Merr., **S22** 97; herb about 1 m tall; swampy lowland forest; collected once at Sg Buloh F.R., Sl.
- 215.17.13 **Mapania squamata** (Kurz) C.B. Clarke, **FMi7** 479, **S22** 76; *Mapania wallichii* auct. non C.B. Clarke, **FMP5** 173 in part; large tufted herb; damp lowland and hill forest to 1500 m; Sl, NS, Jh, Sp.
- 215.17.14 **Mapania sumatrana** (Miq.) Benth. ssp. **pandanophylla** (F. Muell.) D.A. Simpson, **S22** 53; *Thoracostachyum hypolytroides* (F. Muell. ex Benth.) C.B. Clarke, **FMP5** 171; *Thoracostachyum sumatranum* (Miq.) Kurz, **FMi7** 464 in part; herb to 150 cm tall; swampy places in the lowlands; Ph, Ml, Jh.
- 215.17.15 **Mapania tenuiscapa** C.B. Clarke, **FMP5** 173 in part, **FMi7** 481, **S22** 86; large tufted herb; damp lowland forest; Kd, Pk, Ph, NS, Ml, Jh.
- 215.17.16 **Mapania wallichii** C.B. Clarke, **FMP5** 173 in part, **FMi7** 479, **S22** 78; large herb; damp lowland forest; Ph, Sp.
- 215.18.1 **Oreobolus kükenthalii** Steenis, **FMi7** 685, **S17** 153; *Schoenus distichus* Ridl., **FMP5** 166; herb forming cushions to 15 cm tall; mountain tops at 1600–2150 m; Gg Kerbau, Pk, and Gg Tahan, Ph.

- 215.19.1 **Paramapania parvibractea** (C.B. Clarke) Uittien, **FMi7** 486; *Hypolytrum radians* Ridl., **FMP5** 170 (Malayan specimens); herb forming compact three-angled clumps; lowland and lower montane forest to 1200 m; Kl, Jh.
- 215.20.1 **Pycreus polystachyos** (Rottb.) Beauv., **FMP5** 139 incl. var. *laxiflorus* (Benth.) C.B. Clarke; *Cyperus polystachyos* Rottb., **FMi7** 649 incl. var. *laxiflorus* Benth., **M47** 188; herb to about 60 cm; damp open places to 1800 m.
- 215.20.2 **Pycreus pumilus** (L.) Nees, **K70** 224; *Pycreus nitens* Nees, **FMP5** 140; *Cyperus pumilus* L., **FMi7** 650, **M47** 194; herb to 20 cm; open sandy places to 600m.
- 215.20.3a **Pycreus sanguinolentus** (Vahl) Nees ssp. *cyrtostachys* (Miq.) Karth., **K02** 66, **FMP5** 139 in part; *Cyperus sanguinolentus* Vahl ssp. *cyrtostachys* (Miq.) Kern, **FMi7** 647; herb to 60 cm; open wet places.
- 215.20.3b **Pycreus sanguinolentus** (Vahl) Nees ssp. *sanguinolentus*, **FMP5** 139 in part; *Cyperus sanguinolentus* Vahl ssp. *sanguinolentus*, **FMi7** 647; herb to 60 cm; open wet places.
- 215.20.4 **Pycreus substramineus** (Kük.) N.K. Khoi, **N04** 140; *Cyperus substramineus* Kük., **FMi7** 653; tufted herb to 35 cm tall; open grassy places; Kd, Pn .
- 215.21.1 **Remirea maritima** Aubl., **FMP5** 169; *Cyperus pedunculatus* (R.Br.) Kern, **FMi7** 644; *Mariscus pedunculatus* (R.Br.) T. Koyama, **K70** 240; creeping herb to 15 cm tall; sandy beaches; both coasts.
- 215.22.1 **Rhynchospora brownii** Roem. & Schult., **V08** 501; *Rhynchospora glauca* Vahl var. *chinensis* C.B. Clarke, **FMP5** 165; *Rhynchospora rugosa* (Vahl) Gale, **FMi7** 720; densely tufted herb to 75 cm tall; sandy places near the sea or mountain tops.
- 215.22.2 **Rhynchospora corymbosa** (L.) Britt., **FMi7** 713, **M47** 256; *Rhynchospora aurea* Vahl, **FMP5** 164; herb to 100 cm tall; open swampy places to 1200 m; common throughout.
- 215.22.3 **Rhynchospora hookeri** Boeck., **FMi7** 714; herb to 90 cm; dry fields; Ps.
- 215.22.4 **Rhynchospora malasica** C.B. Clarke, **FMP5** 164, **FMi7** 715; herb to 90 cm tall; lowland swamps; Tg, Ml, Jh, Sp.
- 215.22.5 **Rhynchospora rubra** (Lour.) Makino, **FMi7** 715; *Rhynchospora wallichiana* Kunth, **FMP5** 164; herb to 70 cm tall; open dry places; widespread.
- 215.22.6 **Rhynchospora submarginata** Kük., **FMi7** 718; *Rhynchospora wightiana* auct. non Steud., **FMP5** 164; herb to 40 cm tall; open dry places; P. Langkawi, Tg, Pn, Pk, Ph.

- 215.22.7 **Rhynchospora triflora** Vahl, **FMi7** 714; herb to 90 cm tall; swamps; Tasek Bera, Ph.
- 215.23.1 **Schoenoplectus juncoides** (Roxb.) Palla, **K68** 212, **K70** 160; *Scirpus erectus* auct. non Poir., **FMP5** 161; *Scirpus juncoides* Roxb., **FMi7** 512, **M47** 262; herb to 75 cm tall; open wet places to 1200 m; quite common, widespread.
- 215.23.2 **Schoenoplectus lateriflorus** (Gmel.) Lye, **L26** 290; *Scirpus supinus* auct. non L., **FMP5** 161; *Scirpus lateriflorus* Gmel., **FMi7** 514, **M47** 264; herb to 35 cm tall; open wet places, rice fields usually below 300 m; Kd, Kl, Tg, Pn.
- 215.23.3 **Schoenoplectus mucronatus** (L.) Palla, **K68** 214, **K70** 160; *Scirpus mucronatus* L., **FMP5** 161, **FMi7** 510, **M47** 266; herb to 2 m tall; ponds and ditches to 2000 m; common throughout.
- 215.23.4 **Schoenoplectus wallichii** (Nees) T. Koyama, **K68** 210; *Scirpus wallichii* Nees, **FMi7** 513; herb to 75 cm tall; open wet places; Kd, Ml.
- 215.24.1 **Schoenus calostachyus** (R.Br.) Poir., **FMP5** 166, **FMi7** 675; tufted herb to 75 cm tall; open sandy places; Kd, Tg, Ph, Sp.
- 215.24.2 **Schoenus falcatus** R.Br., **FMi7** 677; tufted herb to 90 cm; open grassy places; Ps.
- 215.25.1 **Scirpodendron ghaeri** (Gaertn.) Merr., **FMi7** 456; *Scirpodendron costatum* (Thwaites) Kurz, **FMP5** 175; pandan-like plants; tidal swamps and along rivers; common along both coasts.
- 215.26.1 **Scirpus subcapitatus** Thwaites, **FMi7** 505; *Scirpus clarkei* Stapf, **FMP5** 162; *Bacothryon subcapitatum* (Thwaites) T. Koyama, **K70** 166; herb to 75 cm; near mountain streams; Tg, Ph.
- 215.27.1a **Scleria biflora** Roxb. ssp. **biflora**, **FMi7** 744; *Scleria biflora* Roxb., **FMP5** 180; slender tufted herb to 45 cm; open grassy places up to 900 m; common.
- 215.27.1b **Scleria biflora** Roxb. ssp. **ferruginea** (Ohwi) Kern, **FMi7** 744; very slender herb to 1 m tall; once collected, Jh.
- 215.27.2 **Scleria carphiformis** Ridl., **FMP5** 180, **FMi7** 741; slender herb to 40 cm tall; open damp places on mountains; Kd, Tg, Ph.
- 215.27.3 **Scleria ciliaris** Nees, **FMi7** 734; *Scleria bancana* Miq., **FMP5** 178 incl. var. *nana* Ridl.; *Scleria chinensis* Kunth, **FMP5** 180; slender herb to 1 m tall; open places, forests, below 1000 m; widely distributed.
- 215.27.4 **Scleria corymbosa** Roxb., **FMP5** 176 in part, **FMi7** 740; *Scleria ridleyi* C.B. Clarke, **FMP5** 177; herb to 2 m tall; wet places, open or shaded, lowlands to 300 m; quite widespread.

- 215.27.5 ***Scleria cyathophora*** Holttum, **FMi7** 731; herb to 100 cm tall; shallow water; Tasek Bera, Ph.
- 215.27.6 ***Scleria levis*** Retz., **FMi7** 732; *Scleria hebecarpa* Nees, **FMP5** 179; slender herb to 90 cm tall; open country to 1500 m; whole Peninsula.
- 215.27.7a ***Scleria lithosperma*** (L.) Sw. var. **linearis** Benth., **FMi7** 741; *Scleria lithosperma* (L.) Sw. var. *roxburghii* C.B. Clarke, **FMP5** 176; herb to 60 cm tall; open places; Pk, Jh.
- 215.27.7b ***Scleria lithosperma*** (L.) Sw. var. **lithosperma**, **FMP5** 176, **FMi7** 741; herb to 60 cm tall; open places to 600 m; widespread.
- 215.27.8 ***Scleria motleyi*** C.B. Clarke, **FMi7** 729; *Scleria gonocarpa* Ridl., **FMP5** 177; herb to 100 cm tall; forests to 1200 m; uncommon.
- 215.27.9 ***Scleria neesii*** Kunth, **FMi7** 741; herb to 30 cm tall; damp spots in lowland heath; once collected, Bt Ketri, Ps.
- 215.27.10 ***Scleria oblata*** S.T. Blake, **FMi7** 733; *Scleria levis* (non Retz.) Willd., **FMP5** 177; herb to 100 cm tall; open damp places to 700 m; widespread.
- 215.27.11 ***Scleria poaeformis*** Retz., **FMi7** 736; *Scleria oryzoides* Presl, **FMP5** 177; herb to 2 m tall; lowland swamps; Ps, Kd, Pk, Tg, Ml, Jh, Sp.
- 215.27.12a ***Scleria purpurascens*** Steud. var. **ophirensis** (C.B. Clarke) Kern, **FMi7** 740; *Scleria multifoliata* Boeck. var. *ophirensis* C.B. Clarke, **FMP5** 179; herb; grassland on mountains to 1000 m; Kd, Jh.
- 215.27.12b ***Scleria purpurascens*** Steud. var. **purpurascens**, **FMi7** 739; *Scleria multifoliata* Boeck., **FMP5** 178 incl. var. *pilosula* C.B. Clarke; herb to 2 m tall; open places or in forest to 1000 m; tolerably common.
- 215.27.13 ***Scleria rugosa*** R.Br., **FMi7** 749; *Scleria zeylanica* auct. non Poir., **FMP5** 177; herb to 30 cm tall; open grassy places to 500 m; common widespread.
- 215.27.14 ***Scleria scrobiculata*** Nees & Meyen ex Nees, **FMi7** 738; large herb to 2.5 m tall; damp shady places; once collected, Jh.
- 215.27.15 ***Scleria sumatrensis*** Retz., **FMP5** 179, **FMi7** 736; tall slender herb to 4 m; swamps, dry open places or forest to 500 m; whole Peninsula.
- 215.27.16 ***Scleria terrestris*** (L.) Fassett, **FMi7** 733; *Scleria corymbosa* auct. non Roxb., **FMP5** 176; *Scleria radula* Hance, **FMP5** 178; *Scleria elata* Thwaites, **FMP5** 179 incl. var. *decolorans* C.B. Clarke; herb to several metres tall; forests, open wet places, lowlands to mountains; common throughout.
- 215.27.17 ***Scleria thwaitesiana*** Boeck., **FMi7** 748; herb to 50 cm tall; damp patches in open grassy ground; once collected at Bt Ketri, Ps.

- 215.28.1 **Tricostularia undulata** (Thwaites) Kern, **FMi7** 672; *Cladium undulatum* Thwaites, **FMP5** 167; *Cladium pulchrum* Ridl., **FMP5** 167; herb forming dense tussocks to 90 cm tall; open sandy places to 1600 m; Tg, Ph.
- 215.29.1 **Websteria confervoides** (Poir.) Hooper, **H50** 582; *Scirpus confervoides* Poir., **FMi7** 505; submerged aquatic herb; Tg, Ph.
216. **DIOSCOREACEAE**
- 216.1.1 **Dioscorea bulbifera** L., **FMP4** 315, **FMi4** 311; bulbiferous climber; waste ground; widespread.
- 216.1.2 **Dioscorea calcicola** Prain & Burkill, **FMP5** 341, **FMi4** 327, **C15** 189; slender climber; usually on limestone; P. Langkawi, Kd, Kl.
- 216.1.3 **Dioscorea esculenta** (Lour.) Burkill, **FMi4** 307; *Dioscorea aculeata* (non L.) L., **FMP4** 315; tuberous spiny-rooted climber; wild on limestone, but often cultivated also; Kd.
- 216.1.4 **Dioscorea filiformis** Blume, **FMi4** 329; *Dioscorea gibbiflora* Hook.f., **FMP4** 317; *Dioscorea myriantha* Kunth, **FMP4** 317; tuberous slender climber; lowlands including limestone; north of Malaya.
- 216.1.5 **Dioscorea glabra** Roxb., **FMP4** 318, **FMi4** 331; tuberous climber reaching 8 m; lowland forests; widespread.
- 216.1.6 **Dioscorea hispida** Dennst., **FMi4** 318; *Dioscorea triphylla* (non L.) L., **FMP4** 314; tuberous prickly climber; wild, also cultivated; widespread.
- 216.1.7 **Dioscorea kingii** Knuth, **FMP5** 341, **FMi4** 329; *Dioscorea porteri* Prain & Burkill ex Knuth, **FMP4** 318; tuberous woody climber to 20 m tall; lowland forest; Pn; endemic.
- 216.1.8 **Dioscorea lamprocaula** Prain & Burkill, **FMi4** 327; slender prickly woody climber; lowland and hill forest; Pk, Ph, Jh.
- 216.1.9 **Dioscorea laurifolia** Wall. ex Hook.f., **FMP4** 319, **FMi4** 323; tuberous wiry climber; forest margins, lowlands and hills; west of Main Range; Endemic.
- 216.1.10 **Dioscorea orbiculata** Hook.f., **FMP4** 317, **FMi4** 334; tuberous climber to 10 m tall; open country; widespread.
- 216.1.11 **Dioscorea pentaphylla** L., **FMP4** 314, **FMi4** 315; tuberous climber; sometimes cultivated; widespread.
- 216.1.12 **Dioscorea piscatorum** Prain & Burkill, **FMP4** 319, **FMi4** 310; tuberous climber to 10 or more metres tall; lowland forest; Pk, Ph, P. Tioman.

- 216.1.13 **Dioscorea polyclades** Hook.f., **FMP4** 315, **FMi4** 334; tuberous climber to 30 m tall; margins of lowland and hill forest, also on limestone; widespread.
- 216.1.14 **Dioscorea prainiana** Knuth, **FMi4** 324; tuberous climber reaching 16 m; lowland forest to 350 m, also on limestone; widespread.
- 216.1.15 **Dioscorea prazeri** Prain & Burkill, **FMi4** 304; rhizomatous climber reaching 4 m; on limestone; Ps.
- 216.1.16a **Dioscorea pyrifolia** Kunth var. **ferruginea** Prain & Burkill, **FMP4** 316, **FMi4** 333; tuberous climber to 10 m tall; hedges and thickets in the lowlands; widespread.
- 216.1.16b **Dioscorea pyrifolia** Kunth var. **pyrifolia**, **FMP4** 316, **FMi4** 332; tuberous climber to 10 m tall; hedges and thickets in the lowlands; widespread.
- 216.1.16c **Dioscorea pyrifolia** Kunth var. **subinermis** Prain & Burkill, **FMi4** 333; tuberous climber to 10 m tall; hedges and thickets in the lowlands; central Malaya.
- 216.1.17 **Dioscorea scortechinii** Prain & Burkill, **FMP4** 314, **FMi4** 318; thorny tuberous climber; lowland forest; Pk southward.
- 216.1.18 **Dioscorea stenomeriflora** Prain & Burkill, **FMP4** 319, **FMi4** 306; *Peripetasma polyanthum* Ridl.; **FMP1** 103; slender woody climber reaching 25 m; lowland forest margins; Pk southward.
- 216.1.19 **Dioscorea tamarisciflora** Prain & Burkill, **FMP4** 314, **FMi4** 314; slender tuberous climber; rare and local.
- 216.1.20 **Dioscorea tenuifolia** Ridl., **FMi4** 326; *Dioscorea zollingeriana* (non Kunth) Miq., **FMP4** 317; slender tuberous climber to 16 m tall; lowland forest; Sp.
- 216.2.1 **Stenomeris borneensis** Oliv., **FMP4** 313, **FMi4** 297; slender climber reaching 5 m; damp spots; rare.

217. DRACAENACEAE

- 217.1.1 **Dracaena breviflora** Ridl., **FMP4** 335; nearly stemless shrub; tidal mud; Jh; endemic.
- 217.1.2 **Dracaena cantleyi** Baker, **T23** ??; *Dracaena aurantiaca* Wall. ex Hook.f., **FMP4** 336; shrub to 4m tall; swamps and forest margins; widespread.
- 217.1.3 **Dracaena chiniana** I.M. Turner, *nom. nov.*; *Dracaena congesta* [non (Sweet) Schult. & Schult.f.] Ridl., Trans. Linn. Soc. London, Bot. 3 (1893) 388, **FMP4** 334, **C15** 174; shrub to 30 m tall; lowland forest, also on limestone; widespread.

- 217.1.4 **Dracaena conferta** Ridl., **FMP4** 332, **T23**; *Dracaena robusta* Ridl., **FMP4** 332; *Dracaena curtisii* Ridl., **FMP4** 333, **C15** 174; shrub to 3 m tall; lowland and hill forest; widespread.
- 217.1.5 **Dracaena cuspidata** Ridl., **FMP4** 333; low shrub; lowland forest; Kl; endemic.
- 217.1.6 **Dracaena elliptica** Thunb., **FMP4** 337; shrub to 2 m tall; lowland to montane forest; widespread.
- 217.1.7 **Dracaena finlaysonii** Baker; **T23**; *Dracaena graminifolia* Wall. ex Hook.f., **FMP4** 333, **C15** 174; shrub barely 1 m tall; lowland and hill forest; Pn, Pk.
- 217.1.8 **Dracaena granulata** Hook.f., **FMP4** 332; tree to 20 m tall; wet lowland forest; Jh, Sp.
- 217.1.9 **Dracaena longifolia** Ridl., **FMP4** 335; low shrub; lowland forest; Ph; ?endemic.
- 217.1.10 **Dracaena maingayi** Hook.f., **FMP4** 335; *Dracaena penangensis* Ridl., **FMP4** 335; tree to 20 m tall; dry spots in the lowlands, near the sea; mostly in the south of Malaya; ?endemic.
- 217.1.11 **Dracaena nutans** Ridl., **FMP4** 337, **C15** 175; shrub to 4 m tall; damp thickets, also on limestone; Kl, Ph.
- 217.1.12 **Dracaena pendula** Ridl., **FMP4** 337; shrub to 2 m tall; swampy lowland forest; Pk, Ml; ?endemic.
- 217.1.13 **Dracaena porteri** Baker, **FMP4** 333; shrub to 2 m tall; lowland forest; widespread.
- 217.1.14 **Dracaena siamica** Ridl., **FMP4** 334; dwarf shrub to 50 cm tall; open sandy spots; Ps.
- 217.1.15 **Dracaena singaporensis** Ridl., **FMP4** 334; dwarf shrub to 50 cm tall; lowland forest; south of Malaya; ?endemic.
- 217.1.16 **Dracaena trachystachys** Hook.f., **FMP4** 336; small tree to 6 m tall; lowland forest; widespread.
- 217.1.17 **Dracaena umbratica** Ridl., **FMP4** 334; low shrub about 1 m tall; lowland forest; widespread.
- 217.1.18 **Dracaena yuccifolia** Ridl., **FMP4** 338, **C15** 175; shrub to 5 m tall; on limestone; north of Malaya.

218. ERIOCAULACEAE

- 218.1.1 **Eriocaulon australe** R. Br., **M50** 296; herb; Pn, Tg, Pk, Sl, Jh.
- 218.1.2 **Eriocaulon disepalum** Ridl., **FMP5** 136; herb to 15 m tall; rice-fields; Kl; endemic.
- 218.1.3 **Eriocaulon hookerianum** Stapf, **FMP5** 135; herb to 20 cm tall; among rocks on high mountains; Gg Tahan, Ph.
- 218.1.4 **Eriocaulon lasiolepis** Ruhl., **M50** 296; herb; Ml; endemic.
- 218.1.5 **Eriocaulon oryzetorum** Mart., **M50** 296; herb; Pn, Sp.
- 218.1.6 **Eriocaulon silicicolum** Ridl., **FMP5** 134; tufted herb to 50 cm tall; mountain tops; Gg Tahan, Ph; endemic.
- 218.1.7 **Eriocaulon truncatum** Buch.-Ham. ex Mart., **FMP5** 135, **M49** 501; **M47** 280; *Eriocaulon glabriflorum* Ridl., **FMP5** 135; tufted herb to 10 cm tall; common weed of damp ground; widespread.
- 218.1.8 **Eriocaulon willdenovianum** Moldenke, **M48** 44; *Eriocaulon sexangulare* auct. non L., **FMP5** 133; *Eriocaulon longifolium* (non Raf.) Nees ex Kunth, **M44** 278; tufted herb to 50 cm tall; open damp places; widespread.
- 218.1.9 **Eriocaulon xeranthemum** Mart., **FMP5** 135; herb about 10 cm tall; open grassy places; Pn.

219. FLAGELLARIACEAE

- 219.1.1 **Flagellaria indica** L., **FMP4** 368 incl. var. *minor* (Blume) Hook.f., **FMi4** 246; climber 2–15 m long; common in damp forest near the sea, but also inland to 1500 m; widespread.

220. GRAMINEAE

- 220.1.1 **Acroceras munroanum** (Balansa) Henrard, **G08** 165; *Acroceras ridleyi* (Hack. ex Ridl.) Stapf ex Ridl., **FMP5** 229; stoloniferous herb to 50 cm tall; coastal sands, moist shady places; Kd, Ph, Sl, Jh.
- 220.1.2 **Acroceras tonkinense** (Balansa) C.E. Hubb. ex Bor, **G08** 165; *Acroceras sparsum* Stapf ex Ridl., **FMP5** 229; decumbent herb to 100 cm tall; forest margins, riverbanks, lowlands and hills; Kd, Kl, Pn, Pk, Ph, Sl, Ml, Jh.
- 220.2.1 **Alloteropsis cimicina** (L.) Stapf, **FMP5** 223, **G08** 198; prostrate herb to about 30 cm tall; weed of moist or lightly shaded places; Kd, Pn, Jh, Sp.

- 220.3.1 **Alopecurus geniculatus** L., **S65** 104; herb; weed; Genting Highlands; naturalized from temperate Eurasia.
- 220.4.1 **Apluda mutica** L., **G08** 273, **C16** 33; *Apluda varia* Hack. var. *intermedia* Hack., **FMP5** 207; herb 1–2 m tall; often, though not exclusively, on limestone; Kd, Kl, Ph.
- 220.5.1 **Aristida culionensis** Pilg., **G08** 112; tufted herb to 1.2 m tall; Ps.
- 220.6.1 **Arthraxon hispidus** (Thunb.) Makino, **V22** 266; *Arthraxon nudus* (Nees ex Steud.) Hochst., **G08** 287; *Arthraxon micans* (Nees) Hochst., **G08** 288; herb to 200 m tall; north of Peninsula.
- 220.6.2 **Arthraxon lanceolatus** (Roxb.) Hochst., **V22** 281; *Arthraxon prionodes* (Steud.) Dandy, **G08** 287, **C16** 33; herb to 75 cm tall; on dry limestone; Gg Baling, Kd.
- 220.7.1 **Arundinella setosa** Trin., **FMP5** 239, **G08** 95; densely clumped herb to 120 cm tall; rocky ground on dry hills; Kd, Kl.
- 220.8.1 **Axonopus affinis** A. Chase, **G08** 189; stoloniferous herb to 65 cm tall; waste places, lawns; Kd, Sl; naturalized from tropical America.
- 220.8.2 **Axonopus compressus** (Sw.) P. Beauv, **FMP5** 216, **G08** 187, **M47** 388; creeping herb to 50 cm tall; open sites in the lowlands; throughout; naturalized from tropical America.
- 220.9.1 **Bambusa farinacea** K.M. Wong, **W29** 90; *Bambusa burmanica* auct. non Gamble, **H43** 62, **G08** 19; bamboo to 10 m tall; Kd, Kl, Ph, Sl.
Bambusa heterostachya (Munro) Holttum [**H43** 65, **G08** 18; **W29** 92] and *Bambusa laxa* K.M. Wong [**W29** 94] are only known in cultivation but are possibly endemic to Malaya.
- 220.10.1 **Bothriochloa bladhii** (Retz.) S.T. Blake, **L15** 24; *Amphilophis glabra* (Roxb.) Stapf, **FMP5** 209; *Bothriochloa intermedia* (R.Br.) A. Camus, **G08** 281; tufted herb to 90 cm tall; roadsides and field edges; Ps, Kd, Ph, Sl, Ml.
- 220.10.2 **Bothriochloa pertusa** (L.) A. Camus, **G08** 281; *Amphilophis pertusus* (L.) Nash ex Stapf, **FMP5** 209; herb; once from Ml.
- 220.11.1 **Briza minor** L., **G08** 57; slender herb to 75 cm tall; open places at the Hill Stations; Ph; naturalized from the Mediterranean region.
- 220.12.1 **Capillipedium parviflorum** (R.Br.) Stapf, **G08** 279; tufted herb 60–100 cm tall; on limestone; only known from Gg Baling, Kd.
- 220.13.1 **Cenchrus brownii** Roem. & Schult., J.F. Veldkamp pers. comm.; *Cenchrus echinatus* auct. non L., **S23** 36; herb to 40 cm tall; roadsides, dry waste ground; Sl, Jh; Sp; naturalized from tropical America.

- 220.14.1 ***Centotheca lappacea*** (L.) Desv., **FMP5** 253, **G08** 53, **C18** 110; *Centotheca latifolia* (Osbeck) Trin., **M55** 59; rosette-forming herb to 1 m tall; shady places to 1500 m; widespread.
- 220.14.2 ***Centotheca longilamina*** Ohwi, **G08** 53, **M55** 60; herb to 120 cm tall; shady places to 600 m; Kd, Pn, Pk, Ph, Sl, Jh, Sp.
- 220.15.1 ***Chloris barbata*** Sw., **FMP5** 250, **G08** 86; densely tufted grass to 100 cm tall; open dry places; Pn, Pk, Sl, Jh, Sp; naturalized from tropical America.
- 220.15.2 ***Chloris gayana*** Kunth, **G08** 87; herb 50–100 cm tall; waste places in the lowlands and mountains; Cameron Highlands, Ph; Subang, Sl; naturalised from tropical Africa.
- 220.16.1 ***Chrysopogon aciculatus*** (Retz.) Trin., **FMP5** 207, **G08** 236; creeping herb forming a dense turf, 20–60 cm tall; abundant in open places; throughout.
- 220.16.2 ***Chrysopogon fulvus*** (Spreng.) Chiov., **G08** 237; *Chrysopogon collinus* Ridl., **FMP5** 208; densely tufted herb to 75 cm tall; in dry sandy spots; Bt Wang, Kd and P. Burong, Ph.
- 220.16.3 ***Chrysopogon orientalis*** (Desv.) A. Camus, **G08** 238; *Chrysopogon wightianus* (Nees ex Steud.) Thwaites, **FMP5** 208; creeping herb to 80 cm tall; on limestone or coastal sand; P. Langkawi, Kl, Tg, Ph.
- 220.17.1 ***Coelachne simpliciuscula*** (Wight & Arn. ex Steud.) Munro ex Benth., **G08** 118; small tufted herb to 15 cm tall; damp places in the lowlands; Kd.
- 220.18.1 ***Coix gigantea*** J. König ex Roxb., **FMP5** 191, **G08** 307; herb to 3 m tall; damp places; once on bank of Sg Kinta, Pk.
- 220.18.2a ***Coix lacryma-jobi*** L. var. *lacryma-jobi*, **FMP5** 191, **G08** 304; herb 90–250 cm tall; common on waste land; widespread.
- 220.18.2b ***Coix lacryma-jobi*** L. var. *ma-yuen* (Romanet) Stapf, **G08** 306; herb; forest clearings as escape or relic from shifting cultivation; Jh.
- 220.18.2c ***Coix lacryma-jobi*** L. var. *monilifer* Watt, **FMP5** 191, **G08** 307; herb; Ml.
- 220.19.1 ***Cymbopogon calcicola*** C.E. Hubb., **G08** 297, **C16** 34; tufted herb to 150 cm tall; on limestone to 400 m; Kd, Ph.
- 220.19.2 ***Cymbopogon flexuosus*** (Nees ex Steud.) W. Watson, **G08** 297; herb to 3 m tall; waste places; Sp; naturalized.
- 220.20.1 ***Cynodon dactylon*** (L.) Pers., **FMP5** 249, **G08** 90, **M47** 398; creeping herb 10–40 cm tall; common on open sandy sites in the lowlands; throughout.
- 220.20.2 ***Cynodon radiatus*** Roth ex Roem. & Schult.; J.F. Veldkamp *pers. comm.*; herb to 70 cm tall; waste ground, roadsides, usually near the sea; Kd, Sl.

- 220.21.1 **Cyrtococcum accrescens** (Trin.) Stapf, **FMP5** 234, **G08** 149; slender scrambling herb 20–100 cm tall; shady places in the lowlands; common throughout.
- 220.21.2 **Cyrtococcum oxyphyllum** (Steud.) Stapf, **FMP5** 233, **G08** 148; slender creeping herb 15–50 cm tall; common in lightly shaded places, lowlands and mountains; throughout.
- 220.21.3 **Cyrtococcum patens** (L.) A. Camus, **G08** 148; *Cyrtococcum carinatum* Stapf ex Ridl., **FMP5** 233; slender scrambling herb to 50 cm tall; shady places; SI, NS, MI.
- 220.22.1 **Dactyloctenium aegyptium** (L.) Willd., **FMP5** 251 '*aegyptiacum*', **G08** 81, **M44** 400; rosette-forming herb 10–40 cm tall; sandy places in the lowlands, including seashores; Pn, Pk, Ph, SI, Jh, Sp.
- 220.23.1 **Dendrocalamus asper** (Roem. & Schult.) Backer ex Heyne, **H43** 100, **G08** 27; **W29** 107; *Dendrocalamus flagellifer* Munro, **FMP5** 265; large bamboo to 20 m tall; widely cultivated but possibly native.
- 220.23.2 **Dendrocalamus dumosus** (Ridl.) Holttum, **H43** 96, **G08** 30, **C16** 34, **W29** 109; *Schizostachyum dumosum* Ridl., **FMP5** 271; bamboo to 5 m tall; forest on limestone; P. Langkawi and Gg Baling, Kd.
- 220.23.3 **Dendrocalamus elegans** (Ridl.) Holttum, **H43** 95, **G08** 30, **C16** 34, **W29** 109; *Schizostachyum elegans* Ridl., **FMP5** 271; bamboo to 6 m tall; on limestone; P. Langkawi, KI.
- 220.23.4 **Dendrocalamus hirtellus** Ridl., **FMP5** 266, **H43** 93, **G08** 29, **W29** 113; *Bambusa klossii* Ridl., **FMP5** 259; bamboo to 15 m tall; openings in lowland forest; Kd, KI, Pk, Ph, NS, Jh; endemic.
- 220.23.5 **Dendrocalamus longispathus** (Kurz) Kurz, **W29** 115; bamboo 12–20 m tall; lowland forest; once each from KI and Tg.
- 220.23.6 **Dendrocalamus pendulus** Ridl., **FMP5** 266, **H43** 90, **G08** 29, **W29** 115; *Cephalostachyum malayense* Ridl., **FMP5** 267; *Schizostachyum subcordatum* Ridl., **FMP5** 269; bamboo to 25 m tall; openings in lowland forest to 800 m; Ps, Kd, Pn, KI, Tg, Pk, Ph, SI, NS, MI, Jh; endemic.
- 220.23.7 **Dendrocalamus sinuatus** (Gamble) Holttum, **H43** 97, **G08** 28, **W29** 117; *Oxytenanthera sinuata* Gamble, **FMP5** 264; slender bamboo 12–15 m tall; lowlands; Tg, Pk, Ph, SI, NS.
- 220.24.1 **Dichanthium annulatum** (Forssk.) Stapf, **G08** 284, **C16** 35; *Ischaemum beccarii* auct. non Hack., **FMP5** 204; densely tufted herb to 100 cm tall; on limestone; Kd, SI.

- 220.24.2 **Dichanthium caricosum** (L.) A. Camus, **FMP5** 210, **G08** 284; slender tufted herb 30–100 cm tall; open sunny sites; Kd, Sl, Ph, Sp.
- 220.24.3 **Dichanthium mucronulatum** R.K. Jansen, **G08** 283, **C16** 35; wiry-stemmed herb to 75 cm tall; on limestone; P. Langkawi, Ph, Sl; endemic.
- 220.25.1 **Digitaria ciliaris** (Retz.) Koeler, **G08** 196, **V27** 32, **M47** 402; *Digitaria marginata* Link, **FMP5** 213 incl., in part, var. *ciliaris* Hook.f.; herb forming loose mats, to 60 cm tall; waste places to 1700 m; Kd, Pn, Pk, Ph, Sl, Ml, Jh, Sp.
- 220.25.2 **Digitaria didactyla** Willd., **G08** 195 incl. var. *peninsulae* (Ohwi) Henrard, **V27** 44; tufted yet stoloniferous herb to 40 cm tall; roadsides and lawns to 1800 m; Pn, Ph, Sl, Ml, Sp.
- 220.25.3 **Digitaria fuscescens** (Presl) Henrard, **G08** 193, **V27** 61, **M47** 404; creeping herb to 40 cm tall; disturbed sites; Pn, Ph, Sl, Sp.
- 220.25.4 **Digitaria heterantha** (Hook.f.) Merr., **V27** 46; *Digitaria barbata* auct. non Willd., **FMP5** 215; *Digitaria dispar* Henrard, **G08** 193; creeping herb to 80 cm tall; locally common on sandy beaches; Ph, Jh.
- 220.25.5 **Digitaria longiflora** (Retz.) Pers., **FMP5** 214 in part, **G08** 192, **V27** 66, **M47** 406; tufted mat-forming herb to 50 cm tall; early coloniser of disturbed soil; to 700 m.
- 220.25.6 **Digitaria mollicoma** (Kunth) Henrard, **V27** 69; mat-forming herb to 50 cm tall; open sites in the lowlands; Pn, Sl, Sp.
- 220.25.7 **Digitaria pusilla** Ridl., **FMP5** 215 in part, **G08** 191, **V27** 62; mat-forming herb to 25 cm tall; sandy places to 300 m; P. Langkawi, Kd, Sp.
- 220.25.8 **Digitaria radicata** (Presl) Miq., **V27** 35; *Digitaria marginata* Link var. *debilis* auct. non Ridl., **FMP5** 214 in part; *Digitaria timorensis* (Kunth) Balansa, **G08** 198; herb forming loose mats to 60 cm tall; waste places.
- 220.25.9a **Digitaria setigera** Roem. & Schult. var. **calliblepharata** (Henrard) Veldkamp, **V27** 40; *Digitaria marginata* Link var. *ciliaris* auct. non Ridl., **FMP5** 214 in part; *Digitaria microbachne* (Presl) Henrard ssp. *calliblepharata* Henrard, **G08** 194; *Digitaria microstachya* Henrard, **G08** 195; herb forming loose mats to 90 cm tall; waste places; Ph, Ml, Jh, Sp.
- 220.25.9b **Digitaria setigera** Roem. & Schult. var. **setigera**, **V27** 37; *Digitaria marginata* Link var. *commutata* auct. non Ridl., **FMP5** 214 in part; *Digitaria microbachne* (Presl) Henrard, **G08** 194; herb forming loose mats to 120 cm tall; waste places; Jh, Sp.

- 220.25.10 **Digitaria violascens** Link, **G08** 191, **V27** 63, **M47** 414; *Digitaria pertenuis* Büse, **FMP5** 214, **G08** 192; *Digitaria longiflora* auct. non Pers., **FMP5** 215 in part; *Digitaria caespitosa* Ridl., **FMP5** 215; *Digitaria chinensis* auct. non Hornem., **FMP5** 215; *Digitaria pusilla* auct. non Ridl., **FMP5** 215 in part; tufted herb to 70 cm tall; waste places to 1600 m; Kd, Pn, Pk, Ph, Sl, NS, Jh, Sp.
- 220.26.1 **Dimeria ciliata** Merr., **G08** 214; *Dimeria fuscescens* auct. non Trin., **FMP5** 191; herb to 80 cm tall; Ps.
- 220.26.2 **Dimeria kurzii** Hook.f., **FMP5** 192, **G08** 216; slender tufted herb 15–30 cm tall; sandy places; Kd.
- 220.26.3 **Dimeria leptorhachis** Hack.; **C18** 176; *Dimeria velutina* (Hack.) Bor, **G08** 213; herb 60–100 cm tall; Kd.
- 220.26.4a **Dimeria ornithopoda** Trin. var. **glabra** (Ridl.) R.K. Jansen, **G08** 216; *Dimeria glabra* Ridl., **FMP5** 192; slender tufted herb 15–40 cm tall; lowlands; Ph, NS, Sp.
- 220.26.4b **Dimeria ornithopoda** Trin. var. **ornithopoda**, **FMP5** 192, **G08** 214; slender tufted herb 15–40 cm tall; dry grassy places; Kd, Pn, Sl, Jh, Sp.
- 220.27.1 **Dinochloa malayana** S. Dransf., **D40** 110; *Dinochloa* sp. 1, **W29** 121; *Dinochloa scandens* auct. non (Blume) Kuntze, **H43** 84, **G08** 25; *Dinochloa tjankorreh* Büse, **FMP5** 267; climbing bamboo; lowland forest; Ps, P, Langkawi, Kl, Pk, Ph, Sl.
- 220.27.2 **Dinochloa** sp. 2, **W29** 121; slender climbing bamboo; P. Redang, Tg.
- 220.27.3 **Dinochloa** sp. 3, **W29** 121; slender climbing bamboo; forest; twice from Jh.
- 220.28.1 **Echinochloa colona** (L.) Link, **FMP5** 222, **G08** 167, **M47** 416; herb to 60 cm tall; waste ground, frequently wet sites; Ps, Kd, Kl, Pn, Ph, Sl, MI, Jh, Sp.
- 220.28.2 **Echinochloa crusgalli** (L.) P. Beauv., **FMP5** 222, **G08** 168, **M47** 418; herb to 120 cm tall; common in wet places; Ps, Kd, Kl, Pn, Ph, Sl, MI, Jh, Sp.
- 220.28.3 **Echinochloa stagnina** (Retz.) P. Beauv., **G08** 166, **M47** 420; aquatic herb emerging to 200 cm tall; once in Sp.
- 220.29.1 **Eleusine indica** (L.) Gaertn., **FMP5** 250, **G08** 78, **M47** 422; loosely tufted herb to 50 cm or more tall; open places and waste ground to 1700 m; throughout.
- 220.30.1 **Enteropogon dolichostachyus** (Lag.) H. Keng ex Lazarides, **L15** 160; *Chloris dolichostachya* Lag., **G08** 86; densely tufted herb 60–100 cm tall; once on exposed rocks; P. Langkawi.

- 220.31.1 **Eragrostis amabilis** (L.) Wight & Arn. *ex* Hook. & Arn., **N11** 309; *Eragrostis tenella* (L.) P. Beauv. *ex* Roem. & Schult., **FMP5** 245, **G08** 71, **M47** 424; *Eragrostis viscosa* (Retz.) Trin., **FMP5** 246, **G08** 71; small herb 5–30 cm tall; common on open waste ground; Kd, Pn, Kl, Pk, Sl, Ml, Sp.
- 220.31.2 **Eragrostis atrovirens** (Desf.) Trin. *ex* Steud., **G08** 68; *Eragrostis elegantula* Steud., **FMP5** 248; distinctly blue-green herb to 120 cm tall; waste places to 1600 m; Ps, Kd, Kl, Pn, Pk, Ph, Sl, NS, Ml, Jh, Sp.
- 220.31.3 **Eragrostis cumingii** Steud., **G08** 65; *Eragrostis elongata sensu* Ridl., **FMP5** 248 in part at least; *Eragrostis pilosa auct. non* (L.) P. Beauv., **FMP5** 247, **G08** 69; slender wiry herb 10–100 cm tall; weed of dryish sites; Kd, Pn, Ph, Sl, Jh, Sp.
- 220.31.4 **Eragrostis gangetica** (Roxb.) Steud., **G08** 68; *Eragrostis cambessediana* Steud., **S23** 36; glaucous herb 40–60 cm tall; once in Sp.
- 220.31.5 **Eragrostis japonica** (Thunb.) Trin., **G08** 70; *Eragrostis interrupta auct. non* (R.Br.) P. Beauv., **FMP5** 246; herb 60–120 cm tall; sand bars and beaches; Ph.
- 220.31.6 **Eragrostis luzoniensis** Steud.; J.F. Veldkamp *pers. comm.*; *Eragrostis pubescens auct. non* (R.Br.) Steud., **G08** 64; wiry herb to 80 cm tall; dry open grassland; Ps.
- 220.31.7 **Eragrostis montana** Balansa; J.F. Veldkamp *pers. comm.*; *Eragrostis malayana* Stapf, **FMP5** 247, **G08** 65; rosette-forming herb to 60 cm tall; open sandy places in the lowlands; Pn, Ph, Sl, Kd, Ml, Sp.
- 220.31.8 **Eragrostis multicaulis** Steud., **G08** 70; small tufted herb not exceeding 15 cm tall; waste places; Pk, Ph.
- 220.31.9 **Eragrostis unioides** (Retz.) Nees *ex* Steud., **G08** 66, **M47** 426; *Eragrostis amabilis auct. non* (L.) Hook. & Arn., **FMP5** 246; tufted herb to 50 cm tall; in damp or wet places to 1000 m; throughout.
- 220.32.1 **Eremochloa ciliaris** (L.) Merr., **G08** 275; *Eremochloa malayana* Ridl., **FMP5** 196; tufted herb 30–70 cm tall; open sandy spots to 1000 m; Kd.
- 220.33.1 **Eriachne pallescens** R.Br., **FMP5** 240, **G08** 94, **V06** 133, **L16** 422; tufted herb 50–90 cm tall; open dry places, waste areas; Ps, Pn, Kl, Tg, Ph, Sl, Ml, Jh, Sp.
- 220.33.2 **Eriachne trisetata** Nees *ex* Steud., **FMP5** 240, **V06** 136, **L16** 422; *Massia trisetata* (Nees *ex* Steud.) Balansa, **G08** 94; tufted herb to 80 cm tall; dry sandy places, often near the sea; Tg, Ph, NS, Ml, Sp.

- 220.34.1 **Eriochloa procera** (Retz.) C.E. Hubb., **G08** 202, **M47** 428; *Eriochloa annulata* (Flüggé) Kunth, **FMP5** 223; herb 60–150 cm tall; waste ground, especially near the sea; Ps, Kd, Pn, Pk, Sl, Jh, Sp.
- 220.35.1 **Eulalia lanipes** Ridl., **FMP5** 196, **G08** 243; tufted herb to about 100 cm tall; only known from 900–1300 m on Gg Jerai, Kd; Endemic.
- 220.35.2 **Eulalia leschenaultiana** (Decne.) Ohwi, **G08** 241; wiry herb to 45 cm tall; roadsides, padi-field bunds; Kd, Kl, Ph.
- 220.35.3 **Eulalia milsumi** Ridl., **FMP5** 196, **G08** 240; slender wiry tufted herb to 50 cm tall; on quartzite ridges at about 450 m; known only from the Klang Gates area, Sl; endemic.
- 220.35.4 **Eulalia quadrinervis** (Hack.) Kuntze, **G08** 244, **C16** 36; slender, densely tufted herb 50–100 cm tall; on limestone; P. Langkawi.
- 220.35.5 **Eulalia ridleyi** (Hack.) A. Camus, **FMP5** 197, **G08** 241; creeping herb to 45 cm tall; coastal sand dunes; Ph, Jh; endemic.
- 220.35.6 **Eulalia trispicata** (Schult.) Henrard, **G08** 242; densely tufted herb 50–100 cm tall; on limestone; Ps.
- 220.36.1 **Eustachys tenera** (Presl) A. Camus, **G08** 88; *Chloris tenera* (Presl) Scribn., **M28** 131; stoloniferous herb 20–45 cm tall; open sites in the lowlands, weed; Kl, Pn, Ph, Sp.
- 220.37.1 **Garnotia acutigluma** (Steud.) Ohwi, **G08** 116, **G16** 540; *Garnotia stricta* auct. non Brongn., **FMP5** 242; tufted herb 20–60 cm tall; damp sites in the lowlands and mountains; Kd, Pk, Ph.
- 220.37.2 **Garnotia tenella** (Arn. ex Miq.) Janowski, **G14** 528; *Garnotia patula* auct. non (Munro) Benth., **G08** 116; tufted herb 15–60 cm; damp rocky slopes in the mountains; Gg Jerai, Kd, and Kuala Teku, Ph.
- 220.38.1 **Gigantochloa albovestita** (Holtum) K.M. Wong, **W29** 125; *Gigantochloa scortechinii* Gamble var. *albovestita* Holtum, **H43** 124, **G08** 33, **W15** 347; slender bamboo to 12 m tall; lowlands; Kd, Pn; endemic.
- 220.38.2 **Gigantochloa holttumiana** K.M. Wong, **W23** 346, **W15** 357, **W29** 126; clumped bamboo 10–15 m tall; montane forest; only known from Fraser's Hill, Ph; endemic.
- 220.38.3 **Gigantochloa latifolia** Ridl., **FMP5** 262, **H43** 132 incl. var. *efimbriata* Holtum, **G08** 34, **W15** 359; **W29** 129 *Oxytenanthera auriculata* Prain, **FMP5** 264; densely clumped bamboo to 6–9 m tall; lowlands and hills; Kd, Pk, Ph; endemic.

- 220.38.4 **Gigantochloa ligulata** Gamble, **FMP5** 262, **H43** 129, **G08** 34, **W15** 361, **W29** 131; densely clumped bamboo to 9 m tall; lowlands; Ps, Kd, Pn, Kl, Tg, Pk, Ph, Sl, NS, Jh.
- 220.38.5 **Gigantochloa rostrata** K.M. Wong, **W15** 333, **W29** 134; *Gigantochloa maxima* Kurz var. *minor* Holttum, **H43** 116; bamboo 4–8 m tall; Gg Raya, P. Langkawi.
- 220.38.6 **Gigantochloa scortechinii** Gamble, **FMP5** 261, **H43** 122, **G08** 32, **W15** 341, **W29** 138; densely clumped bamboo to 20 m tall; hill forest, also widely cultivated; throughout.
- 220.38.7 **Gigantochloa wrayi** Gamble, **FMP5** 261, **H43** 124, **G08** 33, **W15** 339, **W29** 142; *Gigantochloa maxima* Kurz var. *viridis* Holttum, **H43** 115, **G08** 36; bamboo to 10 m tall; lowlands, also cultivated in villages; Kd, Pn, Pk, Sl, Jh.
- 220.38.8 **Gigantochloa** sp. 2, **W29** 143; bamboo 4–5 m tall; once from Nami F.R., Kd.

The following species are only known from cultivation but are possibly endemic to Malaya: *Gigantochloa albopilosa* K.M. Wong [**W29** 124], *Gigantochloa thoi* K.M. Wong [**W29** 140] and *Gigantochloa* sp. 1 [**W29** 143].

- 220.39.1 **Hemarthria compressa** (L.f.) R.Br., **G08** 266; sprawling herb; wet places in the lowlands; Kd.
- 220.39.2 **Hemarthria longiflora** (Hook.f.) A. Camus, **G08** 266; *Hemarthria protensa* auct. non Nees ex Steud., **FMP5** 205; herb 60–100 cm tall; Kd, Kl.
- 220.40.1 **Heteropogon contortus** (L.) P. Beauv. ex Roem. & Schult., **FMP5** 213, **G08** 292; tufted herb 25–100 cm tall; sandy coasts; Kd, Pn, Ph, Sl, Sp.
- 220.41.1 **Holttumochloa korbuensis** K.M. Wong, **W28** 520, **W29** 144; slender bamboo; montane forest; Gg Korbu, Pk; endemic.
- 220.41.2 **Holttumochloa magica** (Ridl.) K.M. Wong, **W28** 520, **W29** 145; *Bambusa magica* Ridl., **FMP5** 258, **H43** 75, **G08** 22; *Bambusa elegans* Ridl., **FMP5** 258; slender bamboo to 5 m tall; exposed mountain ridges at 1200–2000 m; Ph, Sl; endemic.
- 220.41.3 **Holttumochloa pubescens** K.M. Wong, **W28** 523, **W29** 149; slender bamboo; upper montane forest at 1450 m; summit of Gg Stong, Kl; Endemic.
- 220.42.1 **Hymenachne acutigluma** (Steud.) Gilliland, **G08** 155, **M47** 432; *Hymenachne myuros* auct. non (H.B.K.) P. Beauv., **FMP5** 230; creeping herb to 100 cm tall or more; open swampy sites and riverbanks; Ps, Kd, Pn, Pk, Ph, Sl, NS, Ml, Jh, Sp.

- 220.43.1 ***Ichnanthus pallens*** (Sw.) Munro *ex* Benth. var. **major** (Nees) Stieber, **S38** 207; *Ichnanthus pallens* (Sw.) Munro *ex* Benth., **FMP5** 231; *Ichnanthus vicinus* (F.M. Bail.) Merr., **G08** 144; creeping and scrambling herb 20–40 cm tall; lowland and hill forests to 1300 m; Kd, Pk, Ph, Sl, NS, Jh.
- 220.44.1 ***Imperata conferata*** (Presl) Ohwi, **G08** 222; *Imperata exaltata* auct. non Brongn., **FMP5** 193; rhizomatous herb to 200 cm tall; open places usually near the sea; Kl, Pk, Ph, Sl, NS, Ml, Jh, Sp.
- 220.44.2 ***Imperata cylindrica*** (L.) P. Beauv. var. **major** (Nees) C.E. Hubb. *ex* C.E. Hubb. & Vaughn, **G08** 220, **M47** 434; *Imperata arundinacea* Cirillo, **FMP5** 193; rhizomatous herb about 100 cm tall; frequent colonizer of bare ground in lowlands and mountains; throughout.
- 220.45.1 ***Isachne albens*** Trin., **FMP5** 237, **G08** 121; herb 30–100 cm tall; in clearings in the mountains; commonest about 1300 m; Tg, Pk, Ph, Sl.
- 220.45.2 ***Isachne confusa*** Ohwi, **G08** 121; *Isachne rigida* auct. non Nees *ex* Steud., **FMP5** 238; slender wiry herb 10–45 cm tall; wet places in lowlands and mountains to 1300 m; Ps, Kd, Tg, Ph.
- 220.45.3 ***Isachne globosa*** (Thunb.) Kuntze, **G08** 123, **M47** 436; *Isachne australis* R.Br., **FMP5** 239; herb 20–90 cm tall; open wet places; Ps, Kd, Tg, Pn Pk, Ph, Sl, NS, Jh, Sp.
- 220.45.4 ***Isachne kinabaluensis*** Merr., **G08** 125; *Isachne javana* auct. non Nees, **FMP5** 238; tufted herb to 60 cm tall; exposed places on mountains 1600–2300 m; Kl, Tg, Pk, Ph, Jh.
- 220.45.5 ***Isachne kunthiana*** (Wight & Arn. *ex* Steud.) Miq., **G08** 122; *Isachne semitalis* Ridl., **FMP5** 237; scrambling herb 10–20 cm tall; damp lightly wooded places in the lowlands; Pk, Sl, Ml, Jh, Sp.
- 220.45.6 ***Isachne langkawiensis*** R.K. Jansen, **G08** 120, **C16** 36; slender tufted herb 15–40 cm tall; abundant in open sites on limestone; only known from P. Langkawi; endemic.
- 220.45.7 ***Isachne pulchella*** Roth *ex* Roem. & Schult., **G08** 120, **M47** 438; *Isachne miliacea* Roth *ex* Roem. & Schult., **FMP5** 239; slender creeping herb to 20 cm tall; in damp lowland forest; Ps, Ph, Sp.
- 220.45.8 ***Isachne saxicola*** (Ridl.) Ridl., **FMP5** 237, **G08** 122; cushion forming herb to 45 cm tall; open places in the mountains at 1600 m and above; Pk, Ph.
- 220.45.9 ***Isachne sylvestris*** Ridl., **FMP5** 238, **G08** 125; herb to 50 cm tall; lowland forest; Pk.
- 220.46.1 ***Ischaemum apricum*** Ridl., **FMP5** 203, **G08** 262; long-creeping herb to 90 cm tall; open sites; Pn; endemic.

- 220.46.2 **Ischaemum barbatum** Retz. var. **imbricatum** (Munro ex Hack.) R.K. Jansen, **G08** 260; *Ischaemum imbricatum* (Munro ex Hack.) Stapf ex Ridl., **FMP5** 200; herb 60–120 cm tall; disturbed sites, weed of cultivation; Ps, Kd, Kl, Tg, Jh, Sp.
- 220.46.3 **Ischaemum ciliare** Retz., **V28** 180; *Ischaemum indicum* auct. non (Houtt.) Merr., **G08** 263; *Ischaemum aristatum* auct. non L., **FMP5** 203; creeping herb to 60 cm tall; open grassy areas; Kd, Tg, Pn, Sp.
- 220.46.4 **Ischaemum fieldingianum** Rendle, **FMP5** 202, **G08** 257; *Ischaemum commelynifolium* Stapf ex Ridl., **FMP5** 202; *Ischaemum maculatum* Stapf ex Ridl., **FMP5** 202; herb 60–100 cm tall; swampy lowlands or on mountains; Kd, Ml, Jh.
- 220.46.5 **Ischaemum fluviatile** Ridl., **FMP5** 202, **G08** 260; herb 50 cm long; on rocks in river; known only from type; Kelumpur, Kl; endemic.
- 220.46.6 **Ischaemum magnum** Rendle, **FMP5** 200, **G08** 261; *Ischaemum laeve* Ridl., **FMP5** 201; herb to 200 cm tall; often along ditches and canals; Ps, NS, Jh, Sp.
- 220.46.7 **Ischaemum muticum** L., **FMP5** 201, **G08** 255; long-creeping herb 15–40 cm tall, often turf-forming; common particularly near the sea; throughout.
- 220.46.8 **Ischaemum polystachyum** Presl, **G08** 264; *Pollinia rupestris* Ridl., **FMP5** 199; *Ischaemum plumulosum* Stapf ex Ridl., **FMP5** 201; herb to 120 cm tall; river banks; Jh.
- 220.46.9 **Ischaemum rugosum** Salisb., **FMP5** 200, **G08** 259, **M47** 440; herb to 100 cm tall; waste places; Sl, Ml, Jh, Sp.
- 220.46.10 **Ischaemum timorense** Kunth, **G08** 264, **M47** 442; *Ischaemum macrurum* Stapf ex Ridl., **FMP5** 203; herb 15–60 cm tall; common in open grassy places; Ps, Kd, Pn, Pk, Ph, Sl, Ns, Jh, Sp.
- 220.47.1 **Kinabaluchloa wrayi** (Stapf) K.M. Wong, **W28** 524, **W29** 150; *Bambusa wrayi* Stapf, **FMP5** 259, **H43** 73, **G08** 22; bamboo to 18 m tall; montane forest at 1500–2000 m; Kl, Tg, Pk, Ph; endemic.
- 220.48.1 **Leersia hexandra** Sw., **FMP5** 253, **G08** 97, **M47** 444; slender herb to 100 cm long, often floating; open swampy areas; Kd, Pn, Pk, Ph, Sl, Ml, Jh, Sp.
- 220.49.1 **Leptaspis urceolata** (Roxb.) R.Br., **FMP5** 255, **G08** 47; *Scrotochloa urceolata* (Roxb.) Judz.; **C18** 400; herb to 1 m tall; lowland forest to 600 m; throughout.
- 220.50.1 **Leptochloa chinensis** (L.) Nees, **G08** 73, **FMP5** 249, **M47** 446, **N14** 83; tufted herb often procumbent, to 100 cm tall; weed of damp sites; Kl, Pn, Pk, Ph, Sl, Sp.

- 220.50.2 **Leptochloa malabarica** (L.) Veldkamp, **V26** 64, **N14** 84; *Diplachne fusca* (L.) P. Beauv., **G08** 76; tufted herb 50–100 cm tall; padi-fields; Kd, Pk.
- 220.50.3 **Leptochloa malayana** (C.E. Hubb.) R.K. Jansen *ex* Veldkamp, **V26** 64, **N14** 85; *Diplachne malayana* C.E. Hubb., **G08** 77; herb 20–80 cm tall; dry open places; Kd.
- 220.50.4 **Leptochloa panicea** (Retz.) Ohwi, **G08** 75, **N14** 87; *Leptochloa polystachya* auct. non Kunth., **FMP5** 248; slender herb to 120 cm tall; open areas in the lowlands; Ps, Kd, Ph.
- 220.51.1 **Lepturus repens** (G. Forst.) R.Br., **FMP5** 254, **G08** 83; creeping herb to 50 cm tall; coastal sands; Ph, Jh, Sp.
- 220.52.1 **Lolium perenne** L., **S62** 105; weed; Genting Highlands; naturalized from temperate regions.
- 220.53.1 **Lophatherum gracile** Brongn., **G08** 55; herb to 100 cm tall often forming loose rosette; openings in forest to 1650 m; Kd, Tg, Pn, Ph, Sl, NS, Ml, Jh, Sp.
- 220.54.1 **Maclurochloa montana** (Ridl.) K.M. Wong, **W28** 528, **W29** 153; *Dinochloa montana* Ridl., **FMP5** 267; *Bambusa pauciflora* Ridl., **FMP5** 259, **H43** 76, **G08** 23; *Bambusa montana* (Ridl.) Holttum, **H43** 77, **G08** 23; scrambling bamboo forming thickets; lower montane forest at 780–1350 m; Kd, Pn, Ph, Sl; endemic.
- 220.55.1 **Melinis repens** (Willd.) Zizka, **Z01** 116; *Rhynchelytrum repens* (Willd.) C.E. Hubb., **G08** 150; *Tricholaena rosea* Nees, **FMP5** 235; herb to 70 cm tall; sandy places, waste ground; widespread; naturalized from tropical Africa.
- 220.56.1 **Microstegium ciliatum** (Trin.) A. Camus, **G08** 249; *Pollinia ciliata* Trin. var. *glabrata* Ridl., **FMP5** 198; scrambling herb to 120 cm tall; forest margins to 1300 m; Pn, Pk, Ph, Sl.
- 220.56.2 **Microstegium geniculatum** (Hayata) Honda, **G08** 247; creeping herb to 150 cm tall; exposed places near streams and wet rocks; Cameron Highlands, Ph; endemic.
- 220.56.3 **Microstegium nudum** (Trin.) A. Camus, **G08** 250; slender creeping herb to 60 cm tall; stream margins in the hills at 1000 m; Fraser's Hill, Ph.
- 220.56.4 **Microstegium vagans** (Nees *ex* Steud.) A. Camus, **G08** 250; *Pollinia grata* Hack., **FMP5** 198; scrambling herb to 100 cm long; forest margins to 800 m; Ps, Kl, Pn.
- 220.57.1 **Miscanthus floridulus** (Labill.) Warb. *ex* K. Schum., **G08** 217; *Miscanthus japonicus* auct. non Andersson, **FMP5** 194; clumped herb 2–3 m tall; open sites in the mountains at 1200–1700 m; Ph, Jh.

- 220.57.2 **Miscanthus nepalensis** (Trin.) Hack., **G08** 218; densely tufted herb to 100 cm or more; open places in the mountains at 1500–2000 m; Cameron Highlands, Ph.
- 220.57.3 **Miscanthus ridleyi** (Hack.) I.M. Turner, **T21** 26; *Sclerostachya ridleyi* (Hack.) A. Camus, **FMP5** 194, **G08** 223; reed to 2.5 m tall; riverbank; Pekan, Ph.
- 220.58.1 **Mnesithea geminata** (Hack.) Ridl., **FMP5** 206, **G08** 267; tufted herb to 60 cm tall; coastal areas; Ph.
- 220.58.2 **Mnesithea glandulosa** (Trin.) de Koning & Sosef, **V32** 290; *Coelorachis glandulosa* (Trin.) Stapf ex Ridl., **FMP5** 204, **G08** 270; prop-rooted herb to 250 cm tall; lowlands and hills in open places, often by rivers; widespread.
- 220.58.3 **Mnesithea granularis** (L.) de Koning & Sosef, **V32** 295; *Manisuris granularis* (L.) L.f., **FMP5** 205; *Hackelochloa granularis* (L.) Kuntze, **G08** 277; herb 20–50 cm tall; one collection from each of Pn and Sp.
- 220.58.4 **Mnesithea helferi** (Hook.f.) de Koning & Sosef, **V32** 291; *Mnesithea rupicola* Ridl., **FMP5** 206; *Coelorachis helferi* (Hook.f.) Henrard, **G08** 272; herb 60–100 cm tall; Kd, Pn, Pk.
- 220.58.5 **Mnesithea mollicoma** (Hance) A. Camus, **G08** 268; *Mnesithea pubescens* Ridl., **FMP5** 206; herb to 70 cm tall; lowlands; Kd, Jh.
- 220.59.1 **Myriostachya wightiana** (Nees ex Steud.) Hook.f., **FMP5** 245, **G08** 62; densely tufted herb to 3 m tall; on estuarine or coastal mud; Ps, Pn, Pk.
- 220.60.1 **Neyraudia reynaudiana** (Kunth) H. Keng ex Hitchc., **G08** 61; *Triraphis madagascariensis sensu* Ridl., **FMP5** 251; reed to 3 m tall; in wet places; Ps, Kd, Pn, Pk, NS, MI.
- 220.61.1 **Opismenus burmanni** (Retz.) P. Beauv., **FMP5** 221, **G08** 172; slender creeping herb 10–30 cm tall; dry sandy places in the lowlands and hills to 1400 m; Kd, Pn, Ph.
- 220.61.2 **Opismenus compositus** (L.) P. Beauv., **FMP5** 221, **G08** 171; slender creeping herb 20–60 cm tall; lowland and hill forest to 1700 m; Ps, Kd, Kl, Pn, Pk, Ph, Sl, MI, Jh.
- 220.62.1 **Oryza meyeriana** (Zoll. & Moritzi) Baill. var. **granulata** (Nees & Arn. ex Watt) Duist., **D42** 185; *Oryza granulata* Nees & Arn. ex Watt, **G08** 101; herb to 80 cm tall; on river bank; Pk.
- 220.62.2 **Oryza minuta** Presl var. **silvatica** (Camus) Veldkamp, **G08** 102, **D42** 179, **V28** 232; *Oryza latifolia auct. non* Desv., **FMP5** 252; herb 50–200 cm tall; marshy grassland and wet forests; Kd, Pk, Sl, Jh.
- 220.62.3 **Oryza ridleyi** Hook.f., **FMP5** 252, **G08** 101, **D43** 187; tufted herb to 150 cm tall; shaded grassland, river and streamsides; Kd, Tg, Pk, Ph, Sl, MI, Jh.

- 220.62.4 **Oryza rufipogon** Griff., **G08** 100, **D43** 170; *Oryza fatua* Trin. var. *longearistata* Ridl., **FMP5** 252; herb 70–90 cm tall; swampy places, sometimes aquatic; Ps, Kd, Ml, Sp.
- 220.63.1 **Ottobchia nodosa** (Kunth) Dandy, **G08** 143; *Hemigymnia multinodis* Stapf, **FMP5** 228; *Hemigymnia fusca* Ridl., **FMP5** 228; creeping herb 30–90 cm tall; forest margins and damp open places in the lowlands; Ps, Kd, Kl, Pn, Ph, Sl, Jh, Sp.
- 220.64.1 **Panicum auritum** Presl ex Nees, **FMP5** 226, **G08** 137, **V31** 187; herb to 200 cm tall; damp open places in the lowlands; Kd, Kl, Pn, Pk, Ph, Sl, Ml, Jh, Sp.
- 220.64.2 **Panicum brevifolium** L., **G08** 139, **V31** 189; *Panicum ovalifolium* Poir., **FMP5** 227; *Panicum hirtifolium* Ridl., **FMP5** 228; slender decumbent herb 20–50 cm tall; shady places in lowlands and hills to 1000 m; Tg, Pn, Pk, Ph, Sl, Ml, Jh, Sp.
- 220.64.3 **Panicum curviflorum** Hornem. var. *suishaense* (Hayata) Veldkamp, **V31** 191; *Panicum elegantissimum* Hook.f., **FMP5** 226, **G08** 132; densely tufted herb to 120 cm tall; lowlands; Pk.
- 220.64.4 **Panicum hayatae** A. Camus, **G08** 137 'hyatae'; herb to 70 cm tall; known only from Fraser's Hill, Ph.
- 220.64.5 **Panicum humidorum** Buch.-Ham. ex Hook.f., **G08** 142; *Panicum perakense* (Hook.f.) Merr., **FMP5** 226; herb to 3 m tall; in water at low altitudes; Pk, Sl, Jh.
- 220.64.6 **Panicum humile** Nees ex Steud., **FMP5** 224; *Panicum walense* Mez, **G08** 140; herb to 45 cm tall; dry open sites in the lowlands; Kd, Kl, Pn, Ph.
- 220.64.7 **Panicum luzonense** Presl, **V31** 195; *Panicum caesium* Nees, **FMP5** 225; *Panicum cambogiense* Balansa, **G08** 141; densely tufted herb to 50 cm tall; waste ground in the lowlands; Ps, Kd, Kl, Tg, Pk, Ph, Sp.
- 220.64.8 **Panicum maximum** Jacq., **FMP5** 226, **G08** 132, **V31** 197; densely clumped grass to 250 cm tall; waste ground, roadsides; widespread; naturalized from tropical Africa.
- 220.64.9 **Panicum notatum** Retz., **G08** 142, **V31** 199; *Panicum montanum* Roxb., **FMP5** 227; tufted herb to 120 cm tall; lowlands and hills to 1100 m; Ps, Kd, Pn, Ph, Sl.
- 220.64.10 **Panicum paludosum** Roxb., **G08** 134, **M47** 450, **V31** 200; *Panicum proliferum* auct. non Lam., **FMP5** 225; floating herb; lowland swamps and padi-fields; Kd, Pn, Ph.

- 220.64.11 **Panicum repens** L., **FMP5** 225, **G08** 135, **M47** 452, **V31** 202; glaucous creeping herb 30–90 cm tall; damp open sites in the lowlands; Ps, Kd, Kl, Pn, Pk, Ph, Sl, Ml, Jh, Sp.
- 220.64.12 **Panicum sarmentosum** Roxb., **FMP5** 227, **G08** 139, **V31** 203; scrambling herb; forest margins and scrub in the lowlands and hills; Kd, Kl, Tg, Pn, Pk, Ph, Sl, Ml, Jh, Sp.
- 220.65.1 **Paspalum conjugatum** Berg., **FMP5** 218, **G08** 180, **D08** 290; stoloniferous herb 40–80 cm tall; grassy places; to 1500 m; throughout; naturalized from the Neotropics.
- 220.65.2 **Paspalum distichum** L., **D08** 295; stoloniferous herb about 60 cm tall; pantropical weed of damp places; Pn.
- 220.65.3 **Paspalum longifolium** Roxb., **FMP5** 217, **G08** 182, **D08** 297, **M47** 462; *Paspalum platycoleum* Ridl., **FMP5** 217; tufted herb 50–125 cm tall; damp places; common throughout.
- 220.65.4 **Paspalum orbiculare** G. Forst., **FMP5** 217, **G08** 184; tufted herb 30–70 cm tall; moist sites; Kd, Pk, Ph, Sl, Ml, Jh, Sp.
- 220.65.5 **Paspalum scrobiculatum** L. var. **bispicatum** Hack., **G08** 185, **D08** 305; *Paspalum commersonii* Lam., **FMP5** 218, **M47** 456; *Paspalum cartilagineum* Presl, **G08** 184, **M47** 454; herb about 70 cm tall; dry or damp disturbed sites; to 1500 m; throughout.
- 220.65.6 **Paspalum urvillei** Steud., **D08** 308; tufted herb 90–200 cm tall; waste ground; naturalized from South America.
- 220.65.7 **Paspalum vaginatum** Sw., **G08** 182, **D08** 309; *Paspalum distichum* auct. non L., **FMP5** 218; stoloniferous herb 25–50 cm tall; open places near the sea; Pn, Pk, Ph, Sl, Jh, Sp.
- 220.66.1 **Pennisetum clandestinum** Hochst. ex Chiov., **G08** 162; creeping herb forming a coarse turf; grassy places in the mountains; Cameron Highlands, Ph; naturalized from Africa.
- 220.66.2 **Pennisetum polystachion** (L.) Schult., **T05** 130, **C18** 366, **M47** 466; herb to 3 m tall; waste places; Sp; naturalized from tropical Africa.
- 220.66.3 **Pennisetum purpureum** Schumach., **G08** 162; herb to 3 m tall; pastures and waste places; Sl, NS, Jh, Sp; naturalized from Africa.
- 220.67.1 **Perotis indica** (L.) Kuntze, **G08** 113, **V36** 610; *Perotis latifolia* Aiton, **FMP5** 243; tufted herb to 75 cm tall; sandy ground near the sea; throughout.

- 220.68.1 **Phragmites vallatoria** (Pluk. ex L.) Veldkamp, **V29** 233; *Phragmites communis* auct. non Trin., **FMP5** 240; *Phragmites karka* (Retz.) Trin. ex Steud., **G08** 49; reed to 3 m tall; margins of rivers and lakes; Ps, Kd, Pn, Pk, Ph, Sl, NS, Ml, Jh, Sp.
- 220.69.1 **Poa annua** L., **FMP5** 254, **G08** 58; tufted herb to 45 cm tall; cultivated ground at the Hill Stations; Pk, Ph; naturalized from temperate regions.
- 220.70.1 **Pogonatherum crinitum** (Thunb. ex Murr.) Kunth; J.F. Veldkamp *pers. comm.*; *Pogonatherum saccharoideum* P. Beauv., **FMP5** 195; *Pogonatherum paniceum* (Lam.) Hack., **G08** 251; much-branched herb 15–60 cm tall; on banks and rocky places to 1600 m; Kd, Kl, Tg, Pn, Pk, Ph, Sl, Sp.
- 220.71.1 **Polytrias indica** (Houtt.) Veldkamp, **V28** 180; *Eulalia praemorsa* (Nees ex Steud.) Stapf ex Ridl., **FMP5** 197; *Polytrias amaura* (Büse) Kuntze, **G08** 244, **M47** 468; creeping, much-branched herb 15–40 cm tall; dryish open places, in lawns; Kd, Pn, Sl, Ml, Sp; probably spread from Java.
- 220.72.1 **Pseudechinolaena polystachya** (Kunth) Stapf, **FMP5** 221, **G08** 204; slender creeping herb to 60 cm tall; lowland forest to 1300 m; Pk, Ph, Sl.
- 220.73.1 **Pseudoraphis spinescens** (R.Br.) Vickery, **G08** 160; aquatic or semi-aquatic; padi-fields; Kd.
- 220.74.1 **Racemobambos setifera** Holttum, **H43** 134, **G08** 16, **D39** 676, **W29** 159; slender bamboo; hill forest, on banks of fast-flowing rivers; Gg Angsi, NS; Gg Pulau and near Batu Pahat, Jh; endemic.
- 220.75.1 **Saccharum arundinaceum** Retz., **FMP5** 193, **G08** 226; reed to 4 m tall; common on river banks; Kd, Tg, Pn, Pk, Ph, Sp.
- 220.75.2 **Saccharum spontaneum** L., **G08** 224; creeping herb 1–4 m tall; waste land; Pn, Pk, Ph, Sl, Sp.
- 220.75.3 **Saccharum velutinum** (Holttum) T.A. Cope, **C25** 703; *Spodiopogon velutinus* Holttum, **G08** 228; scrambling herb to 3 m long; mountains at 1800 m; known only from type; Cameron Highlands, Ph; endemic.
- 220.76.1a **Sacciolepis indica** (L.) Chase var. **indica**, **FMP5** 232, **G08** 152, **M47** 472; *Sacciolepis angusta* (Trin.) Stapf, **FMP5** 232; herb to 50 cm tall; open grassy and swampy places to 1700 m; Pk, Ph, Sl, NS, Ml, Jh, Sp.
- 220.76.1b **Sacciolepis indica** (L.) Chase var. **turgida** (Ridl.) Gilliland, **G08** 154; *Sacciolepis turgida* Ridl., **FMP5** 231; herb to 40 cm tall; grassy places to 800 m; Ps, Kd, Pn.
- 220.76.2 **Sacciolepis interrupta** (Willd.) Stapf, **G08** 151, **M47** 474; creeping herb to 50 cm tall; padi-fields; Kd.

- 220.76.3 **Sacciolepis myosuroides** (R.Br.) A. Camus, **FMP5** 232, **G08** 152, **M47** 476; tufted herb to 75 cm tall; open marshy ground to 1700 m; Pn, Pk, Ph, Sl, Ml, Jh, Sp.
- 220.77.1 **Schizachyrium brevifolium** (Sw.) Nees ex Büse, **FMP5** 210, **G08** 291; slender tufted herb to 75 cm tall; open sandy places in the lowlands; Tg, Pn, Pk, Ph, Ml, Jh.
- 220.77.2 **Schizachyrium sanguineum** (Retz.) Alston, **G08** 289; *Schizachyrium semiberbe* Nees, **FMP5** 210; tufted herb 50–120 cm tall; sandy places near the sea; Jh, Sp.
- 220.78.1 **Schizostachyum aciculare** Gamble, **FMP5** 270, **H43** 39, **G08** 40, **W29** 165; small bamboo; open places in the lowlands; Kl, Sl, NS, Ml.
- 220.78.2 **Schizostachyum gracile** (Munro) Holttum, **H43** 37 incl. var. *erectum* Holttum, **G08** 39, **W29** 169; *Schizostachyum tenue* Gamble, **FMP5** 268; *Schizostachyum chilanthum* Kurz, **FMP5** 269; bamboo to 4 m tall, bending over at the top; forest margins and river banks; Tg, Ph, Sl, NS, Ml, Jh; endemic.
- 220.78.3 **Schizostachyum grande** Ridl., **FMP5** 271, **H43** 49, **G08** 38, **W29** 171; bamboo to 20 m tall; clearings in hill forest to 1000 m; Ps, Kd, Pn, Kl, Tg, Pk, Ph, Sl, NS, Ml, Jh; endemic.
- 220.78.4 **Schizostachyum jaculans** Holttum, **H43** 40, **G08** 39, **W29** 173; bamboo to 7 m tall; lowlands; widespread.
- 220.78.5 **Schizostachyum latifolium** Gamble, **FMP5** 270, **W29** 174; *Ochlandra ridleyi* Gamble, **FMP5** 272; *Schizostachyum longispiculatum* auct. non Kurz, **FMP5** 270, **H43** 48, **G08** 40; bamboo to 5 m tall; forest-river boundaries in the lowlands; throughout.
- 220.78.6 **Schizostachyum lengguanii** K.M. Wong, **W29** 176; graceful bamboo 4–6 m tall; lake margins; Tasek Chini, Ph; endemic.
- 220.78.7 **Schizostachyum terminale** Holttum, **H43** 51, **G08** 38, **W29** 178; slender bamboo clambering 6–10 m tall; swampy lowland forest; Kd, Ph, Sl.
- 220.78.8 **Schizostachyum zollingeri** Steud., **FMP5** 269, **H43** 42, **G08** 41, **W29** 179; bamboo to 15 m tall; forest edges and clearings; throughout.
- 220.78.9 **Schizostachyum sp.**, **W29** 181; bamboo 4–7 m tall; lowland forest; once from Ulu Sg Teroh, Ph.
- 220.79.1 **Setaria barbata** (Lam.) Kunth, **T05** 130, **V30** 375; herb to 1 m tall; waste ground; Sp; naturalized from West Africa.
- 220.79.2 **Setaria geminata** (Forssk.) Veldkamp, **V30** 377; herb; near the sea; Sl.

- 220.79.3 **Setaria geniculata** (Lam.) P. Beauv., **G08** 159; rhizomatous herb; lowlands, often on coastal sand dunes; Ps, Kd, Kl, Pn, Pk,.
- 220.79.4 **Setaria italica** (L.) P. Beauv., **FMP5** 234, **G08** 156, **V30** 377; tufted herb to 150 cm tall; in forest clearings as escape or relic of cultivation; Pk, Ph, MI, Sp; naturalized from subtropical Eurasia.
- 220.79.5 **Setaria palmifolia** (Koenig) Stapf, **G08** 157, **V30** 379; *Setaria plicata* auct. non (Lam.) Cooke, **FMP5** 235; tufted herb to 100 cm or more tall; lightly shaded places in lowlands and hills to 1600 m; Ps, Kd, Kl, Pk, Ph, Sl, NS, Jh, Sp.
- 220.79.6 **Setaria parviflora** (Poir.) Kerguelen, **V30** 379; *Setaria rubiginosa* (Steud.) Miq., **FMP5** 234; *Setaria pallide-fusca* (Schum.) Stapf & C.E. Hubb., **G08** 159; *Setaria pumila* (Poir.) Roem. & Schult.; **C18** 411; tufted herb 25–100 cm tall; weed of dry sites in the lowlands; Pn, Sl, NS, MI, Jh, Sp.
- 220.79.7 **Setaria punctata** (Burm.f.) Veldkamp, **V30** 381; *Paspalum punctatum* Stapf ex Ridl., **FMP5** 218; *Paspalidium punctatum* (Burm.f.) A. Camus, **G08** 173; herb to 150 cm tall; open damp sites in the lowlands; Ps, Kd, Sl, Jh.
- 220.80.1 **Soejatmia ridleyi** (Gamble) K.M. Wong, **W28** 532, **W29** 182; *Bambusa ridleyi* Gamble, **FMP5** 257, **H43** 71, **G08** 21; bamboo to 5 m tall; lowland forest; Ph, Sp; endemic.
- 220.81.1 **Sorghum propinquum** (Kunth) Hitchc., **G08** 229; *Sorghum affine* [non Kuntze] (Presl) A. Camus, **FMP5** 195; stoloniferous herb to 2.5 m tall; riverbanks; Ph, Sp.
- 220.82.1 **Sphaerocaryum malaccense** (Trin.) Pilg., **G08** 126; *Sphaerocaryum elegans* (Arn. ex Steud) Nees ex Hook.f., **FMP5** 241; carpet-forming herb to 15 cm tall; forest paths and field edges in lowlands and hills; Tg, Pn, Ph, Sl, MI, Jh, Sp.
- 220.83.1 **Spinifex littoreus** (Burm.f.) Merr., **G08** 210; *Spinifex squarrosus* L., **FMP5** 236; stiff creeping bushy herb; sandy coasts; Tg, Ph, Jh.
- 220.84.1a **Sporobolus indicus** (L.) R.Br. var. **flaccidus** (Roem. & Schult.) Veldkamp, **B01** 433; *Sporobolus diandrus* (Retz.) P. Beauv., **FMP5** 244 in part, **G08** 106; densely tufted herb to 90 cm tall; disturbed sites in the lowlands.
- 220.84.1b **Sporobolus indicus** (L.) R.Br. var. **major** (Büse) Baaijens, **B01** 437; *Sporobolus indicus* sensu Ridl., **FMP5** 244; *Sporobolus diandrus* (Retz.) P. Beauv., **FMP5** 244 in part; *Sporobolus fertilis* (Steud.) Clayton, **G08** 106; densely tufted herb to 90 cm tall; disturbed sites to 1600 m; Kd, Pn, Ph, Sl, NS, MI, Sp.
- 220.84.2 **Sporobolus piliferus** (Trin.) Kunth, **FMP5** 244, **G08** 105, **B01** 441; densely tufted herb to 30 cm tall; dry open sites; MI.

- 220.84.3 **Sporobulus virginicus** (L.) Kunth, **G08** 108, **B01** 441; tufted herb to 50 cm tall; seashores; Kd, Sp.
- 220.85.1 **Stenotaphrum helferi** Munro *ex* Hook.f., **FMP5** 220, **G08** 205, **S04** 205; creeping herb 20–50 cm long; common near the foot of limestone hills; Kd, Kl, Pn, Pk, Ml.
- 220.85.2 **Stenotaphrum secundatum** (Walter) Kuntze, **S04** 210; *Stenotaphrum dimidiatum auct. non* (L.) Brongn., **G08** 205; creeping prostrate herb to 30 cm long; open grassy places; Sp; naturalized from southern Africa.
- 220.86.1 **Themeda arguens** (L.) Hack., **FMP5** 212, **G08** 300; often reddish, tufted herb 20–120 cm tall; open dry places; Kd, Pn, Pk, Sl, NS, Ml, Jh, Sp.
- 220.86.2 **Themeda arundinacea** (Roxb.) Ridl., **G08** 301; *Themeda subsericans* (Nees) Ridl., **FMP5** 212; herb to 150 cm tall; sandy places in the lowlands; Kl, Pk, Ph.
- 220.86.3 **Themeda villosa** (Poir.) A. Camus, **FMP5** 212, **G08** 301; clumping herb 2–4 m tall; sandy waste places, riverbanks, seashores; Ps, Kd, Kl, Pn, Pk, Ph, Sl, NS, Ml, Jh, Sp.
- 220.87.1 **Thuarea involuta** (G. Forst.) R.Br. *ex* Roem. & Schult., **G08** 207; *Thuarea sarmentosa* Pers., **FMP5** 236; creeping herb 5–10 cm tall; sea shores; Kd, Kl, Tg, Pn, Ph, Jh, Sp.
- 220.88.1 **Thysanolaena latifolia** (Roxb. *ex* Hornem.) Honda, **B01** 451; *Thysanolaena agrostis* Nees, **FMP5** 241; *Thysanolaena maxima* (Roxb.) Kuntze, **G08** 45; tufted reed to 3 m tall; open places to 1300 m; Pn, Pk, Sl, Jh, Sp.
- 220.89.1 **Tripsacum dactyloides** (L.) L., **G08** 309; densely clumped herb 3–4 m tall; plantations, waste places; Ph, NS, Ml, Sp; ?naturalized from tropical America.
- 220.89.2 **Tripsacum laxum** Nash, **G08** 308; herb to 3 m tall; plantations; Sl; naturalized from tropical America.
- 220.90.1 **Urochloa distachya** (L.) T.-Q. Nguyen, **N05** 13; *Brachiaria distachya* (L.) Stapf, **FMP5** 219, **G08** 176; decumbent herb 30–45 cm tall; open places in the lowlands; common throughout.
- 220.90.2 **Urochloa mutica** (Forssk.) T.-Q. Nguyen, **N05** 13; *Brachiaria mutica* (Forssk.) Stapf, **FMP5** 219, **G08** 178, **M47** 392; long-creeping herb to 2 m tall; damp places in the lowlands; Kd, Pk, Sl, Jh, Sp.
- 220.90.3 **Urochloa paspaloides** Presl; J.F. Veldkamp *pers. comm.*; *Brachiaria paspaloides* (Presl) C.E. Hubb., **G08** 179, **M47** 394; creeping herb to 75 cm tall; weed of cultivation, waste places, sometimes on limestone; Ps, Kd, Pk, Ph, Sl, Jh, Sp.

- 220.90.4 **Urochloa pubigera** (Roem. & Schult.) R.D. Webster, **W09** 250; *Brachiaria holotricha* Ohwi, **G08** 176; *Brachiaria pubigera* (Roem. & Schult.) S.T. Blake, **L13** 108; glaucous herb to 100 cm or more tall; Pn.
- 220.90.5 **Urochloa reptans** (L.) Stapf, **FMP5** 220; *Brachiaria reptans* (L.) Gardn. & C.E. Hubb., **G08** 175, **M47** 396; slender glaucous herb to 30 cm tall; open places in the lowlands; Ph, Jh, Sp.
- 220.90.6 **Urochloa subquadripa** (Trin.) R.D. Webster, **W09** 252; *Brachiaria miliiformis* (Presl) A. Chase, **L13** 108; decumbent herb to 1.5 m tall; roadsides, waste ground.
- 220.91.1 **Vetiveria nemoralis** (Balansa) A. Camus, **G08** 231; densely tufted herb to 75 cm tall; rocky places in rivers; Sg Nipah, Tg, and Sg Tahan, Ph.
- 220.92.2 **Vetiveria zizanioides** (L.) Nash, **G08** 232; *Vetiveria odorata* Virey, **FMP5** 208; rhizomatous herb to 2 m or more tall; waste places; Kd, Pn, Pk, Sl, Sp; naturalized from tropical Africa.
- 220.93.1 **Zoysia matrella** (L.) Merr., **G08** 109, **G13** 171; *Zoysia pungens* Willd., **FMP5** 243; mat-forming herb to 35 cm tall; sandy shores above high tide line; Tg, Pn, Ph, Sl, NS, Ml, Jh, Sp.

221. HANGUANACEAE

- 221.1.1 **Hanguana malayana** (Jack) Merr., **FMi4** 249; *Susum anthelminthicum* Blume ex Roem. & Schult., **FMP4** 369; *Susum malayanum* (Jack) Planch. ex Hook.f., **FMP4** 369; herb to 2 m tall, terrestrial or aquatic; in lowland and hill forests to 1500 m or in lowland ponds and rivers; widespread.

222. HYDROCHARITACEAE

- 222.1.1a **Blyxa aubertii** Rich. var. **aubertii**, **FMi5** 390, **C24** 9; *Blyxa malayana* Ridl., **FMP4** 3; aquatic of pools, marshes and rice fields; to 1200 m; Pn, Tg, Pk, Jh, Sp.
- 222.1.1b **Blyxa aubertii** Rich. var. **echinosperma** (C.B. Clarke) C.D.K. Cook & Lüönd, **C24** 14, **M47** 302; *Blyxa echinosperma* (C.B. Clarke) Hook.f., **FMi5** 391; aquatic herb; pools up to 250 m; Pn.
- 222.1.2a **Blyxa japonica** (Miq.) Maxim. ex Asch. & Gürke var. **alternifolia** (Miq.) C.D.K. Cook & Lüönd, **C24** 25; *Enhydrias angustipetala* Ridl., **FMP4** 2; *Blyxa alternifolia* (Miq.) Hartog, **FMi5** 392; aquatic herb; muddy ponds and ditches; Ps, Pk, Ml, Sp.

- 222.1.2b **Blyxa japonica** (Miq.) Maxim. ex Asch. & Gürke var. **japonica**, **FMi5** 393, **C24** 21; *Enhydrias angustipetala* Ridl. var. *latifolia* Ridl., **FMP4** 2; flaccid aquatic herb; stagnant pools; Pk, Ml.
- 222.2.1 **Enhalus acoroides** (L.f.) Royle, **FMi5** 402, **D24** 215; *Enhalus koenigii* Rich., **FMP4** 4; sea grass; growing to depths of 4 m; NS, Sp.
- 222.3.1 **Halophila beccarii** Asch., **FMi5** 411, **D24** 261; sea grass; only uncovered at extreme low tides; Jh, Sp.
- 222.3.2 **Halophila minor** (Zoll.) Hartog, **FMi5** 410; *Halophila ovata* Gaud., **D24** 251; sea grass; to depths of 2 m; Sp.
- 222.3.3 **Halophila ovalis** (R.Br.) Hook.f., **FMi5** 408, **D24** 240; *Halophila ovata* (non Gaudich.) Ridl., **FMP4** 4; sea grass; to at least 10 m underwater; Kd, Pk, Sp.
- 222.3.4 **Halophila spinulosa** (R.Br.) Asch., **FMi5** 412, **D24** 263; sea grass; down to 15 m; Jh, Sp.
- 222.4.1 **Hydrilla verticillata** (L.f.) Royle, **FMP4** 1, **FMi5** 385, **M47** 304; aquatic herb; rivers, ditches and pools; widespread.
- 222.5.1 **Najas indica** (Willd.) Cham., **FMi6** 166; *Najas kingii* Rendle, **FMP4** 366; *Najas minor* (non All.) Hook.f., **FMP4** 366; aquatic herb to 40 cm long; rivers, streams, ditches etc.; scattered.
- 222.5.2 **Najas malesiana** W.J. de Wilde, **FMi6** 169, **M47** 364; *Najas graminea* (non Delile) Ridl., **FMP4** 365 incl. var. *angustifolia* Rendle; aquatic herb to 15 cm long; lowland forest streams and pools; widespread.
- 222.6.1 **Ottelia alismoides** (L.) Pers., **FMP4** 3, **FMi5** 398, **M47** 306; aquatic herb; lowland ponds and sluggish streams.
- 222.7.1 **Thalassia hemprichii** (Ehrenb.) Asch., **FMi5** 406, **D24** 232; sea grass; commonly on coral sand; Jh, Sp.

223. HYPOXIDACEAE

- 223.1.1 **Hypoxis aurea** Lour., **FMP4** 298, **FMi11** 370; hairy herb to 30 cm tall; sandy grassy spots; north and east of Malaya.
- 223.2.1 **Molineria capitulata** (Lour.) Herb., **B04** 209; *Curculigo recurvata* Dryand., **FMP4** 299; *Curculigo capitulata* (Lour.) Kuntze, **FMi11** 367; hairy herb to over 1 m tall; lowland and hill forests; widespread.

- 223.2.2a **Molineria latifolia** (Dryand.) Herb. ex Kurz var. **latifolia**, **B04** 209; *Curculigo latifolia* Dryand., **FMP4** 300 incl. var. *glabrescens* Ridl., **FM11** 369; *Curculigo villosa* Wall. ex Kurz, **FMP4** 300; hairy herb to over 1 m tall; forests and forest margins, lowlands to mountain tops; throughout.
- 223.2.2b **Molineria latifolia** (Dryand.) Herb. ex Kurz var. **megacarpa** (Ridl.) I.M. Turner, **T24** 222; *Curculigo megacarpa* Ridl., **FMP4** 300; *Curculigo latifolia* Dryand. var. *megacarpa* (Ridl.) Geerinck, **FM11** 369; tufted herb; lower montane forest; Taiping Hills, Pk.
224. **IRIDACEAE**
- 224.1.1 **Trimezia martinicensis** (Jacq.) Herb., **T18** 110, **C26** 663; bulbous herb to 60 cm tall; grassy places; widespread; naturalized from the Caribbean.
225. **JOINVILLEACEAE**
- 225.1.1 **Joinvillea ascendens** Brongn. & Gris ssp. **borneensis** (Becc.) Newell, **S52** 225; *Joinvillea malayana* Ridl., **FMP4** 368; *Joinvillea borneensis* Becc., **FM14** 245; clumped reed-like herb 1.5–4.5 m tall; dry open spots in the hills; widespread.
226. **JUNCACEAE**
- 226.1.1 **Juncus prismatocarpus** R.Br., **K13** 91; herb; damp waste ground in the mountains; Cameron Highlands, Ph; dubiously native.
227. **LEMNACEAE**
- 227.1.1 **Lemna perpusilla** Torr., **FM7** 230; *Lemna paucicostata* Hegelm., **FMP5** 132; tiny floating single-rooted plant about 4 mm across; still water bodies; widespread.
- 227.1.2 **Lemna tenera** Kurz, **FMP5** 132, **FM7** 235; tiny submerged single-rooted aquatic herb to 7 mm long; ditches, ponds and rice-fields; Pn, Pk, Sp.
- 227.2.1 **Spirodela polyrhiza** (L.) Schleid., **FM7** 224; *Lemna polyrhiza* L., **FMP5** 132; tiny floating many-rooted plant about 8 mm across; still water bodies; widespread.
- 227.2.2 **Spirodela punctata** (G. Mey.) C.H. Thomps., **FM7** 225; tiny floating few-rooted plant about 4 mm across; still water bodies; Ph.

- 227.3.1 **Wolffia globosa** (Roxb.) Hartog & Plas, **FMi7** 236; *Wolffia arrhiza* [non (L.) Horkel ex Wimm.] G. Martens, **FMP5** 132; miniscule floating rootless plant barely 1 mm in diameter; stagnant pools and ditches; Sl, Ml, Sp.
228. LIMNOCHARITACEAE
- 228.1.1 **Limnocharis flava** (L.) Buchenau, **FMi5** 120, **M47** 118; herb to 1 m tall; shallow water, rice-fields; widespread; naturalized from tropical America.
229. LOWIACEAE
- 229.1.1 **Orchidantha fimbriata** Holttum, **H46** 243, **FMi12** 769; *Orchidantha longiflora* sensu Ridl., **FMP4** 292; herb to 100 cm; lowland and hill forest; Tg, Pk, Ph, Sl, Jh; endemic.
- 229.1.2 **Orchidantha longiflora** (Scort.) Ridl., **H46** 245, **FMi12** 772; *Orchidantha calcarea* M.R. Hend., **H33** 125; herb about 50 cm tall; lowland forest; Pk, Sl; endemic.
- 229.1.3 **Orchidantha maxillarioides** (Ridl.) K. Schum., **FMP4** 293, **H46** 245, **FMi12** 772; herb to about 30 cm; lowland forest; Ph; endemic.
230. MARANTACEAE
- 230.1.1 **Donax grandis** (Miq.) Ridl., **FMP4** 286, **H42** 268; lowland forest herb to 5 m tall; widespread.
- 230.1.2 **Donax parviflorus** Ridl., **FMP4** 287 '*parviflorum*', **H42** 270; forest herb; Kl, Pk, Ph, Sl.
- 230.2.1 **Phacelophrynium maximum** (Blume) K. Schum., **H42** 295; *Phacelophrynium tapirosum* K. Schum., **FMP4** 289; forest herb; wet ground near streams; Tg, Ph, Sl, Jh.
- 230.3.1 **Phrynium gracile** Holttum, **H42** 282; herb; known only from Jh.
- 230.3.2 **Phrynium hirtum** Ridl., **FMP4** 289, **H42** 290; herb; lowland and hill forest; Tg, Pk, Sl, NS, Jh.
- 230.3.3 **Phrynium parvum** (Ridl.) Holttum, **H42** 283; *Stachyphrynium parvum* Ridl., **FMP4** 288; herb; lowland forest; Jh, Sp.
- 230.3.4 **Phrynium pubinerve** Blume, **T19** 129; *Phrynium malaccense* Ridl., **FMP4** 290; *Phrynium capitatum* Willd., *nom. illeg.*, **H42** 287; lowland and hill forest herb; widespread.

- 230.3.5 **Phrynium terminale** Ridl., **FMP4** 290, **H42** 293; herb to 1 m tall; lowland forest; Kd, Pk; endemic.
- 230.3.6 **Phrynium tristachyum** Ridl., **FMP4** 290, **H42** 286, **K11** 728; herb; forest; Sl, NS, Jh.
- 230.3.7 **Phrynium villosulum** Miq., **K11** 728; *Phrynium basiflorum* Ridl., **FMP4** 289, **H42** 292; herb; swampy lowland forest; Pk, NS, Jh, Sp.
- 230.3.8 **Phrynium sp.**, **H42** 282; forest herb; Tg.
- 230.4.1 **Schumannianthus dichotomus** (Roxb.) Gagnep., **H42** 272; *Donax arundastrum* (non Lour.) Schum., **FMP4** 286; herb to 2.5 m tall; forming thickets in wet forest.
- 230.5.1 **Stachyphrynium cylindricum** (Ridl.) K. Schum., **FMP4** 287, **H42** 278, **C16** 40; tufted herb; limestone; Kd, Kl, Pk.
- 230.5.2 **Stachyphrynium griffithii** (Baker) K. Schum., **FMP4** 287, **H42** 276; herb; lowland forest; Pk/Ph southward; endemic.
- 230.5.3 **Stachyphrynium jagorianum** (K. Koch) K. Schum., **FMP4** 288, **H42** 274; herb of partial shade; Tg, Pn, Pk, Ph, Sl, NS.
- 230.5.4 **Stachyphrynium sp.**, **H42** 275; one coll. Temango, Pk.

231. MELANTHIACEAE

- 231.1.1 **Petrosavia stellaris** Becc., **FM9** 199; *Protolirion paradoxum* Ridl., **FMP4** 322; rhizomatous yellow saprophytic herb to 11 cm tall; dry spots in lower montane forest; Kd, Pk, Ph.

232. MUSACEAE

- 232.1.1a **Musa acuminata** Colla ssp. **malaccensis** (Ridl.) N.W. Simmonds, **S77** 466, **H52** 68; *Musa malaccensis* Ridl., **FMP4** 294 including var. *minor* Ridl.; *Musa flava* Ridl., **FMP4** 294; banana to 6 m tall; lowland to lower montane forest; Ps, Kd, Kl, Tg, Pn, Ph, Ml.
- 232.1.1b **Musa acuminata** Colla ssp. **microcarpa** (Becc.) N.W. Simmonds, **S77** 467; *Musa truncata* Ridl., **FMP4** 294; banana to 6 m tall; commoner in the mountains; Kd, Tg, Ph, Sl.
- 232.1.1c **Musa acuminata** Colla ssp. **siamea** N.W. Simmonds, **S77** 466; banana to 6 m tall; lowlands and hills; Ps, Kd, Kl.

- 232.1.2 **Musa gracilis** Holttum; **S77** 488, **K28** 239; **H52** 72; slender banana to 2 m tall; lowland forest; Kl, Tg, Ph, Ml, Jh.
- 232.1.3 **Musa violascens** Ridl.; **FMP4** 294, **S77** 487; slender banana to 3 m tall; lowland and hill forest; Pk, Ph, Sl, NS; endemic.
233. ORCHIDACEAE
- 233.1.1 **Abdominea minimiflora** (Hook.f.) J.J.Sm., **H44** 640, **S20** 590; *Saccolabium minimiflorum* Hook.f, **FMP4** 166; tiny epiphyte; hill and montane forest; Pk, Ph, Sl.
- 233.2.1 **Acampe rigida** (Buch.-Ham. ex Sm.) P.F. Hunt, **S20** 590; *Acampe penangiana* Ridl., **FMP4** 155; *Acampe longifolia* (Lindl.) Lindl., **H44** 625; herb of exposed places; P. Langkawi, Pg.
- 233.3.1 **Acanthephippium javanicum** Blume, **FMP4** 116, **H44** 148, **S20** 157; herb to about 45 cm tall; hill forest; about 600 m; Pn, Ph, NS.
- 233.3.2 **Acanthephippium striatum** Lindl., **H44** 148, **S20** 157; herb to about 45 cm tall; one doubtful collection; Fraser's Hill, Ph.
- 233.3.3 **Acanthephippium sylhetense** Lindl., **H44** 148, **S20** 157; herb to about 45 cm tall; one doubtful collection; Cameron Highlands, Ph.
- 233.4.1 **Acriopsis carrii** Holttum, **H44** 557, **S20** 566; epiphyte to 40 cm tall; on epiphytic ferns in limestone forest or river side trees; Kl, Tg; Endemic.
- 233.4.2 **Acriopsis densiflora** Lindl., **H44** 555, **S20** 563; *Acriopsis purpurea* Ridl., **FMP4** 191; epiphyte about 10 cm tall; collected once; Pekan, Ph.
- 233.4.3 **Acriopsis indica** Wight, **FMP4** 190, **H44** 557, **S20** 566; epiphyte; hill and montane forest; Kd, Kl, Pn, Ph.
- 233.4.4 **Acriopsis liliiflora** (Koenig) Ormerod, **S19** 58; *Acriopsis javanica* Reinw. ex Blume, **FMP4** 190, **H44** 555, **S20** 563; epiphyte to 40 cm tall; on trees in open places; common in lowlands throughout.
- 233.4.5 **Acriopsis ridleyi** Hook.f., **FMP4** 190, **H44** 556, **S20** 563; epiphyte to 30 cm tall; lowland and montane forest; Ph, Jh, Sp.
- 233.5.1 **Adenoncos major** Ridl., **FMP4** 154, **H44** 597, **S20** 583; epiphyte to 30 cm tall; lowland forest to 500 m; commonest in the south.
- 233.5.2 **Adenoncos parviflora** Ridl., **FMP4** 154, **H44** 598, **S20** 583; epiphyte to 15 cm long; lowland forest; Sl.
- 233.5.3 **Adenoncos vesiculosa** Carr, **H44** 598, **S20** 583; epiphyte to 15 cm long; montane forest; Ph, Sl.

- 233.5.4 **Adenoncos sumatrana** J.J.Sm, **H44** 593, **S20** 583; *Adenoncos virens* (non Blume) Ridl., **FMP4** 154; epiphyte to 15 cm long; lowlands and mountains to 1350 m; widespread.
- 233.6.1 **Aerides krabiensis** Seidenf., **S20** 673; *Aerides multiflora* auct. non Roxb., **FMP4** 183, **H44** 700; tufted herb; on exposed limestone rocks; Kd, P. Langkawi.
- 233.6.2 **Aerides odorata** Lour.; **FMP4** 182, **H44** 698, **S20** 673; lowland epiphyte; common on trees near the sea.
- 233.7.1 **Agrostophyllum bicuspidatum** J.J.Sm., **FMP4** 108 in part, **H44** 487, **S20** 319; epiphyte to 40 cm long; lowland and montane forest; rather common.
- 233.7.2 **Agrostophyllum cyathiforme** J.J.Sm, **H44** 487, **S20** 324; epiphyte to 50 cm long; montane forest; Kd, Ph.
- 233.7.3 **Agrostophyllum elongatum** (Ridl.) Schuit., **S20** 321; *Agrostophyllum hasseltii* (Blume) J.J.Sm., **FMP4** 108, **H44** 488; epiphyte/epilith to 120 cm long; on rocks or riverside trees; lowlands and highlands.
- 233.7.4 **Agrostophyllum glumaceum** Hook.f., **FMP4** 108, **H44** 489, **S20** 321; epiphyte to 20 cm long; on trees by streams; lowlands and mountains; widespread.
- 233.7.5 **Agrostophyllum longifolium** (Blume) Rchb.f., **H44** 485, **S20** 321; large epiphyte; montane forest; Cameron Highlands, Ph.
- 233.7.6 **Agrostophyllum majus** Hook.f., **FMP4** 107, **H44** 489, **S20** 321; epiphyte to 100 cm long; lowlands and mountains on exposed trees; widespread.
- 233.7.7 **Agrostophyllum stipulatum** (Griff.) Schltr., **S20** 319; *Agrostophyllum bicuspidatum* (non J.J.Sm.) Ridl., **FMP4** 108 in part; epiphyte to 40 cm long; lowlands and mountains; Kd, Pn, Sp.
- 233.7.8 **Agrostophyllum tenue** J.J.Sm., **H44** 491, **S20** 324; epiphyte to 60 cm long; montane forest; Ph, Pk, Sl.
- 233.8.1 **Ainia penangiana** (Hook.f.) Summerh., **T17** 55; *Ascotainia penangiana* Ridl., **FMP4** 112; *Tainia penangiana* Hook.f., **H44** 182, **S20** 156; herb to 75 cm tall; grassy places in the hills; Kd, Pn, Pk.
- 233.9.1 **Anoetochilus albolineatus** C.S.P. Parish & Rchb.f., **FMP4** 213, **H44** 127, **S20** 73; *Anoetochilus reinwardtii* (non Blume) Ridl., **FMP4** 213; herb to 12 cm tall; montane forests at 1200–1700 m; widespread.
- 233.9.2 **Anoetochilus brevistylus** (Hook.f.) Ridl., **S20** 76, **H44** 128, **FMP4** 214; herb to 30 cm tall; montane forest; Pk, Ph.

- 233.9.3 **Anoectochilus burmannicus** Rolfe, **S20** 73; herb about 4 cm tall; montane forest; only known from Gg Ledang, Jh.
- 233.9.4 **Anoectochilus calcaratus** (Hook.f.) Ridl., **FMP4** 214, **H44** 128, **S20** 75; herb about 7 cm tall; hill forest about 1000 m; Pk, Ph.
- 233.9.5 **Anoectochilus geniculatus** Ridl., **FMP4** 213, **H44** 127, **S20** 73; herb to about 15 cm tall; lowland and hill forest to 900 m; Pn southwards.
- 233.9.6 **Anoectochilus pectinatus** (Hook.f.) Ridl., **FMP4** 214, **H44** 129, **S20** 76; herb to 20 cm tall; montane forest about 1000 m; only known from Gg Hijau, Pk; endemic.
- 233.9.7 **Anoectochilus pomrangianus** Seidenf., **S20** 75; *Zeuxine abbreviata* Hook.f., **H44** 133; herb to 13 cm tall; montane forest; once collected at the Cameron Highlands, Ph.
- 233.9.8 **Anoectochilus repens** (Downie) Seidenf. & Smitinand, **S20** 75; *Anoectochilus duplex* Holttum, **H44** 128; herb about 10 cm tall; montane forest; Ph.
- 233.10.1 **Aphyllorchis montana** Rchb.f., **S20** 45; *Aphyllorchis prainii* Hook.f., **H44** 102; saprophytic herb to 1 m tall; montane forest; found once in the Cameron Highlands, Ph.
- 233.10.2 **Aphyllorchis pallida** Blume, **FMP4** 205, **H44** 102, **S20** 44; saprophytic herb to 50 cm tall; lowland forest; widespread.
- 233.10.3 **Aphyllorchis striata** (Ridl.) Ridl., **FMP4** 205, **H44** 102, **S20** 45; saprophytic herb to 1 m tall; lowland forest; Kl, Ph, Jh.
- 233.11.1 **Apostasia elliptica** J.J.Sm., **S20** 37; herb to 35 cm tall; montane forest; only known from Gg Korbu, Pk.
- 233.11.2 **Apostasia latifolia** Rolfe, **FMP4** 297, **H44** 66, **S20** 37; herb to 50 cm tall; hill and montane forest; Pk, Ph, Ml; endemic.
- 233.11.3 **Apostasia nuda** R.Br., **FMP4** 297, **H44** 66, **S20** 37; herb to 50 cm tall; lowland and hill forest to 900 m; widespread.
- 233.11.4 **Apostasia odorata** Blume, **S20** 35; *Apostasia platystylis* J.J.Sm., **H44** 66; herb; lowland forest; Kd, Ph.
- 233.11.5 **Apostasia wallichii** R.Br., **FMP4** 297, **H44** 65, **S20** 35; herb about 25 cm tall; lowland forest to 600 m; scattered localities.
- 233.12.1 **Appendicula anceps** Blume, **FMP4** 195, **H44** 505, **S20** 329; epiphyte to 45 cm long; lowland and hill forest to 1050 m; widespread common.

- 233.12.2 **Appendicula cornuta** Blume, **FMP4** 196, **H44** 509, **S20** 332; epiphyte to 50 cm long; lowland forests; common.
- 233.12.3 **Appendicula densifolia** (Ridl.) Ridl., **FMP4** 197, **H44** 507, **S20** 329; epiphyte to 35 cm long; on trees by rivers; Tg, Ph, Sl, Jh; endemic.
- 233.12.4 **Appendicula lucida** Ridl., **FMP4** 196, **H44** 509, **S20** 330; epiphyte to 25 cm long; mostly on riverside trees; south of Malaya.
- 233.12.5 **Appendicula ovalis** (Schltr.) J.J.Sm., **H44** 504, **S20** 325; *Appendicula purpurascens* (non Blume) Ridl., **FMP4** 195 in part; pendulous epiphyte to 60 cm long; montane forest; not uncommon.
- 233.11.6a **Appendicula pendula** Blume var. *latibracteata* (J.J.Sm.) Holttum, **S20** 327; pendulous epiphyte to 2 m long; on trees by rivers; Ph, Jh.
- 233.12.6b **Appendicula pendula** Blume var. *pendula*, **FMP4** 198, **H44** 504, **S20** 327; *Appendicula lancifolia* Hook.f., **FMP4** 198; pendulous epiphyte to 2 m long; lowland and montane forest; fairly common.
- 233.12.7 **Appendicula reflexa** Blume, **FMP4** 197, **H44** 507, **S20** 330; *Appendicula robusta* Ridl., **FMP4** 197; epiphyte to 60 cm long; lowland and montane forest; Kd, Pk, Ph, Jh.
- 233.12.8 **Appendicula rupestris** Ridl., **FMP4** 197, **H44** 507, **S20** 329; erect herb about 25 cm tall; rheophyte of mountain streams; Pk, Ph; endemic.
- 233.12.9 **Appendicula torta** Blume, **FMP4** 198, **H44** 505 incl. var. *alba* J.J.Sm., **S20** 327; epiphyte to 25 cm long; hill forest; Kl, Pk, Sl.
- 233.12.10 **Appendicula uncata** Ridl., **FMP4** 196, **H44** 508, **S20** 330; epiphyte to 40 cm long; lowland forests; south of Peninsula.
- 233.12.11 **Appendicula undulata** Blume, **H44** 505, **S20** 329; *Appendicula purpurascens* (non Blume) Ridl., **FMP4** 195 in part; epiphyte to 80 cm long; on riverside trees, also on limestone rocks (Ph).
- 233.13.1 **Arachnis flosaeris** (L.) Rchb.f., **H44** 616 incl. var. *gracilis* Holttum, **S20** 633; *Arachnis moschifera* Blume, **FMP4** 159; scrambler on limestone rocks, or mangrove epiphyte; Pk, Ph, Sl, NS.
- 233.13.2 **Arachnis hookeriana** (Rchb.f.) Rchb.f., **H44** 614, **S20** 633; *Arachnis alba* (Ridl.) Schltr., **FMP4** 159; scrambler; in scrub near the seashore; commonest along east coast.
- 233.13.3 **Arachnis maingayi** (Hook.f.) Schltr., **FMP4** 159, **H44** 618, **S20** 634; scandent herb; usually near the sea; south of the Peninsula.

- 233.14.1 **Arundina graminifolia** (D. Don) Hochr., **H44** 188, **S20** 146; *Arundina bambusifolia* Lindl., **FMP4** 125; *Arundina revoluta* Hook.f., **FMP4** 126; *Arundina speciosa* Blume; **FMP4** 126; sedge-like herb to over 2 m tall; open sunny places in lowlands and mountains; widespread.
- 233.15.1 **Ascidieria longifolia** (Hook.f.) Seidenf., **S20** 306; *Eria longifolia* Hook.f., **FMP4** 88, **H44** 381; tufted epiphyte about 25 cm long; montane forests above 1300 m; widespread.
- 233.16.1 **Ascentrum miniatum** (Lindl.) Schltr., **H44** 735, **S20** 691; *Saccolabium miniatum* Lindl., **FMP4** 172; epiphyte to 25 cm long; on trees; Ps, P, Langkawi.
- 233.17.1 **Ascochilopsis myosurus** (Ridl.) Carr, **H44** 707, **S20** 660; *Saccolabium myosurus* Ridl., **FMP4** 173; epiphyte to about 10 cm tall; lowlands; Kl, Ph, Sl, Jh.
- 233.18.1 **Ascochilus fasciculatus** (Carr) Garay, **S20** 665; *Sarcochilus fasciculatus* Carr, **H44** 690; small epiphyte up to 10 cm tall; known only from Krian, Pk; endemic.
- 233.18.2 **Ascochilus siamensis** Ridl., **FMP4** 181, **S20** 665; *Sarcochilus siamensis* (Ridl.) Carr, **H44** 689; tiny epiphyte a few cm tall; north of Peninsula.
- 233.19.1 **Biermannia ciliata** (Ridl.) Garay, **S20** 685; *Dendrocolla ciliata* Ridl., **FMP4** 188; *Sarcochilus ciliatus* (Ridl.) J.J.Sm., **H44** 690; small epiphyte about 5 cm tall; lowland forest; Tg, Pk, Ph (one locality each).
- 233.19.2 **Biermannia flava** (Carr) Garay, **S20** 685; *Chamaeanthus flavus* Carr, **H44** 680; tiny fleshy-leaved epiphyte a few cm tall; lowland forest; Ph; endemic.
- 233.19.3 **Biermannia laciniata** (Carr) Garay, **S20** 685; *Chamaeanthus laciniatus* Carr, **H44** 680; tiny fleshy-leaved epiphyte a few cm tall; lowland swamp and riverside trees; Ph, Sp; endemic.
- 233.19.4 **Biermannia sarcanthoides** (Ridl.) Garay, **S20** 686; *Bulbophyllum sarcanthoides* Ridl., **FMP4** 71; *Chamaeanthus sarcanthoides* (Ridl.) Carr, **H44** 680; tiny fleshy-leaved epiphyte a few cm tall; only known from type; Tebrau, Jh; endemic.
- 233.20.1 **Brachypeza indusiata** (Rchb.f.) Garay, **S20** 681; *Sarcochilus stenoglottis* Hook.f., **FMP4** 179, **H44** 683; short-stemmed epiphyte; lowland forest; Kl, Pk, Ph.
- 233.21.1 **Bromheadia alticola** Ridl., **FMP4** 151, **H44** 543, **S20** 525; pendulous bushy epiphyte to 60 cm long; lowland and hill forest to 600 m; widespread.
- 233.21.2 **Bromheadia aporoides** Rchb.f., **S20** 529; tufted epiphyte 6–12 cm tall; lowland forest; Sp.

- 233.21.3 **Bromheadia borneensis** J.J.Sm., **S20** 525; herb to 75 cm tall; one collection from Jh.
- 233.21.4 **Bromheadia brevifolia** Ridl., **FMP4** 151, **H44** 545, **S20** 527; epiphyte to 30 cm long; montane forest; Pk, Ph, Sl; endemic.
- 233.21.5 **Bromheadia finlaysoniana** (Lindl.) Miq., **H44** 541, **S20** 525; *Bromheadia palustris* Lindl., **FMP4** 150; *Bromheadia sylvestris* Ridl., **FMP4** 150; herb occasionally to 2 m tall; lowland secondary forest and scrub; common throughout.
- 233.21.6 **Bromheadia sp.** (*B. pandurata*), **S20** 527; herb about 50 cm tall; known only from type; Gg Ledang, Ml; endemic.
- 233.21.7 **Bromheadia pungens** Ridl., **FMP4** 151, **H44** 545, **S20** 527; epiphyte about 40 cm long; montane forest; Gg Tahan, Ph, and Gg Ledang, Ml; endemic.
- 233.21.8 **Bromheadia rupestris** Ridl., **FMP4** 150, **H44** 545, **S20** 527; herb to 1.5 m tall; lower montane forest; Gg Jerai, Kd, Gg Tahan, Ph, P. Tioman and Gg Ledang, Ml; endemic.
- 233.21.9 **Bromheadia scirpoidea** Ridl., **FMP4** 151, **H44** 546, **S20** 529; epiphyte about 20 cm long; lowland forest; widespread but not common.
- 233.21.10 **Bromheadia truncata** Seidenf., **S20** 529; *Bromheadia aporoides auct. non* Rchb.f., **FMP4** 151, **H44** 545; tufted epiphyte about 10 cm long; lowland and montane forest; widespread.
- 233.22.1 **Bulbophyllum abbrevilabium** Carr, **H44** 428, **S20** 509; epiphyte; on riverside trees; known only from Sg Sat, Ph.
- 233.22.2 **Bulbophyllum acuminatum** (Ridl.) Ridl., **FMP4** 79, **H44** 414, **S20** 447; *Bulbophyllum stenophyllum* Ridl., **FMP4** 80; creeping epiphyte; on old mangrove and riverside trees; Jh, Sp.
- 233.22.3 **Bulbophyllum alcorne** C.S.P. Parish & Rchb.f., **FMP4** 66, **H44** 462, **S20** 497; creeping epiphyte about 10 cm tall; widespread.
- 233.22.4 **Bulbophyllum angustifolium** (Blume) Lindl., **H44** 454, **S20** 472; *Bulbophyllum capitatum* (non Lindl.) Ridl., **FMP4** 70; creeping epiphyte with pendulous branches; montane forest; not uncommon.
- 233.22.5 **Bulbophyllum annandalei** Ridl., **FMP4** 78, **H44** 408, **S20** 441; epiphyte about 10 cm tall; lower montane forest; about 1000 m; only known from the Genting Highlands, Sl.
- 233.22.6 **Bulbophyllum apodum** Hook.f., **FMP4** 73, **H44** 446, **S20** 463; *Bulbophyllum vaginulosum* Carr, **H44** 447; epiphyte; lowland and montane forest; south of Peninsula.

- 233.22.7 **Bulbophyllum armeniacum** J.J.Sm., **H44** 449, **S20** 459; epiphyte about 30 cm tall; montane forest; Tg, Ph.
- 233.22.8 **Bulbophyllum bakhuizenii** Steenis, **S20** 471; *Bulbophyllum multiflorum* [non Ridl.] (Breda) Kraenzl., **H44** 454; long-creeping epiphyte; Kd, Pk, Ph.
- 233.22.9 **Bulbophyllum biflorum** Teijsm. & Binn., **H44** 407, **S20** 451; epiphyte; montane forest; Ph, Sl.
- 233.22.10 **Bulbophyllum biseriale** Carr, **H44** 435, **S20** 512; epiphyte; montane forest; about 1800 m; only known from G. Tahan, Ph.
- 233.22.11 **Bulbophyllum blepharistes** Rech.f, **S20** 432; epiphyte; one old collection from Pn.
- 233.22.12 **Bulbophyllum blumei** (Lindl.) J.J.Sm., **FMP4** 74, **H44** 406, **S20** 517; creeping epiphyte; on mangrove and riverside trees; south of Malaya.
- 233.22.13 **Bulbophyllum botryophorum** Ridl., **FMP4** 69, **H44** 457, **S20** 494; creeping epiphyte; on mangrove and riverside trees; Ph, Jh, Sp.
- 233.22.14 **Bulbophyllum brevipes** Ridl., **FMP4** 70, **H44** 453, **S20** 471; creeping epiphyte; montane forest; about 1300 m; Gg Bujang Melaka, Pk and Fraser's Hill, Ph.
- 233.22.15 **Bulbophyllum catenarium** Ridl., **FMP4** 61 in part, **S20** 512; *Bulbophyllum carunculaelabrum* Carr, **H44** 435; epiphyte; Tg, Sl, Jh.
- 233.22.16 **Bulbophyllum caudatisepalum** Ames & Schweinf., **S20** 459; epiphyte; one old collection; Kluang Terbang, Ph.
- 233.22.17 **Bulbophyllum cheiri** Lindl., **S20** 479; *Bulbophyllum megalanthum* Griff., **FMP4** 57, **H44** 416; epiphyte; on trees near the sea; Tg, ML.
- 233.22.18 **Bulbophyllum cheiropetalum** Ridl., **H44** 428, **S20** 507; epiphyte; montane forest; Kd, Ph, Sl.
- 233.22.19 **Bulbophyllum cleistogamum** Ridl., **FMP4** 69, **H44** 401, **S20** 493; epiphyte; usually in the lowlands; Kd, Pn, Pk, Sl, Jh, Sp.
- 233.22.20 **Bulbophyllum comberi** J.J. Verm., **S20** 519; *Bulbophyllum ciliatum* [non (Blume) Lindl.] Holtum, **H44** 439; epiphyte; montane forest; collected once at Cameron Highlands, Ph.
- 233.22.21 **Bulbophyllum concinnum** Hook.f., **FMP4** 70, **H44** 454, **S20** 471; epiphyte; on mangrove and riverside trees; Jh, Sp.
- 233.22.22 **Bulbophyllum coniferum** Ridl., **FMP4** 67, **H44** 462, **S20** 497; *Bulbophyllum musciferum* Ridl., **FMP4** 66, **H44** 462; epiphyte; montane forest; Kd, Ph.

- 233.22.23 **Bulbophyllum crassipes** Hook.f., **S20** 488; epiphyte; one old and possibly wrongly localised collection from Pn.
- 233.22.24 **Bulbophyllum cupreum** Lindl., **S20** 488; epiphyte; poorly known species possibly native to Malaya.
- 233.22.25 **Bulbophyllum cuspidipetalum** J.J.Sm., **H44** 424, **S20** 485; epiphyte; montane forest; once collected on Gg Panti, Jh.
- 233.22.26 **Bulbophyllum dearei** (Hort.) Rchb.f, **S20** 481; *Bulbophyllum reticosum* Ridl., **H44** 420; epiphyte; montane forest; Gg Belumut and Gg Pulau, Jh.
- 233.22.27 **Bulbophyllum dentiferum** Ridl., **S20** 443; *Bulbophyllum cyclosepalon* Carr, **H44** 410; creeping epiphyte; Kl, Pk, Ph.
- 233.22.28 **Bulbophyllum diplantherum** Carr, **H44** 453, **S20** 468; creeping epiphyte; Ph, Sl; endemic.
- 233.22.29 **Bulbophyllum dryas** Ridl., **FMP4** 62, **H44** 437, **S20** 461; epiphyte; on exposed trees on mountains at 1300–1500 m; Ph.
- 233.22.30 **Bulbophyllum elongatum** (Blume) Hassk., **H44** 459, **S20** 499; *Bulbophyllum gigas* Ridl., **FMP4** 67; large epiphyte or epilith; montane forest, often near streams, at 1200–1500 m; Pk, Ph.
- 233.22.31 **Bulbophyllum evansii** M.R. Hend., **H44** 421, **S20** 479; epiphyte; montane forest above 2000 m; Gg Brinchang and Gg Benom, Ph; endemic.
- 233.22.32 **Bulbophyllum flammuliferum** Ridl., **FMP4** 74, **H44** 451, **S20** 465; creeping herb; on limestone rocks; Kl, Ph, Sl.
- 233.22.33 **Bulbophyllum flavescens** (Blume) Lindl., **S20** 459; *Bulbophyllum adenopetalum* Lindl., **FMP4** 71, **H44** 449; *Bulbophyllum montigenum* Ridl., **FMP4** 72; epiphyte; lowland and montane forest; widespread.
- 233.22.34 **Bulbophyllum foetidolens** Carr, **H44** 460, **S20** 487; epiphyte; hill forest at about 1000 m; only known from Gg Tahan, Ph.
- 233.22.35 **Bulbophyllum gibbosum** (Blume) Lindl., **H44** 448, **S20** 463; *Bulbophyllum selangorense* Ridl., **FMP4** 73, **H44** 448; epiphyte; montane forest; Main Range.
- 233.22.36 **Bulbophyllum globulus** Hook.f., **FMP4** 73, **H44** 451, **S20** 465; epiphyte; known only from type; Pk; endemic.
- 233.22.37 **Bulbophyllum gracillimum** (Rolfe) Rolfe, **H44** 408, **S20** 439; *Bulbophyllum psittacoides* (Ridl.) J.J.Sm., **FMP4** 76; epiphyte; lowland forest; not uncommon.

- 233.22.38 **Bulbophyllum grudense** J.J.Sm., **S20** 521; *Bulbophyllum oeneum* Burkill ex Ridl., **FMP4** 63, **H44** 439; epiphyte; montane forest; Ph, Sl.
- 233.22.39 **Bulbophyllum haniffii** Carr, **H44** 428, **S20** 507; epiphyte; only known from Pulau Tikus, Pg.
- 233.22.40 **Bulbophyllum hirtulum** Ridl., **FMP4** 65, **H44** 443, **S20** 435; *Bulbophyllum cincinnatum* Ridl., **FMP4** 65, **H44** 443; *Bulbophyllum trichoglottis* Ridl., **FMP4** 67, **H44** 443; epiphyte; montane forest; Pn, Pk, Ph.
- 233.22.41 **Bulbophyllum hispidum** Ridl., **FMP4** 61, **H44** 457, **S19** 40; *Bulbophyllum dayanum* auct. non Rchb.f., **S20** 435; epiphyte; montane forest at 1200 m; collected once on Gg Jerai, Kd.
- 233.22.42 **Bulbophyllum hodgsonii** M.R. Hend., **H44** 433, **S20** 511; epiphyte; montane forest; only known from Robinson's Falls, Ph; endemic.
- 233.22.43 **Bulbophyllum holttumii** A.D. Hawkes, **H44** 462, **S20** 499; *Bulbophyllum apiferum* (non Schltr.) Carr; epiphyte; montane forest; Gg Tahan and Gg Brinchang, Ph; endemic.
- 233.22.44 **Bulbophyllum ignevenosum** Carr, **H44** 435, **S20** 512; epiphyte; montane forest; known only from Gg Tahan at 1600 m.
- 233.22.45 **Bulbophyllum inunctum** J.J.Sm., **S20** 475; *Bulbophyllum longiflorum* (non Thouars.) Ridl., **FMP4** 59, **H44** 421; epiphyte; hill forest; Kd, Pn.
- 233.22.46 **Bulbophyllum korthalsii** Schltr., **S20** 461; *Bulbophyllum arachnites* Ridl., **FMP4** 73, **H44** 448; epiphyte; montane forest; collected once at the Cameron Highlands, Ph.
- 233.22.47 **Bulbophyllum lasianthum** Lindl., **FMP4** 65, **H44** 463, **S20** 483; epiphyte and epilith; on lowland trees and rocks in moist shady places; throughout.
- 233.22.48 **Bulbophyllum lasiochilum** C.S.P. Parish & Rchb.f., **S20** 451; *Bulbophyllum breviscapum* (Rolfe) Ridl., **FMP4** 74, **H44** 407; epiphyte; one doubtful record; Pk.
- 233.22.49 **Bulbophyllum laxiflorum** (Blume) Lindl., **H44** 452, **S20** 468; creeping epiphyte; widespread.
- 233.22.50 **Bulbophyllum leptosepalum** Hook.f., **FMP4** 72, **H44** 449, **S20** 461; epiphyte; lowland and hill forest; widespread; endemic.
- 233.22.51 **Bulbophyllum lilacinum** Ridl., **FMP4** 68, **H44** 460, **S20** 491; epiphyte; P. Langkawi and Gg Jerai, Kd.
- 233.22.52 **Bulbophyllum limbatum** Lindl., **FMP4** 65, **H44** 460, **S20** 435; epiphyte; Jh, Sp.

- 233.22.53 **Bulbophyllum linearifolium** King & Pantl., **FMP4** 72, **H44** 448, **S20** 463; epiphyte; montane forest; Kd, Pk, Ph, Sl; endemic.
- 233.22.54 **Bulbophyllum lobbii** Lindl., **H44** 424, **S20** 481; *Bulbophyllum polystictum* (non Schltr.) Ridl., **FMP4** 59, **H44** 424; *Bulbophyllum siamense* Rchb.f., **FMP4** 60; epiphyte; montane forest; widespread.
- 233.22.55 **Bulbophyllum lumbriciforme** J.J.Sm., **H44** 400, **S20** 493; epiphyte; montane forest; Gg Jerai, Kd and Gg Tahan, Ph.
- 233.22.56 **Bulbophyllum macranthum** Lindl., **FMP4** 57, **H44** 417, **S20** 477; creeping epiphyte; on lowland trees; widespread.
- 233.22.57 **Bulbophyllum macrochilum** Rolfe, **S20** 493; *Bulbophyllum stella* Ridl., **FMP4** 69, **H44** 401; epiphyte; lowland forest; Jh, Sp.
- 233.22.58 **Bulbophyllum malleolabrum** Carr, **H44** 434, **S20** 512; epiphyte; montane forest; about 1500 m; known only from Cameron Highlands, Ph.
- 233.22.59 **Bulbophyllum medusae** (Lindl.) Rchb.f., **FMP4** 75, **H44** 409, **S20** 468; epiphyte and epilith; lowland forest; widespread.
- 233.22.60 **Bulbophyllum membranaceum** Teijsm. & Binn., **FMP4** 64, **H44** 430, **S20** 501; creeping epiphyte; lowland and hill forests; widespread.
- 233.22.61 **Bulbophyllum membranifolium** Hook.f., **FMP4** 60, **H44** 420, **S20** 475; epiphyte; montane forest at about 1300 m; Ph, Sl, Jh.
- 233.22.62 **Bulbophyllum microglossum** Ridl., **FMP4** 60, **H44** 421, **S20** 483; small epiphyte; montane forest; Ph.
- 233.22.63 **Bulbophyllum minutulum** Ridl.; **FMP4** 62, **H44** 433, **S20** 511; ? terrestrial; montane forest; Fraser's Hill, Ph and Gg Ulu Kali, Sl.
- 233.22.64 **Bulbophyllum mobilifilum** Carr, **H44** 428, **S20** 507; epiphyte; on lowland trees; collected twice, Ph; endemic.
- 233.22.65 **Bulbophyllum modestum** Hook.f., **FMP4** 71, **H44** 453, **S20** 468; *Bulbophyllum ochranthum* Ridl., **FMP4** 71; *Bulbophyllum paullum* Ridl., **FMP4** 70; epiphyte; montane forest; widespread.
- 233.22.66 **Bulbophyllum mutabile** (Blume) Lindl., **H44** 445, **S20** 457; pendulous epiphyte; montane forest; Pk, Ph, Sl (one collection each).
- 233.22.67 **Bulbophyllum nematocaulon** Ridl., **FMP4** 63, **H44** 442, **S20** 521; *Bulbophyllum oreas* Ridl., **FMP4** 63, **H44** 442; epiphyte; montane forest; Pk, Ph, Sl.
- 233.22.68 **Bulbophyllum nigropurpureum** Carr, **H44** 430, **S20** 503; epiphyte; on mangrove and riverside trees; Ph, Sp; endemic.

- 233.22.69 **Bulbophyllum obtusipetalum** J.J.Sm., **S20** 464; creeping epiphyte; montane forest; once collected at Cameron Highlands, Ph.
- 233.22.70 **Bulbophyllum obtusum** (Blume) Lindl., **S20** 472; *Bulbophyllum parvilabium* Schltr., **H44** 455; pendulous epiphyte; hill forest; Penang Hill and Ulu Kali, Sl.
- 233.22.71 **Bulbophyllum octorhopalon** Seidenf., **S20** 509; *Bulbophyllum epicrianthes auct. non* Hook.f., **FMP4** 64, **H44** 428; epiphyte; lowland forest; Pk, Ph, Jh; endemic.
- 233.22.72 **Bulbophyllum odoratum** (Blume) Lindl., **FMP4** 72, **H44** 446, **S20** 457; epiphyte; on trees by rivers; Kl, Pk, Ph, Sl.
- 233.22.73 **Bulbophyllum ovalifolium** (Blume) Lindl., **H44** 435, **S20** 513; *Bulbophyllum tineae* Ridl., **FMP4** 62, **H44** 436; epiphyte; lowland and montane forest; widespread.
- 233.22.74 **Bulbophyllum pan** Ridl., **FMP4** 63, **H44** 439, **S20** 518; epiphyte; on mossy mountain trees at about 1600 m; only known from Gg Tahan, Ph; endemic.
- 233.22.75 **Bulbophyllum papillosofilum** Carr, **H44** 427, **S20** 507; epiphyte; lowland forest; Kuala Teku, Pk and Batu Kurau, Ph; endemic.
- 233.22.76 **Bulbophyllum patens** King *ex* Hook.f., **FMP4** 57, **H44** 417, **S20** 481; epiphyte; lowland trees; many places.
- 233.22.77 **Bulbophyllum penduliscapum** J.J.Sm., **S20** 501; epiphyte; only recorded from Batu Melintang, Kl.
- 233.22.78 **Bulbophyllum pileatum** Lindl.; **FMP4** 57, **H44** 422, **S20** 479; climbing epiphyte; on lowland trees; widespread.
- 233.22.79 **Bulbophyllum planibulbe** (Ridl.) Ridl., **FMP4** 75, **H44** 406, **S20** 465; *Bulbophyllum tenerum* Ridl., **FMP4** 65, **H44** 408; epiphyte; lowland forest; Kd, Ph.
- 233.22.80 **Bulbophyllum poekilon** Carr, **H44** 458, **S20** 497; epiphyte; montane forest; known only from Fraser's Hill, Ph; endemic.
- 233.22.81 **Bulbophyllum purpurascens** Teijsm. & Binn., **FMP4** 78, **H44** 410, **S20** 449; *Bulbophyllum perakense* Ridl., **FMP4** 77, **H44** 410; *Bulbophyllum rhizophoreti* Ridl., **FMP4** 77; epiphyte; lowland forest; not uncommon.
- 233.22.82 **Bulbophyllum pustulatum** Ridl., **FMP4** 60, **H44** 420, **S20** 477; epiphyte; lowland forest; Jh.
- 233.22.83 **Bulbophyllum restrepia** Ridl., **FMP4** 75, **H44** 406, **S20** 517; epiphyte; on old mangrove and riverside trees; Ph, Jh, Sp; endemic.

- 233.22.84 **Bulbophyllum retusiusculum** Rchb.f., **S20** 453; epiphyte; montane forest; one poor specimen from Gg Tahan, Ph.
- 233.22.85 **Bulbophyllum rhizomatosum** Ames & Schweinf., **S20** 457; *Bulbophyllum minimibulbum* Carr., **H45** 445; pendulous epiphyte; montane forest; once collected at Fraser's Hill, Ph.
- 233.22.86 **Bulbophyllum ruficaudatum** Ridl., **S20** 445; *Bulbophyllum microbulbon auctt. non* Schltr., **FMP4** 79, **H44** 414; epiphyte; on lowland trees; Sp.
- 233.22.87 **Bulbophyllum rugosum** Ridl., **FMP4** 60, **H44** 421, **S20** 475; epiphyte; lowland forest; Sp.
- 233.22.88 **Bulbophyllum salaccense** Rchb.f., **H44** 457, **S20** 495; pendulous epiphyte; montane forest; about 1200 m; Fraser's Hill, Ph, only confirmed locality.
- 233.22.89 **Bulbophyllum sessile** (J. König) J.J.Sm., **H44** 451, **S20** 503; *Bulbophyllum clandestinum* Lindl., **FMP4** 69; bushy pendulous epiphyte; exposed lowland trees; widespread.
- 233.22.90 **Bulbophyllum sichyobulbon** C.S.P. Parish & Rchb.f., **S20** 491; epiphyte; doubtfully recorded from Ps.
- 233.22.91 **Bulbophyllum singaporeanum** Schltr., **H44** 458, **S20** 485; *Bulbophyllum densiflorum* (non Rolfe) Ridl., **FMP4** 68; epiphyte; on riverside trees; Jh, Sp.
- 233.22.92 **Bulbophyllum stormii** J.J.Sm., **S20** 511; *Bulbophyllum araniferum* Ridl., **FMP4** 61, **H44** 433; *Bulbophyllum longistelidium* Ridl., **FMP4** 64, **H44** 433; *Bulbophyllum tristriatum* Carr, **H44** 433; epiphyte; montane forest; Ph, Sl.
- 233.22.93 **Bulbophyllum striatellum** Ridl., **FMP4** 62, **H44** 437, **S20** 519; epiphyte; old mangrove and riverside trees; Kl, Jh, Sp.
- 233.22.94 **Bulbophyllum subumbellatum** Ridl., **FMP4** 61, **H44** 426, **S20** 485; epiphyte; lowland forest; Jh.
- 233.22.95 **Bulbophyllum tahanense** Carr, **H44** 463, **S20** 487; epiphyte; montane forest; about 1700 m; known only from Gg Tahan, Ph; endemic.
- 233.22.96 **Bulbophyllum tekuense** Carr, **H44** 436, **S20** 515; epiphyte; known only from type, Kuala Teku, Ph; Endemic.
- 233.22.97 **Bulbophyllum tenuifolium** (Blume) Lindl., **H44** 439, **S20** 518; *Bulbophyllum nigromaculatum* Holttum, **H44** 441; epiphyte; lowland and montane forest; Ph, Sl, Jh, Sp.
- 233.22.98 **Bulbophyllum titanea** Ridl., **FMP4** 62, **H44** 436, **S20** 515; epiphyte; montane forest; known only from the upper slopes of Gg Tahan, Ph; endemic.

- 233.22.99 **Bulbophyllum tortuosum** (Blume) Lindl., **H44** 431, **S20** 503; pendulous epiphyte; on riverside trees; only collected from Sg Sat, Ph.
- 233.22.100 **Bulbophyllum trifolium** Ridl., **FMP4** 68, **H44** 457, **S20** 495; epiphyte; on riverside trees; Ph, Jh, Sp.
- 233.22.101 **Bulbophyllum uniflorum** (Blume) Hassk., **H44** 422, **S20** 477; *Bulbophyllum galbinum* Ridl., **FMP4** 58; *Bulbophyllum variabile* Ridl., **FMP4** 59; epiphyte; mostly montane forest; widespread.
- 233.22.102 **Bulbophyllum vaginatum** (Lindl.) Rchb.f., **FMP4** 76, **H44** 409, **S20** 439; epiphyte; on exposed lowland trees; common, widespread.
- 233.22.103 **Bulbophyllum vermiculare** Hook.f., **FMP4** 71, **H44** 446, **S20** 461; creeping epiphyte; on lowland trees incl. mangroves; Pk to Sp.
- 233.22.104 **Bulbophyllum vesiculosum** J.J.Sm., **S20** 507; *Bulbophyllum corneri* Carr, **H44** 428; epiphyte; on old mangrove trees; collected once from Chua Chu Kang, Sp.
- 233.22.105 **Bulbophyllum virescens** J.J.Sm., **S20** 483; *Bulbophyllum maximum* [non (Lindl.) Rchb.f.] (Ridl.) Ridl., **FMP4** 81, **H44** 426; epiphyte; hill forest; Main Range.
- 233.22.106 **Bulbophyllum viridescens** Ridl., **FMP4** 73, **H44** 445, **S20** 463; epiphyte or epilith; montane forest; only known from 1100 m on Gg Tahan, Ph.
- 233.22.107 **Bulbophyllum wrayi** Hook.f., **FMP4** 66, **H44** 463, **S20** 487; epiphyte; montane forest above 750 m; Pk, Ph, Sl; endemic.
- 233.22.108 **Bulbophyllum xanthum** Ridl., **FMP4** 68, **H44** 451, **S20** 491; epilith; on limestone at 270 m; only known from type, P. Dayang Bunting, Langkawi; endemic.
- 233.22.109 **Bulbophyllum yoksunense** J.J.Sm., **H44** 410, **S20** 443; epiphyte; montane forest; once collected at The Gap, Sl; identity uncertain.
- 233.22.110 **Bulbophyllum** sp. (C.E. Carr 434), **H44** 458, **S20** 495; pendulous epiphyte; hill forest; known only from (missing !) type, Gg Panti, Jh; endemic.
- 233.23.1 **Calanthe albolutea** Ridl., **FMP4** 121, **H44** 156, **S20** 173; herb to 80 cm tall; montane forest; Kd, Pk, Ph; endemic.
- 233.23.2 **Calanthe angustifolia** (Blume) Lindl., **FMP4** 120 incl. var. *flava* Ridl., **H44** 156, **S20** 171; herb about 50 cm tall; montane forest; up to 2000 m; north of the Peninsula.
- 233.23.3 **Calanthe aurantiaca** Ridl., **FMP4** 120, **H44** 157, **S20** 173; herb to 40 cm tall; montane forest; Pk, Ph; endemic.

- 233.23.4 ***Calanthe carrii*** Seidenf. & J.J. Wood, **S20** 171; *Calanthe pusilla* (non Finet) Carr, **H44** 156; herb to 40 cm tall; montane forest; 1000–1200 m; only known from Gg Tahan, Ph; endemic.
- 233.23.5 ***Calanthe ceciliae*** Rchb.f., **FMP4** 119, **H44** 153, **S20** 169; herb to 50 cm tall; lowland and hill forest including on limestone; to 1000 m; widespread but not extreme south.
- 233.23.6 ***Calanthe clavata*** Lindl., **S20** 175; herb to 80 cm tall; montane forest; once collected at Cameron Highlands, Ph.
- 233.23.7 ***Calanthe cleistogama*** Holttum, **H44** 155, **S20** 171; herb; montane forest; Gg Jerai, Kd and Fraser's Hill, Ph; endemic.
- 233.23.8 ***Calanthe johorensis*** Holttum, **H44** 156, **S20** 171; herb to over 1 m tall; montane forest; known only from the top of Gg Panti, Jh; endemic.
- 233.23.9 ***Calanthe lyroglossa*** Rchb.f., **S20** 175; *Calanthe foerstermannii* Rchb.f., **FMP4** 121, **H44** 157; herb to about 50 cm tall; montane forest; 700–1900 m; Pk, Ph.
- 233.23.10 ***Calanthe monophylla*** Ridl., **FMP4** 122, **H44** 151, **S20** 165; one-leaved herb; montane forest; only one certain collection from Cameron Highlands, Ph; endemic.
- 233.23.11 ***Calanthe ovata*** Ridl., **FMP4** 120, **H44** 155, **S20** 169; herb to nearly 1 m tall; montane forest; known only from type, Cameron Highlands, Ph; endemic.
- 233.23.12 ***Calanthe pubescens*** Ridl., **FMP4** 120, **H44** 154, **S20** 169; herb to 50 cm tall; poorly known; endemic.
- 233.23.13 ***Calanthe pulchra*** (Blume) Lindl., **H44** 157, **S20** 173; *Calanthe curculigoides* Lindl., **FMP4** 121; herb about 60 cm tall; lowland and hill forest; to 1000 m; widespread.
- 233.23.14 ***Calanthe rubens*** Ridl., **H44** 151, **S20** 165; *Preptanthe rubens* (Ridl.) Ridl., **FMP4** 123; epilith; on limestone rocks; P. Langkawi.
- 233.23.15 ***Calanthe rigida*** Carr, **H44** 158, **S20** 175; herb about 40 cm tall; montane forest above 1700 m; Ph, Sl; endemic.
- 233.23.16 ***Calanthe salaccensis*** J.J.Sm., **H44** 158, **S20** 175; herb about 40 cm tall; montane forest; once on Gg Panti, Jh.
- 233.23.17 ***Calanthe speciosa*** (Blume) Lindl., **FMP4** 121, **H44** 158, **S20** 175; herb to 60 cm tall; montane forest; true occurrence doubtful.
- 233.23.18 ***Calanthe sylvatica*** (Thouars) Lindl., **S20** 167; *Calanthe emarginata* (Blume) Lindl., **H44** 153; *Calanthe masuca* (D. Don) Lindl., **H44** 153; herb to 50 cm tall; montane forest; only known from Gg Lang, Kd.

- 233.23.19 **Calanthe taenioides** J.J.Sm., **S20** 167; herb to 45 cm tall; montane forest at about 1600 m; only known from Gg Brinchang, Ph.
- 233.23.20 **Calanthe triplicata** (Willemet) Ames, **H44** 154, **S20** 169; *Calanthe veratrifolia* (Willd.) Ker Gawl., **FMP4** 119; herb to 75 cm tall; wet lowland and montane forest to 1700 m; widespread.
- 233.23.21 **Calanthe vestita** Lindl., **H44** 151, **S20** 165; *Preptanthe vestita* (Lindl.) Rchb.f., **FMP4** 123; epiphyte; forest on limestone; once at Batu Caves, Sl.
- 233.24.1 **Cephalantheropsis gracilis** (Lindl.) S.Y. Hu, **S20** 180; *Calanthe gracilis* Lindl., **FMP4** 122; *Phaius longipes* (Hook.f.) Holttum, **H44** 175; herb about 60 cm tall; montane forest; only known from Gg Jerai, Kd.
- 233.25.1 **Ceratostylis ampullacea** Kraenzl., **H44** 493, **S20** 311; rush-like tufted epiphyte about 15 cm tall; montane forest; widespread.
- 233.25.2 **Ceratostylis clathrata** Hook.f., **FMP4** 111, **H44** 496, **S20** 317; pendulous epiphyte about 12 cm long; montane forest; Pk, Ph, Sl; endemic.
- 233.25.3 **Ceratostylis eriaeoides** Hook.f., **FMP4** 110, **H44** 495, **S20** 315; tiny tufted epiphyte to 6 cm tall; montane forest; Ph, Sl; endemic.
- 233.25.4 **Ceratostylis gracilis** Blume, **S20** 311, **H44** 493; rush-like tufted epiphyte to 10 cm tall; montane forest; Ph, Sl.
- 233.25.5 **Ceratostylis lancifolia** Hook.f., **FMP4** 109, **H44** 493, **S20** 311; tufted epiphyte to 15 cm tall; montane forest; Pk, Ph, Sl; endemic.
- 233.25.6 **Ceratostylis pendula** Hook.f., **FMP4** 111, **H44** 496, **S20** 317; pendulous epiphyte to 30 cm long; lowland forest; widespread.
- 233.25.7 **Ceratostylis pulchella** Holttum, **H44** 495, **S20** 315; epiphyte about 15 cm tall; low down on trees in montane forest; Ph, Sl; endemic.
- 233.25.8 **Ceratostylis puncticulata** Ridl., **FMP4** 111, **H44** 496, **S20** 315; pendulous epiphyte; montane forest; known only from type, Gg Hijau, Pk; endemic.
- 233.25.9 **Ceratostylis radiata** J.J.Sm., **S20** 311; *Ceratostylis linearifolia* Ridl., **FMP4** 110, **H44** 495; epiphyte about 15 cm tall; hill forest; once collected on Gg Raya, Langkawi.
- 233.25.10 **Ceratostylis robusta** Hook.f., **FMP4** 110, **H44** 496, **S20** 315; epiphyte; montane forest; known only from type, Pk; endemic.
- 233.25.11 **Ceratostylis subulata** Blume, **FMP4** 109, **H44** 493, **S20** 310; rush-like tufted epiphyte to 15 cm tall; lowland and montane forest; widespread.
- 233.25.12 **Ceratostylis sp.**, **H44** 495, **S20** 317; epiphyte; Cameron Highlands, Ph.

- 233.26.1 **Cheirostylis goldschmidtiana** Schltr., **S20** 77; herb to 20 cm tall; hill forest; Penang Hill, Pn; endemic.
- 233.26.2 **Cheirostylis montana** Blume, **S20** 77; *Cheirostylis flabellata* auct. non Wight; **FNP4** 218, **H44** 129; herb about 20 cm tall; Pn, Ph.
- 233.26.3 **Cheirostylis pusilla** Lindl., **S20** 77; herb up to 10 cm tall; hill forest; only known from Penang Hill, Pn.
- 233.27.1 **Chelonistele sulphurea** (Blume) Pfitzer, **S20** 199; *Chelonistele perakensis* (Rolfe) Ridl., **FMP4** 138, **H44** 240; *Chelonistele pusilla* (Ridl.) Ridl., **FMP4** 138, **H44** 240; epiphyte; montane forest; Kd, Pk, Ph, Sl.
- 233.28.1 **Chiloschista sweelimii** Holttum, **S20** 657; epiphyte consisting largely of green roots; Pk; endemic.
- 233.29.1 **Chroniochilus ecalcaratus** (Holttum) Garay, **S20** 694; *Sarcochilus ecalcaratus* Holttum, **H44** 690; tiny epiphyte about 5 cm tall; lowland forest; only known from Mentakab, Ph; endemic.
- 233.29.2 **Chroniochilus minimus** (Blume) J.J.Sm., **S20** 694; *Sarcochilus tjidadapensis* (J.J.Sm.) Carr, **H44** 689; tiny epiphyte about 2 cm tall; lowland and montane forest; Ph.
- 233.29.3 **Chroniochilus virescens** (Ridl.) Holttum, **S20** 693; *Sarcochilus virescens* Ridl., **FMP4** 179, **H44** 688; tiny epiphyte about 5 cm tall; lowland forest; Pk, Ph.
- 233.30.1 **Chrysoglossum ornatum** Blume, **H44** 178, **S20** 533; large-leaved creeping herb to 70 cm tall; montane forest; once at Fraser's Hill, Ph.
- 233.31.1 **Cirrhopetalum auratum** Lindl., **G06** 617; *Bulbophyllum campanulatum* Rolfe, **FMP4** 78, **H44** 416; *Bulbophyllum auratum* (Lindl.) Rchb.f, **S20** 447; epiphyte; lowland riverside trees; Tg, Sl, Ph.
- 233.31.2 **Cirrhopetalum brienianum** Rolfe, **G06** 617, **S19** 34; *Bulbophyllum makoyanum* (Rchb.f.) Ridl. var. *brienianum* (Rolfe) Ridl., **FMP4** 80; *Bulbophyllum brienianum* (Rolfe) Ames, **H44** 412, **S20** 445; creeping epiphyte; Pk, Jh.
- 233.31.3 **Cirrhopetalum concinnum** Hook.f., **G06** 618, **S19** 34; *Bulbophyllum pulchellum* Ridl., **FMP4** 80, **H44** 415, **S20** 449; epiphyte; lowland and hill forest; widespread.
- 233.31.4 **Cirrhopetalum curtisii** Hook.f., **G06** 618, **S20** 34; *Bulbophyllum pulchellum* Ridl. var. *purpureum* Ridl., **FMP4** 80; *Bulbophyllum corolliferum* J.J.Sm., **H44** 414, **S20** 445; epiphyte; Kl, Tg, Pn, Pk, Ph.

- 233.31.5 **Cirrhopetalum fenestratum** (J.J. Sm.) Garay & al., **G06** 621, **S19** 37; *Bulbophyllum taeniophyllum* auct. non C.S.P. Parish & Rechb.f., **S20** 449 in part; *Bulbophyllum punctatissimum* (Ridl.) Ridl., **FMP4** 77; *Bulbophyllum fenestratum* J.J.Sm., **H44** 411 in part; only known from type, locality uncertain.
- 233.31.6a **Cirrhopetalum gusdorfii** (J.J. Sm.) Garay & al. var. *gusdorfii*, **G06** 621, **S19** 35; *Bulbophyllum gusdorfii* J.J.Sm., **S20** 447 in part; epiphyte; lowland forest; Ph, Sl, Jh.
- 233.31.6b **Cirrhopetalum gusdorfii** (J.J. Sm.) Garay & al. var. *johorensis* nom. inval., **G06** 621, **S19** 35; *Bulbophyllum gusdorfii* J.J.Sm., **S20** 447 in part; *Bulbophyllum gusdorfii* J.J.Sm. var. *johorensis* nom. nud., **H44** 412; lowland forest; Jh, Sp.
- 233.31.7 **Cirrhopetalum lepidum** (Blume) Schltr., **G06** 618, **S19** 36; *Bulbophyllum griffithianum* C.S.P. Parish & Rechb.f., **FMP4** 80; *Bulbophyllum lepidum* (Blume) J.J.Sm., **H44** 415, **S20** 441; epiphyte; on lowland trees; south of Malaya.
- 233.31.8 **Cirrhopetalum makoyanum** Rechb.f., **G06** 619, **S19** 36; *Bulbophyllum makoyanum* (Rechb.f.) Ridl., **FMP4** 79, **H44** 412, **S20** 443; epiphyte; once collected from Chan Chu Kang, Sp.
- 233.31.9 **Cirrhopetalum ochraceum** Ridl., **G06** 619, **S19** 36; *Bulbophyllum ochraceum* [non Cogn.] (Ridl.) Ridl., **FMP4** 81, **H44** 415; *Bulbophyllum serratotruncatum* Seidenf., **S20** 441; epiphyte; lowland forest; Ph, Sl; endemic.
- 233.31.10 **Cirrhopetalum puguahaanense** (Ames) Garay & al., **G06** 621, **S19** 36; *Bulbophyllum chekaense* Carr, **H44** 408; *Bulbophyllum puguahaanense* Ames, **S20** 453; epiphyte; on riverside trees; once at Sg Cheka, Ph.
- 233.31.11 **Cirrhopetalum skeatianum** (Ridl.) Garay & al., **G06** 622, **S19** 36; *Bulbophyllum skeatianum* Ridl., **FMP4** 78, **H44** 411, **S20** 453; epiphyte; montane forest; Tg, Ph; endemic.
- 233.31.12 **Cirrhopetalum taeniophyllum** (C.S.P. Parish & Rechb.f.) Hook.f., **G06** 620, **S19** 37; *Bulbophyllum taeniophyllum* C.S.P. Parish & Rechb.f., **S20** 449 in part; *Bulbophyllum rupicolum* Ridl., **FMP4** 77; *Bulbophyllum fenestratum* auct. non J.J.Sm., **H44** 411 in part; epilith; often on limestone; mostly Kl.
- 233.32.1 **Claderia viridiflora** Hook.f., **FMP4** 140, **H44** 184, **S20** 531; creeping herb often ascending tree trunks a short way; lowland and hill forest; widespread.
- 233.33.1 **Cleisomeria lanatum** (Lindl.) Lindl. ex G. Don, **S20** 619; *Sarcanthus lanatus* (Lindl.) Holttum, **H44** 654; erect plant about 15 cm tall; lowlands; Kd, Ph, Jh.

- 233.34.1 **Cleisostoma arietinum** (Rchb.f.) Garay, **S20** 621; *Saccolabium kunstleri* (King & Pantl.) Ridl., **FMP4** 169; *Sarcanthus kunstleri* King & Pantl., **H44** 652; epiphyte about 10 cm tall; once from Pk.
- 233.34.2 **Cleisostoma capricorne** (Ridl.) Garay, **S20** 623; Ridl., **FMP4** 181; *Sarcanthus capricornis* (Ridl.) Holttum, **H44** 653; tufted epiphyte about 10 cm tall; montane forest; once on Gg Senyum, Ph.
- 233.34.3 **Cleisostoma complicatum** (Seidenf.) Garay, **S19** 63; epiphyte; once from Tasek Temengor, Pk.
- 233.34.4 **Cleisostoma discolor** Lindl., **S20** 627; *Sarcanthus termissus* Rchb.f., **H44** 657; epiphyte about 10 cm tall; lowland forest ? on limestone; P. Langkawi and Lenggong, Pk.
- 233.34.5 **Cleisostoma fissicors** (Ridl.) Seidenf. & J.J. Wood, **S20** 629; *Saccolabium fissicors* Ridl., **FMP4** 170; *Sarcanthus fissicors* (Ridl.) J.J.Sm., **H44** 659; epiphyte about 10 cm tall; lowland and montane forest; Pk, Ph; endemic.
- 233.34.6 **Cleisostoma halophilum** (Ridl.) Garay, **S20** 623; *Saccolabium halophilum* Ridl., **FMP4** 168; *Ascochilus teres* Ridl., **FMP4** 181; *Sarcanthus halophilus* (Ridl.) J.J.Sm., **H44** 653; pendulous epiphyte about 30 cm long; on lowland trees, often near the sea; south of Peninsula.
- 233.34.7 **Cleisostoma holttumii** (Carr) Garay, **S20** 627; epiphyte; known only from type; unknown Malayan locality; endemic.
- 233.34.8 **Cleisostoma inflexilobum** (Holttum) Garay, **S20** 627; *Sarcanthus inflexilobus* Holttum, **H44** 657; epiphyte; forest on limestone; known only from type; Gua Musang, Kl; endemic.
- 233.34.9 **Cleisostoma odoratum** Garay, **S20** 631; *Saccolabium ionosmum* (Ridl.) Ridl., *nom. illeg.*, **FMP4** 174; *Sarcanthus ionosmum* (Ridl.) Holttum, *nom. illeg.*, **H44** 660; epiphyte; montane forest; known only from the Taiping Hills, Pk; endemic.
- 233.34.10 **Cleisostoma rostellatum** (Ridl.) Garay, **S20** 631; *Saccolabium bicarinatum* Ridl., **FMP4** 170; *Sarcanthus rostellatum* Ridl., **H44** 660; epiphyte; lowlands; Pk, Sl.
- 233.34.11 **Cleisostoma rugosulum** (Ridl.) Seidenf., **S19** 62; *Saccolabium rugosulum* Ridl., **FMP4** 168; *Sarcanthus rugosulus* (Ridl.) Holttum, **H44** 659 'rugulosus'; epiphyte; known only from type, Gg Jerai, Kd; endemic.
- 233.34.12 **Cleisostoma scortechinii** (Hook.f.) Garay, **S20** 625; *Saccolabium scortechinii* (Hook.f.) Ridl., **FMP4** 169; *Sarcanthus scortechinii* Hook.f., **H44** 655; climbing epiphyte to 2 m long; lowland forest; widespread.

- 233.34.13 **Cleisostoma striatum** (Rchb.f.) Garay, **S20** 629; epiphyte to 15 cm long; montane forest; Kl, Sl.
- 233.34.14 **Cleisostoma subulatum** Blume, **S20** 625; *Saccolabium secundum* (Griff.) Ridl., **FMP4** 169; *Sarcanthus subulatus* (Blume) Rchb.f., **H42** 654; epiphyte to 30 cm tall; on lowland trees, often near the sea; widespread.
- 233.34.15 **Cleisostoma suffusum** (Ridl.) Garay, **S20** 628; *Saccolabium suffusum* Ridl., **FMP4** 166; *Sarcanthus suffusus* (Ridl.) J.J.Sm., **H44** 657; epiphyte to 20 cm long; Pk, Ph, Ml.
- 233.34.16 **Cleisostoma teretifolium** Teijsm. & Binn., **S20** 621; *Saccolabium machadonis* Ridl., **FMP4** 168; *Sarcanthus machadonis* (Ridl.) J.J.Sm., **H44** 652; epiphyte about 20 cm long; lowland forest; Kl, Pk, Sl, Jh.
- 233.34.17 **Cleisostoma williamsonii** (Rchb.f.) Garay, **S20** 623; *Saccolabium sacculatum* (Ridl.) Ridl., **FMP4** 172; *Sarcanthus sacculatus* Ridl., **H44** 653; epiphyte about 30 cm long; P. Langkawi, Ps.
- 233.35.1 **Coelogyne anceps** Hook.f., **FMP4** 135, **H44** 247, **S20** 217; epiphyte; Pk; endemic.
- 233.35.2 **Coelogyne asperata** Lindl., **FMP4** 131, **H44** 253, **S20** 217; epiphyte or epilith about 40 cm tall; near lowland streams.
- 233.35.3 **Coelogyne cumingii** Lindl., **FMP4** 134, **H44** 249, **S20** 209; epiphyte or epilith about 10 cm tall; lowlands and hills; widespread.
- 233.35.4 **Coelogyne fimbriata** Lindl., **S20** 207; *Coelogyne pallens* auct. non Ridl., **FMP4** 135 in part, **H44** 248 in part; epiphyte; montane forest; once collected on Gg Jerai, Kd.
- 233.35.5 **Coelogyne flexuosa** Rolfe, **H44** 248, **S20** 207; epiphyte up to 10 cm tall; poorly known.
- 233.35.6 **Coelogyne foerstermannii** Rchb.f., **FMP4** 132, **H44** 251, **S20** 208; *Coelogyne kingii* Hook.f., **FMP4** 133, **H44** 251; epiphyte to 40 cm tall; lowland and hill forest, often high on trees; widespread.
- 233.35.7 **Coelogyne judithiae** P. Taylor, **S20** 215; epiphyte up to 50 cm tall; montane forest; only known from Taiping Hills, Pk; endemic.
- 233.35.8 **Coelogyne kaliana** P.J. Cribb, **S20** 211; epiphyte up to 10 cm tall; montane forest at 1650–1900 m; Pk, Ph, Sl; endemic.
- 233.35.9 **Coelogyne longibracteata** Hook.f., **FMP4** 132, **H44** 249, **S20** 209; epiphyte about 30 cm tall; montane forest; several highland areas; endemic.

- 233.35.10 **Coelogyne massangeana** Rchb.f., **H44** 257, **S20** 213; *Coelogyne densiflora* Ridl., **FMP4** 130; *Coelogyne tomentosa* Lindl. var. *cymbidioides* (Ridl.) Ridl., **FMP4** 130; *Coelogyne tomentosa* Lindl. var. *massangeana* (Rchb.f.) Ridl., **FMP4** 130; epiphyte about 40 cm tall; montane forest; not uncommon.
- 233.35.11 **Coelogyne mayeriana** Rchb.f., **FMP4** 133, **H44** 254, **S20** 217; epiphyte about 30 cm tall; on old trees near the sea; south of the Peninsula.
- 233.35.12 **Coelogyne pallens** Ridl., **FMP4** 135, **H44** 248, **S20** 205; epiphyte about 15 cm tall; montane forest; Kd, Pk, Ph.
- 233.35.13 **Coelogyne pandurata** Lindl., **FMP4** 133, **H44** 254, **S20** 217; epiphyte about 30 cm tall; on old riverside trees in the lowlands; widespread.
- 233.35.14 **Coelogyne prasina** Ridl., **FMP4** 136, **H44** 244, **S20** 201; epiphyte, occasionally terrestrial; montane forest; Kd, Pk, Ph.
- 233.35.15 **Coelogyne pulverula** Teijsm. & Binn., **S19** 18; *Coelogyne dayana* Rchb.f., **H44** 258, **S20** 215; *Coelogyne tomentosa* (non Lindl.) Ridl.; **FMP4** 130 in part; epiphyte about 50 cm tall; montane forest.
- 233.35.16 **Coelogyne radicata** Ridl., **FMP4** 135, **S20** 203; *Coelogyne carnea* [non (Blume) Rchb.f.] Hook.f., **FMP4** 135, **H44** 246; epiphyte about 20 cm tall; montane forest; widespread.
- 233.35.17 **Coelogyne rochussenii** de Vriese, **FMP4** 131, **H44** 257, **S20** 213; epiphyte about 30 cm tall; lowland forest; widespread; common.
- 233.35.18 **Coelogyne septemcostata** J.J.Sm., **S20** 205; *Coelogyne speciosa* [non (Blume) Lindl.] Ridl., **FMP4** 134 in part; *Coelogyne membranifolia* Carr, **H44** 243; epiphyte about 20 cm tall; lowland forest; Ph, Jh.
- 233.35.19 **Coelogyne stenochila** Hook.f., **FMP4** 136, **H44** 245, **S20** 201; creeping epiphyte about 15 cm tall; montane forest; Ph, Sl; endemic.
- 233.35.20 **Coelogyne stipitibulbum** Holttum, **H44** 247, **S20** 203; epiphyte about 10 cm tall; montane forest; only known from the Cameron Highlands, Ph; endemic.
- 233.35.21 **Coelogyne swaniana** Rolfe, **H44** 257, **S20** 213; *Coelogyne quadrangularis* Ridl., **FMP4** 131; epiphyte; montane forest; known only from the Taiping Hills, Pk.
- 233.35.22 **Coelogyne testacea** Lindl., **FMP4** 129, **H44** 259, **S20** 215; epiphyte about 20 cm tall; on big trees near rivers and the sea; more frequent in the south.
- 233.35.23 **Coelogyne tiomanensis** M.R. Hend., **H44** 243, **S20** 205; epiphyte about 20 cm tall; hill forest; about 1000 m; known only from P. Tioman; endemic.

- 233.35.24 **Coelogyne tomentosa** Lindl., **FMP4** 130, **H44** 256, **S20** 211; epiphyte up to 15 cm tall; montane forest; Pk.
- 233.35.25 **Coelogyne trinervis** Lindl., **S20** 207; *Coelogyne stenophylla* Ridl., **FMP4** 132; *Coelogyne cinnamomea* (non Lindl.) Teijsm. & Binn., **H44** 253; epiphyte about 20 cm tall; P. Langkawi, Kl, Pn, Ph.
- 233.35.26 **Coelogyne viscosa** Rchb.f., **S20** 209; *Coelogyne graminifolia* C.S.P. Parish & Rchb.f., **H44** 253; epiphyte to 40 cm tall; once from Pk.
- 233.35.27 **Coelogyne xanthoglossa** Ridl., **FMP4** 134, **H44** 243, **S20** 205; epiphyte about 15 cm tall; known only from Gg Tahan, Ph; endemic.
- 233.35.28 **Coelogyne xyrekes** Ridl., **FMP4** 134, **H44** 243, **S20** 203; epiphyte to 30 cm tall; montane forest; 1300–1700 m; common.
- 233.36.1 **Collabium simplex** Rchb.f., **S20** 533; *Chrysoglossum simplex* (Rchb.f.) J.J.Sm., **H44** 179; purple-spotted herb to 40 cm tall; montane forest; Pk, Ph.
- 233.37.1 **Cordiglottis breviscapa** (Carr) Garay, **S20** 635; *Cheirorchis breviscapa* Carr, **H44** 67; pendulous epiphyte up to 20 cm long; lowland forest; known only from Budu and Batu Balai, Ph; endemic.
- 233.37.2 **Cordiglottis filiformis** (Hook.f.) Garay, **S20** 637; *Dendrocolla filiformis* (Hook.f.) Ridl., **FMP4** 187; *Cheirorchis filiformis* (Hook.f.) Carr, **H44** 679; epiphyte to 20 cm tall; lowland forest; Kl, Pk, Ph, Sl, Jh, Sp.
- 233.37.3 **Cordiglottis fulgens** (Ridl.) Garay, **S20** 637; *Cheirorchis fulgens* (Ridl.) Carr, **H44** 679; epiphyte; known only in cultivation; possibly Malayan native.
- 233.37.4 **Cordiglottis major** (Carr) Garay, **S20** 635; *Cheirorchis major* Carr, **H44** 678; pendulous epiphyte about 15 cm long; lowland forest; Kerambit, Ph, and Mawai, Jh.
- 233.37.5 **Cordiglottis pulverulenta** (Carr) Garay, **S20** 637; *Cheirorchis pulverulenta* Carr, **H44** 678; tiny epiphyte a few cm tall; lowland forest; known only from type, Tembeling, Ph; endemic.
- 233.38.1 **Corybas calcicolus** J. Dransf. & G. Smith, **S20** 121; *Corybas mucronatus* [non (Blume) Schltr.] Holttum, **H44** 93 in part; tiny tuberous one-leaved herb a few cm tall; on mossy limestone rocks; Kl, Ph, Sl; endemic.
- 233.38.2 **Corybas calopeplos** J. Dransf. & G. Smith, **S20** 119; *Corybas johanniswinkleri* (non J.J.Sm.) Holttum, **H44** 93; tiny tuberous one-leaved herb a few cm tall; on mossy banks in lower montane forest at 1400–1800 m; Kd, Ph; endemic.

- 233.38.3 **Corybas carinatus** (J.J.Sm.) Schltr., **S20** 117; *Corysanthes mucronata* (non Blume) Ridl., **FMP4** 205; *Corybas johanniswinkleri* J.J.Sm., **H44** 93 in part; *Corybas mucronatus* [non (Blume) Schltr.] Holttum, **H44** 93 in part; tiny tuberous one-leaved herb a few cm tall; on mossy rocks in montane forest; Pk, Ph, Jh.
- 233.38.4 **Corybas caudatus** Holttum, **H44** 93, **S20** 122; tiny tuberous one-leaved herb a few cm tall; on mountain rocks; known only from type collected on Gg Tahan, Ph; endemic.
- 233.38.5 **Corybas comptus** J. Dransf. & G. Smith, **S20** 119; tiny tuberous one-leaved herb a few cm tall; on mossy banks in upper montane forest at 1600–1800 m; Ph, Sl; endemic.
- 233.38.6 **Corybas fornicatus** (Blume) Rchb.f., **H44** 94 in part, **S20** 117; *Corysanthes fornicata* (Blume) Lindl., **FMP4** 117; tiny tuberous one-leaved herb a few cm tall; mossy rocks in montane forest; Kd, Ph.
- 233.38.7 **Corybas geminigibbus** J.J.Sm., **S20** 121; tiny tuberous one-leaved herb a few cm tall; montane forest; known only from Gg Jerai, Kd.
- 233.38.8 **Corybas holttumii** J. Dransf. & G. Smith, **S20** 119; *Corybas johanniswinkleri* (non J.J.Sm.) Holttum, **H44** 93 in part; tiny tuberous one-leaved herb a few cm tall; mossy banks in upper montane forest at about 1800 m; Gg Tahan, Ph and Genting Highlands, Ph/Sl; endemic.
- 233.38.9 **Corybas ridleyanus** Schltr., **S20** 120; *Corysanthes picta* [non (Blume) Lindl.] Ridl., **FMP4** 204; *Corysanthes pictus* [non (Blume) Rchb.f.] Holttum, **H44** 93; tiny tuberous one-leaved herb a few cm tall; ridge-tops in upper montane forest, often in *Sphagnum* clumps, at 1400–1900 m; Ph; endemic.
- 233.38.10 **Corybas selangorensis** J. Dransf. & G. Smith, **S20** 121; tiny tuberous one-leaved herb a few cm tall; on ridge-tops in montane forest at about 1300 m; known only from Gg Bunga Buah, Sl; endemic.
- 233.38.11 **Corybas villosus** J. Dransf. & G. Smith, **S20** 120; tiny tuberous one-leaved herb a few cm tall; on ridge-tops in upper montane forest, often in *Sphagnum*; known only from the Genting Highlands, Ph/Sl; endemic.
- 233.39.1 **Corymborkis veratrifolia** (Reinw.) Blume, **H44** 144, **S20** 52; *Corymbis longiflora* Hook.f., **FMP4** 208; *Corymbis brevistylis* Hook.f., **FMP4** 208; *Corymborkis rhytidocarpa* (Hook.f.) Kuntze, **H44** 146; *Corymborkis brevistylis* (Hook.f.) Kuntze, **H44** 146; unbranched herb to 3 m tall; lowland and montane forest; widespread.
- 233.40.1 **Cryptostylis arachnites** (Blume) Hassk., **FMP4** 225, **H44** 103, **S20** 49; herb 20–60 cm tall; lowland and montane forest to 1800 m; widespread.

- 233.40.2 **Cryptostylis conspicua** J.J.Sm., **H44** 105, **S20** 50; herb about 50 cm tall; montane forest at 1200–1800 m; Pk, Ph, Jh.
- 233.41.1 **Cymbidium aloifolium** (L.) Sw., **S20** 553; *Cymbidium simulans* Rolfe, **H44** 523; epiphyte to 1 m long; only known from P. Langkawi.
- 233.41.2 **Cymbidium atropurpureum** (Lindl.) Rolfe, **H44** 520, **S20** 551; epiphyte about 50 cm long; lowlands; Ph, Ml, Jh.
- 233.41.3 **Cymbidium bicolor** Lindl. ssp. **pubescens** (Lindl.) Du Puy & P.J. Cribb, **S20** 551; *Cymbidium pubescens* Lindl., **FMP4** 145, **H44** 522; epiphyte; on exposed trees often near the sea; widespread.
- 233.41.4 **Cymbidium chloranthum** Lindl., **H44** 519, **S20** 549; epiphyte; lowlands; Galas, Kl, and Tembeling, Ph.
- 233.41.5 **Cymbidium dayanum** Rchb.f., **FMP4** 146, **H44** 519, **S20** 549; grassy-leaved tufted epiphyte; lowlands and mountains; Ps, Kd, Ph.
- 233.41.6 **Cymbidium ensifolium** (L.) ssp. **haematodes** (Lindl.) Du Puy & P.J. Cribb, **S20** 549; *Cymbidium munronianum* auct. non King & Pantl., **FMP4** 146, **H44** 519; grassy-leaved herb to nearly 1 m tall; only known from P. Langkawi.
- 233.41.7 **Cymbidium finlaysonianum** Lindl., **FMP4** 145, **H44** 520, **S20** 551; epiphyte often forming large masses; on exposed lowland trees; most abundant in the north.
- 233.41.8 **Cymbidium lancifolium** Hook., **FMP4** 146, **H44** 518, **S20** 547; herb about 20 cm tall; hill forest; Pk, Ph, Ml.
- 233.41.9 **Cymbidium rectum** Ridl., **FMP4** 146, **H44** 520, **S20** 549; epiphyte to 60 cm tall; lowland forest; Sl, NS.
- 233.41.10 **Cymbidium roseum** J.J.Sm., **H44** 518, **S20** 547; herb, occasionally a low-level epiphyte; mountain ridges at 1500–1800 m; Ph.
- 233.42.1 **Cyrtosia javanica** Blume, **S20** 128; *Galeola javanica* (Blume) Benth. & Hook.f., **FMP4** 203, **H44** 98; fleshy-rooted saprophyte about 25 cm tall; mountain forest; Pk, Ph.
- 233.43.1 **Cystorchis aphylla** Ridl., **FMP4** 212, **H44** 140, **S20** 69; red-brown saprophyte about 15 cm tall; lowland and hill forest; widespread.
- 233.43.2 **Cystorchis gracilis** (Hook.f.) Holttum, **H44** 140, **S20** 69; *Goodyera gracilis* Hook.f., **FMP4** 219; herb to 30 cm tall; montane forest; Taiping Hills, Pk; endemic.
- 233.43.3a **Cystorchis variegata** Blume var. **purpurea** Ridl., **FMP4** 212, **H44** 139, **S20** 69; herb 10–15 cm tall; lowland forest; Ph, Jh, Sp.

- 233.43.3b **Cystorchis variegata** Blume var. **variegata**, **FMP4** 211, **H44** 139, **S20** 68; herb 15–25 cm tall; lowland forest; Pk southward.
- 233.44.1 **Dendrobium acerosum** Lindl., **FMP4** 38, **H44** 338, **S20** 423; epiphyte to 25 cm long; on moderately exposed trees; widespread.
- 233.44.2 **Dendrobium aciculare** Lindl., **S20** 403; tall thin epiphyte to 30 cm; type possibly from Sp.
- 233.44.3 **Dendrobium acinaciforme** Roxb., **S20** 411; tufted epiphyte to 40 cm tall; once at Tembeling, Ph.
- 233.44.4 **Dendrobium aloifolium** (Blume) Rchb.f., **H44** 330, **S20** 411; *Dendrobium serra* (Lindl.) Lindl., **FMP4** 35; epiphyte to 45 cm tall; lowland forest; widespread.
- 233.44.5 **Dendrobium anosmum** Lindl., **H44** 286, **S20** 383; *Dendrobium superbum* Rchb.f., **FMP4** 52; epiphyte to 120 cm long; forest on limestone; chiefly in the north, uncommon.
- 233.44.6 **Dendrobium aphyllum** (Roxb.) C.E.C. Fisch., **S20** 383; *Dendrobium pierardii* Roxb. ex Hook., **FMP4** 51, **H44** 292; pendulous epiphyte to 1 m long; Ph, Sl.
- 233.44.7 **Dendrobium atrorubens** Ridl., **FMP4** 37, **H44** 335, **S20** 419; epiphyte to 60 cm tall; montane forest at 900–1500 m; endemic.
- 233.44.8 **Dendrobium bifarium** Lindl., **FMP4** 42, **H44** 322, **S20** 399; epiphyte to 30 cm long; mostly in the lowlands; widespread.
- 233.44.9 **Dendrobium blumei** Lindl., **S20** 407; epiphyte 20–40 cm long; Pk.
- 233.44.10 **Dendrobium brinchangense** Holttum, **H44** 316, **S20** 373; epiphyte to 70 cm tall; upper montane forest at 1800–2000 m; only known from Gg Berinchang, Ph; endemic.
- 233.44.11 **Dendrobium calicopis** Ridl., **FMP4** 48, **H44** 316, **S20** 373; epiphyte to 40 cm long; [missing] type from P. Langkawi.
- 233.44.12 **Dendrobium clavator** Ridl., **FMP4** 41, **H44** 326, **S20** 403; very thin epiphyte about 30 cm long; Pk, NS, Jh.
- 233.44.13 **Dendrobium concinnum** Miq., **S20** 419; *Dendrobium atropurpureum* [non (Blume) Miq.] Ridl., **FMP4** 37 in part; *Dendrobium carnosum* (Blume) Rchb.f., **H44** 337; small epiphyte; lowlands and mountains; quite widespread.
- 233.44.14 **Dendrobium cornutum** Hook.f., **FMP4** 46, **H44** 319, **S20** 378; epiphyte to 60 cm long; mountain tops above 2000 m; several localities.

- 233.44.15 **Dendrobium crocatum** Hook.f., **FMP4** 47, **H44** 319, **S20** 378; epiphyte to 60 cm tall; lowlands, especially on riverside trees; widespread.
- 233.44.16 **Dendrobium crumenatum** Sw., **FMP4** 42, **H44** 329, **S20** 409; epiphyte sometimes over 1 m long; ubiquitous on roadside trees in the lowlands.
- 233.44.17 **Dendrobium derryi** Ridl., **FMP4** 47, **H44** 315, **S20** 371; epiphyte to 25 cm long; hill forest; known only from Larut Hills, Pk; endemic.
- 233.44.18 **Dendrobium erosum** (Blume) Lindl., **S20** 367; *Dendrobium aegle* Ridl., **FMP4** 47, **H44** 318; epiphyte to 60 cm long; lowland and hill forest; Pk, Ph, Jh.
- 233.44.19 **Dendrobium excavatum** (Blume) Miq., **H44** 336, **S20** 419; epiphyte about 30 cm tall; hill and montane forest; Kd, Pn, Ph.
- 233.44.20 **Dendrobium exilicaule** Ridl., **S20** 382, **H44** 320; weak, slender epiphyte about 30 cm long; known only from P. Langkawi; endemic.
- 233.44.21 **Dendrobium farmeri** Paxton, **H44** 282, **S20** 365; epiphyte about 30 cm long; lowland forest, on riverside trees; north of Peninsula.
- 233.44.22 **Dendrobium flexile** Ridl., **FMP4** 39, **H44** 339, **S20** 423; epiphyte about 12 cm long; on old mangrove and riverside trees; Jh, Sp.
- 233.44.23 **Dendrobium foxii** Ridl., **FMP4** 49, **H44** 320, **S20** 378; epiphyte about 40 cm long; montane forest; known only from the Taiping Hills, Pk; endemic.
- 233.44.24 **Dendrobium grande** Hook.f., **FMP4** 36, **H44** 332, **S20** 413; epiphyte to 50 cm long; on lofty lowland trees; widespread.
- 233.44.25 **Dendrobium hendersonii** A.D. Hawkes & A.H. Heller, **H44** 328 in part, **S20** 407; epiphyte to 60 cm tall; lowland forest; Tg, ?Pk, Ph, ?Jh.
- 233.44.26 **Dendrobium hercoglossum** Rchb.f., **FMP4** 45 in part, **S20** 391; *Dendrobium linguella* (non Rchb.f.) Holttum, **H44** 290 in part; epiphyte about 20 cm long; lowland forest; various localities.
- 233.44.27 **Dendrobium heterocarpum** Lindl., **H44** 290, **S20** 389; *Dendrobium aureum* Lindl., **FMP4** 51; epiphyte 20–30 cm tall; montane forest; once on the Taiping Hills, Pk.
- 233.44.28 **Dendrobium hosei** Ridl., **FMP4** 43, **H44** 323 incl. var. *pelor* Carr, **S20** 397; epiphyte to 60 cm long; on riverside trees; Ph.
- 233.44.29 **Denrabiium hughii** Rchb.f., **H44** 314, **S20** 368; *Dendrobium lepidum* Ridl., **FMP4** 48; epiphyte about 30 cm long; montane forest; about 1300 m; Kd, Ph, Sl, Jh; endemic.

- 233.44.30 **Dendrobium hymenanthum** Rchb.f., **S20** 360; *Dendrobium quadrangulare* C.S.P. Parish & Rchb.f., **H44** 275; tufted epiphyte about 10 cm tall; KI, Ph.
- 233.44.31 **Dendrobium hymenopterum** Hook.f., **FMP4** 48, **H44** 319, **S20** 375; epiphyte about 30 cm long; montane forest; about 1100 m; once from Gg Batu Puteh, Pk.
- 233.44.32 **Dendrobium incurvum** Lindl., **S20** 401; *Dendrobium eriaeflorum* auct. non Griff., **FMP4** 51, **H44** 311; epiphyte about 20 cm tall; hill forest; once on Bt Wang, Kd.
- 233.44.33 **Dendrobium indivisum** (Blume) Miq., **H44** 332, **S20** 413; *Dendrobium eulophotum* Lindl., **FMP4** 35; epiphyte about 30 cm tall; lowland forests; widespread.
- 233.44.34 **Dendrobium indragiriense** Schltr., **H44** 340, **S20** 425; *Dendrobium gemellum* (non Lindl.) Ridl., **FMP4** 40 in part; slender epiphyte to 100 cm long; lowland forest; widespread.
- 233.44.35 **Dendrobium kentrochilum** Hook.f., **FMP4** 50, **S20** 371; epiphyte 20–30 cm long; hill forest; known only from type, Ulu Batang Padang, Pk; endemic.
- 233.44.36 **Dendrobium kentrophyllum** Hook.f., **FMP4** 39, **H44** 339, **S20** 420; epiphyte about 20 cm long; montane forest; about 1200 m; Pk, Ph, Sl.
- 233.44.37 **Dendrobium lamellatum** (Blume) Lindl., **FMP4** 46, **H44** 317, **S20** 373; flat-stemmed epiphyte to 12 cm long; lowland forest; widespread but uncommon.
- 233.44.38 **Dendrobium lampongense** J.J.Sm., **H44** 312, **S20** 381; epiphyte about 65 cm long; lowland forest; Kd, NS.
- 233.44.39 **Dendrobium lankaviense** Ridl., **H44** 320, **S20** 378; epiphyte about 30 cm long; twice collected on P. Langkawi; endemic.
- 233.44.40 **Dendrobium leonis** (Lindl.) Rchb.f., **FMP4** 37, **H44** 334, **S20** 417; epiphyte to 25 cm tall; on lowland trees; widespread and common.
- 233.44.41 **Dendrobium linguella** Rchb.f., **H44** 290 in part, **S20** 391; *Dendrobium hercoglossum* (non Rchb.f.) Ridl., **FMP4** 45 in part; wiry-stemmed epiphyte to 60 cm tall; probably widespread.
- 233.44.42 **Dendrobium lobatum** (Blume) Miq., **FMP4** 36, **H44** 332, **S20** 413; pendulous epiphyte to 100 cm long; lowland trees, especially those near rivers; widespread.
- 233.44.43 **Dendrobium lobbii** Teijsm. & Binn., **H44** 342, **S20** 427; *Dendrobium calcaratum* Lindl., *nom. illeg.*, **FMP4** 39; slender herb to 70 cm tall; beds of lowland forest streams; commoner in the south.

- 233.44.44 **Dendrobium mannii** Ridl., **H44** 333, **S20** 415; *Dendrobium terminale* (non C.S.P. Parish & Rchb.f.) Ridl., **FMP4** 36; epiphyte to 15 cm long; lowland and hill forest; Ml, Jh.
- 233.44.45 **Dendrobium megaceras** Hook.f., **FMP4** 50, **H44** 319, **S20** 375; epiphyte about 60 cm long; lowlands; Ph, Ml, Jh (one collection each); endemic.
- 233.44.46 **Dendrobium metachilinum** Rchb.f., **FMP4** 44, **H44** 323, **S20** 397; epiphyte to 35 cm long; lowland forest; commoner in the south.
- 233.44.47 **Dendrobium metrium** Kraenzl., **FMP4** 45, **H44** 314, **S20** 368; ? herb; in the hills; once from Penang Hill and once from Semangkok, Sl; endemic.
- 233.44.48 **Dendrobium microglaphys** Rchb.f., **S20** 389; *Dendrobium callibotrys* Ridl., **FMP4** 44, **H44** 287; erect terrestrial or pendulous epiphyte 20–60 cm long; lowlands; commoner in the south.
- 233.44.49 **Dendrobium pachyglossum** C.S.P. Parish & Rchb.f., **FMP4** 40, **H44** 342, **S20** 429; pendulous epiphyte to 50 cm long; montane forest; several localities.
- 233.44.50 **Dendrobium pachyphyllum** (Kuntze) Bakh.f., **S20** 363; *Dendrobium pumilum* Roxb., **FMP4** 34, **H44** 275; tiny epiphyte to 5 cm tall forming dense mats; on lowland trees; common throughout.
- 233.44.51 **Dendrobium pahangense** Carr, **H44** 322, **S20** 397; epiphyte about 20 cm long; montane forest; Fraser's Hill and Gg Tahan, Ph; endemic.
- 233.44.52 **Dendrobium pandaneti** Ridl., **FMP4** 44, **H44** 324, **S20** 395; epiphyte to 35 cm long; on lowland palms and pandans; commoner in the south.
- 233.44.53 **Dendrobium panduriferum** Hook.f., **S20** 375; *Dendrobium virescens* Ridl., **FMP4** 47; *Dendrobium serpens* (Hook.f.) Hook.f., **FMP4** 47, **H44** 319; epiphyte to 60 cm long; Pk, Ph.
- 233.44.54 **Dendrobium peculiare** J.J.Sm., **S20** 402, **H44** 325; epiphyte about 30 cm long; montane forest; known only from the Cameron Highlands, Ph.
- 233.44.55 **Dendrobium pensile** Ridl., **FMP4** 40, **H44** 340, **S20** 425; pendulous epiphyte to 120 cm long; on old mangrove and riverside trees; Ph, Jh, Sp.
- 233.44.56 **Dendrobium planibulbe** Lindl., **FMP4** 41 in part, **H44** 328 in part, **S20** 407; epiphyte about 40 cm tall; Tg, Pk.
- 233.44.57 **Dendrobium procumbens** Carr, **H44** 275, **S20** 364; tufted procumbent epiphyte; montane forest; known only from the Cameron Highlands, Ph; endemic.
- 233.44.58 **Dendrobium prostratum** Ridl., **FMP4** 38, **H44** 334, **S20** 415; creeping epiphyte; lowland trees; widespread.

- 233.44.59 **Dendrobium pulchellum** Roxb. ex Lindl., **H44** 293, **S20** 383; *Dendrobium dalhousieanum* Wall., **FMP4** 52; epiphyte 1–2 m long; on lofty lowland trees; collected wild once at Chan Chu Kang, Sp.
- 233.44.60 **Dendrobium quadrilobatum** Carr, **H44** 332, **S20** 413; epiphyte to 30 cm long; lowland forest; Tg, Ph; endemic.
- 233.44.61 **Dendrobium revolutum** Lindl., **FMP4** 43 in part, **H44** 323 in part, **S20** 399; epiphyte 40–60 cm long; lowland trees; Jh, Sp; endemic.
- 233.44.62 **Dendrobium rhodostele** Ridl., **FMP4** 35, **H44** 331, **S20** 411; epiphyte about 45 cm long; on lowland forest trees by rivers; Tg, Ph.
- 233.44.63 **Dendrobium roseatum** Ridl., **FMP4** 48, **H44** 320, **S20** 382; *Dendrobium clarissimum* Ridl., **FMP4** 49; epiphyte about 60 cm long; montane forest at about 1300 m, near streams; endemic.
- 233.44.64 **Dendrobium rosellum** Ridl., **FMP4** 35, **H44** 331, **S20** 411; epiphyte about 45 cm long; on lowland riverside trees; Jh.
- 233.44.65 **Dendrobium rupicolum** Ridl., **FMP4** 42, **S20** 397; *Dendrobium distichophyllum* A.D. Hawkes & A.H. Heller, **H44** 322; about 35 cm long; on rocks or trees in the mountains; Main Range and Gg Tahan; endemic.
- 233.44.66 **Dendrobium salaccense** (Blume) Lindl., **H44** 341, **S20** 427; *Dendrobium gemellum* (non Lindl.) Ridl., **FMP4** 40 in part; slender epiphyte to 100 cm long; lowland forest; widespread.
- 233.44.67 **Dendrobium sanguinolentum** Lindl., **FMP4** 50, **H44** 314, **S20** 371; epiphyte about 60 cm long; hill forest; widespread.
- 233.44.68 **Dendrobium secundum** (Blume) Lindl., **FMP4** 46, **H44** 316, **S20** 373; epiphyte to 1 m long; lowland epiphyte, often on exposed trees near the sea; commoner in the north.
- 233.44.69 **Dendrobium setifolium** Ridl., **H44** 326, **S20** 403; *Dendrobium gracile* [non (Blume) Lindl.] Ridl., **FMP4** 41; slender epiphyte to 40 cm long; lowland forest; Ph, Sp.
- 233.44.70 **Dendrobium singaporense** A.D. Hawkes & A.H. Heller, **H44** 337, **S20** 420; *Dendrobium teres* (non Roxb.) Lindl., **FMP4** 38; epiphyte about 40 cm long; lowland and hill forest; Kd, Pn, Pk, Ph, Sl, Sp.
- 233.44.71 **Dendrobium sinuatum** (Lindl.) Lindl. ex Rchb.f., **FMP4** 37, **H44** 335, **S20** 419; pendulous epiphyte about 25 cm long; lowlands and mountains; widespread.
- 233.44.72 **Dendrobium spigidoglossum** Rchb.f.; **S20** 393; *Dendrobium flavidulum* Ridl. ex Hook.f., **FMP4** 45, **H44** 311; epiphyte about 60 cm long; on old mangrove trees; Kl, Pn, Sp.

- 233.44.73 **Dendrobium spurium** (Blume) J.J.Sm., **H44** 277, **S20** 365; *Dendrobium euphlebioides* Rehb.f. ex Lindl., **FMP4** 44; about 30 cm long; on limestone rocks or old mangrove trees; widespread though more frequent in the south.
- 233.44.74 **Dendrobium striatellum** Carr, **H44** 275, **S20** 363; small, tufted epiphyte about 7 cm tall; Gua Musang, Kl, and Merapok, Ph; endemic.
- 233.44.75 **Dendrobium stuartii** F.M. Bailey, **S20** 389; *Dendrobium tetradon auct. non* Rehb.f. ex Lindl., **FMP4** 45, **H44** 293; pendulous epiphyte about 30 cm long; on exposed lowland trees; widespread.
- 233.44.76 **Dendrobium subflavidum** Ridl., **FMP4** 49, **H44** 320, **S20** 378; *Dendrobium chloroleucum* Ridl., **FMP4** 49; epiphyte to 70 cm long; exposed places in montane forest at about 1500 m; Tg, Pk, Ph; endemic.
- 233.44.77 **Dendrobium subulatum** (Blume) Lindl., **FMP4** 39, **H44** 339, **S20** 423; epiphyte about 10 cm tall; on sheltered lowland trees; widespread.
- 233.44.78 **Dendrobium terminale** C.S.P. Parish & Rehb.f., **S20** 415; epiphyte 10–15 cm long; one dubious report from ML.
- 233.44.79 **Dendrobium tortile** Lindl., **FMP4** 52, **H44** 294, **S20** 383; *Dendrobium haniffii* Ridl., **FMP4** 51; epiphyte 20–30 cm long; Kd, Kl, Pn, Ph.
- 233.44.80 **Dendrobium trinervium** Ridl., **FMP4** 51, **S20** 395; tufted epiphyte to 8 cm tall; montane forest; known only from Gg Jerai, Kd.
- 233.44.81 **Dendrobium tropaeoliflorum** Hook.f., **FMP4** 49, **H44** 319, **S20** 375; described from plant from Pk; endemic.
- 233.44.82 **Dendrobium truncatum** Lindl., **FMP4** 41, **H44** 327, **S20** 403; epiphyte about 30 cm long; lowlands; Kd, Pk, Ph, Sl.
- 233.44.83 **Dendrobium uniflorum** Griff., **FMP4** 43, **H44** 323, **S20** 399; *Dendrobium revolutum auct. non* Lindl., **FMP4** 43 in part, **H44** 322 in part; epiphyte around 40 cm long; lowlands; widespread.
- 233.44.84 **Dendrobium ustulatum** Carr., **H44** 275, **S20** 364; procumbent epiphyte; montane forest; about 1200 m; Ph, Sl.
- 233.44.85 **Dendrobium villosulum** Lindl., **FMP4** 40, **S20** 429; *Dendrobium melanochlamys* Lindl., **H44** 342; terrestrial to 1 m tall; on dead leaves in lowland and montane forest; widespread.
- 233.44.86 **Dendrobium viridulum** Ridl., **S20** 425; epiphyte; Kd, Ph.
- 233.45.1 **Dendrochilum angustifolium** Ridl., **FMP4** 82, **H44** 234, **S20** 191; creeping epiphyte about 10 cm tall; montane forest on exposed ridges; Pk, Ph.

- 233.45.2 **Dendrochilum carnosum** (Ridl.) Holttum, **H44** 231, **S20** 187; *Platyclinis carnosus* Ridl., **FMP4** 26; creeping epiphyte; exposed montane forest at 1350–2100 m; several localities; endemic.
- 233.45.3 **Dendrochilum crassum** Ridl., **FMP4** 82, **H44** 234, **S20** 191; creeping epiphyte; montane forest; collected once on the Taiping Hills, Pk.
- 233.45.4 **Dendrochilum ellipticum** Ridl., **FMP4** 83, **H44** 234, **S20** 191; creeping epiphyte; lowland forest; KI, Ph, Jh, Sp.
- 233.45.5a **Dendrochilum gracile** (Hook.f.) J.J.Sm. var. **angustifolia** (Ridl.) Holttum, **H44** 233, **S20** 188; *Platyclinis gracilis* Hook.f. var. *angustifolia* Ridl., **FMP4** 25; creeping epiphyte; montane forest; about 1500 m; Pk, Ph; endemic variety.
- 233.45.5b **Dendrochilum gracile** (Hook.f.) J.J.Sm. var. **gracile**, **H44** 233, **S20** 187; *Platyclinis gracilis* Hook.f., **FMP4** 25; creeping epiphyte; montane forest at about 1200 m; Pk, Ph, Sl.
- 233.45.6 **Dendrochilum gramineum** (Ridl.) Holttum, **H44** 233, **S20** 188; *Platyclinis graminea* Ridl., **FMP4** 26; creeping epiphyte; montane forest; Pk, Ph; endemic.
- 233.45.7 **Dendrochilum kingii** (Hook.f.) J.J.Sm., **H44** 229, **S20** 185; *Platyclinis kingii* Hook.f., **FMP4** 27; *Platyclinis sarawakensis* Ridl., **FMP4** 27; creeping epiphyte; montane forest; Pk.
- 233.45.8 **Dendrochilum linearifolium** Hook.f., **H44** 232, **S20** 187; *Platyclinis linearifolia* (Hook.f.) Ridl., **FMP4** 25; *Platyclinis pulchella* Ridl., **FMP4** 26; creeping on trees and rocks; on mountains at 1200–2100 m; quite widespread.
- 233.45.9 **Dendrochilum longifolium** Rchb.f., **H44** 229, **S20** 185; *Platyclinis longifolia* (Rchb.f.) Hemsl., **FMP4** 25; creeping epiphyte; on old mangrove trees; Ph southward.
- 233.45.10 **Dendrochilum odoratum** (Ridl.) J.J.Sm., **H44** 231, **S20** 187; *Platyclinis odorata* Ridl., **FMP4** 26; epiphyte; montane forest at 1200–1500 m; Kd, Pk, Ph; endemic.
- 233.45.11 **Dendrochilum pallideflavens** Blume, **S20** 189; *Dendrochilum album* Ridl., **FMP4** 82, **H44** 234; epiphyte about 15 cm tall; lowlands and mountains; widespread.
- 233.45.12 **Dendrochilum simile** Blume, **H44** 231, **S20** 185; *Platyclinis linearis* Ridl., **FMP4** 26; terrestrial; montane forest; Kd, Ph.
- 233.45.13 **Dendrochilum spathulatum** Ridl., **FMP4** 82, **H44** 234, **S20** 190; epiphyte; lowlands and mountains; Pk, Ph, Jh.

- 233.46.1 **Didymoplexiella ornata** (Ridl.) Garay, **S20** 138; *Leucolaena ornata* Ridl., **FMP4** 207 incl. var. *singaporensis* Ridl.; *Didymoplexis ornata* (Ridl.) J.J.Sm., **H44** 108; tuberous leafless saprophyte 20–80 cm tall; lowland forest; Pk southward.
- 233.47.1 **Didymoplexis pallens** Griff., **FMP4** 206, **H44** 109, **S20** 139; leafless saprophyte to 12 cm tall; lowland forest; quite widespread.
- 233.48.1 **Diglyphosa latifolia** Blume, **FMP4** 112, **H44** 177, **S20** 536; creeping herb about 50 cm tall; montane forest; Pk, Ph, Sl.
- 233.49.1 **Dilochia cantleyi** (Hook.f.) Ridl., **FMP4** 127, **H44** 190, **S20** 148; herb to 2 m tall; *Sphagnum* peat bogs in the mountains; several localities.
- 233.49.2 **Dilochia wallichii** Lindl., **FMP4** 126, **H44** 190, **S20** 148; plant to 1.5 m tall; on rocks or sometimes trees; lowlands and hills; several localities.
- 233.50.1 **Diplocaulobium longicolle** (Lindl.) Kraenzl, **FMP4** 27, **S20** 348; *Dendrobium longicolle* Lindl., **H42** 263; epiphyte, occasionally terrestrial, to 40 cm tall; often on old mangrove trees; south of Peninsula.
- 233.51.1 **Dipodium paludosum** (Griff.) Rchb.f., **FMP4** 148, **H44** 515, **S20** 555; tufted herb to 1 m tall; open sandy places near the sea; Ph, Ml, Sp.
- 233.51.2 **Dipodium parviflorum** J.J.Sm., **H44** 513, **S20** 555; long climbing from ground using adpressed roots; lowland forest; once from Sungkap F.R., Kd.
- 233.51.3 **Dipodium pictum** (Lindl.) Rchb.f., **FMP4** 147, **H44** 513, **S20** 553; long climbing from ground using adpressed roots; lowland and montane forest; widespread.
- 233.51.4 **Dipodium scandens** (Blume) J.J.Sm., **S20** 555; long climbing from ground using adpressed roots; lowland and montane forest; Pn, Sl, Ml.
- 233.52.1 **Doritis pulcherrima** Lindl., **FMP4** 158, **S20** 585; *Phalaenopsis pulcherrima* (Lindl.) J.J.Sm., **H44** 671; herb to 30 cm tall; sandy heaths; P. Langkawi, Kd, Tg.
- 233.53.1 **Epigeneium geminatum** (Blume) Summerh., **S20** 351; *Sarcopodium geninatum* (Blume) Rolfe, **FMP4** 28; *Dendrobium geminatum* (Blume) Lindl., **H44** 273; creeping epiphyte or epiplith about 10 cm tall; on high exposed mountain ridges; many localities.
- 233.53.2 **Epigeneium longipes** (Hook.f.) Summerh., **S20** 348; *Sarcopodium longipes* (Hook.f.) Rolfe, **FMP4** 28; *Dendrobium longipes* Hook.f., **H44** 272; creeping epiphyte or epiplith about 15 cm tall; on high exposed mountain ridges; many localities.

- 233.53.3 **Epigeneium macropodum** (Hook.f.) Summerh., **S20** 351; *Sarcopodium macropodum* (Hook.f.) Rolfe, **FMP4** 28; *Dendrobium macropodum* Hook.f., **H44** 273; creeping epiphyte or epilith about 15 cm tall; on high exposed mountain ridges; many localities.
- 233.53.4 **Epigeneium zebrinum** (J.J.Sm.) Summerh., **S20** 351; *Sarcopodium citrinocastaneum* (Burkill) Ridl., **FMP4** 29; *Dendrobium zebrinum* J.J.Sm., **H44** 274; creeping epiphyte about 30 cm tall; lowland forests; Kl, Ph, Jh.
- 233.54.1 **Epipogium roseum** (D. Don) Lindl., **H44** 107, **S20** 141; leafless saprophyte to 80 cm tall; montane forest; once at the Cameron Highlands, Ph.
- 233.55.1 **Eria appendiculata** (Blume) Lindl., **H44** 389, **S20** 298; *Eria carunculata* Ridl., **FMP4** 94; epilith about 15 cm tall; high mountains at about 2000 m; Pk, Ph.
- 233.55.2 **Eria atrovinosa** Carr, **H44** 388, **S20** 295; epiphyte about 15 cm tall; lowland and montane forest; Ph, Sl, Ml; endemic.
- 233.55.3 **Eria bicristata** (Blume) Lindl., **H44** 391, **S20** 301; epiphyte about 20 cm tall; lowland forest; once from Sg Sat, Ph.
- 233.55.4 **Eria biflora** Griff., **H44** 372, **S20** 293; epiphyte to 25 cm tall; lowland forest; Kl, Ph.
- 233.55.5 **Eria bractescens** Lindl., **FMP4** 91, **H44** 388, **S20** 295; epiphyte about 15 cm tall; montane forest and lowland trees near rivers or the sea; widespread, though more frequent in the south.
- 233.55.6 **Eria cepifolia** Ridl., **FMP4** 90, **H44** 383, **S20** 283; about 15 cm tall; limestone areas; Kl, Pk.
- 233.55.7 **Eria citrina** Ridl., **FMP4** 87, **H44** 366, **S20** 281; clumped epiphyte to 60 cm tall; montane forest; Tg, Pk, Ph, Sl.
- 233.55.8 **Eria clavata** Holttum, **H44** 391, **S20** 301; epiphyte to 10 cm tall; montane forest; known only from Fraser's Hill, Ph; endemic.
- 233.55.9 **Eria crassipes** Ridl., **FMP4** 97, **H44** 382, **S20** 287; *Eria reptans* Ridl., **FMP4** 97; *Eria crassifolia* Ridl., **FMP4** 98; terrestrial or epiphytic to 30 cm tall; exposed mountain ridges; several localities.
- 233.55.10 **Eria dasystachys** Ridl., **FMP4** 98, **H44** 390, **S20** 298; epiphyte to 15 cm tall; lowland forest; known only from type, Pekan, Ph; endemic.
- 233.55.11 **Eria densa** Ridl., **FMP4** 90, **H44** 384, **S20** 285; thick-stemmed epiphyte to 50 cm tall; montane forest at 1300–2000 m; many places.
- 233.55.12 **Eria diluta** Ridl., **FMP4** 95, **H44** 369, **S20** 291; epiphyte to 20 cm tall; hill forest; Kd, Pn; endemic.

- 233.55.13 **Eria earine** Ridl., **FMP4** 88, **H44** 383, **S20** 283; epiphyte about 10 cm tall; montane forest; Gg Tahan and Cameron Highlands, Ph; endemic.
- 233.55.14 **Eria elata** Hook.f., **FMP4** 96, **H44** 388, **S20** 295; epiphyte about 30 cm tall; montane forest; Pk, Sl; endemic.
- 233.55.15 **Eria flavescens** (Blume) Lindl., **H44** 396, **S20** 306; epiphyte to 30 cm tall; montane forest; Cameron Highlands, Ph.
- 233.55.16 **Eria floribunda** Lindl., **FMP4** 89, **H44** 384, **S20** 285; epiphyte to 30 cm long; lowlands and hills to 1300 m; widespread.
- 233.55.17 **Eria hyacinthoides** (Blume) Lindl., **H44** 390, **S20** 298; *Eria endymion* Ridl., **FMP4** 91; fleshy epiphyte about 20 cm tall; lowlands and hills; Kl, Tg, Pk, Sl, Sp.
- 233.55.18 **Eria iridifolia** Hook.f., **FMP4** 86, **S20** 279; *Eria bidens* Ridl., **FMP4** 86; *Eria latifolia* (Blume) Rchb.f., *nom. illeg.*, **H44** 365; plant to 30 cm tall; on rocks and trees in the mountains above 1200 m; widespread.
- 233.55.19 **Eria javanica** (Sw.) Blume, **H44** 377, **S20** 271; *Eria stellata* Lindl., **FMP4** 96; *Eria striolata* Rchb.f., **FMP4** 96; epiphyte to about 60 cm tall; lowland forests; widespread.
- 233.55.20 **Eria lamonganensis** Rchb.f., **H44** 396, **S20** 305; *Eria carnea* (non J.J.Sm.) Ridl., **FMP4** 93; epiphyte to 25 cm long; montane forest; Fraser's Hill and Cameron Highlands, Ph.
- 233.55.21 **Eria lasiopetala** (Willd.) Ormerod, **S19** 22; *Eria albidotomentosa* (Blume) Lindl., **FMP4** 98, **H44** 375; *Eria pubescens* (Hook.) Steud., **S20** 277; epiphyte to 40 cm tall; Pk northwards.
- 233.55.22 **Eria latibracteata** Ridl., **S20** 305; *Eria braddonii* Rolfe, **FMP4** 92, **H44** 395; epiphyte to 20 cm long; lowland and hill forest; Ph, Sl, NS.
- 233.55.23 **Eria lancifolia** Hook.f., **FMP4** 85, **H44** 392, **S20** 303; creeping epiphyte to 30 cm tall; on riverside trees; Pk, Ph, Jh.
- 233.55.24 **Eria leiophylla** Lindl., **FMP4** 99, **H44** 379, **S20** 275; creeping epilith to 15 cm tall; in the hills; Tg, Pn, Pk.
- 233.55.25 **Eria longerepens** Ridl., **FMP4** 95, **H44** 372, **S20** 293; long-creeping epiphyte to 30 cm tall; on mangrove trees; south of Peninsula.
- 233.55.26 **Eria maingayi** Hook.f., **FMP4** 92, **H44** 390, **S20** 301; epiphyte to 10 cm tall; hill forest; Kl, Pn, Ph; endemic.
- 233.55.27 **Eria mucronata** Lindl., **S20** 289; *Eria pendula* Ridl., **FMP4** 89; *Eria rigida* Blume, **H44** 371; pendulous to 100 cm long; on limestone rocks or trees; widespread.

- 233.55.28 **Eria neglecta** Ridl., **FMP4** 95, **H44** 368, **S20** 293; epiphyte to 30 cm tall; often on mangrove or riverside trees; widespread.
- 233.55.29 **Eria nutans** Lindl., **FMP4** 94, **H44** 368, **S20** 291; epiphyte to 30 cm tall; lowlands and hills, often near rivers; widespread.
- 233.55.30 **Eria obliqua** (Lindl.) Lindl., **FMP4** 86, **H44** 365, **S20** 279; tufted epiphyte to 10 cm tall; on mangrove and riverside trees; in the south.
- 233.55.31 **Eria oblitterata** (Blume) Rchb.f., **S20** 281; *Eria tahanensis* Ridl., **FMP4** 87; *Eria ridleyi* Rolfe, **FMP4** 87, **H44** 366; *Eria larutensis* Ridl., **FMP4** 86; epiphyte about 50 cm tall; montane forest at 1200–1800 m; widespread.
- 233.55.32 **Eria ornata** (Blume) Lindl., **H44** 375, **S20** 277; epiphyte to 50 cm tall; extreme north.
- 233.55.33 **Eria pachystachya** Lindl., **H44** 384, **S20** 283; thick-stemmed epiphyte to 30 cm long; montane forest at 1300–1700 m; Pk, Ph, Sl.
- 233.55.34 **Eria pannea** Lindl., **FMP4** 99, **H44** 380, **S20** 273; creeping epiphyte to 15 cm tall; on lowland trees; common in the south.
- 233.55.35 **Eria pellipes** Hook.f., **S20** 273; *Eria teretifolia* (non Griff.) Griff., **FMP4** 99, **H44** 379; creeping epiphyte to 15 cm tall; montane forest to 1300 m; common, widespread.
- 233.55.36 **Eria pilifera** Ridl., **FMP4** 89, **H44** 369, **S20** 289; drooping epiphyte; montane forest at 1000–1300 m; Pk, Ph.
- 233.55.37 **Eria pudica** Ridl., **FMP4** 85, **H44** 391, **S20** 303; epiphyte about 15 cm tall; on old mangrove and riverside trees; Jh, Sp.
- 233.55.38 **Eria pulchella** Lindl., **H44** 372, **S20** 275; *Tylostylis rigida* (non Blume) Ridl., **FMP4** 104; creeping epiphyte to 20 cm tall; lowlands; widespread, common.
- 233.55.39 **Eria punctata** J.J.Sm., **H44** 389, **S20** 296; creeping epiphyte about 20 cm tall; montane forest; Bukit Fraser and Ulu Kali, Ph.
- 233.55.40 **Eria ramulosa** Ridl., **FMP4** 94, **H44** 393, **S20** 305; creeping epiphyte; montane forest; once from Taiping Hills, Pk; endemic.
- 233.55.41 **Eria recurvata** Hook.f., **FMP4** 92, **H44** 391, **S20** 301; stout fleshy epiphyte to 15 cm tall; poorly known, original collection from Pk; endemic.
- 233.55.42 **Eria robusta** (Blume) Lindl., **H44** 381, **S20** 286; *Eria aeridostachya* Rchb.f. ex Lindl., **FMP4** 96; *Eria brunea* Ridl., **FMP4** 97; *Eria linearifolia* Ridl., **FMP4** 97; *Eria lorifolia* Ridl., **FMP4** 98; epiphyte to 40 cm tall; montane forest, occasionally in the lowlands; widespread.

- 233.55.43 **Eria saccifera** Hook.f., **FMP4** 92, **H44** 387, **S20** 294; *Eria saccata* Ridl., **FMP4** 90, **H44** 387; epiphyte to 20 cm tall; montane forest; Gg Batu Puteh and Gg Korbu, Pk.
- 233.55.44 **Eria scortechinii** Hook.f., **FMP4** 88, **H44** 363, **S20** 271; plant to 120 cm tall; on trees or unshaded rocks in the mountains at 1700–2000 m; quite widespread; endemic.
- 233.55.45 **Eria suaveolens** Ridl., **FMP4** 91, **H44** 388, **S20** 295; fleshy epiphyte to 12 cm long; lowland and hill forest; Pk, Ph, Jh; endemic.
- 233.55.46 **Eria tenuiflora** Ridl., **FMP4** 90, **H44** 393, **S20** 306; epiphyte to 30 cm tall; lowland and hill forest to 1050 m; widespread.
- 233.55.47 **Eria valida** Lindl., **S19** 21; *Eria leptocarpa* Hook.f., **FMP4** 88, **H44** 370, **S20** 289; large epiphyte to 120 cm tall; lowland and hill forest; Pk, Ph, Sl.
- 233.55.48 **Eria xanthocheila** Ridl., **FMP4** 91, **H44** 393, **S20** 303; thick-stemmed epiphyte to 30 cm long; on riverside trees; chiefly in the south.
- 233.56.1 **Erythroides blumei** (Lindl.) Schltr., **S20** 55; *Erythroides brevicar* J.J.Sm., **H44** 119; herb to 60 cm tall; montane forest; collected once at Fraser's Hill, Ph.
- 233.56.2 **Erythroides latifolia** Blume, **S20** 55, **H44** 118; *Physurus latifolius* (Blume) Blume, **FMP4** 210; *Physurus humilis* Blume, **FMP4** 210; *Erythroides humilis* (Blume) J.J.Sm., **H44** 119; herb to 60 cm tall; hill forest; Pk, Ph, Sl.
- 233.57.1 **Erythrorchis altissima** (Blume) Blume, **S20** 132; *Galeola altissima* (Blume) Rchb.f., **FMP4** 203, **H44** 99 in part; scale-leaved saprophyte, much-branched and long-climbing; lowland forest; several localities.
- 233.57.2 **Erythrorchis ochobiensis** (Hayata) Garay, **S20** 132; *Galeola altissima* [non (Blume) Rchb.f.] Holtum, **H44** 99 in part; scale-leaved saprophyte, much-branched and long-climbing; possibly recorded from Pn.
- 233.58.1 **Eulophia andamanensis** Rchb.f., **S20** 539; *Eulophia keithii* Ridl., **FMP4** 142, **H44** 536; herb to 40 cm tall; often on limestone; Ps, Kd, Pn.
- 233.58.2 **Eulophia bicallosa** (D. Don) P.F. Hunt & Summerh., **S20** 541; *Eulophia bicarinata* (Lindl.) Hook.f., **H44** 534; herb about 60 cm tall; once from NS.
- 233.58.3 **Eulophia graminea** Lindl., **FMP4** 41, **H44** 534, **S20** 539; weedy herb to 80 cm tall; open places in the lowlands; widespread, common.
- 233.58.4 **Eulophia spectabilis** (Dennst.) Suresh, **S20** 541; *Eulophia squalida* Lindl., **FMP4** 141, **H44** 537; herb to 1 m tall; open or lightly shaded places including plantations; widespread and common.

- 233.58.5 **Eulophia zollingeri** (Rchb.f.) J.J.Sm., **H44** 534, **S20** 539; *Eulophia macrorrhiza* Blume, **FMP4** 142; leafless saprophyte to 60 cm tall; lowland forest; Pk.
- 233.59.1 **Flickingeria angustifolia** (Blume) A.D. Hawkes, **S20** 359; *Desmotrichum kelsallii* (Ridl.) Ridl., **FMP4** 30; *Desmotrichum ardenii* (Ridl.) Ridl., **FMP4** 30; *Dendrobium kelsallii* Ridl., **H44** 270 in part; tufted epiphyte to 40 cm long; lowlands and mountains; widespread.
- 233.59.2 **Flickingeria appendiculata** (Blume) A.D. Hawkes, **S20** 357; *Desmotrichum bifidum* (Ridl.) Kraenzl., **FMP4** 31; *Dendrobium bifidum* Ridl., **H44** 267; large plant; presence uncertain; Ridley's type possibly from P. Langkawi.
- 233.59.3 **Flickingeria bancana** (J.J. Sm.) A.D. Hawkes, **S20** 360; *Desmotrichum lonchophyllum* [non (Hook.f.) Kraenzl.] Ridl., **FMP4** 29 in part; *Dendrobium kelsallii* (non Ridl.) Holttum, **H44** 270 in part; tufted epiphyte; lowland forests; widespread.
- 233.59.4 **Flickingeria comata** (Blume) A.D. Hawkes, **S20** 352; *Desmotrichum criniferum* Lindl., **FMP4** 30; *Dendrobium comatum* (Blume) Lindl., **H44** 266; much-branched epiphyte to 60 cm tall; lowland forests including mangroves; south of Peninsula.
- 233.59.5 **Flickingeria convexa** (Blume) A.D. Hawkes, **S20** 357; *Dendrobium convexum* (Blume) Lindl., **H44** 270; creeping epiphyte hardly 5 cm tall; Pontian, Jh and ?Ulu Kali, Sl.
- 233.59.6 **Flickingeria fimbriata** (Blume) A.D. Hawkes, **S20** 355; *Desmotrichum fimbriatum* Blume, **FMP4** 30; *Dendrobium plicatile* Lindl., **H44** 267; large much-branched epiphyte; lowland and hill forest; widespread.
- 233.59.7 **Flickingeria forcipata** (Kraenzl.) A.D. Hawkes, **S20** 359; *Dendrobium padangense* Schltr., **H44** 269; creeping epiphyte; Pk, Ph, Sl.
- 233.59.8 **Flickingeria laciniosa** (Ridl.) A.D. Hawkes, **S20** 355; *Desmotrichum laciniosum* (Ridl.) Kraenzl., **FMP4** 31; *Dendrobium laciniosum* Ridl., **H44** 267; epiphyte about 30 cm long; probably on mangroves; known only from type; P. Seletar, Sp; endemic.
- 233.59.9 **Flickingeria luxurians** (J.J.Sm.) A.D. Hawkes, **S20** 357; *Dendrobium luxurians* J.J.Sm., **H44** 267; straggling epiphyte; lowland forest; Tembeling, Ph.
- 233.59.10 **Flickingeria pallens** (Ridl.) A.D. Hawkes, **S20** 355; plant 30–40 cm high; poorly known; one record from P. Langkawi.

- 233.59.11 **Flickingeria xantholeuca** (Rchb.f.) A.D. Hawkes, **S20** 359; *Desmotrichum lonchophyllum* Hook.f., **FMP4** 29 in part; *Desmotrichum pallidiflorum* (Ridl.) Ridl., **FMP4** 31; *Dendrobium xantholeucum* Rchb.f., **H44** 270; much-branched epiphyte 15–30 cm tall; lowland trees including mangroves; P, Langkawi, Pk, Ph, Jh, Sp.
- 233.60.1 **Galeola nudifolia** Lour., **S20** 130; *Galeola hydra* Rchb.f., **FMP4** 202; *Galeola kuhlii* (Rchb.f.) Rchb.f., **H44** 99; scale-leaved saprophyte climbing using adpressed roots; open places in lowland and hill forest to 1200 m; widespread.
- 233.61.1 **Gastrochilus calceolaris** (Buch.-Ham. ex Sm.) D. Don, **H44** 661, **S20** 689; *Saccolabium bigibbum* (non Rchb.f. ex Hook.f.) Ridl., **FMP4** 165; short-stemmed epiphyte; montane forest; Pk, Ph.
- 233.61.2 **Gastrochilus patinatus** (Ridl.) Schltr., **H44** 661, **S20** 691; *Saccolabium patinatum* Ridl., **FMP4** 165; fleshy-leaved epiphyte; lowland forest; Pk, Ph.
- 233.62.1 **Gastrodia javanica** (Blume) Lindl., **H44** 110, **S20** 140; *Gastrodia hasseltii* Blume, **FMP4** 208; *Gastrodia malayana* Ridl., **FMP4** 207; leafless tuberous saprophyte to 70 cm tall; lowland forest; several localities.
- 233.62.2 **Gastrodia verrucosa** Blume, **S20** 141; *Gastrodia holtzumii* Carr, **H44** 110; leafless tuberous saprophyte to 10 cm tall; lowland forest; Ph, Jh (one collection each).
- 233.63.1 **Geodorum citrinum** G.Jacks., **FMP4** 143, **H44** 539, **S20** 545; herb to 50 cm tall; lowland forest; Kd, Pk, Jh.
- 233.63.2 **Geodorum densiflorum** (Lam.) Schltr., **S20** 543; *Geodorum purpureum* (non R.Br.) Ridl., **FMP4** 142, **H44** 539; herb about 50 cm tall; open grassy places; Ml northward.
- 233.64.1 **Goodyera bifida** (Blume) Blume, **S20** 63; *Goodyera foliosa* auct. non (Lindl.) Benth. ex Hook.f., **FMP4** 220, **H44** 123; herb 15–25 cm tall; hill forest; Pk, Ph.
- 233.64.2 **Goodyera colorata** (Blume) Blume, **H44** 122, **S20** 61; herb 10–15 cm tall; one doubtful record from Tembeling, Ph.
- 233.64.3 **Goodyera hispida** Lindl., **H44** 123, **S20** 61; herb about 20 cm tall; on limestone hills at 500 m; Gua Panjang and Gua Nenek, Kl.
- 233.64.4 **Goodyera lanceolata** Ridl., **FMP4** 220, **H44** 122, **S20** 59; herb about 22 cm tall; montane forest; poorly known; type from The Gap, Sl; endemic.
- 233.64.5 **Goodyera pusilla** Blume, **FMP4** 219, **H44** 123, **S20** 61; herb about 10 cm tall; rare; Kd, Pk.

- 233.64.6 **Goodyera rubicunda** (Blume) Lindl., **H44** 122, **S20** 59; *Goodyera rubens* Blume, **FMP4** 220; herb to 60 cm tall; in forest; Ulu Batang Padang, Pk, and Gg Pantl, Jh.
- 233.64.7 **Goodyera viridiflora** (Blume) Blume, **S20** 61; *Goodyera cordata* (Lindl.) G. Nicolson., **FMP4** 220, **H44** 122; herb to 20 cm tall; hill forest; Gg Jerai, Kd, Penang Hill and Fraser's Hill, Ph.
- 233.65.1 **Grammatophyllum speciosum** Blume, **FMP4** 149, **H44** 527, **S20** 557; huge clumped epiphyte with stems to 3 m long; often on trees near lowland streams; widespread.
- 233.65.2 **Grammatophyllum stapeliiflorum** (Teijsm. & Binn.) J.J.Sm., **H44** 529, **S20** 558; *Cymbidium stapeliiflorum* Teijsm. & Binn., **FMP4** 147; epiphyte; montane forest; Taiping Hills, Pk, and Gg Ulu Kali, Ph.
- 233.66.1 **Grosourdyia appendiculata** (Blume) Rchb.f., **S20** 695; *Ascochilus hirtulus* (Hook.f.) Ridl., **FMP4** 181; *Sarcophilus appendiculatus* (Blume) J.J.Sm., **H44** 691; small epiphyte about 5 cm tall; often in limestone areas; widespread.
- 233.66.2 **Grosourdyia incurvicalcar** (J.J.Sm.) Garay, **S20** 695; small epiphyte; twice from Ph.
- 233.66.3 **Grosourdyia minutiflora** (Ridl.) Garay, **S20** 695; *Ascochilus minutiflorus* Ridl., **FMP4** 182; *Sarcophilus minutiflorus* (Ridl.) Holttum, **H44** 691; tiny epiphyte; known only from type; Tembeling, Ph; endemic.
- 233.66.4 **Grosourdyia muscosa** (Rolfe) Garay, **S20** 697; *Sarcophilus carriei* L.O. Williams, **H44** 692; epiphyte about 5 cm tall; lowland forests; Ph.
- 233.67.1 **Habenaria carnea** N.E. Br., **FMP4** 227, **H44** 84, **S20** 116; herb 15–25 cm tall; on limestone; P. Langkawi.
- 233.67.2 **Habenaria dentata** (Sw.) Schltr., **S20** 113; herb to 60 cm tall; once collected in Pg.
- 233.67.3 **Habenaria kingii** Hook.f., **FMP4** 228 in part, **H44** 87, **S20** 111; herb 30–50 cm tall; on limestone rocks; Pk; endemic.
- 233.67.4 **Habenaria medioflexa** Turrill, **S20** 111; small herb; hill forest; Kd.
- 233.67.5 **Habenaria reflexa** Blume, **H44** 85, **S20** 113; *Habenaria kingii* (non Hook.f.) Ridl., **FMP4** 228 in part; herb 30–50 cm tall; forest on limestone; Pk, Ph.
- 233.67.6 **Habenaria rhodocheila** Hance, **H44** 84, **S20** 113; *Habenaria xanthocheila* Ridl., **FMP4** 227; herb 20–30 cm tall; lowland forest; Pn.
- 233.67.7 **Habenaria rostellifera** Rchb.f., **S20** 113; *Habenaria roseata* Ridl., **FMP4** 228, **H44** 85; herb 30–45 cm tall; lowland forest; Kd, Tg, Pk.

- 233.67.8 **Habenaria singapurens** Ridl., **FMP4** 229, **H44** 84, **S20** 109; herb to 1 m tall; lowland swamp forest; Tg, Jh, Sp.
- 233.68.1 **Herminium lanceum** (Thunb. ex Sw.) Vuijk, **S20** 101; herb to 50 cm tall; known only from Mt Austen, Jh.
- 233.69.1 **Hetaeria alta** Ridl., **FMP4** 221, **H44** 115, **S20** 93; herb about 60 cm tall; hill forests; Pk, Ph.
- 233.69.2 **Hetaeria anomala** (Lindl.) Hook.f.; **S19** 9; *Zeuxine biloba* Ridl., **FMP4** 218, **H44** 134; *Hetaeria biloba* (Ridl.) Seidenf. & J.J. Wood, **S20** 95; herb about 35 cm tall; montane forest; known only from Telom, Ph.
- 233.69.3 **Hetaeria elata** Hook.f., **FMP4** 222, **H44** 114, **S20** 91; herb 40–60 cm tall; montane forest at 1700–2000 m; Cameron Highlands, Ph; endemic.
- 233.69.4 **Hetaeria elegans** Ridl., **FMP4** 222, **H44** 115, **S20** 93; herb about 45 cm tall; montane forest; known only from Gg Tahan, Ph; endemic.
- 233.69.5 **Hetaeria nitida** Ridl., **FMP4** 222, **H44** 116, **S20** 95; herb 20–30 cm tall; lowland forest; Pn, Ph, Sp.
- 233.69.6 **Hetaeria obliqua** Blume, **FMP4** 221 in part, **H44** 115 in part, **S20** 93; herb 25–35 cm tall; lowland forest; Ph southward.
- 233.69.7 **Hetaeria oblongifolia** (Blume) Blume, **S20** 93; *Hetaeria obliqua* auct. non Blume, **FMP4** 221 in part, **H44** 115 in part; herb to 40 cm tall; hill forest; Kd, Pn, Pk.
- 233.69.8 **Hetaeria ophirensis** Ridl., **FMP4** 222, **H44** 114, **S20** 91; herb 45 cm tall; montane forest; known only from type, Gg Tundok, Ml; endemic.
- 233.69.9 **Hetaeria pauciflora** Ridl., **FMP4** 222, **H44** 117, **S20** 95; herb about 15 cm tall; montane forest; known only from type; Telom, Ph; endemic.
- 233.70.1 **Hippeophyllum scortechinii** (Hook.f.) Schltr., **FMP4** 18, **H44** 225, **S20** 258; creeping epiphyte about 20 cm tall; lowland forest, often on riverside trees; Pk, Ph.
- 233.71.1 **Hylophila cheangii** Holttum, **H44** 120, **S20** 57; *Hylophila lanceolata* [non (Blume) Miq.] Ridl., **FMP4** 223; creeping herb to 25 cm tall; hill forest; Pk, Ph.
- 233.71.2 **Hylophila mollis** Lindl., **FMP4** 223, **H44** 119, **S20** 57; creeping herb to 60 cm tall; lowland and hill forests; widespread.
- 233.72.1 **Kingidium deliciosum** (Rchb.f.) H.R. Sweet, **S20** 657; *Kingiella decumbens* (Griff.) Rolfe, **FMP4** 158; *Phalaenopsis decumbens* (Griff.) Holttum, **H44** 669; 2–3-leaved epiphyte; widespread but not common.

- 233.73.1 **Kuhlhasseltia carrii** Holttum, **H44** 131, **S20** 81; herb about 18 cm tall; montane forest; known only from type; Fraser's Hill, Ph; endemic.
- 233.74.1 **Lecanorchis malaccensis** Ridl., **FMP4** 206 in part, **H44** 101, **S20** 134; leafless saprophyte to 35 cm tall; lowland forest; Ph, Jh, Sp.
- 233.74.2 **Lecanorchis multiflora** J.J.Sm., **H44** 101, **S20** 134; *Lecanorchis malaccensis* (*non* Ridl.) Ridl., **FMP4** 206 in part; leafless saprophyte to 60 cm tall; lowland forests; widespread.
- 233.74.3 **Lecanorchis** sp., **S20** 134; one collection from the Cameron Highlands, Ph.
- 233.75.1 **Lepidogyne longifolia** (Blume) Blume, **FMP4** 224, **H44** 138, **S20** 68; creeping herb to 1 m tall; lowland forests including peat swamp; Ph, Jh.
- 233.76.1 **Liparis atosanguinea** Ridl., **FMP4** 19, **H44** 202, **S20** 231; plant to about 50 cm tall; hill forest; Pk, ?Sl.
- 233.76.2 **Liparis bicolor** J.J.Sm., **H44** 208, **S20** 239; plant about 40 cm tall; presence still doubtful; ?Kl, ?Pk.
- 233.76.3 **Liparis bootanensis** Griff., **FMP5** 337, **H44** 205, **S20** 233; clumped epiphyte about 5 cm tall; only recorded from Gg Raya, P. Langkawi.
- 233.76.4 **Liparis cespitosa** (Lam.) Lindl., **H44** 205, **S20** 235; *Liparis cosmosa* Ridl., **FMP4** 23; clumped plant about 10 cm tall; on rocks and trees in the hills at 300–1500 m; widespread.
- 233.76.5 **Liparis compressa** (Blume) Lindl., **FMP4** 24, **H44** 209, **S20** 239; creeping plant; montane forest epiphyte (1300–1700 m) or lowlands epilith; widespread.
- 233.76.6 **Liparis elegans** Lindl., **FMP4** 23, **H44** 208, **S20** 236; creeping epiphyte or epilith; lowland and hills to 1000 m; widespread.
- 233.76.7 **Liparis ferruginea** Lindl., **FMP4** 20, **H44** 203, **S20** 233; herb to 50 cm tall; open damp grassy places; widespread in the lowlands.
- 233.76.8 **Liparis furcata** (Hook.f.) Ridl., **FMP4** 22, **H44** 202, **S20** 229; herb about 20 cm tall; montane forest; known only from Taiping Hills, Pk; endemic.
- 233.76.9 **Liparis gibbosa** Finet, **H44** 209, **S20** 240; *Liparis disticha* [*non* (Thouars) Lindl.] Ridl., **FMP4** 24; creeping epiphyte to about 20 cm tall; lowland to montane forest at 1500 m, including mangroves; widespread.
- 233.76.10 **Liparis hirundo** Holttum, **H44** 204, **S20** 233; pendulous epiphyte with swallow-like flowers; montane forest; known only from the Cameron Highlands, Ph; endemic.

- 233.76.11 **Liparis lacerata** Ridl., **FMP4** 22, **H44** 207, **S20** 237; lowland and hill forest; Pk, Ph, Jh.
- 233.76.12 **Liparis latifolia** (Blume) Lindl., **FMP4** 22, **H44** 207, **S20** 235; clumped epiphyte about 40 cm tall; montane forest; Taiping Hills, Pk.
- 233.76.13 **Liparis maingayi** (Hook.f.) Ridl., **FMP4** 21, **H44** 201, **S20** 229; one-leaved plant about 10 cm tall; on wet rocks in hill forest at 670–1300 m; Kd, Pn, Pk, Jh.
- 233.76.14 **Liparis parviflora** (Blume) Lindl., **FMP4** 23, **H44** 208, **S20** 239; epiphyte about 10 cm tall; on lowland and montane trees to 1300 m; widespread.
- 233.76.15 **Liparis parvula** (Hook.f.) Ridl., **FMP4** 22, **H44** 202, **S20** 229; one-leaved epilith to 10 cm tall; wet rocks in montane forest at 1300 m; Taiping Hills, Pk; endemic.
- 233.76.16 **Liparis purpureoviridis** Burkill ex Ridl., **FMP4** 21, **H44** 201, **S20** 229; herb to 30 cm tall; montane forest; Fraser's Hill and Gg Tahan, Ph.
- 233.76.17 **Liparis rheedei** (Blume) Lindl., **H44** 203, **S20** 232; *Liparis transtillata* Ridl., **FMP4** 21; about 50 cm tall; montane forest about 1300 m; widespread.
- 233.76.18 **Liparis rhombea** J.J.Sm., **H44** 207, **S20** 236; epiphyte about 15 cm tall; lowland forest; once from Tembeling, Ph.
- 233.76.19 **Liparis tricallosa** Rechb.f., **FMP4** 20, **H44** 202, **S20** 231; to about 50 cm tall; lowlands to 670 m; widespread.
- 233.76.20 **Liparis viridicallus** Holttum, **H44** 208, **S20** 236; creeping plant; montane forest; Fraser's Hill and Gg Ulu Kali, Ph; endemic.
- 233.76.21 **Liparis viridiflora** (Blume) Lindl., **H44** 205, **S20** 235; *Liparis longipes* Lindl., **FMP4** 23; epiphyte; lowlands and mountains; Pn, Pk, Ph.
- 233.76.22 **Liparis wrayi** Hook.f., **FMP4** 21, **H44** 203, **S20** 231; plant about 25 cm tall; lowland freshwater swamp forest; Pk, P. Tioman, Jh, Sp.
- 233.77.1 **Ludisia discolor** (Ker Gawl.) A. Rich., **S20** 63; *Haemaria discolor* (Ker Gawl.) Lindl., **FMP4** 216, **H44** 124; purple-leaved creeping herb to 20 cm tall; on rocks in the lowlands and hills; Kd, Pn, Pk, Ph, Jh.
- 233.78.1 **Luisia antennifera** Blume, **FMP4** 153, **H44** 696, **S20** 687; epiphyte to 60 cm tall; on riverside trees; Pk, Ph, Sl, NS.
- 233.78.2 **Luisia curtisii** Seidenf., **S20** 687; *Luisia tristis sensu* Hook.f., **FMP4** 153; *Luisia jonesii* (non J.J.Sm.) Holttum, **H44** 695; epiphyte; lowland forest; Pn, Pk, NS.
- 233.78.3 **Luisia jonesii** J.J.Sm., **S20** 687; epiphyte; Kd; endemic.

- 233.78.4 **Luisia zollingeri** Rchb.f., **H44** 697, **S20** 689; *Luisia brachystachys* [non (Lindl.) Blume] Ridl., **FMP4** 153; epiphyte; Ps, P. Langkawi.
- 233.79.1 **Macodes petola** (Blume) Lindl., **FMP4** 215, **H44** 117, **S20** 98; herb about 30 cm tall; damp lowland and hill forest; Pn southward.
- 233.80.1 **Macropodanthus alatus** (Holtum) Seidenf. & Garay, **S20** 683; *Sarcochilus alatus* Holtum, **H44** 684; epiphyte; montane forest; once on Fraser's Hill, Ph, at 1350 m.
- 233.80.2 **Macropodanthus tridentatus** Seidenf., **S20** 683; *Sarcochilus berkeleyi* [non (Rchb.f.) Rchb.f.] Holtum, **H44** 684; epiphyte; known only from type, Gg Panti, Jh; endemic.
- 233.81.1 **Malaxis acutangula** (Hook.f.) Kuntze, **H44** 198, **S20** 225; *Microstylis acutangula* Hook.f., **FMP4** 11; plant about 20 cm tall; on rocks and trees in hill forest; Kl, Pk.
- 233.81.2 **Malaxis calophylla** (Rchb.f.) Kuntze, **H44** 197, **S20** 223; *Microstylis calophylla* Rchb.f., **FMP4** 11; bronze-leaved herb to 25 cm tall; hill forest, often on limestone; Kd, Kl, Pn, Jh.
- 233.81.3 **Malaxis carriei** Seidenf. & J.J. Wood, **S20** 221; herb; known only from type, Gg Senyum, Ph; endemic.
- 233.81.4 **Malaxis chamaeorchis** (Schltr.) Seidenf., **S20** 220; herb about 10 cm tall; montane forest; once from Gg Panti, Jh.
- 233.81.5 **Malaxis langkawiensis** Seidenf. & J.J. Wood, **S20** 221; *Microstylis macrochila* Rolfe var. *minor* Ridl., **FMP4** 11; *Malax macrochila* (Rolfe) Holtum var. *minor* (Ridl.) Holtum, **H44** 195; herb about 10 cm tall; known only from type; Kuala Kuah, P. Langkawi; endemic.
- 233.81.6 **Malaxis latifolia** Sm., **H44** 195, **S20** 219; *Microstylis congesta* Rchb.f., **FMP4** 12; herb to 40 cm tall; lowland forests; widespread.
- 233.81.7 **Malaxis macrochila** (Rolfe) Holtum, **S20** 226; herb; locality uncertain.
- 233.81.8 **Malaxis micrantha** (Hook.f.) Kuntze, **H44** 197, **S20** 225; *Microstylis flavoviridis* Ridl., **FMP4** 12; *Microstylis micrantha* Hook.f., **FMP4** 12; creeping herb; lowland and hill forest, sometimes on rocks; widespread.
- 233.81.9 **Malaxis nemoralis** (Ridl.) Holtum, **H44** 198, **S20** 226; *Microstylis nemoralis* Ridl., **FMP4** 13; creeping herb to 20 cm tall; lowland swamp forest; Pk, Sl, Ml, Jh; endemic.
- 233.81.10 **Malaxis perakensis** (Ridl.) Holtum, **H44** 198, **S20** 223; *Microstylis perakensis* Ridl., **FMP4** 11; creeping herb; lowland forest; Pk, Ph, NS.

- 233.81.11 **Malaxis prasina** (Ridl.) Seidenf. & Smitinand, **S20** 221; *Malaxis reniloba* (Carr) Holttum, **H44** 195; herb to 20 cm tall; limestone hills; Ps.
- 233.81.12 **Malaxis stenophylla** Holttum, **H44** 195, **S20** 223; plant about 10 cm tall; known only from type; Gg Padang, Tg, at 1300 m; endemic.
- 233.82.1 **Malleola dentifera** J.J.Sm., **H44** 712, **S20** 703; epiphyte to 25 cm long; lowland forest; Kl, Ph.
- 233.82.2 **Malleola insectifera** (J.J.Sm.) J.J.Sm. & Schltr., **H44** 712, **S20** 703; epiphyte to 20 cm long; lowland forest; Kl, ?Ph.
- 233.82.3 **Malleola macranthera** (Ridl.) Holttum, **H44** 709, **S20** 699; *Malleola altocarinata* Holttum, **H44** 709; short-stemmed epiphyte; hill forest; Sl.
- 233.82.4 **Malleola penangiana** (Hook.f.) J.J.Sm. & Schltr., **H44** 710, **S20** 701; *Saccolabium penangianum* Hook.f., **FMP4** 172; pendulous epiphyte to 20 cm long; lowland forest; Kl, Pk, Ph.
- 233.82.5 **Malleola sylvestris** (Ridl.) Garay, **S20** 703; *Saccolabium sylvestre* Ridl., **FMP4** 168; *Saccolabium undulatum* (non Lindl.) Ridl., **FMP4** 173; *Malleola undulata* (Ridl.) J.J.Sm. & Schltr., **H44** 711; epiphyte; lowland forest, including that on limestone; Kl, Pk.
- 233.82.6 **Malleola witteana** (Rchb.f.) J.J.Sm. & Schltr., **H44** 710, **S20** 701; pendulous epiphyte to 30 cm long; montane forest; once at the Cameron Highlands, Ph.
- 233.83.1 **Mastigion putidum** (Teijsm. & Binn.) Garay & al., **G06** 637, **S19** 50; *Bulbophyllum fascinator* Rolfe, **FMP4** 74, **H44** 407; *Bulbophyllum putidum* (Teijsm. & Binn.) J.J.Sm., **S20** 439; epiphyte; ?Kd, Malayan occurrence in some doubt.
- 233.84.1 **Micropera fuscolutea** (Lindl.) Garay, **S20** 615; *Saccolabium adnatum* (Ridl.) Ridl., **FMP4** 174; *Camarotis adnata* (Ridl.) Holttum, **H44** 631; climbing to 40 cm long; lowland forest; Tg, Ph, Jh, Sp.
- 233.84.2 **Micropera pallida** (Roxb.) Lindl., **S20** 617; *Saccolabium saxicola* Ridl., **FMP4** 172; *Camarotis apiculata* Rchb.f., **H44** 633; slender-stemmed plant on rocks and trees; widespread, commoner in the north.
- 233.84.3 **Micropera proboscidea** (J.J.Sm.) Garay, **S20** 615; *Camarotis proboscidea* (J.J.Sm.) J.J.Sm., **H44** 631; long climbing plant; lowland forest; Sl.
- 233.85.1 **Microsaccus ampullaceus** J.J.Sm., **H44** 594, **S20** 582; epiphyte to 15 cm long; widespread.
- 233.85.2 **Microsaccus javensis** Blume, **FMP4** 175, **H44** 595, **S20** 582; epiphyte to 15 cm long; on lowland trees including mangroves; Ph southward.

- 233.85.3 **Microsaccus griffithii** (C.S.P. Parish & Rechb.f.) Seidenf., **S20** 581; *Microsaccus brevifolius* J.J.Sm., **H44** 594; epiphyte to 10 cm long; on mangrove and riverside trees, also on limestone; Kl, Ph, Sl, Jh, Sp.
- 233.85.4 **Microsaccus sumatranus** J.J.Sm., **H44** 594, **S20** 581; epiphyte to 12 cm long; montane forest; Pk, Ph.
- 233.85.5 **Microsaccus truncatus** Carr, **H44** 594, **S20** 582; epiphyte about 12 cm long; montane forest; Fraser's Hill and Gg Ulu Kali, Ph; endemic.
- 233.86.1 **Mischobulbum crassum** H. Turner, **S20** 152; herb about 20 cm tall; hill forest; 450 m; known only from type; Ulu Gombak, Sl; endemic.
- 233.86.2 **Mischobulbum wrayanum** (Hook.f.) Rolfe, **FMP4** 115, **S20** 151; *Tainia wrayana* (Hook.f.) J.J.Sm., **H44** 183; herb to 20 cm tall; montane forest; Kd, Pn, Pk.
- 233.87.1 **Nephelaphyllum pulchrum** Blume, **FMP4** 115, **H44** 178, **S20** 150; *Nephelaphyllum latilabre* Ridl., **H44** 178; purplish creeping herb to 15 cm tall; lowland and hill forests; widespread.
- 233.87.2 **Nephelaphyllum tenuiflorum** Blume, **FMP4** 115, **H44** 178, **S20** 151; slender creeping herb; montane forest; uncommon.
- 233.88.1 **Nervilia aragoana** Gaudich., **H44** 106, **S20** 137; *Aplostellis flabelliformis* (Lindl.) Ridl., **FMP4** 203; tuberous herb to 30 cm tall; grassy places; Kd, Pk, Ph.
- 233.88.2 **Nervilia calcicola** Kerr, **S20** 135; *Aplostellis punctata* Ridl., **FMP4** 204 in part; *Nervilia punctata auct. non* (Blume) Makino, **H44** 106 in part; tuberous hexagonally-leaved herb to 15 cm tall; P. Langkawi.
- 233.88.3 **Nervilia plicata** (Andr.) Schltr., **S20** 137; *Aplostellis velutina* (C.S.P. Parish & Rechb.f.) Ridl., **FMP4** 204; *Nervilia discolor* (Blume) Schltr., **H44** 106; brownish herb to 10 cm tall; P. Langkawi, Pn.
- 233.88.4 **Nervilia punctata** (Blume) Makino, **H44** 106 in part, **S20** 135; *Aplostellis punctata* (Blume) Ridl., **FMP4** 204 in part; herb to 10 cm tall; lowland forest; Pn, Pk, Jh, Sp.
- 233.89.1 **Neuwiedia griffithii** Rechb.f., **FMP4** 296, **H44** 63, **S20** 34; creeping herb about 30 cm tall; damp lowland forest; Ph, Sl, NS, MI, Jh, Sp.
- 233.89.2 **Neuwiedia veratrifolia** Blume, **H44** 64, **S20** 32; *Neuwiedia lindleyi* Rolfe, **FMP4** 295; herb to over 1 m tall; lowland forest; Pn southward.
- 233.89.3 **Neuwiedia zollingeri** Rechb.f. var. **singaporeana** (Baker) de Vogel, **S20** 34; *Neuwiedia curstisii* Rolfe, **FMP4** 297; *Neuwiedia ocrea* Ridl., **FMP4** 296; *Neuwiedia singaporeana* (Baker) Rolfe, **H44** 64; stout-rooted herb to 30 cm tall; lowland and hill forest to 600 m; widespread.

- 233.90.1 **Oberonia anthropophora** Lindl., **H44** 221, **S20** 254; *Oberonia aurantiaca* Ridl., **FMP4** 15; nodding epiphyte to 10 cm long; lowlands; Sl, Jh.
- 233.90.2 **Oberonia bertoldii** King & Pantl., **S20** 251, **H44** 225, **FMP4** 17; *Oberonia gracillima* Ridl., **FMP4** 14; tiny epiphyte; lowland forest; Pk, Ph, Sl, Jh, Sp; endemic.
- 233.90.3 **Oberonia boerlageana** J.J.Sm., **S20** 243; *Oberonia flava* Ridl., **FMP4** 17, **H44** 214; small epiphyte to 12 cm tall; lowland forest; Tenom, Ph.
- 233.90.4 **Oberonia brachystachys** Lindl., **S20** 257; *Oberonia demissa* Lindl., **H44** 224; tiny epiphyte hardly 5 cm tall; lowlands; ?Ml, Jh.
- 233.90.5 **Oberonia ciliolata** Hook.f., **FMP4** 16, **H44** 220, **S20** 247; epiphyte to 20 cm tall; lowlands, including mangroves and limestone, and mountains; widespread.
- 233.90.6 **Oberonia dissitiflora** Ridl., **H44** 218, **S20** 245; *Oberonia lunata* auct. non (Blume) Lindl., **FMP4** 14 in part; epiphyte to 30 cm long; lowlands; Ph southward.
- 233.90.7 **Oberonia falcata** King & Pantl., **S20** 250; *Oberonia caudata* King & Pantl., **FMP4** 18, **H44** 219; *Oberonia pendula* Ridl., **FMP4** 18, **H44** 219; slender pendulous epiphyte to 30 cm long; montane forest; Pk, Ph.
- 233.90.8 **Oberonia falconeri** Hook.f., **S20** 245; *Oberonia calcicola* Holttum, **H44** 217; epiphyte to 10 cm tall; once from P. Langkawi.
- 233.90.9 **Oberonia flabellifera** Holttum, **H44** 222, **S20** 253; epiphyte to 10 cm long; riverside trees; Mawai, Jh and ?Sp; endemic.
- 233.90.10 **Oberonia fungumolens** Burkill, **FMP5** 337, **H44** 221, **S20** 249; mushroomy-smelling pendulous epiphyte to 30 cm long; lowlands; once near Tanjong Malim, Pk.
- 233.90.11 **Oberonia gracilis** Hook.f., **FMP4** 17, **H44** 219, **S20** 247; epiphyte to 30 cm long; lowlands and mountains; Sg Kinta, Pk, and Cameron Highlands, Ph; endemic.
- 233.90.12 **Oberonia grandis** Ridl., **FMP4** 16, **H44** 218, **S20** 247; epiphyte about 30 cm long; hills and mountains; Main Range; endemic.
- 233.90.13 **Oberonia insectifera** Hook.f., **FMP4** 15, **H44** 221, **S20** 253; epiphyte barely 10 cm tall; lowland forest; Pk, Ph.
- 233.90.14 **Oberonia intermedia** King & Pantl., **FMP4** 17, **H44** 225, **S20** 251; epiphyte about 15 cm long; known only from type; Pk; endemic.

- 233.90.15 **Oberonia iridifolia** (Roxb.) Lindl., **FMP4** 14, **H44** 218, **S20** 243; epiphyte to 25 cm long; lowlands and mountains; P. Hujung Duri (Langkawi) and Cameron Highlands, Ph.
- 233.90.16 **Oberonia lunata** (Blume) Lindl., **FMP4** 14 in part, **H44** 223, **S20** 256; *Oberonia subnavicularis* King & Pantl., **FMP4** 14; *Oberonia porphyrochila* Ridl., **FMP4** 16; epiphyte to about 15 cm tall; lowlands and mountains; Pn, Pk, Ph, Jh, Sp.
- 233.90.17 **Oberonia lycopodioides** (K.D. Koenig) Ormerod, **S19** 21; *Oberonia anceps* Lindl., **FMP4** 15, **H44** 219, **S20** 247; epiphyte 10–30 cm long; lowlands; widespread, common.
- 233.90.18 **Oberonia marina** J.B. Comber, **S20** 254; *Oberonia rhizophoreti* (non Schltr.) J.J.Sm., **H44** 223; tiny epiphyte barely 5 cm tall; on riverside trees; only known from Mawai, Jh.
- 233.90.19 **Oberonia miniata** Lindl., **FMP4** 16, **H44** 220, **S20** 249; *Oberonia rolfeana* King & Pantl., **FMP4** 18; epiphyte to 50 cm long; lowlands; widespread.
- 233.90.20 **Oberonia prainiana** King & Pantl., **FMP4** 14, **H44** 222, **S20** 255; *Oberonia brunnescens* Ridl., **FMP4** 17; tiny epiphyte to 10 cm tall; lowlands; Pk, NS, Jh.
- 233.90.21 **Oberonia pumilio** Rechb.f., **H44** 224, **S20** 257; tufted epiphyte to 10 cm tall; lowlands and mountains; Pn, Pk, Ph, Jh.
- 233.90.22 **Oberonia rosea** Hook.f., **FMP4** 15, **H44** 224, **S20** 251; epiphyte about 6 cm long; montane forest; once each from Gg Batu Puteh and Taiping Hills, Pk.
- 233.90.23 **Oberonia rufilabris** Lindl., **S20** 253; *Oberonia tiomanensis* M.R. Hend., **H44** 222; epiphyte about 10 cm long; hill forest; Kd, P. Tioman.
- 233.90.24 **Oberonia semifimbriata** J.J.Sm., **H44** 223, **S20** 254; epiphyte about 10 cm tall; lowland forest; once at Tembeling, Ph.
- 233.90.25 **Oberonia sinuosa** Ridl., **FMP4** 15, **H44** 219, **S20** 248; epiphyte to 25 cm long; poorly known and somewhat doubtful species; SI, NS.
- 233.90.26 **Oberonia spiralis** Lindl., **S19** 21; *Oberonia spathulata* Lindl., *nom. illeg.*, **FMP4** 17, **H44** 220; *Oberonia padangensis* Schltr., **S20** 249; epiphyte to 35 cm long; montane forest; ?Kl, Ph.
- 233.90.27 **Oberonia stenophylla** Ridl., **FMP4** 15, **H44** 222, **S20** 254; epiphyte about 10 cm tall; lowland forest; Tg, Pk, Ph, Jh, Sp.
- 233.90.28 **Oberonia suborbicularis** Carr, **H44** 225, **S20** 257; tiny epiphyte about 5 cm tall; lowland and montane forest; Tembeling and Cameron Highlands, Ph; endemic.

- 233.90.29 **Oberonia transversiloba** Holttum, **H44** 214, **S20** 245; epiphyte to 20 cm tall; forest on limestone; once at Gua Berong, Kl, and once at Gua Tipus, Ph; endemic.
- 233.91.1 **Octarrhena condensata** (Ridl.) Holttum, **H44** 548, **S20** 337; *Oberonia condensata* Ridl., **FMP4** 18; flat-stemmed epiphyte to 20 cm long; montane forest; Ph, Sl.
- 233.91.2 **Octarrhena parvula** Thwaites, **H44** 548, **S20** 337; *Phreatia nana* Hook.f., **FMP4** 106; epiphyte to 10 cm tall; montane forest; several localities.
- 233.92.1 **Oeceoclades pulchra** (Thouars) P.J. Cribb & M.A. Clem., **W32** 114; *Eulophia macrostachya* Lindl., **FMP5** 338, **H44** 537; *Eulophia pulchra* (Thouars) Lindl., **S20** 541; herb to 75 cm tall; lowland forest; Pk, Sl.
- 233.93.1 **Orchipedum plantaginifolium** Breda, **S20** 79; *Queteletia plantaginifolia* (Breda) Blume, **H44** 130; herb to 50 cm tall; montane forest; once each from Gg Lang, Kd, and Gg Korbu, Pk.
- 233.94.1 **Ornithochilus difformis** (Wall. ex Lindl.) Schltr., **S20** 588; epiphyte about 10 cm tall; montane forest; once at 1800 m on Gg Ulu Kali, Ph.
- 233.95.1 **Pachystoma pubescens** Blume, **S20** 159; *Pachystoma senile* (Lindl.) Rchb.f., **FMP4** 116 'sessile', **H44** 147; herb to 60 cm tall; open grassy places; north of Peninsula.
- 233.96.1 **Paphiopedilum barbatum** (Lindl.) Pfitzer, **FMP4** 231, **H44** 77, **S20** 40; herb; open grassy or rocky places on mountains; widespread.
- 233.96.2 **Paphiopedilum bullenianum** (Rchb.f.) Pfitzer, **H44** 77, **S20** 40; *Paphiopedilum robinsonii* (Ridl.) Ridl., **FMP4** 232; herb to 60 cm tall; mossy places in montane forest; Gg Tahan, Ph, P. Tioman and Gg Panti, Jh.
- 233.96.3 **Paphiopedilum callosum** (Rchb.f.) Stein var. **sublaeve** (Rchb.f.) P.J. Cribb, **H44** 78, **S20** 42; herb; montane forest; known only from Gg Jerai, Kd.
- 233.96.4 **Paphiopedilum lowii** (Lindl.) Stein, **FMP4** 232, **H44** 73, **S20** 39; epiphyte, occasionally on rocks; lower montane forest at 1000–1300 m; Main Range.
- 233.96.5 **Paphiopedilum niveum** (Rchb.f.) Stein, **FMP4** 231, **H44** 69, **S20** 39; herb; on limestone rocks; P. Langkawi, Ps, Kd, Kl.
- 233.97.1 **Papilionanthe hookeriana** (Rchb.f.) Schltr., **S20** 663; *Vanda hookeriana* Rchb.f., **FMP4** 158, **H44** 716; long-climbing epiphyte; open swampy places; Tg, Pk, Jh.
- 233.98.1 **Pecteilis susannae** (L.) Raf., **S20** 108; *Habenaria susannae* (L.) R.Br., **FMP4** 228, **H44** 82; tuberous herb to 120 cm tall; open grassy places; Kd.

- 233.99.1 **Pelatantheria cristata** (Ridl.) Ridl., **FMP4** 177, **H44** 649, **S20** 614; climbing epiphyte to 30 cm long; lowland trees; Kd, Kl, Pk, Ph, NS.
- 233.100.1 **Pennilabium acuminatum** (Ridl.) Holttum, **H44** 706, **S20** 704; *Sarcochilus acuminatus* Ridl., **FMP4** 178; epiphyte to 10 cm tall; montane forest; Cameron Highlands, Ph; endemic.
- 233.100.2 **Pennilabium angraecum** (Ridl.) J.J.Sm., **H44** 706, **S20** 706; *Saccolabium angraecum* Ridl., **FMP4** 173; small epiphyte a few cm tall; Kl, Ph, Sl; endemic.
- 233.100.3 **Pennilabium struthio** Carr, **H44** 706, **S20** 706; small epiphyte; lowlands and mountains; Kl, Ph.
- 233.101.1 **Peristylus candidus** J.J.Sm., **S20** 107; *Habenaria lacertifera* auct. non (Lindl.) Benth., **FMP4** 230 in part; *Habenaria sumatrana* (Schltr.) Schltr., **H44** 88; herb to 50 cm tall; open grassy places; widespread, commoner in the south.
- 233.101.2 **Peristylus goodyeroides** (D. Don) Lindl., **S20** 103; *Habenaria glaucescens* Ridl., **FMP4** 229; *Habenaria goodyeroides* D. Don, **H44** 87; herb to 60 cm tall; P. Langkawi.
- 233.101.3 **Peristylus gracilis** Blume, **S20** 103; *Habenaria inconspicua* Ridl., **FMP4** 229; *Habenaria bambusetorum* Kraenzl., **H44** 85; herb to 50 cm tall; damp montane forest; once at Telom, Ph.
- 233.101.4 **Peristylus grandis** Blume, **S20** 103; *Habenaria gigas* Hook.f., **FMP4** 229, **H44** 87; herb to 150 cm tall; montane forest; Pk, Ph, Sl.
- 233.101.5 **Peristylus holttumii** Seidenf., **S20** 107; *Habenaria lacertifera* auct. non (Lindl.) Benth., **FMP4** 230 in part; *Habenaria sumatrana* (Schltr.) Schltr. var. *major* Holttum, **H44** 89; herb to 50 cm tall; open places in the lowlands; Kd.
- 233.101.6 **Peristylus lacertiferus** (Lindl.) J.J.Sm, **S20** 107; *Habenaria lacertifera* (Lindl.) Benth., **FMP4** 230 in part, **H44** 88; herb 20–40 cm tall; open places; widespread.
- 233.101.7 **Peristylus monticola** (Ridl.) Seidenf., **S20** 103; *Habenaria monticola* Ridl., **FMP4** 230, **H44** 87; herb to 60 cm tall; open places at 700–1200 m; Gg Jerai, Kd, and Gg Ledang, Jh.
- 233.102.1 **Phaius callosus** (Blume) Lindl., **FMP4** 124, **H44** 174, **S20** 177; herb to 1 m tall; montane forest at 1200–1500 m; several localities.
- 233.102.2 **Phaius flavus** (Blume) Lindl., **H44** 174, **S20** 177; herb to 90 cm tall; montane forest; Cameron Highlands and Gg Ulu Kali, Ph.

- 233.102.3 **Phaius pauciflorus** (Blume) Blume var. **pallidus** (Ridl.) Holttum, **H44** 175, **S20** 177; *Limatodes pallidus* (Ridl.) Ridl., **FMP4** 124; herb to 1 m tall; montane forest at 600–1200 m; Taiping Hills and Main Range; endemic variety.
- 233.102.4 **Phaius tankervilleae** (Banks ex l'Her.) Blume, **H44** 172, **S20** 176; *Phaius wallichii* Lindl., **FMP4** 123; herb to 1.4 m tall; lowland and hill forest to 1200 m; widespread but uncommon.
- 233.103.1 **Phalaenopsis appendiculata** Carr, **H44** 668, **S20** 671; small epiphyte; lowlands; only known from Tembeling, Ph; endemic.
- 233.103.2 **Phalaenopsis cochlearis** Holttum, **S20** 669; epiphyte; once from Kuala Kelawi, NS.
- 233.103.3 **Phalaenopsis cornucervi** (Breda) Blume & Rchb.f., **FMP4** 156, **H44** 667, **S20** 668; epiphyte to 25 cm tall; lowlands and mountains; Kd, Pk, Ph, Sl, NS.
- 233.103.4 **Phalaenopsis fuscata** Rchb.f.; ?**FMP4** 157, **H44** 669 in part, **S20** 668; epiphyte; Kota Gelanggi and Tembeling, Ph.
- 233.103.5 **Phalaenopsis kunstleri** Hook.f., **S20** 669; *Phalaenopsis fuscata* auct. non Rchb.f., **FMP4** 157, **H44** 669 in part; epiphyte; Pk, Jh.
- 233.103.6 **Phalaenopsis maculata** Rchb.f., **S20** 671; *Phalaenopsis muscicola* Ridl., **FMP4** 156; *Phalaenopsis sumatrana* auct. non (Korth.) Rchb.f., **H44** 670 in part; epiphyte; on wet mossy trees; Sg Tahan, Ph.
- 233.103.7 **Phalaenopsis sumatrana** Korth. & Rchb.f., **FMP4** 156, **H44** 670 in part, **S20** 671; epiphyte; lowlands and hills; Pk, Sl, Ml, Jh.
- 233.103.8a **Phalaenopsis violacea** Witte var. **murtoniana** Rchb.f., **FMP4** 156, **S20** 668; short-stemmed epiphyte; Pk; endemic variety.
- 233.103.8b **Phalaenopsis violacea** Witte var. **violacea**, **FMP4** 156, **H44** 667, **S20** 668; short-stemmed epiphyte; on lowland riverside trees; Pk, Sl, Ml.
- 233.104.1 **Pholidota articulata** Lindl., **H44** 236, **S20** 192; *Pholidota decurva* Ridl., **FMP4** 139; pendulous epiphyte about 50 cm long; hill forest; Pk, Sl.
- 233.104.2a **Pholidota carnea** (Blume) Lindl. var. **carnea**, **H44** 238, **S20** 197; *Crinonia carnea* Blume, **FMP4** 137; *Crinonia elizabethiana* (Ridl.) Ridl., **FMP4** 137; *Pholidota globosa* [non (Blume) Lindl.] Ridl., **H44** 238; exposed mountain ridges; Pk, Ph.
- 233.104.2b **Pholidota carnea** (Blume) Lindl. var. **parviflora** (Hook.f.) de Vogel, **S20** 197; *Crinonia parviflora* (Hook.f.) Pfitzer, **FMP4** 137; *Pholidota parviflora* Hook.f., **H44** 238; common on high mountains; Ph, Sl; endemic variety.

- 233.104.2c **Pholidota carnea** (Blume) Lindl. var. **pumila** (Ridl.) de Vogel, **S20** 197; *Crinonia parviflora* var. *pumila* (Ridl.) Ridl., **FMP4** 137; high mountains; Kd, Pk, Ph; endemic variety.
- 233.104.3 **Pholidota gibbosa** (Blume) de Vriese, **H44** 237, **S20** 195; *Chelonanthera gibbosa* Blume, **FMP4** 139; long-creeping; montane forest; Ph, Sl.
- 233.104.4 **Pholidota imbricata** Hook., **FMP4** 139, **S20** 192; *Pholidota pallida* (non Lindl.) Holttum, **H44** 237; on trees or rocks; common on limestone; widespread.
- 233.104.5 **Pholidota longibulba** Holttum, **H44** 237, **S20** 195; creeping epiphyte about 30 cm tall; Cameron Highlands, Ph, and Liam, Sl; endemic.
- 233.104.6 **Pholidota ventricosa** (Blume) Rechb.f., **H44** 238, **S20** 195; *Pholidota grandis* Ridl., **FMP4** 140; epiphyte to 50 cm tall; hill forest; Pk, Sl.
- 233.105.1 **Phreatia crassifolia** Ridl., **FMP4** 106, **H44** 554, **S20** 346; tiny epiphyte a few cm tall; montane forest; Ph; endemic.
- 233.105.2 **Phreatia densiflora** (Blume) Lindl., **FMP4** 105, **H44** 553, **S20** 344; epiphyte; montane forest; Pk, Ph.
- 233.105.3 **Phreatia laxiflora** (Blume) Lindl., **H44** 553, **S20** 344; epiphyte about 20 cm tall; montane forest; Ph, Sl.
- 233.105.4 **Phreatia linearis** Ridl., **FMP4** 106, **H44** 553, **S20** 344; epiphyte to 30 cm tall; Gg Tahan, Ph, and Ulu Langat, Sl; endemic.
- 233.105.5 **Phreatia listrophora** Ridl., **FMP4** 106, **H44** 552, **S20** 344; creeping epiphyte to 20 cm tall; montane forest; Pk, Ph, ?Sl.
- 233.105.6 **Phreatia plantaginifolia** (K.D. Koenig) Ormerod, **S19** 22; *Phreatia minutiflora* Lindl., **FMP4** 105; *Phreatia microtidis* Lindl., **FMP4** 106; *Phreatia secunda* (Blume) Lindl., **H44** 553, **S20** 346; small epiphyte to 10 cm long; lowland swamps and forest on limestone; widespread.
- 233.105.7 **Phreatia pusilla** (Blume) Lindl., **H44** 553, **S20** 344; epiphyte to 15 cm tall; montane forest; Ph.
- 233.105.8 **Phreatia sulcata** (Blume) J.J.Sm., **H44** 552, **S20** 342; epiphyte about 20 cm long; hill forest at 600–1200 m; widespread.
- 233.106.1 **Pilophyllum villosum** (Blume) Schltr., **W32** 123; *Chrysoglossum villosum* Blume, **FMP4** 111, **H44** 178, **S20** 531; large-leaved creeping herb to 70 cm tall; montane forest; Pk, Ph, Sl.
- 233.107.1 **Platanthera angustata** (Blume) Lindl., **S20** 99; *Habenaria zosterostyloides* Hook.f., **FMP4** 226; *Habenaria angustata* (Blume) Kuntze, **H44** 82; herb to 120 cm tall; montane forest at 1700–2300 m; many localities.

- 233.108.1 **Plocoglottis gigantea** (Hook.) J.J.Sm., **H44** 160, **S20** 183; *Plocoglottis foetida* Ridl., **FMP4** 144; herb to 100 cm tall; damp lowland forest; widespread.
- 233.108.2 **Plocoglottis javanica** Blume, **FMP4** 143, **H44** 159, **S20** 181; *Plocoglottis acuminata* auct. non Blume, **FMP4** 143, **H44** 160; herb to 100 cm tall; wet places in lowland and montane forest; widespread.
- 233.108.3 **Plocoglottis lowii** Rchb.f., **H44** 160, **S20** 181; *Plocoglottis porphyrophylla* Ridl., **FMP4** 144; herb to 100 cm or more tall; damp lowland forest, commoner near the sea; Ph southward.
- 233.108.4 **Plocoglottis quadrifolia** J.J.Sm., **S20** 181; herb 60–90 cm tall; one collection from Pn.
- 233.109.1 **Poaephyllum pauciflorum** (Hook.f.) Ridl., **FMP4** 108, **H44** 511, **S20** 335; narrow-leaved epiphyte to 50 cm long; lowland forest; Pk, Ph, Jh.
- 233.110.1 **Podochilus lucescens** Blume, **FMP4** 193, **H44** 502, **S20** 335; slender tufted epiphyte to 20 cm long; Ps, P. Langkawi, Jh.
- 233.110.2 **Podochilus microphyllus** Lindl., **FMP4** 193, **H44** 500, **S20** 333; slender tufted epiphyte to 20 cm long; lowland and hill forest to 1000 m; widespread and common.
- 233.110.3 **Podochilus muricatus** (Teijsm. & Binn.) Schltr., **H44** 501, **S20** 335; *Appendicula muricata* Teijsm. & Binn., **FMP4** 197; tufted plant to 15 cm long; on rocks and trees in the mountains to 1300 m; widespread.
- 233.110.4 **Podochilus tenuis** (Blume) Lindl., **FMP4** 193, **H44** 500, **S20** 333; tufted moss-like plant; on wet rocks and tree trunks in lowland and hill forest to 700 m; widespread and not uncommon.
- 233.111.1 **Polystachya concreta** (Jacq.) Garay & H.R. Sweet, **S20** 566; *Polystachya penangensis* Ridl., **FMP4** 152; *Polystachya siamensis* Ridl., **FMP4** 152; *Polystachya singapurensis* Ridl., **FMP4** 152; *Polystachya flavescens* (Blume) J.J.Sm., **H44** 546; epiphyte to 10 cm tall; lowlands and hills; widespread.
- 233.112.1 **Pomatocalpa andamanica** (Hook.f.) J.J.Sm., **S20** 611; *Saccolabium latifolium* (Lindl.) Schltr. var. *strictum* Ridl., **FMP4** 166; *Pomatocalpa naevatum* auct. non J.J.Sm., **H44** 630; elongate epiphyte; one poor specimen from Batu Caves, Sl.
- 233.112.2 **Pomatocalpa arachnanthe** (Ridl.) J.J.Sm., **H44** 629, **S20** 611; *Saccolabium arachnanthe* Ridl., **FMP4** 174; long-climbing epiphyte; lowlands; Kd, Pk, Ph; endemic.
- 233.112.3 **Pomatocalpa fusca** (Lindl.) J.J.Sm., **S20** 611; *Pomatocalpa elongata* Carr, **H44** 630; epiphyte to 120 cm long; on exposed lowland trees; Ph, MI, Jh.

- 233.112.4 **Pomatocalpa kunstleri** (Hook.f.) J.J.Sm., **H44** 627, **S20** 608; *Saccolabium pubescens* Ridl., **FMP4** 174; epiphyte to 30 cm tall; lowlands; Kd, Kl, Pk, Ph.
- 233.112.5 **Pomatocalpa latifolia** (Lindl.) J.J.Sm., **H44** 628, **S20** 613; *Saccolabium latifolium* (Lindl.) Schltr., **FMP4** 166 incl. var. *parviflorum* Ridl.; *Saccolabium hortense* Ridl., **FMP4** 167; epiphyte, sometimes long-stemmed; lowlands; widespread.
- 233.112.6 **Pomatocalpa parva** (Ridl.) J.J.Sm., **H44** 627, **S20** 613; *Saccolabium parvum* (Ridl.) Ridl., **FMP4** 167; epiphyte; on limestone; known only from type, Kota Gelanggi, Ph; endemic.
- 233.112.7 **Pomatocalpa spicata** Breda, **H44** 628, **S20** 613; *Saccolabium hobsonii* Ridl., **FMP4** 167; *Saccolabium setulense* Ridl., **FMP4** 167; *Saccolabium uteriferum* (Hook.f.) Ridl., **FMP4** 168; *Pomatocalpa setulensis* (Ridl.) Holttum, **H44** 628; short-stemmed epiphyte to 40 cm across; lowland forest; Pk, Ph, NS.
- 233.113.1 **Porpax elwesii** (Rchb.f.) Rolfe, **S20** 308; *Porpax meirax* auct. non (Rchb.f.) King & Pantl., **FMP4** 104, **H44** 396; tiny plants barely 1 cm across; on lowland and montane rocks; P. Dayang Bunting (Langkawi), Gg Jerai, Kd, and Gg Tahan, Ph.
- 233.114.1 **Porphyroglottis maxwelliae** Ridl., **H44** 515, **S20** 534; large epiphyte to 120 cm long; restricted to SE Jh.
- 233.115.1 **Pristiglottis macrantha** (Hook.) J.J. Wood & Seidenf., **S20** 82; *Anoectochilus macranthus* (Hook.f.) Ridl., **FMP4** 214; *Cystopus macranthus* (Hook.f.) Holttum, **H44** 131; herb to 15 cm tall; hill forest; Taiping Hills. Pk, and Gg Belumut, Jh; endemic.
- 233.116.1 **Pteroceras biserratum** (Ridl.) Holttum, **H44** 687, **S20** 679; *Sarcochilus biserratus* Ridl., **FMP4** 180; epiphyte to 20 cm long; lowlands; Pk, Ph.
- 233.116.2 **Pteroceras cladostachyum** (Hook.f.) H.A. Peders., **S20** 676; *Sarcochilus cladostachys* Hook.f., **FMP4** 179; *Sarcochilus tanyphyllus* Ridl., **FMP4** 179, **H44** 686; *Sarcochilus unguiculatus* (non Lindl.) Ridl., **FMP4** 178 in part; plant about 50 cm long; on trees and rocks; Kl, Pk, Ph.
- 233.116.3 **Pteroceras compressum** (Blume) Holttum, **S20** 679; pendulous epiphyte; montane forest; once from the Cameron Highlands, Ph.
- 233.116.4 **Pteroceras hirsutum** (Hook.f.) Holttum, **S20** 679; *Ascochilus hirsutus* (Hook.f.) Ridl., **FMP4** 182; *Sarcochilus hirsutus* Hook.f., **H44** 691; epiphyte about 20 cm long; lowlands; Pk.
- 233.116.5 **Pteroceras johorensis** (Holttum) Holttum, **S20** 680; *Sarcochilus johorensis* Holttum, **H44** 689; small epiphyte about 5 cm long; only known from near Sg Sedili in Jh; endemic.

- 233.116.6 **Pteroceras pallidum** (Blume) Holttum, **S20** 675; *Sarcochilus caligaris* Ridl., **FMP4** 178, **H44** 685; small epiphyte to 10 cm tall; Pk, Ph, NS, Jh, Sp.
- 233.116.7 **Pteroceras unguiculatum** (Lindl.) H.A. Peders., **S20** 676; *Sarcochilus unguiculatus* Lindl., **FMP4** 178 in part; *Sarcochilus pallidus* auct. non (Blume) Rchb.f., **H44** 686; epiphyte about 30 cm tall; Pk, Ph.
- 233.116.8 **Pteroceras violaceum** (Ridl.) Holttum, **S20** 680; *Sarcochilus violaceus* Ridl., **FMP4** 180, **H44** 687; poorly known montane forest epiphyte; type only collection; Gg Tahan, Ph; endemic.
- 233.117.1 **Renanthera angustifolia** Hook.f., **W32** 335; *Renanthera matutina* (Blume) Lindl., *nom. inval.*, **FMP4** 160, **H44** 636, **S20** 593; long climbing epiphyte, often hanging; exposed montane forest above 1350 m; Main Range.
- 233.117.2 **Renanthera elongata** (Blume) Lindl., **FMP4** 160, **H44** 634, **S20** 593; long climbing epiphyte; lowlands often near the sea; widespread.
- 233.118.1 **Renantherella histrionica** (Rchb.f.) Ridl., **FMP4** 161, **S20** 596; *Renanthera histrionica* Rchb.f., **H44** 634; epiphyte to 60 cm long, often hanging; on old mangroves or trees and rocks in the hills; quite widespread.
- 233.119.1 **Rhynchogyna luisifolia** (Ridl.) Seidenf. & Garay, **S20** 658; pendent epiphyte to 50 cm long; lowlands; ? P. Langkawi, Pk.
- 233.120.1 **Rhynchostylis gigantea** (Lindl.) Ridl., **FMP4** 163, **H44** 704, **S20** 661; large epiphyte to 50 cm tall; lowlands, but dubiously native; once from Seletar, Sp.
- 233.120.2 **Rhynchostylis retusa** (L.) Blume, **FMP4** 163, **H44** 703, **S20** 661; epiphyte to 40 cm long; lowlands; Ps, Kd, Kl, Tg.
- 233.121.1 **Rhytionanthos mirum** (J.J. Sm.) Garay & al., **S19** 52; *Bulbophyllum mirum* J.J.Sm., **S20** 451; epiphyte; once collected at Bertam, Kl.
- 233.122.1 **Robiquetia spatulata** (Blume) J.J.Sm., **H44** 714, **S20** 663; *Saccolabium densiflorum* Lindl., **FMP4** 170; pendulous epiphyte to 50 cm long; lowlands; widespread.
- 233.123.1 **Sarcoglyphis pensilis** (Ridl.) Seidenf., **S20** 617; *Saccolabium pensile* (Ridl.) Ridl., **FMP4** 170; *Sarcanthus pensilis* Ridl., **H44** 659; epiphyte to 30 cm long; lowlands; Kota Gelanggi, Ph, and Batu Pahat, Jh; endemic.
- 233.124.1 **Sarcostoma javanica** Blume, **H44** 499, **S20** 317; *Cerastostylis cryptantha* Ridl., **FMP4** 110; *Cerastostylis linearis* Ridl., **FMP4** 110; tufted epiphyte barely 5 cm tall; lowlands and mountains; quite widespread.
- 233.125.1 **Schoenorchis micrantha** Blume, **H44** 663, **S20** 597; *Saccolabium perpusillum* Hook.f., **FMP4** 171; tufted epiphyte about 15 cm tall; lowlands; Pk and Ph southward.

- 233.125.2 **Schoenorchis minutiflora** (Ridl.) J.J.Sm., **H44** 663, **S20** 597; *Saccolabium minutiflorum* Ridl., **FMP4** 171; epiphyte about 15 cm tall; montane forest; Main Range.
- 233.125.3 **Schoenorchis secundiflora** (Ridl.) J.J.Sm., **H44** 662, **S20** 597; *Saccolabium secundiflorum* Ridl., **FMP4** 173; small epiphyte to 10 cm tall; on old riverside and mangrove trees; Ph southward.
- 233.126.1 **Smitinandia micrantha** (Lindl.) Holttum, **S20** 592; *Saccolabium fissum* Ridl., **FMP4** 173; *Ascocentrum micranthum* (Lindl.) Holttum, **H44** 735; epiphyte to 20 cm long; P. Langkawi, Kd.
- 233.127.1 **Spathoglottis affinis** de Vriese, **FMP4** 118, **H44** 162, **S20** 161; herb to 50 cm tall; open rocky places 600–900 m; known only from Gg Jerai, Kd.
- 233.127.2 **Spathoglottis aurea** Lindl., **FMP4** 117, **H44** 165, **S20** 162; herb to 60 cm tall; grassy spots in the mountains at 900–1500 m; widespread.
- 233.127.3 **Spathoglottis gracilis** Rolfe *ex* Hook.f., **H44** 165, **S20** 161; herb; montane forest at 900 m; P. Tioman.
- 233.127.4 **Spathoglottis hardingiana** C.S.P. Parish & Rchb.f., **FMP4** 118 '*hardingiana*', **H44** 166, **S20** 163; herb about 25 cm tall; on limestone near the sea; P. Langkawi.
- 233.127.5 **Spathoglottis microchilina** Kraenzl., **H44** 165, **S20** 163; herb; mountains above 900 m; Taiping Hills and Main Range.
- 233.127.6 **Spathoglottis plicata** Blume, **FMP4** 117, **H44** 166, **S20** 161; herb to 2 m tall; grassy places to 700 m; common and widespread in the lowlands.
- 233.128.1 **Spiranthes sinensis** (Pers.) Ames, **S20** 47; *Spiranthes lancea* auct. non (Thunb.) Backer & al., **H44** 141; herb to 25 cm tall; montane forest; Ph.
- 233.129.1 **Staurochilus fasciatus** (Rchb.f.) Ridl., **FMP4** 157, **S20** 604; *Trichoglottis fasciata* Rchb.f., **H44** 644; climbing plant to 60 cm long; on rocks and trees; P. Langawi, Kd.
- 233.129.2 **Staurochilus ramosus** (Lindl.) Seidenf., **S20** 607; epiphyte dubiously native; ?Pk.
- 233.130.1 **Stereosandra javanica** Blume, **FMP4** 224, **H44** 108, **S20** 143; tuberous saprophytic herb to 60 cm tall; lowland and montane forest; several localities.
- 233.131.1 **Taeniophyllum annuliferum** Carr, **H44** 593, **S20** 579; tiny leafless epiphyte with spreading green roots, barely 1 cm tall; once from Gua Musang, Kd; endemic.

- 233.131.2 **Taeniophyllum calceolus** Carr, **H44** 592, **S20** 579; tiny leafless epiphyte with flat green roots, barely 3 cm tall; Ps, P. Langkawi.
- 233.131.3 **Taeniophyllum campanulatum** Carr, **H44** 590, **S20** 575; tiny leafless epiphyte with flat green roots, barely 1 cm tall; montane forest; once from Fraser's Hill, Ph; endemic.
- 233.131.4 **Taeniophyllum filiforme** J.J.Sm., **H44** 593, **S20** 579; *Taeniophyllum macrorrhizum* Ridl., **FMP4** 176; small leafless epiphyte with spreading green roots; lowlands; widespread.
- 233.131.5 **Taeniophyllum glandulosum** Blume, **S20** 575; *Taeniophyllum tjibodasanum* J.J.Sm., **H44** 590; *Taeniophyllum viride* Carr, **H44** 590; tiny leafless epiphyte with flat green roots, to 5 cm tall; lowlands and mountains; Tg, Ph.
- 233.131.6 **Taeniophyllum gracillimum** Schltr., **S20** 577; *Taeniophyllum culiciferum* Ridl., **FMP4** 176, **H44** 592; tiny leafless epiphyte with flat green roots, about 3 cm tall; lowland forest; Kl, Ph.
- 233.131.7 **Taeniophyllum intermedium** Carr, **H44** 590, **S20** 575; tiny leafless epiphyte with flat green roots, about 3 cm tall; Tg, Ph; endemic.
- 233.131.8 **Taeniophyllum micranthum** Carr, **H44** 592, **S20** 577; tiny leafless epiphyte with spreading green roots, barely 1 cm tall; montane forest; Fraser's Hill and Cameron Highlands, Ph; endemic.
- 233.131.9 **Taeniophyllum montanum** Carr, **H44** 592, **S20** 577; tiny leafless epiphyte with flat green roots, about 2 cm tall; montane forest; Fraser's Hill and Cameron Highlands, Ph; endemic.
- 233.131.10 **Taeniophyllum obtusum** Blume, **H44** 592, **S20** 577; *Taeniophyllum serrula* Hook.f., **FMP4** 176; tiny leafless epiphyte with flat green roots, about 2 cm tall; exposed lowland trees; widespread.
- 233.131.11 **Taeniophyllum pahangense** Carr, **H44** 590, **S20** 572; leafless epiphyte with spreading green roots, about 3 cm tall; lowlands and mountains; Ph.
- 233.131.12 **Taeniophyllum pallidiflorum** Carr, **H44** 592, **S20** 579; tiny leafless epiphyte with spreading green roots, to 3 cm tall; only known from trees by the Sg Tahan, Ph; endemic.
- 233.131.13 **Taeniophyllum rostratum** Carr, **H44** 593, **S20** 579; tiny leafless epiphyte with spreading green roots, to 2 cm tall; lowland forest; known only from Tembeling, Ph; endemic.
- 233.131.14 **Taeniophyllum rubrum** Ridl., **FMP4** 177, **H44** 589, **S20** 572; tiny leafless epiphyte with spreading green roots, about 2 cm tall; Ph, NS.

- 233.131.15 **Taeniophyllum rugulosum** Carr, **H44** 591, **S20** 575; small leafless epiphyte with flat green roots, to nearly 5 cm tall; lowland forest; known only from near the Sg Sat, Ph; endemic.
- 233.131.16 **Taeniophyllum stella** Carr., **H44** 590, **S20** 575; small leafless epiphyte with flat green roots, about 1 cm tall; lowland forest; Ph.
- 233.132.1 **Tainia maingayi** Hook.f., **FMP4** 114, **H44** 182, **S20** 153; creeping herb to 125 cm tall; rocky places in the mountains; north of the Peninsula.
- 233.132.2 **Tainia paucifolia** (Breda) J.J.Sm., **S20** 156; *Tainia latilingua* Hook.f., **FMP4** 114, **H44** 183; herb to 60 cm tall; montane forest; Pk, Ph, Sl, Jh.
- 233.132.3 **Tainia speciosa** Blume, **FMP4** 114, **H44** 182, **S20** 153; herb to 50 cm; montane forest; widespread.
- 233.132.4 **Tainia vegetissima** Ridl., **FMP4** 114, **H44** 183, **S20** 156; herb about 20 cm tall; montane forest; only known from Gg Tahan.
- 233.133.1 **Thecopus maingayi** (Hook.f.) Seidenf., **S20** 560; *Thecostele maingayi* Hook.f., **FMP4** 192, **H44** 559; ?*Thecostele quinquefida* Hook.f., **FMP4** 192; epiphyte about 20 cm tall; lowland forest; ML.
- 233.133.2 **Thecopus secunda** (Ridl.) Seidenf., **S20** 560; *Thecostele secunda* Ridl., **FMP4** 192, **H44** 558; epiphyte about 20 cm tall; montane forest; Pk, Jh.
- 233.134.1 **Thecostele alata** (Roxb.) C.S.P. Parish & Rchb.f., **H44** 558, **S20** 562; *Thecostele maculosa* Ridl., **FMP4** 191; *Thecostele zollingeri* Rchb.f., **FMP4** 192; epiphyte about 20 cm tall; lowlands; widespread but uncommon.
- 233.135.1 **Thelasis carinata** Blume, **FMP4** 200, **H44** 550, **S20** 341; epiphyte to about 30 cm tall; lowlands; widespread and common.
- 233.135.2 **Thelasis macrobulbon** Ridl., **FMP4** 199, **H44** 550, **S20** 339; epiphyte about 30 cm tall; lowlands and montane forest; Pk, Ph.
- 233.135.3 **Thelasis micrantha** (Brongn.) J.J.Sm., **H44** 551, **S20** 341; *Thelasis decurva* Hook.f., **FMP4** 200; tufted epiphyte to about 30 cm tall; on riverside trees or in forests on limestone; widespread.
- 233.135.4 **Thelasis pygmaea** (Griff.) Blume, **S20** 341; *Thelasis elongata* Blume, **FMP4** 199; *Thelasis capitata* (non Blume) Ridl., **FMP4** 199; *Thelasis triptera* Rchb.f., **H44** 550; epiphyte to 25 cm tall; on old riverside and mangrove trees or on limestone; quite widespread.
- 233.135.5 **Thelasis succosa** Carr, **H44** 550, **S20** 339; to 20 cm tall; on limestone; Gua Musang, KI, Kota Gelanggi and Bt Chintamani, Ph; endemic.

- 233.136.1 **Thrixspermum acuminatissimum** (Blume) Rchb.f., **H44** 600, **S20** 639; *Thrixspermum notabile* (Hook.f.) Ridl., **FMP4** 186; epiphyte about 10 cm tall; lowlands; K1 and S1 southward.
- 233.136.2 **Thrixspermum amplexicaule** (Blume) Rchb.f., **H44** 602, **S20** 645; *Thrixspermum lilacinum* (Griff.) Rchb.f., **FMP4** 184; long climbing epiphyte; open places in the lowlands; widespread.
- 233.136.3 **Thrixspermum brevibracteatum** J.J.Sm., **H44** 605, **S20** 647; epiphyte to 50 cm or more long; montane forest; Gg Korbu, Pk, and Cameron Highlands, Ph.
- 233.136.4 **Thrixspermum brevicapsularis** Holtum, **H44** 609, **S20** 651; epiphyte about 20 cm long; montane forest; Cameron Highlands and Gg Ulu Kali, Ph; endemic.
- 233.136.5 **Thrixspermum calceolus** (Lindl.) Rchb.f., **FMP4** 184, **H44** 604, **S20** 645; long creeping plant; on lowland rocks or trees; widespread.
- 233.136.6 **Thrixspermum carinatifolium** (Ridl.) Schltr., **H44** 608, **S20** 649; *Dendrocolla carinatifolia* (Ridl.) Ridl., **FMP4** 189; epiphyte about 20 cm long; on trees near the sea; southeast Jh and P. Aur.
- 233.136.7 **Thrixspermum carnosum** (Ridl.) Schltr., **H44** 611, **S20** 653; *Dendrocolla carnos* Ridl., **FMP4** 188; epiphyte about 5 cm tall; Pn, Pk; endemic.
- 233.136.8 **Thrixspermum centipeda** Lour., **S20** 643; *Thrixspermum arachnites* (Blume) Rchb.f., **FMP4** 185 in part, **H44** 601; epiphyte about 20 cm long; lowlands; widespread.
- 233.136.9 **Thrixspermum corneri** Holtum, **H44** 610, **S20** 653; epiphyte a few cm tall; on riverside trees; known only from type; Mawai, Jh; endemic.
- 233.136.10 **Thrixspermum crassifolium** Ridl., **FMP4** 186, **H44** 601, **S20** 643; epiphyte about 20 cm long; lowlands; Pk, Ph, S1, Jh.
- 233.136.11 **Thrixspermum duplocallosum** Holtum, **H44** 608, **S20** 649; epiphyte about 5 cm tall; montane forest; only known from the Cameron Highlands, Ph; endemic.
- 233.136.12 **Thrixspermum iodoichilus** Ridl., **FMP4** 186, **H44** 601, **S20** 643; epiphyte about 10 cm long; known only from type; Bt Tangga, NS; endemic.
- 233.136.13 **Thrixspermum leucarachne** Ridl., **FMP4** 186, **H44** 601, **S20** 641; epiphyte about 20 cm long; P. Langkawi.
- 233.136.14 **Thrixspermum merguense** (Hook.f.) Kuntze, **S20** 653; tiny epiphyte about 3 cm tall; montane forest; collected once in the Cameron Highlands, Ph.

- 233.136.15 **Thrixspermum montanum** Ridl., **FMP4** 185, **H44** 606, **S20** 647; epiphyte about 20 cm long; known only from type; Ulu Langat, Sl; endemic.
- 233.136.16 **Thrixspermum pardale** (Ridl.) Schltr., **H44** 607, **S20** 647; *Dendrocolla pardalis* (Ridl.) Ridl., **FMP4** 187; epiphyte about 25 cm long; lowland trees; Pk, Ph.
- 233.136.17 **Thrixspermum pauciflorum** (Hook.f.) Ridl., **FMP4** 184, **H44** 604, **S20** 645; long climbing epiphyte; hill forest; known only from type; Taiping Hills, Pk; endemic.
- 233.136.18 **Thrixspermum platycaule** Holttum, **H44** 604, **S20** 645; *Sarcochilus anceps* Ridl., **FMP4** 180; pendulous epiphyte to 50 cm long; lowlands and ?mountains; ?Ph, Jh; endemic.
- 233.136.19 **Thrixspermum psiloglottis** (Ridl.) Schltr., **H44** 608, **S20** 649; *Dendrocolla psiloglottis* Ridl., **FMP4** 189; epiphyte about 10 cm long; known only from type; Kuala Pahang, Ph; endemic.
- 233.136.20 **Thrixspermum pulchrum** Carr, **H44** 607, **S20** 647; small epiphyte to 5 cm tall; known only from type; Kerambit, Ph; endemic.
- 233.136.21 **Thrixspermum cf. raciborskii** J.J.Sm., **S20** 639; epiphyte; montane forest; once at Cameron Highlands, Ph.
- 233.136.22 **Thrixspermum recurvum** (Hook.f.) Kuntze, **H44** 607, **S20** 649; *Dendrocolla pardalis* (non Ridl.) Ridl., **FMP4** 187 in part; epiphyte about 15 cm tall; on riverside trees; Pk, Ph.
- 233.136.23 **Thrixspermum ridleyanum** Schltr., **H44** 611, **S20** 651; *Dendrocolla maculata* Ridl., **FMP4** 188; *Thrixspermum rubrocallosum* Carr, **H44** 610; epiphyte about 10 cm tall; lowlands; Tg, Ph, NS, Jh, Sp.
- 233.136.24 **Thrixspermum sarcophyllum** Garay, **S20** 653; *Sarcochilus tahanensis* Ridl., **FMP4** 180, **H44** 688; epiphyte about 15 cm tall; montane forest; only known from type; at 1800 m on Gg Tahan, Ph; endemic.
- 233.136.25 **Thrixspermum scopa** (Rchb.f. ex Hook.f.) Holttum, **H44** 600, **S20** 641; *Thrixspermum arachnites* (non Rchb.f.) Ridl., **FMP4** 185 in part; long climbing epiphyte; widespread.
- 233.136.26 **Thrixspermum scortechinii** (Hook.f.) Ridl., **FMP4** 185, **H44** 600, **S20** 641; epiphyte to 40 cm long; montane forest; Kd, Pk, Sl; endemic.
- 233.136.27 **Thrixspermum tahanense** Carr, **H44** 601, **S20** 641; epiphyte to 40 cm long; montane forest; Gg Jerai, Kd, and Gg Tahan, Ph; endemic.
- 233.136.28 **Thrixspermum tenuicalcar** Carr, **H44** 610, **S20** 651; epiphyte about 10 cm tall; lowlands; Tg, Ph.

- 233.136.29 **Thrixspermum trichoglottis** (Hook.f.) Kuntze, **H44** 611, **S20** 655; *Dendrocolla trichoglottis* (Hook.f.) Ridl., **FMP4** 187; *Dendrocolla alba* Ridl., **FMP4** 188; *Thrixspermum album* (Ridl.) Schltr., **H44** 613; epiphyte to 10 cm long; lowlands; south of Peninsula.
- 233.137.1 **Thunia alba** (Lindl.) Rchb.f., **FMP4** 125, **S20** 146; herb to 60 cm tall; only known from Bt Wang, Kd.
- 233.138.1 **Trichoglottis bipunctata** (C.S.P. Parish & Rchb.f.) T. Tang & F.T. Wang, **S20** 603; *Saccolabium miserum* Ridl., **FMP4** 171; *Trichoglottis misera* (Ridl.) Holttum, **H44** 643; epiphyte to 50 cm or more long; lowland and hill forest; P. Langkawi, Kd, Pn, Pk.
- 233.138.2 **Trichoglottis cirrhifera** Teijsm. & Binn., **H44** 642, **S20** 601; *Trichoglottis tetraceras* Ridl., **FMP4** 162; *Saccolabium cornigerum* Ridl., **FMP4** 171; *Saccolabium pantlingii* Ridl., **FMP4** 175; long-climbing epiphyte or epilith; Ps, P. Langkawi, Kd, Pn, Pk.
- 233.138.3 **Trichoglottis lanceolaria** Blume, **H44** 643, **S20** 603; pendulous epiphyte to 70 cm long; montane forest; Fraser's Hill, Ph, P. Tioman, and Gg Panti, Jh.
- 233.138.4 **Trichoglottis scapigera** Ridl., **S20** 599, **H44** 641, **FMP4** 162; long trailing epiphyte; Kd, Pg.
- 233.138.5 **Trichoglottis retusa** Blume, **FMP4** 162, **H44** 642, **S20** 601; long climbing plant; on rocks including limestone; Kl, Ph, Sl.
- 233.138.6a **Trichoglottis winkleri** J.J.Sm. var. **minor** J.J.Sm., **H44** 642, **S20** 601, **H44** 642; pendulous epiphyte to 60 cm or more long; known only from Kota Gelenggi, Ph.
- 233.138.6b **Trichoglottis winkleri** J.J.Sm. var. **winkleri**, **H44** 641, **S20** 601; pendulous epiphyte to 60 cm or more long; Cameron Highlands and Port Swettenham.
- 233.139.1 **Trichotosia aporina** (Hook.f.) Kraenzl., **FMP4** 102, **S20** 265; *Eria aporina* Hook.f., **H44** 360; tufted epiphyte to 15 cm tall; montane forest; Kd, Pk, Ph.
- 233.139.2 **Trichotosia ferox** Blume, **FMP4** 101, **S20** 262; *Trichotosia pyrrhotricha* (Ridl.) Ridl., **FMP4** 101; *Eria ferox* (Blume) Blume, **H44** 359; plant to 2 m tall; on rocks in the mountains; widespread.
- 233.139.3 **Trichotosia gracilis** (Hook.f.) Kraenzl., **FMP4** 104, **S20** 268; *Trichotosia oligantha* (Hook.f.) Kraenzl., **FMP4** 103; *Eria gracilis* Hook.f., **H44** 362; epiphyte to 20 cm long; lowlands and mountains; widespread.
- 233.139.4 **Trichotosia hispidissima** (Ridl.) Kraenzl., **FMP4** 102, **S20** 265; *Eria hispidissima* Ridl., **H44** 360; epiphyte about 15 cm tall; known only from type; Ulu Langat, Sl; endemic.

- 233.139.5 **Trichotosia microphylla** Blume, **FMP4** 102, **S20** 261; *Eria microphylla* (Blume) Blume, **H44** 360; creeping plant to 10 cm tall; in the mountains; Ph, Sl.
- 233.139.6 **Trichotosia pauciflora** Blume, **S20** 268; *Trichotosia biflora* Griff., **FMP4** 103; *Trichotosia tuberosa* (Hook.f.) Kraenzl., **FMP4** 103; *Eria monticola* Hook.f., **H44** 363; epiphyte to 60 cm long; montane forests at 900–1200 m; widespread.
- 233.139.7 **Trichotosia poculata** (Ridl.) Kraenzl., **FMP4** 103, **S20** 268; *Eria poculata* Ridl., **H44** 363; epiphyte to 100 cm long; montane forest about 900 m; widespread.
- 233.139.8 **Trichotosia rotundifolia** (Ridl.) Kraenzl., **FMP4** 102, **S20** 261; *Eria rotundifolia* Ridl., **H44** 360; creeping epiphyte a few cm tall; P. Langkawi, Pn.
- 233.139.9 **Trichotosia teysmannii** (J.J.Sm.) Kraenzl., **S20** 262; *Eria teysmannii* J.J.Sm., **H44** 359; pendulous epiphyte to 200 cm long; often on riverside trees; Kl, Ph, Jh.
- 233.139.10 **Trichotosia velutina** (Lodd. ex Lindl.) Kraenzl., **FMP4** 101, **S20** 265; *Eria velutina* Lodd. ex Lindl., **H44** 361; epiphyte to 40 cm tall; lowlands; widespread and common.
- 233.139.11 **Trichotosia vestita** (Lindl.) Kraenzl., **FMP4** 100, **S20** 262; *Eria vestita* Lindl., **H44** 359; epiphyte to 200 cm long; lowlands and mountains; widespread.
- 233.140.1 **Tropidia angulosa** (Lindl.) Blume, **FMP4** 209, **H44** 142, **S20** 50; herb about 30 cm tall; once near Ipoh, Pk.
- 233.140.2 **Tropidia curculigoides** Lindl., **FMP4** 209, **H44** 143, **S20** 53; herb to nearly 100 cm tall; lowland and montane forest; widespread.
- 233.140.3 **Tropidia graminea** Blume, **H44** 143, **S20** 53; herb to nearly 100 cm tall; lowland and montane forest; widespread.
- 233.140.4 **Tropidia pedunculata** Blume, **H44** 142, **S20** 51; *Tropidia maingayi* Hook.f., **FMP4** 209; herb 50–100 cm tall; in damp lowland and montane forest; widespread.
- 233.141.1 **Tuberolabium rhopalorrhachis** (Rchb.f.) J.J. Wood, **S20** 698; *Dendrocolla brachyglottis* (Hook.f.) Ridl., **FMP4** 189; *Saccolabium rhopalorrhachis* (Rchb.f.) J.J.Sm., **H44** 737; epiphyte about 10 cm tall; montane forest; Pk, Ph.
- 233.142.1 **Vanda helvola** Blume, **H44** 716, **S20** 660; epiphyte to 50 cm long; Pk, Sl.

- 233.143.1 **Vandopsis gigantea** (Lindl.) Pfitz., **H44** 647, **S20** 588; *Stauroopsis gigantea* (Lindl.) Benth. & Hook.f., **FMP4** 155; large epiphyte; Ps, P. Langkawi, Tg, Ml.
- 233.144.1 **Vanilla albida** Blume, **S20** 127; *Vanilla montana* Ridl., **FMP4** 201, **H44** 97; long stout climber; montane forest at 1350 m; once from Gg Korbu, Pk.
- 233.144.2 **Vanilla aphylla** Blume, **FMP4** 201, **H44** 98, **S20** 127; climber; on low bushes in open places; Ps.
- 233.144.3 **Vanilla griffithii** Rchb.f., **FMP4** 201, **H44** 95, **S20** 125; climber; on trees in fairly open places; throughout.
- 233.144.4 **Vanilla kinabaluensis** Carr, **H44** 96, **S20** 125; climber; montane forest; Ph.
- 233.144.5 **Vanilla pilifera** Holttum, **H44** 95, **S20** 125; climber; known only from Kota Tinggi, Jh.
- 233.145.1 **Ventricularia tenicaulis** (Hook.f.) Garay, **S20** 592; *Saccolabium tenicaule* Hook.f., **FMP4** 171; *Uncifera tenuicaulis* (Hook.f.) Holttum, **H44** 665; pendulous plant to 30 cm long; chiefly on limestone; P. Langkawi, Pn, Pk, Ph, Sl.
- 233.146.1 **Vrydagzynea albida** (Blume) Blume, **FMP4** 211, **H44** 138, **S20** 65; herb to 25 cm tall; lowland and montane forest; Pk, Ph, Sp.
- 233.146.2 **Vrydagzynea lancifolia** Ridl., **FMP4** 210, **H44** 137, **S20** 65; herb to 20 cm tall; lowland forest; widespread.
- 233.146.3 **Vrydagzynea tristriata** Ridl., **FMP4** 221, **H44** 138, **S20** 65; herb to 10 cm tall; damp lowland forest; Pk, Ph, Jh, Sp.
- 233.147.1 **Zeuxine affinis** (Lindl.) Benth. ex Hook.f., **FMP4** 217, **S20** 89; *Zeuxine gracilis* auct. non (Breda) Blume, **H44** 136 in part; herb to 20 cm tall; hill forest; Government Hill, Pn.
- 233.147.2 **Zeuxine clandestina** Blume, **FMP4** 217, **H44** 135, **S20** 89; herb 10–25 cm tall; open places in lowlands; widespread.
- 233.147.3 **Zeuxine gracilis** (Breda) Blume, **H44** 136 in part, **S20** 89; herb to 20 cm tall; once from Tembeling, Ph.
- 233.147.4 **Zeuxine palustris** Ridl., **FMP4** 217, **H44** 135, **S20** 87; herb to 30 cm tall; damp grassy places; only known from type; Ulu Temengor, Pk; endemic.
- 233.147.5 **Zeuxine parvifolia** (Ridl.) Seidenf., **S20** 87; *Hetaeria parvifolia* Ridl., **FMP4** 223, **H44** 117; herb about 25 cm tall; in the hills; Pn, Pk.
- 233.147.6 **Zeuxine purpurascens** Blume, **H44** 134, **S20** 85; herb to 10 cm tall; once from Tembeling, Ph.

- 233.147.7 **Zeuxine reniformis** Hook.f., **FMP4** 217, **H44** 134, **S20** 85; herb about 30 cm tall; only known from type; an old collection from Pk; endemic.
- 233.147.8 **Zeuxine rupestris** Ridl., **FMP4** 218, **H44** 136, **S20** 89; herb 14–20 cm tall; once on Penang Hill; endemic.
- 233.147.9 **Zeuxine strateumatica** (L.) Schltr., **H44** 133, **S20** 85; *Zeuxine sulcata* Lindl., **FMP4** 217; herb 12–20 cm tall; once near Malacca.
- 233.147.10 **Zeuxine violascens** (Blume) Ridl., **FMP4** 218, **H44** 135, **S20** 85; herb to 20 cm tall; damp lowland forest; once at Tanjung Kupang, Jh.
234. PALMAE
- 234.1.1 **Areca latiloba** Ridl., **FMP5** 3; *Areca montana* Ridl., **FMP5** 4; single-stemmed feather palm; forest understorey.
- 234.1.2 **Areca ridleyana** Furtado, **W14** 35; single-stemmed feather palm about 1 m tall; understorey of hill forest; Tg, Ph, Jh; endemic.
- 234.1.3 **Areca triandra** Roxb. ex Buch.-Ham., **FMP5** 4, **W14** 35; clumping feather palm to 6 m tall; understorey of lowland and mountain forest; widespread.
- 234.1.4 **Areca tunku** J. Dransf. & C.K. Lim, **D34** 81; stilt-rooted feather palm to 2.5 m tall; hill forest; Tg, Pk, Jh.
- 234.2.1 **Arenga hastata** (Becc.) Whitmore, **W11** 124, **W14** 37; *Didymosperma hastata* Becc., **FMP5** 20; clustering feather palm to 1 m tall; lowland forest, sometimes on limestone; Tg, Pk, Ph, Sl, Jh.
- 234.2.2 **Arenga hookeriana** (Becc.) Whitmore, **W11** 124, **W14** 37; *Didymosperma hastata* Becc., **FMP5** 20; tiny clustering feather palm to 50 cm tall; lowland forest including on limestone; widespread.
- 234.2.3 **Arenga obtusifolia** Mart., **K45** 27.
- 234.2.4 **Arenga pinnata** (Wurmb) Merr., **W14** 37; *Arenga saccharifera* Labill.; feather palm to 10 m tall or more; naturalizing around villages; native of Assam and Burma.
- 234.2.5 **Arenga westerhoutii** Griff., **FMP5** 19, **W14** 38; feather palm to 10 m or more tall; locally gregarious in hillside forest including on limestone; widespread.
- 234.3.1 **Borassodendron machadonis** (Ridl.) Becc., **D26** 353, **W14** 39; *Borassus machadonis* Ridl., **FMP5** 71; fan palm to 20 m tall; lowland forest including on limestone; Kl, Pk.

- 234.4.1 **Calamus axillaris** Becc., **D29** 135; rattan to 40 m long; lowland swamp forest; Ph, Pk, Jh; endemic.
- 234.4.2 **Calamus balingensis** Furtado, **D29** 234; rattan to 12 m tall; only known from type, Gg Baling, Kd; endemic.
- 234.4.3 **Calamus blumei** Becc., **D29** 192; clustering rattan climbing to 15 m tall; swampy or wet forest to 800 m; Pk, Ph, Sl, NS, Jh.
- 234.4.4 **Calamus burkillianus** Becc. ex Ridl., **FMP5** 56, **D29** 241; clustering rattan climbing to 20 m; forming thickets near the sea; Tg, Ph, Jh; endemic.
- 234.4.5 **Calamus caesius** Blume, **FMP5** 60, **W14** 43, **D29** 135; clustering rattan to 100 m long; swampy and wet lowland forests; Pk, Ph, Sl, NS, MI, Jh.
- 234.4.6 **Calamus castaneus** Griff., **FMP5** 63, **W14** 43, **D29** 130; stemless feather palm about 1.5 m tall; lowland and hill forest to 800 m; Kd, Kl, Tg, Pn, Pk, Ph, Sl, NS, MI, Jh.
- 234.4.7 **Calamus cockburnii** J. Dransf., **D29** 173; short-stemmed erect rattan; hill forest; only known from Gg Tapis, Ph; endemic.
- 234.4.8 **Calamus concinnus** Martelli, **FMP5** 59 in part, **D29** 230; *Plectocomiopsis ferox* Ridl., **FMP5** 66; rosette-forming rattan; lowland forest; Ps, Kd, Pk.
- 234.4.9 **Calamus conirostris** Becc., **FMP5** 60, **D29** 186; clustering rattan climbing to 10 m; steep slopes in hill forest; Tapah, Pk, and Bt Lagong, Sl.
- 234.4.10 **Calamus corneri** Furtado, **D29** 219; clustering rattan climbing to 20 m; lowland forest; Ulu Kemaman, Tg, and near Kuantan, Ph; endemic.
- 234.4.11 **Calamus densiflorus** Becc., **FMP5** 53, **D29** 244; *Calamus neglectus* Becc., **FMP5** 62; clustering high-climbing rattan 30–40 m tall; lowland forest to 600 m; Kd, Tg, Pk, Ph, Sl, NS, MI, Jh, Sp; endemic.
- 234.4.12 **Calamus diepenhorstii** Miq., **FMP5** 55, **D29** 246; clustering rattan climbing to 20 m; lowland and hill forests to 700 m; Kl, Tg, Pn, Pk, Ph, Sl, NS, MI, Jh, Sp.
- 234.4.13 **Calamus endauensis** J. Dransf., **D29** 152; slender clustering rattan to 25 m tall; hill forest at 200 m; known only from type, Gg Janing, Jh; endemic.
- 234.4.14 **Calamus erinaceus** (Becc.) J. Dransf., **D29** 130; *Calamus aquatilis* Ridl., **FMP5** 63; robust thicket-forming rattan; backs of mangrove swamps, coastal sand bars; Tg, Pk, Ph, Sl, NS, MI, Jh, Sp.
- 234.4.15 **Calamus exilis** Griff., **FMP5** 54, **D29** 176; *Calamus curtisii* Ridl., **FMP5** 54; solitary or clustering rattan to 15 m tall; lowlands and hills to 1000 m; Tg, Pn, Pk, Ph, Sl, MI, Jh.

- 234.4.16 **Calamus filipendulus** Becc., **FMP5** 51, **D29** 205; *Calamus pauciflorus* Ridl., **FMP5** 57; slender clustering rattan to 5 m tall; lowlands and hills; Pk, Ph, Sl; endemic.
- 234.4.17 **Calamus flabellatus** Becc., **D29** 195; *Calamus flabelloides* Furtado, **D29** 195; very slender clustering rattan; swamp forest; only known from Sg Kayu, Jh.
- 234.4.18 **Calamus holttumii** Furtado, **D29** 222; solitary rattan climbing to 15 m tall; hill forest; Bt Bauk, Tg, and Gg Panti and Ulu Endau, Jh; endemic.
- 234.4.19a **Calamus insignis** Griff. var. **insignis**, **FMP5** 51, **D29** 212; slender clustering rattan climbing high; lowland and hill forest to 800 m; Kd, Tg, Pk, Ph, Sl, NS, Jh; endemic variety.
- 234.4.19b **Calamus insignis** Griff. var. **longispinosus** J. Dransf., **D29** 213; slender solitary rattan climbing high; steep slopes and ridgetops in hill forest 100–1000 m; Kd, Tg, Pk, Ph, Sl, NS.
- 234.4.19c **Calamus insignis** Griff. var. **robustus** (Becc.) J. Dransf.; slender clustering rattan climbing high; lowland forest; Pk; endemic variety.
- 234.4.20 **Calamus javensis** Blume, **FMP5** 49, **D29** 198; slender clustering rattan to 10 m tall; lowland and hill forests to 1200 m; Kd, Kl, Tg, Pk, Ph, Sl, NS, Ml, Jh, Sp.
- 234.4.21 **Calamus laevigatus** Martelli, **D29** 138; *Calamus pallidulus* Becc., **FMP5** 62 'pallidus'; solitary rattan to 30 m long; lowland and hill forests to 800 m; Kd, Kl, Tg, Pk, Ph, Sl, NS, Jh, Sp.
- 234.4.22 **Calamus laxissimus** Ridl., **FMP5** 63, **D29** 170; solitary rattan to 3 m long; Kl, Ph, Jh; endemic.
- 234.4.23 **Calamus lobbianus** Becc., **FMP5** 59, **D29** 190; solitary rattan, stem to 50 cm tall; lowland and hill forest; Kl, Ph, Sl, NS, Jh, Sp.
- 234.4.24 **Calamus longisetus** Griff., **D29** 154; clustering rattan to 5 m tall; lowland forest; P. Langkawi.
- 234.4.25 **Calamus longispathus** Ridl., **FMP5** 62, **D29** 179; thicket-forming rattan to 7 m tall; ridgetops in hill forest; Tg, Pk, Ph, Sl, NS, Ml, Jh.
- 234.4.26 **Calamus luridus** Becc., **FMP5** 56 in part, **D29** 237; *Calamus distans* Ridl., **FMP5** 56; *Calamus laxiflorus* Becc., **FMP5** 56; slender clustering rattan to 15 m tall; lowland to lower montane forest at 1400 m; Kl, Tg, Pk, Ph, Sl, NS, Jh, Sp; endemic.
- 234.4.27 **Calamus manan** Miq., **FMP5** 53, **D29** 143; massive solitary rattan reaching 100 m long; lowland and, more commonly, hill forest to 1000 m; Kl, Tg, Pk, Ph, Sl, NS, Jh.

- 234.4.28 **Calamus minutus** J. Dransf., **D29** 173; stemless feather palm to 60 cm tall; steep slopes in lowland forest at 150 m; only known from Ulu Setiu F.R., Tg; endemic.
- 234.4.29 **Calamus moorehousei** Furtado, **D29** 234; rattan; lowland forest; known only from type; Kuala Pilah, NS; endemic.
- 234.4.30 **Calamus multirameus** Ridl., **D29** 157; slender rattan; Ph, Pk; endemic.
- 234.4.31 **Calamus ornatus** Blume, **FMP5** 53, **D29** 201; large clustering rattan to 50 m long; lowland to lower montane forests at 1100 m; Kd, Kl, Tg, Pk, Ph, Sl, NS, Jh, Sp.
- 234.4.32a **Calamus oxleyanus** Teijsm. & Binn. var. **montanus** Furtado, **D29** 148; solitary or clustering rattan to 5 m long; montane forest; known only from Gg Padang, Tg; endemic variety.
- 234.4.32b **Calamus oxleyanus** Teijsm. & Binn. var. **oxleyanus**, **FMP5** 62, **D29** 148; solitary or clustering rattan to 5 m long; lowland forest on gentle slopes; Tg, Ph, Sl, NS, Ml, Jh, Sp.
- 234.4.33 **Calamus padangensis** Furtado, **D29** 176; clustering rattan; montane forest at 1300 m; known only from type; Gg Padang, Tg; endemic.
- 234.4.34 **Calamus palustris** Griff. var. **malaccensis** Becc., **FMP5** 61, **D29** 140; *Calamus dumetorum* Ridl., **FMP5** 63; clustering rattan to 25 m tall; secondary forest; Pn, Pk; endemic variety.
- 234.4.35 **Calamus pandanosmus** Furtado, **D29** 201; clustering rattan to 15 m tall; lowland forest; once each from Tg and Ph.
- 234.4.36 **Calamus paspalanthus** Becc., **FMP5** 55, **D29** 157; solitary rattan to 20 m tall; lowland forest to 500 m; Kl, Pk, Sl, Jh.
- 234.4.37 **Calamus penicillatus** Roxb., **D29** 216; *Calamus penangensis* Ridl., **FMP5** 51; extremely slender clustering rattan to 40 m tall; hill forest at 650 m; Penang Hill; endemic.
- 234.4.38a **Calamus perakensis** Becc. var. **crassus** J. Dransf., **D29** 167; solitary rattan to 2 m long; slopes in lowland forest at 100–500 m; Tg; endemic variety.
- 234.4.38b **Calamus perakensis** Becc. var. **niger** J. Dransf., **D29** 167; solitary rattan to 5 m long; swamp forest margins; Jh; endemic.
- 234.4.38c **Calamus perakensis** Becc. var. **perakensis**, **FMP5** 58, **D29** 164; clustering rattan to 3 m long, often stemless; lower montane forest at 900–1500 m; Pk, Ph, Sl.
- 234.4.39 **Calamus peregrinus** Furtado, **D29** 183; solitary rattan to 20 m tall; slopes and ridges in hill forest to 600 m; Kd, Kl, Pk, Sl, NS; endemic.

- 234.4.40 **Calamus polystachys** Becc., **D29** 132; thicket-forming rattan climbing high; only known from Mentakab, Ph, and P. Tioman.
- 234.4.41 **Calamus pycnocarpus** (Furtado) J. Dransf., **D29** 186; slender clustering rattan to 30 m tall; lowland forest; only known from Kemaman, Tg; endemic.
- 234.4.42 **Calamus radulosus** Becc., **FMP5** 57, **D29** 226; rattan climbing 10–15 m; only known from two collection from Pk; endemic.
- 234.4.43 **Calamus ridleyanus** Becc., **FMP5** 54, **D29** 246; clustering rattan climbing to 30 m; lowland forest; Tg, Jh, Sp; endemic.
- 234.4.44 **Calamus rugosus** Becc., **FMP5** 58, **D29** 219; slender rattan climbing to 8 m; lowland and hill forest; Pk, Ph, Jh.
- 234.4.45 **Calamus scabridulus** Becc., **FMP5** 58, **D29** 226; clustering rattan to 20 m tall; peat swamp forest; Tg, Sl, Jh.
- 234.4.46 **Calamus scipionum** Lour., **FMP5** 52, **D29** 203; massive clustering rattan climbing to a great height; lowlands, rarely above 200 m; Kd, Pn, Pk, Ph, Sl, NS, Ml, Jh.
- 234.4.47 **Calamus sedens** J. Dransf., **D29** 161; *Calamus ramosissimus auct. non* Griff., **FMP5** 58; rattan, often stemless, to 2 m tall; hill forest to 1100 m; Kd, Kl, Tg, Pk, Ph, Sl, NS, Jh; endemic.
- 234.4.48 **Calamus senalingensis** J. Dransf., **D29** 216; solitary rattan climbing to 15 m tall; only known from Bt Senaling, Kuala Pilah, NS; endemic.
- 234.4.49 **Calamus setulosus** J. Dransf., **D29** 237; slender rattan; lowland forest including on limestone; twice from Pk; endemic.
- 234.4.50 **Calamus siamensis** Becc. var. **malaianus** Furtado, **FMP5** 59, **D29** 230; clustering rattan to 5 m tall; open ground in the lowlands; Ps, Kd.
- 234.4.51 **Calamus simplex** Becc., **D29** 140; thicket-forming rattan to 6 m tall; lower montane forest mostly at 1500–2000 m; Pk, Ph; endemic.
- 234.4.52 **Calamus speciosissimus** Furtado, **D29** 205; clustering rattan to 25 m tall; lowland forest including swamps; Tg, Ph, Sl, NS, Ml, Jh; endemic.
- 234.4.53 **Calamus spectatissimus** Furtado, **D29** 179; clustering rattan climbing to 20 m; lowland forest; once from Kroh, Pk.
- 234.4.54 **Calamus tanakadatei** Furtado, **D29** 222; rattan to 20 m tall; lowland and hill forest to 500 m; Tg, Ph, Sl, NS, Jh; endemic.
- 234.4.55 **Calamus tomentosus** Becc., **FMP5** 52, **D29** 192; clustering rattan to 20 m tall; steep slopes in hill forest to 800 m; Tg, Pk.

- 234.4.56 **Calamus tumidus** Furtado, **D29** 145; solitary rattan to 60 m long; swampy lowland forest; Tg, Ph, NS, Jh.
- 234.4.57 **Calamus ulur** Becc., **D29** 152; clustering rattan to 10 m tall; swamp forest; only known from the base of Gg Panti, Jh.
- 234.4.58 **Calamus viminalis** Willd. var. **fasciculatus** (Roxb.) Becc., **D29** 234; rattan; once from Pn.
- 234.4.59 **Calamus viridispinus** Becc., **FMP5** 61, **D29** 148; *Calamus brevispadix* Ridl., **FMP5** 61; *Calamus distichus* Ridl., **FMP5** 60; *Calamus elegans* Ridl., **FMP5** 61; slender clustering rattan to 10 m tall, sometimes stemless; montane forest at 1000–2200 m; Kl, Tg, Pk, Ph, Sl; endemic.
- 234.4.60 **Calamus whitmorei** J. Dransf., **FMP5** 170; slender solitary rattan to 3 m long; montane forest at 1300 m; known only from Gg Padang, Tg; endemic.
Calamus pulaiensis Becc. [**FMP5** 56, **D30** 248]; remains a doubtful species.
- 234.5.1 **Calospatha scortechinii** Becc., **FMP5** 47, **D29** 72; solitary rattan to 10 m long; valleys in hill forest; Bt Lagong and Ulu Semenyih, Sl, and Bt Tangga, NS; endemic.
- 234.6.1 **Caryota mitis** Lour., **FMP5** 21, **W14** 44; clump-forming fishtail palm to 4 m tall; lowland secondary forests; throughout.
- 234.6.2 **Caryota maxima** Blume, **D27** 89; *Caryota aequatorialis* (Becc.) Ridl., **FMP5** 20; *Caryota obtusa* Griff. var. *aequatorialis* Becc., **W14** 45; solitary fishtail palm to 30 m tall; montane forest at 1000–1500 m; Main Range.
- 234.7.1 **Ceratolobus kingianus** Becc., **FMP5** 46, **D29** 251; slender clustering rattan 5–8 m long; lowland forest including swamps; Tg, Pk, Ph; endemic.
- 234.7.2 **Ceratolobus subangulatus** (Miq.) Becc., **D29** 251; *Ceratolobus laevigatus* (Martelli) Becc., **FMP5** 46; clustering rattan to 15 m tall, usually shorter; lowland and hill forest to 800 m; Tg, Pk, Ph, Sl, Ml, Sp.
- 234.8.1 **Cocos nucifera** L., **W14** 48; large feather palm to 25 m tall; sandy shores, widely planted; all coasts.
- 234.9.1 **Corypha utan** Lam., **D36** 207, **K46** 28; *Corypha elata* Roxb., **FMP5** 22, **W14** 51; solitary fan palm to 20 m tall; lowlands; Ps, Kd, Kl, Sl.
- 234.10.1 **Cyrtostachys renda** Blume, **D36** 380, **K46** 28; *Cyrtostachys lakka* Becc., **FMP5** 17, **W14** 53; clump-forming feather palm with scarlet crown shaft to 12 m tall; peat swamp forest; scattered.

- 234.11.1 ***Daemonorops angustifolia*** (Griff.) Martelli, **FMP5** 36, **D29** 78; *Daemonorops carcharodon* Ridl., **FMP5** 40; *Daemonorops hygrophila* Griff., **FMP5** 40; thicket-forming rattan to 40 m tall; damp lowland forest, riverbanks; Kd, Kl, Tg, Pk, Ph, Sl, NS, Ml, Jh, Sp.
- 234.11.2 ***Daemonorops brachystachys*** Furtado, **D29** 94; rattan to 1 m tall; by streams in lowland forest; Kd, Kl, Pk, Sl.
- 234.11.3 ***Daemonorops calicarpa*** (Griff.) Martelli, **FMP5** 37, **D29** 85; *Daemonorops microthamna* Becc., **FMP5** 37; thicket-forming, usually stemless, feather palm; lowland and hill forest; Pk, Ph, Sl, NS, Ml, Jh.
- 234.11.4 ***Daemonorops didymophylla*** Becc., **FMP5** 41, **D29** 90; rattan to 15 m long; lowland and hill forest to 1000 m; Kl, Tg, Pn, Pk, Ph, Sl, NS, Jh, Sp.
- 234.11.5 ***Daemonorops geniculata*** (Griff.) Martelli, **FMP5** 44, **D29** 107; usually solitary rattan to 20 m tall; common in lowland and hill forest to 1000 m; Kd, Kl, Tg, Pn, Pk, Ph, Sl, NS, Ml, Jh, Sp.
- 234.11.6 ***Daemonorops grandis*** (Griff.) Martelli, **FMP5** 38, **D29** 80; clustering rattan climbing to 20 m; steep slopes in the hills to 900 m; Pk, Ph, Sl, NS, Ml, Sp.
- 234.11.7a ***Daemonorops hystrix*** (Griff.) Martelli var. ***hystrix***, **FMP5** 42, **D29** 101; clustering rattan to 10 m tall; lowland forest to 300 m; Kl, Pk, Ph, Sl, NS, Ml, Jh, Sp.
- 234.11.7b ***Daemonorops hystrix*** (Griff.) Martelli var. ***minor*** Becc., **FMP5** 43, **D29** 104; very slender rattan to 1.5 m tall; ridge-top forest to 1000 m; Kd, Tg, Pk; endemic variety.
- 234.11.8 ***Daemonorops kunstleri*** Becc., **FMP5** 43, **D29** 104; *Daemonorops vagans* Becc., **FMP5** 43; clustering rattan to 5 m tall, sometimes stemless; lowlands and mountains to 1400 m; Kd, Kl, Tg, Pk, Ph, Sl, NS, Jh, Sp.
- 234.11.9 ***Daemonorops leptopus*** (Griff.) Martelli, **FMP5** 42, **D29** 96; clustering rattan to 15 m tall; lowland and hill forest to 1000 m; Kl, Tg, Pk, Ph, Sl, NS, Ml, Jh, Sp; endemic.
- 234.11.10 ***Daemonorops lewisiana*** (Griff.) Martelli, **FMP5** 38, **D29** 85; *Daemonorops pseudosepal* Becc., **FMP5** 40; thicket forming rattan rarely more than 2 m tall; lowlands and hills; Kd, Pn, Pk, Jh, Sp.
- 234.11.11 ***Daemonorops longipes*** (Griff.) Martelli, **FMP5** 44, **D29** 117; clustering rattan not high climbing; damp spots in lowland forest; Ph, NS, Ml, Jh, Sp.
- 234.11.12 ***Daemonorops macrophylla*** Becc., **FMP5** 46, **D29** 109; clustering rattan reaching to 20 m; lowland and hill forest to 800 m; Tg, Pk, Ph, Sl, NS, Jh; endemic.

- 234.11.13 **Daemonorops melanochaetes** Blume, **D29** 80; clustering rattan to 30 m tall; dry ground near the sea; Pk, Ph, NS, MI, Jh.
- 234.11.14 **Daemonorops micracantha** (Griff.) Becc., **FMP5** 41, **D29** 96; rattan climbing to 20 m or more; lowland forest to 400 m; Tg, Pk, Ph, NS, Jh, Sp.
- 234.11.15 **Daemonorops monticola** (Griff.) Martelli, **FMP5** 37, **D29** 87; clustering rattan climbing to 5 m; hill forest; Pn, Jh; endemic.
- 234.11.16 **Daemonorops oligophylla** Becc., **D29** 112; slender clustering rattan; montane forest; only known from Gg Tambang Batak, Pk; endemic.
- 234.11.17 **Daemonorops periacantha** Miq., **FMP5** 44, **D29** 117; clustering rattan about 10 m long; lowland forest to 200 m; Jh, Sp.
- 234.11.18 **Daemonorops propinqua** Becc., **FMP5** 41, **D29** 94; thicket-forming rattan to 5 m tall; lowland swamps; Pk, Ph, SI, MI; endemic.
- 234.11.19 **Daemonorops sabut** Becc., **FMP5** 46, **D29** 109; clustering rattan to 20 m or more tall; alluvial or freshwater swamp forest to 250 m; Tg, Pk, Ph, NS, Jh, Sp.
- 234.11.20 **Daemonorops scapigera** Becc., **FMP5** 43, **D23** 65; *Daemonorops lasiospatha* Furtado, **D29** 114; solitary, almost stemless rattan; lowland forest; Jh.
- 234.11.21 **Daemonorops sepal** Becc., **FMP5** 36, **D29** 82; *Daemonorops scortechinii* Becc., **FMP5** 36; *Daemonorops imbellis* Becc., **FMP5** 41; clustering rattan to 10 m tall; slopes and ridges in montane forest; Kl, Tg, Pk, Ph, SI; endemic.
- 234.11.22 **Daemonorops verticillatus** (Griff.) Martelli, **FMP5** 45, **D29** 112; usually solitary rattan to 15 m long; lowland and hill forest to 1000 m; Kl, Tg, Pk, Ph, SI, NS, MI, Jh.
- 234.12.1 **Eleiodoxa conferta** (Griff.) Burret, **D36** 249, **K46** 28; *Salacca conferta* Griff., **FMP5** 32 'Zalacca', **W14** 106; stemless thicket-forming feather palm to 6 m tall; wet places in lowland forest; throughout.
- 234.13.1 **Eugeissona brachystachys** Ridl., **FMP5** 34, **W14** 60; stemless feather palm to 6 m tall; lowland forest; Tg, Ph; endemic.
- 234.13.2 **Eugeissona tristis** Griff., **FMP5** 34, **W14** 59; clumping stemless feather palm to nearly 10 m tall; lowland and hill forest to about 700 m; ?Ps, Kd, Kl, Tg, Pn, Pk, Ph, SI, NS, MI, Jh; endemic.
- 234.14.1 **Iguanura bicornis** Becc., **FMP5** 16, **K21** 204, **W14** 63; *Pinanga canina* Becc., **FMP5** 6; *Iguanura arakudensis* Furtado, **W14** 62; feather palm 1–2 m tall; hill and lower montane forest at 1000–1500 m; Kd, Pk.
- 234.14.2 **Iguanura corniculata** Becc., **FMP5** 15, **K21** 205, **W14** 63; feather palm 1–1.3 m tall; hill forest; Selama, Pk, and Bt Serdam (limestone), Ph; endemic.

- 234.14.3 **Iguanura polymorpha** Becc., **FMP5** 15 incl. var. *canina* Becc., **K21** 212, **W14** 64; *Iguanura ferruginea* Ridl., **FMP5** 15; *Iguanura brevipes* Hook.f., **W14** 63; solitary or clustering feather palm 1–3 m tall; lowlands and mountains to 1500 m; Kd, Kl, Tg, Pk.
- 234.14.4a **Iguanura wallichiana** (Wall. ex Martelli) Hook.f. ssp. **malaccensis** (Becc.) Kiew var. **elatifior** Kiew, **K21** 223; simple-leaved palm 0.5–3.5 m tall; known only from Gg Belumut, Jh; endemic variety.
- 234.14.4b **Iguanura wallichiana** (Wall. ex Martelli) Hook.f. ssp. **malaccensis** (Becc.) Kiew var. **humilis** Kiew, **K21** 223; solitary, often stemless, simple-leaved palm to 1 m tall; known only from Kemaman, Tg; endemic variety.
- 234.14.4c **Iguanura wallichiana** (Wall. ex Martelli) Hook.f. ssp. **malaccensis** (Becc.) Kiew var. **malaccensis**, **K21** 222; *Iguanura geonomaeformis* Griff. ex Martelli, **FMP5** 13 incl. vars. *malaccensis* (Becc.) Ridl. and *ramosa* Ridl., **W14** 63; gregarious feather palm 1–2 m tall; along streams and other wet places in lowland forest; common south of Genting Simpah and Kemaman.
- 234.14.4d **Iguanura wallichiana** (Wall. ex Martelli) Hook.f. ssp. **wallichiana** var. **major** Becc. ex Hook.f., **K21** 221; *Iguanura spectabilis* Ridl., **FMP5** 14; simple-leaved palm 1.5–2.5 m tall; hill forest; Pk.
- 234.14.4e **Iguanura wallichiana** (Wall. ex Martelli) Hook.f. ssp. **wallichiana** var. **wallichiana**, **FMP5** 14, **K21** 221, **W14** 65; *Iguanura diffusa* Becc., **FMP5** 15; often gregarious feather palm 1–2 m tall; lowland and hill forest to 1000 m; north of Fraser's Hill and Sg Dungun.
- 234.15.1 **Johannesteijsmannia altifrons** (Rchb.f. & Zoll.) H.E. Moore, **D25** 68; *Teysmannia altifrons* Rchb.f. & Zoll., **FMP5** 31 in part, **W14** 110; solitary stemless simple-leaved palm to 6 m tall; primary lowland forest; Kl, Ph, Sl, Jh.
- 234.15.2 **Johannesteijsmannia lanceolata** J. Dransf., **D25** 78; solitary stemless simple-leaved palm to 3.5 m tall; lowland and hill forest; Ph, Sl; endemic.
- 234.15.3 **Johannesteijsmannia magnifica** J. Dransf., **D25** 75; *Teysmannia altifrons* auct. non Rchb.f. & Zoll., **FMP5** 31 in part; solitary stemless simple-leaved palm to 5 m tall; lowland forest to 500 m; Sl, NS; endemic.
- 234.15.4 **Johannesteijsmannia perakensis** J. Dransf., **D25** 73; *Teysmannia altifrons* auct. non Rchb.f. & Zoll., **FMP5** 31 in part; solitary simple-leaved palm to 4 m tall; hill forest; Pk; endemic.
- 234.16.1 **Korthalsia echinometra** Becc., **FMP5** 68, **D29** 47, **D30** 188; clustering ant-inhabited rattan to 30 m tall; lowland and hill forest; Tg, Ph, Sl, Jh, Sp.

- 234.16.2 **Korthalsia flagellaris** Miq., **FMP5** 70, **D29** 42, **D30** 180; *Korthalsia rubiginosa* Becc., **FMP5** 70; clustering rattan to 40 m long; peat swamp forest; Tg, Pk, Ph, Sl, NS, Jh.
- 234.16.3 **Korthalsia hispida** Becc., **D29** 50, **D30** 192; clustering fish-tailed rattan to 30 m tall; swampy lowland forest or near rivers; Ph, Jh.
- 234.16.4 **Korthalsia laciniosa** (Griff.) Martelli, **D30** 179; *Korthalsia grandis* Ridl., **FMP5** 69, **D29** 40; *Korthalsia wallichiaefolia* (Griff.) H. Wendl., **FMP5** 69; clustering fish-tailed rattan climbing high; lowland and hill forest to 1100 m; Kl, Pn, Pk, Ph, Sl, NS, Jh, Sp.
- 234.16.5 **Korthalsia lanceolata** J. Dransf., **D29** 45, **D30** 174; clustering high-climbing rattan; lowland and hill forest to 500 m; Pk, Sl; endemic.
- 234.16.6 **Korthalsia rigida** Blume, **D29** 38, **D30** 172; *Korthalsia polystachya* Martelli, **FMP5** 69; *Korthalsia ferox* Becc. var. *malayana* Becc., **FMP5** 69, **D29** 38; clustering fish-tailed rattan moderately high-climbing; lowlands and mountains to 1100 m; Kd, Kl, Tg, Pn, Pk, Ph, Sl, NS, Ml, Jh, Sp.
- 234.16.7 **Korthalsia rostrata** Blume, **D30** 184; *Korthalsia scaphigera* Griff. ex Martelli, **FMP5** 68, **D29** 47; ? *Korthalsia machadonis* Ridl., **FMP5** 68; slender fish-tailed ant-inhabited rattan; lowland and hill forest to 800 m; Pk, Ph, Sl, NS, Ml, Jh, Sp.
- 234.16.8 **Korthalsia scortechinii** Becc., **FMP5** 68, **D29** 50, **D30** 189; clustering ant-inhabited high-climbing rattan; lowland and hill forest to 900 m; Pn, Pk, Ph, Sl, NS, Ml, Sp; endemic.
- 234.16.9 **Korthalsia tenuissima** Becc., **FMP5** 69, **D29** 42; slender fish-tailed rattan reaching 60 m long; lowland and hill forest to 500 m; Pk, Sl; endemic.
- 234.17.1 **Licuala acutifida** Martelli, **FMP5** 27 in part, **F23** 44; small fan palm; hill forest; Pn; endemic.
- 234.17.2 **Licuala confusa** Furtado, **F23** 44; stemless fan palm about 1 m tall; hill forest; Pk; endemic.
- 234.17.3 **Licuala corneri** Furtado, **F23** 47; solitary fan palm 2–4 m tall; hill forest; known only from Kemaman, Tg; endemic.
- 234.17.4 **Licuala dransfieldii** Kiew, **K32** 263; fan palm to 3 m tall; hill slopes in lowland forest; Ulu Endau, Jh; endemic.
- 234.17.5 **Licuala ferruginea** Becc., **FMP5** 26, **F23** 47; short-stemmed or stemless fan palm; lowland forest; Tg, Ph, NS, Jh, Sp.
- 234.17.6a **Licuala glabra** Griff. var. *glabra*, **FMP5** 26, **F23** 49, **W14** 69; *Licuala longepedunculata* Ridl., **FMP5** 26; stemless or stout-stemmed palm to 3 m tall; forest understorey, lowlands and mountains; Kl, Pk, Ph, Sl, Ml.

- 234.17.6b **Licuala glabra** Griff. var. **selangorensis** Becc., **FMP5** 26, **F23** 50, **W14** 69; fan palm to 2 m tall; lower montane forest 600–1200 m, lowlands also; Tg, Ph, Sl, Jh; endemic variety.
- 234.17.7 **Licuala kemamanensis** Furtado, **F23** 50; stemless fan palm barely 1 m tall; known only from Sg Nipa, Tg.
- 234.17.8 **Licuala kiahii** Furtado, **F23** 52; stemless fan palm barely 1 m tall; known only from Sg Kayu and Gg Pulai, Jh; endemic.
- 234.17.9 **Licuala kingiana** Becc., **FMP5** 30, **F23** 54; fan palm to about 2 m tall; hill forest; Pk; endemic.
- 234.17.10 **Licuala kunstleri** Becc., **FMP5** 27, **F23** 54; fan palm to 2 m tall; hill forest; Pk, Ph, Sl.
- 234.17.11 **Licuala lanuginosa** Ridl., **FMP5** 30, **F23** 54; *Licuala longipes* auct. non Griff., **FMP5** 27 in part; short-stemmed fan palm; hill forest; Jh; endemic.
- 234.17.12 **Licuala longicalycata** Furtado, **F23** 54; fan palm to 3 m tall; lowland forest; NS, Jh; endemic.
- 234.17.13 **Licuala longipes** Griff., **FMP5** 27 in part, **F23** 57; stemless fan palm barely 1 m tall; lowland and hill forest; Tg, Ph, NS, MI.
- 234.17.14 **Licuala malajana** Becc., **FMP5** 26 in part, **F23** 58; clumping fan palm to 2 m tall; lowland and hill forest; Kl, Tg, Ph, Sl, Jh; endemic.
- 234.17.15 **Licuala mirabilis** Furtado, **F23** 58; solitary fan palm 3–4 m tall; hill forest; Kd, Pn, Pk; endemic.
- 234.17.16 **Licuala modesta** Becc., **FMP5** 28, **F23** 60; *Licuala wrayi* Becc. ex Ridl., **FMP5** 28; fan palm to 3 m tall; lowland and mountains; Pk; endemic.
- 234.17.17 **Licuala moyseyi** Furtado, **F23** 61; fan palm; only known from Gg Padang, Tg; endemic.
- 234.17.18 **Licuala pahangensis** Furtado, **F23** 63; *Licuala malajana* auct. non Becc., **FMP5** 26 in part; fan palm; lowland forest; Ph; endemic.
- 234.17.19 **Licuala paludosa** Griff., **FMP5** 25 in part, **F23** 65; *Licuala patens* Ridl., **FMP5** 25; *Licuala paniculata* Ridl., **FMP5** 30; clumping fan palm to 6 m tall; lowlands and mountains; Pk, Sl, Jh.
- 234.17.20 **Licuala pusilla** Becc., **FMP5** 28, **F23** 66; tiny fan palm; hill forest; Kl, Sl, NS, MI.
- 234.17.21 **Licuala ridleyana** Becc., **F23** 66; *Licuala malajana* auct. non Becc., **FMP5** 26 in part; fan palm; hill forest; Gg Bujong Malacca, Pk; endemic.

- 234.17.22 **Licuala scortechinii** Becc., **FMP5** 30, **F23** 67; fan palm; hill forest; Kd, Pk; endemic.
- 234.17.23 **Licuala spinosa** Wurmbe., **FMP5** 25, **F23** 67, **W14** 70; clumping fan palm to 6 m tall; damp open sites; throughout.
- 234.17.24 **Licuala thoana** L.G. Saw & J. Dransf., **S07** 71; solitary stemless undergrowth palm barely 1 m tall; lowland forest; only known along the Sg Kinchin, Jh; endemic.
- 234.17.25 **Licuala tiomanensis** Furtado, **F23** 68; fan palm; montane forest; known only from Bt Kajang, P. Tioman; endemic.
- 234.17.26 **Licuala triphylla** Griff., **FMP5** 28 incl. var. *integrifolia* Ridl., **F23** 68; stemless fan palm barely 1 m tall; lowland and hill forest; Kd, Pk, Ph, Ns, Ml, Jh, Sp.
- 234.18.1 **Livistona endauensis** J. Dransf. & K.M. Wong, **D38** 121; *Livistona saribus auct. non* (Lour.) Chev., **W14** 72 in part; often gregarious fan palm to 15 m tall; hill forest to 660 m; only known from Ulu Endau area, Jh; endemic.
- 234.18.2 **Livistona saribus** (Lour.) Merr. ex Chev., **K46** 29; *Livistona cochinchinensis* (Blume) Martelli, **FMP5** 22 in part; fan palm to 20 m tall; landward edge of mangrove forest; Sl.
- 234.18.3 **Livistona speciosa** Kurz, **W14** 73; fan palm to 20 m tall; lower montane forest 600–1000 m; Kd, Kl, Pk, Ph, Sl.
- 234.18.4 **Livistona tahanensis** Ridl., **FMP5** 23, **W14** 74; fan palm to 8 m tall; montane forest at 1000–1600 m; only known from Gg Tahan; endemic.
- 234.19.1 **Maxburretia gracilis** (Burret) J. Dransf., **D28** 194, **C16** 69; *Liberbaileya lankawiensis* Furtado, **F24** 238; *Liberbaileya gracilis* (Burret) Burret & Potztl, **W14** 67; clustering fan palm to 3 m tall; in forest on limestone; only known from P. Dayang Bunting, Langkawi; endemic.
- 234.19.2 **Maxburretia rupicola** (Ridl.) Furtado, **F24** 240, **W14** 76, **D28** 193, **C16** 69; *Livistona rupicola* Ridl., **FMP5** 23; clustering fan palm 1–2 m tall; on limestone hills; only known from Batu Caves, Bt Takun and Anak Bt Takun, Sl; endemic.
- 234.20.1 **Myrialepis paradoxa** (Kurz) J. Dransf., **D31** 242; *Plectocomiopsis annulata* Ridl., **FMP5** 66; *Plectocomiopsis scortechinii* (Becc.) Ridl., **FMP5** 67; *Myrialepis scortechinii* Becc., **D29** 68; thicket-forming rattan to 40 m long; lowland and hill forest to 1000 m; Tg, Pk, Ph, Sl, NS, Jh, Sp.
- 234.21.1 **Nenga grandiflora** Fernando, **F06** 66; solitary feather palm to 3 m tall; lowland forest 180–500 m; Jh; endemic.

- 234.21.2 **Nenga macrocarpa** Scort. ex Becc., **FMP5** 12, **W14** 79, **F06** 65; solitary feather palm to 7 m tall; montane forest to 1300 m, sometimes in the lowlands; Kd, Tg, Pk, Ph, Sl, NS.
- 234.21.3 **Nenga pumila** (Martelli) H. Wendl. var. **pachystachya** (Blume) Fernando, **W14** 79, **F06** 61; *Nenga wendlandiana* Scheff., **FMP5** 12; feather palm to 6 m tall; lowland and hill forest to 1100 m; Kd, Kl, Pk, Ph, Sl, NS, Jh, Sp.
- 234.22.1 **Nypa fruticans** Wurmb, **FMP5** 71 'Nipa', **W14** 81; rhizomatous rosette feather palm to 6 m tall; gregarious in tidal reaches of estuaries; throughout.
- 234.23.1 **Oncosperma horridum** (Griff.) Scheff., **FMP5** 16, **W14** 82; ferociously spiny, clustered feather palm to 20 m tall; lowland and hill forest to 500 m; throughout.
- 234.23.2 **Oncosperma tigillarium** (Jack) Ridl., **W14** 83; *Oncosperma filamentosum* Blume, **FMP5** 16; 20-m-tall spiny feather palm growing in many-stemmed clumps; common near the sea; throughout.
- 234.24.1 **Orania sylvicola** (Griff.) H.E. Moore, **W14** 84; *Orania macrocladus* Martelli, **FMP5** 17; solitary feather palm to 20 m tall; lowland forest to 300 m; throughout.
- 234.25.1 **Phoenix paludosa** Roxb., **FMP5** 21, **W14** 86; clumping feather palm to 6 m tall; inland edge of mangrove forests; Ps, Kd, Kl, Tg, Pn, Pk.
- 234.26.1 **Pholidocarpus kingianus** (Becc.) Ridl., **FMP5** 24, **D35** 198; *Livistona kingiana* Becc., **W14** 72; solitary fan palm to 25 m tall; swampy lowland forest; widespread; endemic.
- 234.26.2 **Pholidocarpus macrocarpus** Becc., **FMP5** 23, **W14** 88; solitary fan palm to 15 m tall; swampy lowland forest; widespread.
- 234.27.1 **Pinanga acaulis** Ridl., **FMP5** 8; tiny feather palm barely 50 cm tall; lowland forest; Kd, Pk; endemic.
- 234.27.2 **Pinanga adangensis** Ridl., **FMP5** 10; clumping feather palm to 6 m tall; damp lowland forest; P. Langkawi; endemic.
- 234.27.3 **Pinanga beccariana** Furtado, **F20** 278; *Pinanga calamifrons* auct. non Becc., **FMP5** 9; stemmed feather palm; hill forest; Gg Jerai, Kd; endemic.
- 234.27.4 **Pinanga cleistantha** J. Dransf., **D32** 127; clustering feather palm to 2.5 m tall; damp lowland forest; only known from Ulu Setiu F.R., Tg; endemic.
- 234.27.5 **Pinanga disticha** (Roxb.) Blume ex H. Wendl., **FMP5** 7 in part, **W14** 91; clumping generally simple-leaved palm to 1.5 m tall; lowland and montane forest to 1200 m; widespread and common.

- 234.27.6 ***Pinanga fruticans*** Ridl., **FMP5** 9; clumping feather palm to 1.5 m tall; lowland forest; north-east; endemic.
- 234.27.7 ***Pinanga limosa*** Ridl., **FMP5** 8, **W14** 91; solitary simple or feather palm to 4 m tall; lowland and montane forest to 1200 m; Kl, Tg, Ph, Sl, NS, Ml, Jh, Sp.
- 234.27.8 ***Pinanga malaiana*** (Martelli) Scheff., **FMP5** 10, **W14** 91; clumping feather palm occasionally to 6 m tall; lowland and hill forest to 900 m; widespread.
- 234.27.9 ***Pinanga paradoxa*** Scheff., **FMP5** 9, **W14** 92; solitary feather palm 1–2 m tall; montane forest, usually 800–1400 m; widespread; endemic.
- 234.27.10 ***Pinanga patula*** Blume, **FMP5** 11, **W14** 92; solitary feather palm 2–5 m tall; hill and montane forest, 100–1200 m; widespread.
- 234.27.11 ***Pinanga pectinata*** Becc., **FMP5** 10, **W11** 125, **W14** 92; *Pinanga riparia* Ridl., **FMP5** 11; *Pinanga singaporensis* Ridl., **FMP5** 11; tufted feather palm 2–5 m tall; lowland and hill forest to 250 m; Pn, Pk, Ph, Sl, Jh, Sp; endemic.
- 234.27.12 ***Pinanga perakensis*** Becc., **FMP5** 10, **W11** 125, **W14** 93; *Pinanga densifolia* Ridl., **FMP5** 6; clumping feather palm to 3 m tall; ridges in lower montane forest, 900–1300 m; widespread; endemic.
- 234.27.13 ***Pinanga polymorpha*** Becc., **FMP5** 6 in part, **W11** 126, **W14** 93; *Pinanga brewsteriana* Ridl., **FMP5** 9; *Pinanga glaucescens* Ridl., **FMP5** 6; thicket-forming feather palm 1–3 m tall; gregarious in damp montane forest above 500 m; widespread; endemic.
- 234.27.14 ***Pinanga scortechinii*** Becc., **FMP5** 5, **W14** 93; usually solitary feather palm to 5 m tall; lowland and montane forest to 900 m; widespread; endemic.
- 234.27.15 ***Pinanga simplicifrons*** (Miq.) Becc., **W14** 93; *Pinanga subruminata* auct. non Becc., **FMP5** 8 in part; simple-leaved carpet-forming palm rarely more than 1 m tall; wet lowland forest; east of Main Range.
- 234.27.16 ***Pinanga subintegra*** Ridl., **FMP5** 8, **W14** 94; solitary feather palm 1–2 m tall; montane forest at 800–1400 m; Kd, Kl, Tg, Pk, Ph; endemic.
- 234.27.17 ***Pinanga subruminata*** Becc., **FMP5** 8 in part, **W14** 94; simple-leaved palm to 1.5 m tall; hill forest; Tg, Pn, Pk; endemic.
- 234.27.18 ***Pinanga wrayi*** Furtado, **F20** 276; *Pinanga polymorpha* auct. non Becc., **FMP5** 6 in part; *Pinanga disticha* auct. non (Roxb.) Blume ex H. Wendl., **FMP5** 7 in part; feather palm to 2.5 m tall; montane forest; Pk, Sl; endemic.
- 234.27.19 ***Pinanga* aff. *mirabilis***, **K46** 29.

- 234.28.1 **Plectocomia dransfieldii** Madulid, **M08** 77; *Plectocomia* sp., **D29** 59; robust solitary rattan to 50 m tall; hill forest; known only from the road to Cameron Highlands, Ph; endemic.
- 234.28.2 **Plectocomia elongata** Mart. ex Blume, **M08** 45; *Plectocomia griffithii* Becc., **FMP5** 70, **D29** 55; massive solitary or clustering rattan to 50 m tall; lowlands and mountains to 2000 m; Kd, Kl, Tg, Pn, Pk, Ph, Sl, NS, Ml, Jh, Sp.
- 234.28.3 **Plectocomia muelleri** Blume, **D29** 57, **M08** 55; massive solitary rattan reaching 40 m; swampy lowland forest; Ph, Jh.
- 234.29.1 **Plectocomiopsis corneri** Furtado, **D29** in part, **D31** 250; clustering rattan to 30 m tall; lowland forest; Kemaman, Tg, and Bt Galing, Ph; endemic.
- 234.29.2 **Plectocomiopsis geminiflora** (Griff.) Becc., **FMP5** 65, **D29** 61, **D31** 246; thicket-forming rattan to 50 m tall; lowland and hill forest; Kd, Tg, Pk, Ph, Sl, NS, Ml, Jh.
- 234.29.3 **Plectocomiopsis mira** J. Dransf., **D31** 247; *Plectocomiopsis corneri* auct. non Furtado, **D29** 65 in part; clustering rattan climbing high; montane forest; known only from Gg Bubu, Pk.
- 234.29.4 **Plectocomiopsis wrayi** Becc., **FMP5** 65, **D29** 63, **D31** 252; *Plectocomiopsis dubia* Becc., **FMP5** 66; clustering rattan climbing to 30 m; lowland freshwater swamp forest; Pk, Sl; endemic.
- 234.30.1 **Pogonotium ursinum** (Becc.) J. Dransf., **D33** 193; *Daemonorops ursina* Becc., **D29** 90; solitary rattan rarely more than 4 m tall; lowland forest; once from Taman Negara, Ph.
- 234.31.1 **Rhopaloblaste singaporensis** (Becc.) Hook.f., **M56** 88; *Ptychoraphis singaporensis* (Becc.) Becc., **FMP5** 18, **W14** 96; *Ptychoraphis longiflora* Ridl., **FMP5** 18; tufted feather palm to 4 m tall; lowland forest; Pk, Ph, Jh, Sp; endemic.
- 234.32.1 **Salacca affinis** Griff., **FMP5** 32, **W14** 105; prickly dense rosette-forming feather palm to 3 m tall; wet lowland forest; widespread.
- 234.32.2 **Salacca flabellata** Furtado, **W14** 107, **M44** 466; stemless palm forming wide low clumps about 1 m tall; damp lowland forest; Tg, ?Jh; endemic.
- 234.32.3 **Salacca glabrescens** Griff., **FMP5** 33, **W14** 107; stemless feather palm to 5 m tall; damp lowland and hill forest; widespread; endemic.
- 234.32.4 **Salacca graciliflora** Moge, **M46** 6; short-stemmed feather palm to 2 m tall; lowland forest understorey at 300 m; Gg Janing, Jh; endemic.
- 234.32.5 **Salacca minuta** Moge, **M46** 11; simple-leaved stemless palm about 1 m tall; Gg Janing, Jh; endemic.

- 234.32.6 **Salacca multiflora** Moge, **M46** 13; stemless simple-leaved palm about 3 m tall; near streams in lowland forest; Ulu Setiu F.R., Besut, Tg; endemic.
- 234.32.7 **Salacca wallichiana** Martelli, **FMP5** 33, **M45** 121; *Salacca rumphii* Wall. ex Blume, **W14** 107; tufted spiny feather palm to 7 m tall.
235. PANDANACEAE
- 235.1.1 **Freycinetia angustifolia** Blume, **FMP5** 82, **S42** 197; *Freycinetia malaccensis* Ridl., **FMP5** 81; woody climber; lowland swamp and low hill forest; Pn, Pk, Sl, NS, Ml, Jh, Sp.
- 235.1.2 **Freycinetia confusa** Ridl., **FMP5** 82, **S42** 203; slender liana; lowland forests; Sl, Jh, Sp; endemic.
- 235.1.3 **Freycinetia corneri** B.C. Stone, **S42** 198; lowland forest liana; Sl, Jh, Sp.
- 235.1.4a **Freycinetia imbricata** Blume var. **hispidula** B.C. Stone, **S42** 204; forest climber; lowlands, hills and mountains; Ph, Sl, Jh.
- 235.1.4b **Freycinetia imbricata** Blume var. **imbricata**, **S42** 203; *Freycinetia kingiana* Ridl., **FMP5** 82; lowland forest climber, sometimes on rocks.
- 235.1.5 **Freycinetia javanica** Blume, **S42** 195; *Freycinetia lucens* Ridl., **FMP5** 80; *Freycinetia montana* Ridl., **FMP5** 82; woody climber with clasping adventitious roots; humid forest, lowlands to mountains; Tg, Pn, Pk, Ph, Sl, NS, Ml, Jh, Sp.
- 235.1.6 **Freycinetia kamiana** B.C. Stone, **S42** 205; slender climber; only collected at Bt Lagong, Sl.
- 235.1.7 **Freycinetia rigidifolia** Hemsl., **S42** 204; *Freycinetia acuminata* Ridl., **FMP5** 82; slender climber; lowland and hill forests; Tg, Pk, Ph, Sl, Jh.
- 235.1.8a **Freycinetia sumatrana** Hemsl. var. **penangiana** B.C. Stone, **S42** 202; forest liana; Kd, Pn.
- 235.1.8b **Freycinetia sumatrana** Hemsl. var. **sumatrana**, **S42** 199; *Freycinetia valida* Ridl., **FMP5** 83; forest liana; lowlands and mountains; Kd, Pn, Pk, Ph, Sl, NS, Ml, Jh, Sp.
- 235.2.1 **Pandanus affinis** Kurz, **S45** 13; *Pandanus aurantiacus* Ridl., **FMP5** 81; shrub to 5 m tall; freshwater or brackish swamps; Tg, Ph, Sl, NS, Jh, Sp.
- 235.2.2 **Pandanus albifrons** B.C. Stone, **S58** 317; sparsely branched shrub to 3.5 m; only known from Pasoh F.R., NS; endemic.
- 235.2.3 **Pandanus alticola** Holttum & H. St. John, **S45** 57, **C16** 70; shrub; on limestone or epiphytic; Kl, Ph, Sl.

- 235.2.4 **Pandanus atroparpus** Griff., **FMP5** 80, **S45** 26; big tree; common in lowland swamps; Tg, Pn, Ph, Sl, Jh, Sp.
- 235.2.5 **Pandanus calcicola** Holttum & H. St.John, **S40** 136, **C16** 70; shrub to 5 m tall; on limestone; Ps, Sl; endemic.
- 235.2.6 **Pandanus calvus** B.C. Stone, **S61** 427; rosette-forming shrubs; lowland forest; Sl; endemic.
- 235.2.7 **Pandanus crinifolius** Martelli, **S55** 14; *Pandanus bidens* Ridl., **FMP5** 75, **S40** 126; short-stemmed clumps about 1 m tall; Kd, Pk, Ph, Sl; endemic.
- 235.2.8a **Pandanus dubius** Spreng. var. **compressus** (Martelli) Stone, **S55** 90.
- 235.2.8b **Pandanus dubius** Spreng. var. **dubius**, **S55** 88; erect stout-trunked plants; rocky and sandy shores.
- 235.2.9 **Pandanus dumetorum** Holttum & H. St.John, **S45** 62; stemless, tufted pandan; Tg, Ph; endemic.
- 235.2.10 **Pandanus echinodermops** Holttum & H. St.John, **S39** 10; swampy areas; Jh; endemic.
- 235.2.11 **Pandanus elostigma** Martelli, **FMP5** 79, **S45** 48; stemless pandan; Kl, Pk, Ph, Ml, Jh; endemic.
- 235.2.12 **Pandanus epiphyticus** Martelli, **S45** 65; massive shrub; usually epiphytic; lowland forests; Ph, Jh.
- 235.2.13 **Pandanus furcatus** Roxb. var. **penangensis** (Ridl.) B.C. Stone, **S55** 24; *Pandanus penangensis* Ridl., **FMP5** 81, **S40** 128; erect trees to 10 m; hills, including limestone; Ps, Pn, Sl; endemic variety.
- 235.2.14 **Pandanus glaucophyllus** Ridl., **S45** 42; shrub to 4 m tall; Pk, NS; endemic.
- 235.2.15 **Pandanus helicopus** Kurz, **S40** 131, **S45** 116; *Pandanus muarensis* Ridl., **FMP5** 77; tall erect aquatic shrub; usually standing in water; Sl, Ph, Jh.
- 235.2.16 **Pandanus herbaceus** Martelli, **FMP5** 81, **S45** 37; *Pandanus collinus* Ridl., **FMP5** 79 incl. var. *spinulosus* Ridl.; *Pandanus kingianus* Martelli, **FMP5** 79, **S40** 136; *Pandanus spinulosus* (Ridl.) H. St.John, **S40** 136; understorey shrub; lowland and hill forest; Ps, Kd, Kl, Pn, Pk, Jh.
- 235.2.17 **Pandanus horizontalis** H. St.John, **S43** 200, **S55** 26; lowland forest; Ph.
- 235.2.18 **Pandanus houllettei** Carrière, **FMP5** 74, **S55** 26; dubiously native; Sp.
- 235.2.19 **Pandanus humilis** Lour., **S55** 17; *Pandanus perakensis* Ridl., **FMP5** 81; *Pandanus ovatus* Warb., **S40** 136; Ps, Kd, Tg, Pn, Pk, Ph, NS, Ml.

- 235.2.20 **Pandanus immersus** Ridl., **FMP5** 76, **S55** 29; massive shrub forming dense thickets; often in water; Sl, Ph; endemic.
- 235.2.21 **Pandanus irregularis** Ridl., **FMP5** 76, **S55** 84, **C16** 71, **S61** 431; erect shrub to 5 m tall; limestone hills; Kl, Ph; endemic.
- 235.2.22 **Pandanus kaida** Kurz, **S55** 93; Kd, Pn, NS.
- 235.2.23 **Pandanus kamiae** B.C. Stone, **S43** 201 '*kamii*', **S55** 33; acaulescent or decumbent pandan; freshwater swamp forest; Jh.
- 235.2.24 **Pandanus kedahensis** H. St.John, **S55** 36; pandan; forest at about 1100 m; only known from G. Jerai; Kd; endemic.
- 235.2.25 **Pandanus klossii** Ridl., **FMP5** 74, **S55** 68; erect trees with prop roots to 7 m; mountain tops; Kl, Tg, Ph; endemic.
- 235.2.26 **Pandanus lais** Kurz, **S43** 200, **S55** 42; only collected on P. Tinggi, Jh.
- 235.2.27 **Pandanus longicaudatus** Holttum & H. St.John, **S55** 44; pandan; hill and montane forest, 1000–1800 m; Pk, Ph, Sl; endemic.
- 235.2.28a **Pandanus militaris** Parkinson var. **malayanus** B.C. Stone, **S44** 127; erect, sparsely branched shrub 3–4 m tall; in swamps; Kd, Kl, Tg, Jh, Sp.
- 235.2.28b **Pandanus militaris** Parkinson var. **militaris**, **S44** 125; erect, sparsely branched shrub 3–4 m tall; in swamps; Tg, Sl, ?Sp.
- 235.2.29 **Pandanus monotheca** Martelli, **FMP5** 79, **S45** 33; *Pandanus ornatus* [*non* Hort. *ex* Bull] (Gaudich.) Kurz, **FMP5** 80; *Pandanus recurvatus* H. St.John, **S40** 136; erect, slender shrub; common in hill forests, 500–1500 m; Kd, Kl, Tg, Pn, Pk, Ph, NS, Jh, Sp.
- 235.2.30 **Pandanus motleyanus** Solms, **S40** 132, **S44** 130; slender erect shrub to 5 m tall; near forest streams or in swampy forest; once from Jh.
- 235.2.31 **Pandanus nanus** Martelli, **S45** 49; stemless pandan; Pk, Ph.
- 235.2.32 **Pandanus odoratissimus** L.f., **S39** 3; *Pandanus fascicularis* Lam., **FMP5** 73; large prop-rooted shrub; the common seashore pandan; widespread.
- 235.2.33 **Pandanus parvus** Ridl., **FMP5** 78, **S45** 39; shrub to 2.5 m tall; lowland forest; Ph, Ml, Jh, Sp.
- 235.2.34 **Pandanus pentodon** Ridl., **FMP5** 75, **S39** 7; low slender bush; rheophyte; Tg, Jh; endemic.
- 235.2.35 **Pandanus pilaris** Ridl., **FMP5** 79, **S45** 51; Sl, NS, Jh.
- 235.2.36 **Pandanus piniformis** Holttum & H. St.John, **S55** 68, **C16** 71; clumping pandan 3–4 m tall; limestone hills; Pulau area of Pk; endemic.

- 235.2.37 **Pandanus polycephalus** Lam., **S39** 14; slender bushy treelet; beaches; Jh.
- 235.2.38 **Pandanus prainii** Martelli, **S40** 132, **S44** 138; shrub; Pk, Sl; endemic.
- 235.2.39 **Pandanus rostratus** Martelli, **S64** 49; *Pandanus corneri* Kaneh., **S39** 14; stems to about 2 m; along streams near the sea; Jh, Sp.
- 235.2.40 **Pandanus saint-johnii** B.C. Stone, **S45** 63; stemless pandan; hill forest; Jh; endemic.
- 235.2.41 **Pandanus scortechinii** Martelli, **S40** 132, **S44** 142; shrub 120–130 cm tall; wet swamps; Pk, Jh; endemic.
- 235.2.42 **Pandanus sobolifer** B.C. Stone, **S45** 63; stemless pandan; hill forest; Pn, Pk; endemic.
- 235.2.43 **Pandanus stelliger** Ridl., **FMP5** 76, **S55** 81; shrub to 3 m tall; lowlands and mountains; Tg, Pn, Pk, Ph, Sl, Jh.
- 235.2.44 **Pandanus tetradon** Ridl., **S55** 83; erect prop-rooted shrub; Sp.
- 235.2.45 **Pandanus undulifolius** Holtum & H. St. John, **S45** 42; Jh; endemic.
- 235.2.46 **Pandanus unguiculatus** Ridl., **FMP5** 78, **S45** 41; *Pandanus attenuatus* H. St. John, **S40** 136; understory shrub; montane forest; Ph, Sl; endemic.
- 235.2.47 **Pandanus unguifer** Hook.f., **S55** 56; *Pandanus bicornis* Ridl., **FMP5** 76; montane forest; Pk, Ph.
- 235.2.48 **Pandanus yvanii** Solms, **S40** 132, **S45** 133; tall prickly shrub 5–6 m tall; common along water courses in shady forest; Tg, Pk, Ph, Sl, NS, MI, Jh, Sp.

236. PHILYDRACEAE

- 236.1.1 **Philydrum lanuginosum** Banks ex Gaertn., **FMP4** 347, **FMi4** 5; tufted herb to 1 m tall; in shallow water, rice-fields; widespread.

237. PHORMIACEAE

- 237.1.1 **Dianella ensifolia** (L.) DC., **FMP4** 329, **FMi9** 207; *Dianella parviflora* Ridl., **FMP4** 330; tufted herb to 1 m tall; sea shores and open forest to 1000 m; throughout.
- 237.1.2 **Dianella javanica** (Blume) Kunth, **FMi9** 209; *Rhuacophila javanica* Blume, **FMP4** 328; herb to 2 m tall; rocky places on mountain tops; Pk, Ph.

238. PONTEDERIACEAE

- 238.1.1 **Eichhornia crassipes** (Mart.) Solms, **FMI4** 259, **M47** 484; floating herb 30–50 cm tall; forming mats on water bodies; naturalized from tropical America; throughout.
- 238.2.1 **Monochoria elata** Ridl., **FMP4** 344, **C23** 167; *Monochoria hastata* (L.) Solms var. *elata* (Ridl.) Backer, **FMI4** 258; herb to 150 cm tall; wet rice-fields; Kd.
- 238.2.2 **Monochoria hastata** (L.) Solms, **FMI4** 258, **C23** 164; *Monochoria hastaeifolia* Presl, *nom. illeg.*, **FMP4** 344; rhizomatous herb to 125 cm tall; margins of ditches, lakes and rivers; widespread.
- 238.2.3 **Monochoria vaginalis** (Burm.f.) Kunth, **FMP4** 346 incl. var. *plantaginea* (Roxb.) Solms, **FMI4** 256, **C23** 161; rhizomatous herb; common in damp or wet places; throughout.

239. POTOMAGETONACEAE

- 239.1.1 **Ruppia maritima** L., **FMP4** 367; creeping submerged aquatic herb; wet rice-fields; Pn.

240. RESTIONACEAE

- 240.1.1 **Leptocarpus disjunctus** Mast., **FMP5** 136, **FMI5** 419; rhizomatous sedge-like herb to 1 m tall; sandy places, often near the sea; Tg.

241. SMILACACEAE

- 241.1.1 **Heterosmilax borneensis** A. DC., **K69** 203; *Heterosmilax indica* auct. non A. DC., **FMP4** 344; slender vine to 3 m long; thickets near the sea; once at Tanjong Katong, Sp.
- 241.2.1 **Smilax blumei** A. DC., **FMP4** 343, **K66** 10, **K67** 230; large climber to 10 m long; lowland and hill forest; Ph, Sl.
- 241.2.2 **Smilax calophylla** Wall. ex A. DC., **FMP4** 330, **K67** 239; slender straggling shrub 60–230 cm tall; lowland and hill forest; widespread.
- 241.2.3 **Smilax corbularia** Kunth var. **woodii** (Merr.) T. Koyama; **K66** 15; *Smilax peguana* A. DC., **FMP4** 340; rocks on mountains; Ph, Sp.
- 241.2.4 **Smilax extensa** Wall. ex A. DC., **FMP4** 341, **K67** 224; climber; hill forests; Pn.

- 241.2.5 **Smilax kingii** Hook.f., **FMP4** 343, **K66** 22; thick woody climber; hill forest; Pk.
- 241.2.6 **Smilax lanceifolia** Roxb., **K67** 225; *Smilax laevis* Wall. ex A. DC., **FMP4** 340; climber to 5 m long; montane forest; widespread.
- 241.2.7 **Smilax leucophylla** Blume, **FMP4** 343, **K66** 27; woody climber; lowland and montane forest; Pn, Pk, Ph, Jh, Sp.
- 241.2.8 **Smilax luzonensis** Presl, **K67** 222; *Smilax helferi* A. DC., **FMP4** 342; climber to 5 m long; climbing on bushes in open country; Kd, Kl, Pk, Ph, Sl, NS, Ml.
- 241.2.9 **Smilax megacarpa** A. DC. & C. DC., **FMP4** 341, **K67** 217; climber 2–6 m long; lowland forests; Pn, Pk, Ph.
- 241.2.10 **Smilax myosotiflora** A. DC., **FMP4** 340, **K67** 243; slender vine; lowland forest; Pn, Kl, Pk, Ph, NS, Ml, Jh, Sp.
- 241.2.11 **Smilax odoratissima** Blume, **FMP4** 342; sparsely thorny climber; montane forests; Pk, Sl.
- 241.2.12 **Smilax polyacantha** Wall. ex Kunth, **FMP4** 342, **K67** 224; slender thorny climber; hill and montane forests; several localities; endemic.
- 241.2.13 **Smilax setosa** Miq., **K66** 45; *Smilax bracteata* Presl var. *barbata* (Wall. ex A. DC.) T. Koyama *nomen*; **T18** 214; *Smilax barbata* Wall. ex A. DC., **FMP4** 342; large-leaved thorny liana; lowland forest margins; widespread.
- 241.2.14 **Smilax sinclairi** T. Koyama; **K66** 48; climber; lowland forest; Pk, NS; endemic.

242. STEMONACEAE

- 242.1.1 **Stemona curtisii** Hook.f., **FM11** 403; *Stemona tuberosa* auct. non Lour., **FMP4** 320; vine to 3 m long; thickets near the sea, sometimes on limestone; widespread.
- 242.2.1 **Stichoneuron caudatum** Ridl., **FMP4** 321, **FM11** 408; slender erect herb to 60 cm tall; wet places in lowland forest; Kl, Pk.

243. TACCACEAE

- 243.1.1 **Tacca chantrieri** André, **FM7** 813; *Tacca minor* Ridl., **FMP4** 311; herb to 60 cm tall; lowland and hill forest; Ps, Pn, Pk.
- 243.1.2 **Tacca integrifolia** Ker Gawl., **FM7** 811; *Tacca cristata* Jack, **FMP4** 310; herb to 1 m tall; lowland and hill forest; widespread.

243.1.3 **Tacca leontopetaloides** (L.) Kuntze, **FMi7** 809; *Tacca pinnatifida* J.R. Forst. & G. Forst., **FMP4** 309; *Tacca chantrieri* auct. non André, **FMP4** 311; tuberous herb to nearly 2 m tall; sandy places near the sea; widespread but not common.

243.1.4 **Tacca palmata** Blume, **FMP4** 309, **FMi7** 814; tuberous palmate-leaved herb to 80 cm tall; forest margins to 1000 m; Kl, Pn, P. Tioman, Jh.

244. TRICHOPODACEAE

244.1.1 **Trichopus zeylanicus** Gaertn. ssp. **travancoricus** (Bedd.) Burkill, **FMi4** 299; *Trichopus malayanus* Ridl., **FMP4** 312; tufted herb to about 30 cm tall; seasonally-flooded lowland forest; Kl, Ph.

245. TRIURIDACEAE

245.1.1 **Sciaphila maculata** Miers, **FMi10** 113; *Sciaphila affinis* Becc., **FMP4** 364; erect red saprophytic herb 3–16 cm tall; on leaf litter in lowland and hill forest to 1000 m; widespread.

245.1.2 **Sciaphila nana** Blume, **FMi10** 117; erect purple saprophytic herb 5–15 cm tall; dense hill forest 250–500 m; Pk, Ph.

245.1.3 **Sciaphila secundiflora** Thwaites ex Benth., **FMi10** 116; *Sciaphila major* Becc., **FMP4** 364; *Sciaphila asterias* Ridl., **FMP4** 365; erect red saprophytic herb 6–33 cm tall; in damp rocky forest, lowland and hills and on limestone; widespread.

245.1.4 **Sciaphila tenella** Blume, **FMi10** 113; erect red saprophytic herb 5–24 cm tall; lowland and hill forest; Ph, Jh, Sp.

246. TYPHACEAE

246.1.1 **Typha angustifolia** L., **FMi4** 243; tufted herb to 3 m tall; in shallow water; widespread; naturalized.

If *Typha angustifolia* is accepted in a narrower sense as a temperate species then the correct name for the Malayan plant is probably *Typha domingensis* Pers. [**C36** 365].

247. XYRIDACEAE

- 247.1.1 **Xyris bancana** Miq., **FMP4** 349, **FMi4** 370 incl. var. *lacerata* Malme, **H08** 133, **FMi9** 571; *Xyris ridleyi* Rendle, **FMP4** 349, **FMi4** 370; tufted sedge-like herb to 30 cm tall; open sandy places in the lowlands and mountains; Ph, Ml.
- 247.1.2 **Xyris capensis** Thunb., **FMi4** 374 incl. var. *schoenoides* (Mart.) Nilsson, **H08** 135, **FMi9** 573; tufted herb approaching 1 m tall; once from the Cameron Highlands, Ph.
- 247.1.3 **Xyris complanata** R.Br., **FMi4** 369, **H08** 133, **FMi9** 571; *Xyris anceps* (*non* Lam.) Vahl, **FMP4** 348; tufted sedge-like herb to 60 cm tall; open sandy places; widespread, common along east coast.
- 247.1.4 **Xyris grandis** Ridl., **FMP4** 347, **FMi4** 372, **H08** 135, **FMi9** 572; tufted herb to 90 cm tall; wet places in the mountains at 900–2200 m; Main Range.
- 247.1.5 **Xyris indica** L., **FMP4** 348, **FMi4** 373, **H08** 134, **FMi9** 372; tufted herb to 80 cm tall; weed of wet rice; Ml northward.
- 247.1.6 **Xyris pauciflora** Willd., **FMP4** 348, **FMi4** 371, **H08** 136, **FMi9** 573; tufted sedge-like herb to 40 cm tall; damp sandy places; widespread.
- 247.1.7 **Xyris wallichii** Kunth, **H08** 136, **FMi9** 573; *Xyris oreophila* Ridl., **FMP4** 349, **FMi4** 372; *Xyris malmei* P. Royen, **FMi4** 370; tufted sedge-like herb to 45 cm tall; known only from Gg Jerai, Kd at 850–1300 m.

248. ZINGIBERACEAE

- 248.1.1 **Alpinia aquatica** (Retz.) Roscoe, **S34** 37; *Alpinia melanocarpa* (Teijsm. & Binn.) Ridl., **FMP4** 279; *Languas melanocarpa* (Teijsm. & Binn.) Burkill, **H41** 159; herb to 2 m tall; locally common near the sea; south and east of the Peninsula.
- 248.1.2 **Alpinia assimilis** Ridl., **FMP4** 280, **S34** 38; *Catimbium assimile* (Ridl.) Holttum, **H41** 152; herb to 2 m tall; known only from type; near Pekan, Ph; endemic.
- 248.1.3 **Alpinia capitellata** Jack, **FMP4** 283, **H41** 143, **S34** 40; herb 2–3 m tall; Pn, Pk.
- 248.1.4 **Alpinia conchigera** Griff., **FMP4** 278, **H41** 142, **S34** 41; herb to 120 cm tall; damp open places; widespread.
- 248.1.5 **Alpinia corneri** (Holttum) R.M. Sm., **S34** 65; *Cenolophon corneri* Holttum, **H41** 139; herb to 1.5 m tall; wet lowland forest, 150 m; only known from type; Bt Kajang, Tg; endemic.

- 248.1.6 ***Alpinia denticulata*** (Ridl.) Holttum, **H41** 143, **S34** 43; *Odontychium denticulatum* (Ridl.) K. Schum., **FMP4** 243; herb to 60 cm tall; hill forest; only known from near Lumut, Pk; endemic.
- 248.1.7 ***Alpinia galanga*** (L.) Sw., **FMP4** 279, **S34**; *Languas galanga* (L.) Stuntz, **H41** 157; tufted herb to 2 m tall or more; areas abandoned after cultivation; widespread; not native, escaped from cultivation.
- 248.1.8a ***Alpinia javanica*** Blume var. **javanica**, **FMP4** 283, **H41** 145; *Alpinia campanaria* Ridl., **FMP4** 283; herb to 3 m tall; open places in lowland forest; widespread.
- 248.1.8b ***Alpinia javanica*** Blume var. **colorata** Ridl., **FMP4** 283, **H41** 146; herb to 3 m tall; open places in lowland forest; Kinta Valley, Pk; endemic variety.
- 248.1.9 ***Alpinia latilabris*** Ridl., **FMP4** 282, **S34** 48; *Catimbium latilabre* (Ridl.) Holttum, **H41** 153; herb to 3 m tall; lowland forest; Ph; endemic.
- 248.1.10 ***Alpinia macrostephana*** (Baker) Ridl., **FMP4** 284, **S34** 50; *Cenolophon macrostephanum* (Baker) Holttum, **H41** 135; herb to 3 m tall; hill forest; 120–240 m; only known from Larut, Pk; endemic.
- 248.1.11 ***Alpinia malaccensis*** (Burm.) Roscoe var. **nobilis** (Ridl.) I.M. Turner, **T24** 223; *Alpinia nobilis* Ridl., **FMP4** 282; *Catimbium malaccense* (Burm.) Holttum var. **nobilis** (Ridl.) Holttum, **H39** 155; herb to 4 m tall; lowland forest; Ph, Sl.
- 248.1.12 ***Alpinia mollissima*** Ridl., **FMP5** 339, **S34** 51; *Cenolophon mollissimum* (Ridl.) Holttum, **H41** 138; herb to 120 cm tall; montane forest; Ph, Jh; endemic.
- 248.1.13 ***Alpinia murdochii*** Ridl., **FMP4** 280, **H41** 148, **S34** 51; herb to 1.5 m tall; montane forest about 1500 m; Ph, Sl; endemic.
- 248.1.14 ***Alpinia mutica*** Roxb., **FMP4** 279, **S34** 51; *Catimbium muticum* (Roxb.) Holttum, **H41** 150; herb to 2 m; open damp places; Kd, Pn, Pk, Ph, Jh, Sp.
- 248.1.15 ***Alpinia nutans*** (L.) Roscoe, **S34** 52; *Catimbium speciosum* (J.C. Wendl.) Holttum, **H41** 152; herb to 2 m tall; Ps, Kl.
- 248.1.16 ***Alpinia oxymitra*** K. Schum., **S34** 53; *Alpinia comosa* (non Jacq.) Ridl., **FMP4** 285; *Cenolophon oxymitrum* (K. Schum.) Holttum, **H41** 134; herb to 3 m tall; lowland and hill forest; Kd, Kl.
- 248.1.17 ***Alpinia pahangensis*** Ridl., **FMP4** 282, **H41** 146, **S34** 53; *Alpinia burkillii* M.R. Hend., **H34** 55; herb 2–3 m tall; lowland forest; Tg, Ph, NS, Jh; endemic.
- 248.1.18 ***Alpinia petiolata*** Baker, **FMP4** 284, **S34** 54; *Cenolophon petiolatum* (Baker) Holttum, **H41** 136; herb to 1.5 m tall; montane forests above 700 m; Pk, Ph, Sl, NS; endemic.

- 248.1.19 ***Alpinia pulcherrima*** Ridl., **FMP4** 284, **S34** 55; *Cenolophon pulcherrimum* (Ridl.) Holttum, **H41** 136; herb to 1.5 m tall; montane rain forest; Cameron Highlands, Ph; endemic.
- 248.1.20a ***Alpinia rafflesiana*** Wall. ex Baker var. ***rafflesiana***, **FMP4** 281, **H41** 144; *Alpinia aurantiaca* Ridl., **FMP4** 282; herb to 1.5 m tall; lowland and hill forest to 1200 m; common, widespread.
- 248.1.20b ***Alpinia rafflesiana*** Wall. ex Baker var. ***hirtior*** (Ridl.) Holttum, **H41** 145; *Alpinia aurantiaca* var. *hirtior* Ridl., **FMP4** 282; herb to 2 m tall; montane forest above 1200 m; Kd, Kl, Pk; endemic variety.
- 248.1.21 ***Alpinia scabra*** (Blume) Baker, **FMP4** 279, **S34** 57; *Languas scabra* (Blume) Burkill, **H41** 158; herb to 3 m tall; lowlands and hills; commonest at 300–900 m; widespread.
- 248.1.22 ***Alpinia seimundii*** Ridl., **FMP4** 280, **H41** 149, **S34** 57; montane forest herb; Ph; endemic.
- 248.1.23a ***Alpinia vitellina*** (Lindl.) Ridl. var. ***cannaefolia*** (Ridl.) I.M. Turner, **T24** 223; *Alpinia cannaefolia* Ridl., **FMP4** 285; *Cenolophon vitellinum* (Lindl.) Horan. var. *cannaefolium* (Ridl.) Holttum; **H41** 138; herb to 1.2 m tall; lowland and hill forest; Pn, Sl, NS.
- 248.1.23b ***Alpinia vitellina*** (Lindl.) Ridl. var. ***vitellina***, **FMP4** 284; *Cenolophon vitellinum* (Lindl.) Horan., **H41** 137; herb to 1.2 m tall; lowland and hill forest; Pn, Sl, Jh.
- 248.2.1 ***Amomum aculeatum*** Roxb., **H41** 212; *Amomum flavum* Ridl., **FMP4** 283; *Amomum aurantiacum* Ridl., **FMP4** 262; herb to 4 m tall; lowland forest; Pn.
- 248.2.2 ***Amomum biflorum*** Jack, **H41** 199; *Elettariopsis pubescens* Ridl., **FMP4** 275; herb to 1 m tall; lowland forest; Kd, Pn, Ph, ML.
- 248.2.3 ***Amomum cephalotes*** Ridl., **FMP4** 264, **H41** 209; herb to about 2 m tall; damp lowland forest; Ph, Jh; endemic.
- 248.2.4 ***Amomum citrinum*** (Ridl.) Holttum, **H41** 207; *Conamomum citrinum* Ridl., **FMP4** 255; *Amomum cylindrostachys* Ridl., **FMP4** 265; stilt-rooted herb 3–4 m tall; montane forest; Pk, Sl; endemic.
- 248.2.5 ***Amomum cylindraceum*** Ridl., **FMP4** 265, **H41** 204; herb to 2 m tall; lowland forest; known only from type; Telok Sera, Dindings, Pk; endemic.
- 248.2.6 ***Amomum hastilabium*** Ridl., **FMP4** 266, **H41** 203; *Amomum holttumii* Ridl., **FMP4** 264; *Amomum xanthoglossum* Ridl., **FMP4** 263; herb to 2.5 m tall; lowland and hill forest; Kl, Pk, Ph, Sl, NS, Jh, Sp; ? endemic.

- 248.2.7 **Amomum lappaceum** Ridl., **FMP4** 263, **H41** 210; *Amomum perakense* Ridl., **FMP4** 266; stilt-rooted herb to about 3 m tall; montane forest at 750–1500 m; Pk, Ph, Sl; endemic.
- 248.2.8 **Amomum macrodous** Scott., **FMP4** 266 ‘*macrodots*’, **H41** 202; herb to 60 cm tall; lowland forest; poorly known; Pk; endemic.
- 248.2.9 **Amomum macroglossum** K. Schum., **H41** 200; stilt-rooted herb to 60 cm tall; montane forest at 900 m; Gg Padang, Tg.
- 248.2.10 **Amomum micranthum** Ridl., **FMP4** 267, **H41** 201; herb to 1 m tall; hill forest; Pn, Pk, Sl, NS; endemic.
- 248.2.11 **Amomum ochreum** Ridl., **FMP4** 264, **H41** 208; herb to nearly 5 m tall; hill forest at 700–1100 m; Kd, Ph, Sl, NS; endemic.
- 248.2.12 **Amomum rivale** Ridl., **FMP5** 338, **H41** 205; herb; known only from type; gorge of the Tras, near Raub, Ph; endemic.
- 248.2.13 **Amomum spiceum** Ridl., **FMP4** 263, **H41** 197; herb about 2 m tall; montane forest at about 750 m; NS, P. Tioman; endemic.
- 248.2.14 **Amomum squarrosum** Ridl., **FMP4** 265, **H41** 206; stilt-rooted herb to 4 m tall; lowland forest; Tg, Pk, Ml; endemic.
- 248.2.15 **Amomum testaceum** Ridl., **FMP4** 266, **H41** 205, **C16** 73; herb to 3 m tall; lowland forest, often on limestone; widespread, mostly in the north.
- 248.2.16 **Amomum uliginosum** J. König, **FMP4** 264, **H41** 213; herb to 3 m tall; lowland forest; Kd, Kl, Pn, Ph, Sl, Ml, Jh.
- 248.2.17 **Amomum utriculosum** (Ridl.) Holttum, **H41** 208; *Conamomum utriculosum* Ridl., **FMP4** 255; stilt-rooted herb to 2.5 m tall; montane forest at 1000–1200 m; Pk, Ph; endemic.
- 248.2.18 **Amomum xanthophlebium** Baker, **FMP4** 262, **H41** 198; herb to 5 m tall; lowland and montane forest to 1200 m; Pk, Ph, Sl, NS, Ml, Jh, Sp; endemic.
- 248.3.1 **Boesenbergia clivalis** (Ridl.) Schltr., **H41** 116; *Gastrochilus clivalis* Ridl., **FMP4** 249; *Gastrochilus puberulus* Ridl., **FMP4** 251; herb about 50 cm tall; lowland forest; Pk, Ph, Sl, Jh; endemic.
- 248.3.2 **Boesenbergia curtisii** (Baker) Schltr., **H41** 112, **C16** 73; *Gastrochilus curtisii* Baker, **FMP4** 249; *Gastrochilus acuta* Ridl., **FMP4** 249; herb to about 50 cm tall; forest on limestone; Ps, P. Langkawi, Ph.
- 248.3.3 **Boesenbergia flava** (Ridl.) Holttum, **H41** 113; *Gastrochilus flava* Ridl., **FMP4** 248; 4-leaved herb to about 30 cm tall; lowland forest; Pk; endemic.

- 248.3.4 **Boesenbergia longipes** (King & Prain ex Ridl.) Schltr., **H41** 114; *Gastrochilus longipes* King & Prain ex Ridl., **FMP4** 250; herb to 30 cm tall with 2 or 3 leaves; lowland forest; poorly known; Pk; endemic.
- 248.3.5a **Boesenbergia plicata** (Ridl.) Holttum var. **lurida** (Ridl.) Holttum, **H41** 110; *Gastrochilus luridus* Ridl., **FMP4** 248; tufted herb; only known from P. Langkawi.
- 248.3.5b **Boesenbergia plicata** (Ridl.) Holttum var. **plicata**, **H41** 109; *Gastrochilus plicatus* Ridl., **FMP4** 247; tufted herb about 40 cm tall; lowland forest to 800 m; Kl, Tg, Pk, Ph, Jh; endemic species.
- 248.3.6 **Boesenbergia prainiana** (Baker) Schltr., **H41** 111; *Gastrochilus prainiana* (Baker) Ridl., **FMP4** 248; *Gastrochilus albosanguineus* Ridl., **FMP4** 247; few-leaved herb to about 30 cm tall; lowland forest; Tg, Pk, Ph, Jh.
- 248.3.7 **Boesenbergia pulcherrima** (Wall.) Kuntze, **H41** 109; *Gastrochilus pulcherrima* Wall., **FMP4** 247; herb; collected once from Penang Hill.
- 248.3.8 **Boesenbergia rotundata** (L.) Mansf., **N11** 315; *Gastrochilus panduratus* (Roxb.) Ridl., **FMP4** 249; *Boesenbergia pandurata* (Roxb.) Schltr., **H41** 115; small herb; Pn, Pk; doubtfully wild, oft cultivated.
- 248.4.1 **Camptandra latifolia** Ridl., **FMP4** 243, **H41** 81; tufted herb to about 50 cm tall; montane forest at 900–1500 m; Pk, Ph; common at Cameron Highlands; endemic.
- 248.4.2 **Camptandra ovata** Ridl., **FMP4** 244, **H41** 81; *Camptandra tahanensis* Ridl., **FMP4** 244; herb about 20 cm tall; montane forest at 1200–2100 m; Sl, Ph; endemic.
- 248.4.3 **Camptandra parvula** (King ex Baker) Ridl., **FMP4** 243, **H41** 80; tufted herb about 15 cm tall; lowland and hill forest to 900 m, often on wet rocks; widespread.
- 248.5.1 **Curcuma aurantiaca** Zijp, **H41** 67; herb to 30 cm tall; collected once in a banana plantation; Besih Hangat, Ps.
- 248.5.2 **Curcuma parviflora** Wall., **H41** 68; few-leaved herb about 30 cm tall; collected once; Ps.
- 248.5.3 **Curcuma zeodaria** (Christm.) Roscoe, **FMP4** 254, **H41** 71; herb to about 1 m tall; waste ground.
- 248.6.1 **Elettaria longituba** (Ridl.) Holttum, **H41** 238; *Elettariopsis longituba* Ridl., **FMP4** 275; herb to about 3 m tall; lowland and hill forest; Tg, Pk, Ph, Sl; endemic.
- 248.7.1 **Elettariopsis burtiana** Y.K. Kam, **K01** 144; creeping herb to 50 cm tall; lowland forest; once from Pk; endemic.

- 248.7.2 **Elettariopsis curtisii** Baker, **FMP4** 274, **H41** 217, **K01** 142; *Elettariopsis latiflora* Ridl., **FMP4** 274; herb about 40 cm tall; lowland and hill forest to 900 m; Tg, Pn, Pk, Jh, Sp; endemic.
- 248.7.3 **Elettariopsis exserta** (Scort.) Baker, **FMP4** 274, **H41** 217, **K01** 141; herb; once collected in Pk; poorly known.
- 248.7.4a **Elettariopsis smithiae** Y.K. Kam var. **rugosa** Y.K. Kam, **K01** 150; creeping herb to 70 cm tall; lowland and hill forest; Sl; endemic.
- 248.7.4b **Elettariopsis smithiae** Y.K. Kam var. **smithiae**, **K01** 148; creeping herb to 70 cm tall; lowland and hill forest; Kd, Pk, Sl, NS, Jh; endemic.
- 248.7.5 **Elettariopsis triloba** (Gagnep.) Loes., **H41** 219, **K01** 146; herb to about 50 cm tall; mostly in the hills at 250–500 m; Ps, Kd, Pn, Pk, Ph, Sl, NS, Jh.
- 248.8.1 **Etlingera elatior** (Jack) R.M. Sm., **S33** 244; *Phaeomeria imperialis* Lindl., **FMP4** 272; *Phaeomeria speciosa* (Blume) Merr., **H41** 181; kantan, torch ginger; herb to 5 m tall; often cultivated, probably wild in lowland forests; widespread.
- 248.8.2 **Etlingera hemisphaerica** (Blume) R.M. Sm., **S33** 245; *Phaeomeria fulgens* (Ridl.) K. Schum., **FMP4** 272, **H41** 180; herb to 5 m tall; hill forest; Tg, Pk; endemic.
- 248.8.3 **Etlingera littoralis** (J. König) Giseke, **S33** 252; *Hornstedtia megalocheilos* (Griff.) Ridl., **FMP4** 270; *Achasma megalocheilos* Griff., **H41** 191; herb 3–6 m tall; common in damp lowland forests; throughout Peninsula.
- 248.8.4a **Etlingera maingayi** (Baker) R.M. Sm. var. **longibracteata** (Holtum) I.M. Turner, **T24** 223; *Phaeomeria maingayi* (Baker) K. Schum. var. *longibracteata* Holtum, **H41** 180; creeping, sometimes walking, herb to 3 m tall; lowland forest; Ph.
- 218.8.4b **Etlingera maingayi** (Baker) R.M. Sm. var. **maingayi**, **S33** 247; *Phaeomeria maingayi* (Baker) K. Schum., **FMP4** 272, **H41** 180; creeping, sometimes walking, herb to 3 m tall; lowland forest; widespread.
- 248.8.5a **Etlingera metriocheilos** (Griff.) R.M. Sm. var. **grandiflora** (Holtum) I.M. Turner, **T24** 223; *Achasma sphaerocephalum* (Baker) Holtum var. *grandiflora* Holtum, **H41** 191; herb; lowland and hill forest.
- 248.8.5b **Etlingera metriocheilos** (Griff.) R.M. Sm. var. **major** (Holtum) I.M. Turner, **T24** 223; *Achasma sphaerocephalum* (Baker) Holtum var. *majus* Holtum, **H41** 190; herb; lowland and hill forest.
- 248.8.5c **Etlingera metriocheilos** (Griff.) R.M. Sm. var. **metriocheilos**, **S33** 247; *Hornstedtia albomarginata* Ridl., **FMP4** 269; *Achasma sphaerocephalum* (Baker) Holtum, **H41** 189; herb to 4m tall; lowland and hill forest; widespread.

- 248.8.5d **Etlingera metriocheilos** (Griff.) R.M. Sm. var. **petiolata** (Holtum) I.M. Turner, **T24** 223; *Achasma sphaerocephalum* (Baker) Holtum var. *petiolatum* Holtum, **H41** 191; herb; lowland and hill forest.
- 248.8.5e **Etlingera metriocheilos** (Griff.) R.M. Sm. var. **rubrostriata** (Holtum) I.M. Turner, **T24** 223 *Achasma sphaerocephalum* (Baker) Holtum var. *rubrostriatum* Holtum, **H41** 191; herb; lowland and hill forest.
- 248.8.6 **Etlingera pauciflora** (Ridl.) R.M. Sm., **S33** 248; *Hornstedtia pauciflora* Ridl., **FMP4** 270; *Achasma pauciflora* (Ridl.) Holtum, **H41** 187; herb to 4 m tall; forests, sometimes on limestone; Tg, Sl, Jh; endemic.
- 248.8.7 **Etlingera punicea** (Roxb.) R.M. Sm., **S33** 249; *Hornstedtia macrocheilos* (Griff.) Ridl., **FMP4** 271; *Hornstedtia metriocheilos sensu* Ridl., **FMP4** 271; *Achasma macrocheilos* Griff., **H41** 188; herb 2–4 m high; common at forest edges and near forest streams in lowlands; throughout Malaya.
- 248.8.8 **Etlingera subterranea** (Holtum) R.M. Sm., **S33** 250; *Achasma subterraneum* Holtum, **H41** 187; herb to 3 m tall; montane rain forest about 1500 m; Cameron Highlands, Ph; endemic.
- 248.8.9 **Etlingera triorgyalis** (Baker) R.M. Sm., **S33** 250; *Hornstedtia triorgyalis* (Baker) Ridl., **FMP4** 269; *Achasma triorgyale* (Baker) Holtum, **H41** 186; herb to 5 m or more tall; lowland forest, sometimes on limestone; Pk, Sl; endemic.
- 248.8.10 **Etlingera venusta** (Ridl.) R.M. Sm., **S33** 250; *Phaeomeria venusta* (Ridl.) K.Schum., **FMP4** 272, **H41** 182; herb to 4 m tall; lowland and hill forest; Tg, Pk, Sl, Jh.
- 248.9.1 **Geocharis aurantiaca** Ridl., **FMP4** 273, **H41** 222; herb to 2 m tall; fresh-water swamp forest; Jh.
- 248.9.2 **Geocharis secundiflora** (Ridl.) Holtum, **H41** 223; *Alpinia secundiflora* Ridl., **FMP4** 278; herb to 2 m tall; hill forest at about 600 m; Kl, Sl, NS; endemic.
- 248.10.1 **Geostachys decurvata** (Baker) Ridl., **FMP4** 276, **H41** 234; herb to 1.5 m tall; montane forest at 900–1200 m; Pk; endemic.
- 248.10.2 **Geostachys densiflora** Ridl., **FMP4** 276, **H41** 234; tufted stilt-rooted herb to 1 m tall; montane forest at 1200–1500 m; Pk, Ph; endemic.
- 248.10.3 **Geostachys elegans** Ridl., **FMP4** 277, **H41** 227; tufted stilt-rooted herb to 1.5 m tall; montane forest at 1100–2100 m; Ph, MI; endemic.
- 248.10.4 **Geostachys leucantha** B.C. Stone, **S50** 77; stilt-rooted herb to 3 m tall; upper montane forest at 1750 m; summit of Gg Ulu Kali, Ph; endemic.
- 248.10.5 **Geostachys megaphylla** Holtum, **H41** 228; herb to 3 m tall; montane forest; only known from type; Gg Batu Brinchang, Ph; endemic.

- 248.10.6 **Geostachys montana** (Ridl.) Holttum, **H41** 229; *Carenophila montana* Ridl., **FMP4** 256; herb to 1.5 m tall; montane forest; known only from type; summit of Gg Berembun, Ph; endemic.
- 248.10.7 **Geostachys penangensis** Ridl., **FMP4** 276, **H41** 231; herb to about 60 cm tall; hill forest usually about 600 m; Pn, Ph.
- 248.10.8 **Geostachys primulina** Ridl., **FMP4** 277, **H41** 233; herb; montane forest; known only from type; Semangkok Pass, Sl; endemic.
- 248.10.9 **Geostachys rupestris** Ridl., **FMP4** 276, **H41** 231; stilt-rooted herb about 1 m tall; montane forest at 900–1200 m; only known from Gg Jerai, Kd; endemic.
- 248.10.10 **Geostachys secunda** (Baker) Ridl., **FMP4** 276, **H41** 233; herb about 50 cm tall; rocky places in the mountains; Pk; endemic.
- 248.10.11 **Geostachys sericea** (Ridl.) Holttum, **H41** 229; *Conamomum sericeum* Ridl., **FMP4** 255; stilt-rooted herb to 2 m tall; montane forest at above 1500 m; only known from Gg Tahan, Ph; endemic.
- 248.10.12 **Geostachys tahanensis** Holttum, **H41** 232; herb about 50 cm tall; montane forest at about 1000 m; only known from Gg Tahan, Ph; endemic.
- 248.10.13 **Geostachys taipingensis** Holttum, **H41** 230; herb; hill forest; only known from Taiping Hills, Pk; endemic.
- 248.11.1a **Globba albiflora** Ridl. var. **albiflora**, **FMP4** 237, **H41** 31, **L22** 263; herb to 80 cm tall; hill forest; known only from Penang Hill; endemic.
- 248.11.1b **Globba albiflora** Ridl. var. **aurea** Holttum, **H41** 32, **L22** 263; herb to 80 cm tall; forest on limestone; known only from Gua Lambok, Kl; endemic.
- 248.11.2a **Globba cernua** Baker ssp. **cernua**, **FMP4** 240, **H41** 32, **L22** 249; *Globba macranthera* Ridl., **FMP4** 240; *Globba brachycarpa* Baker, **FMP4** 240; herb about 70 cm tall; lowland and hill forest; common on the Main Range; endemic species.
- 248.11.2b **Globba cernua** Baker ssp. **crocea** S.N. Lim, **L22** 250; herb; lowland forest; known only from Jenka, Ph; endemic subspecies.
- 248.11.2c **Globba cernua** Baker ssp. **porphyria** S.N. Lim, **L22** 251; herb; on shaded rocks in hill forest at about 400 m; only known from Bujang Melaka, Pk; endemic subspecies.
- 248.11.3 **Globba corneri** A. Weber, **W05** 1; *Globba unifolia* Ridl. var. *sessiliflora* Holttum, **H41** 34, **L22** 252; herb to 30 cm tall; lowland and hill forest; ?Kl, Tg; endemic.

- 248.11.4 **Globba curtisii** Holttum, **H41** 35, **L22** 254; herb about 60 cm tall; damp spots in hill forest at 600–1200 m, often near streams; Ph, Sl; endemic.
- 248.11.5 **Globba fasciata** Ridl., **FMP4** 236, **H41** 28, **L22** 263, **C16** 74; herb to 1 m tall; on limestone; Ph, Kl; endemic.
- 248.11.6 **Globba fragilis** S.N. Lim, **L22** 252, **C16** 74; tufted herb to 50 cm tall; near shaded lowland forest stream; only known from type; P. Langkawi; endemic.
- 248.11.7a **Globba holttumii** S.N. Lim ssp. **aurea** S.N. Lim, **L22** 257; herb to about 70 cm tall; lowland and hill forest; Sl, Jh; endemic species.
- 248.11.7b **Globba holttumii** S.N. Lim ssp. **holttumii**, **L22** 255; herb to about 70 cm tall; near streams in hill forest at 600–1200 m; Ph, Sl; endemic species.
- 248.11.8 **Globba x intermedia** S.N. Lim, **L22** 257; herb to 1 m tall; damp shady places in montane forest at 1300–1500 m; Ph, NS; endemic hybrid.
- 248.11.9a **Globba leucantha** Miq. var. **bicolor** Holttum, **H41** 27, **L22** 268; *Globba regalis* Ridl., **FMP4** 237; herb to 1 m tall; lowland and hill forests; Kl, Tg, Ph.
- 248.11.9b **Globba leucantha** Miq. var. **flavidula** (Ridl.) Holttum, **H41** 28, **L22** 268; *Globba flavidula* Ridl., **FMP45** 338; herb to 1 m tall; known only from type; Ulu Sg Merapoh, Ph; endemic variety.
- 248.11.9c **Globba leucantha** Miq. var. **peninsularis** Holttum, **L22** 267; *Globba leucantha* Miq., **FMP4** 238, **H41** 26; herb to 1 m tall; lowland forest; Tg & Pk southward; endemic variety.
- 248.11.9d **Globba leucantha** Miq. var. **violacea** (Ridl.) Holttum, **H41** 27, **L22** 268; *Globba violacea* Ridl., **FMP4** 239; herb to 1 m tall; lowland and hill forest; Pk southward; endemic variety.
- 248.11.10 **Globba marantina** L., **FMP4** 241, **H41** 25, **L22** 247; herb to 50 cm tall, rarely flowering; open dry lowland sites; north of Peninsula and east coast.
- 248.11.11 **Globba nawawii** H. Ibrahim & K. Larsen, **I01** 157; herb to 40 cm tall; riverbank in lowland forest; Sg Pertang, Hulu Dugun, Tg; endemic.
- 248.11.12a **Globba patens** Miq. var. **costulata** S.N. Lim, **L22** 260; herb about 60 cm tall; lowland and hill forest; Ph, Sl; endemic variety.
- 248.11.12b **Globba patens** Miq. var. **patens**, **L22** 259; *Globba aurantiaca* (non Miq.) K. Schum., **FMP4** 239, **H41** 36; herb to about 60 cm tall; lowland and hill forest; Pn southwards to Jh.
- 248.11.13a **Globba pendula** Roxb. ssp. **montana** (Ridl.) S.N. Lim, **L22** 266; *Globba montana* Ridl., **FMP4** 236; herb to 1 m tall; lowland and hill forest; Kd, Pg; endemic subspecies.

- 248.11.13b **Globba pendula** Roxb. ssp. **pendula** var. **elegans** (Ridl.) Holttum, **H41** 29, **L22** 265; *Globba elegans* Ridl., **FMP4** 237; herb to 1 m tall; damp shady places; Pk, Ph; endemic variety.
- 248.11.13c **Globba pendula** Roxb. ssp. **pendula** var. **pendula**, **FMP4** 236 (as *Globba pendula*), **H41** 29, **L22** 264; *Globba panicoides* Miq., **FMP4** 235; *Globba uliginosa* Miq., **FMP4** 235; *Globba valida* Ridl., **FMP4** 236; *Globba wallichii* Baker, **FMP4** 235; herb to 1 m tall; lowland and hill forests to 1200 m under deep damp shade; common throughout.
- 248.11.14b **Globba unifolia** Ridl., **FMP4** 240, **H41** 33, **L22** 252; herb to 30 cm tall; lowland and montane forest; Kl, Tg; endemic species.
- 248.11.15a **Globba variabilis** Ridl. ssp. **pusilla** S.N. Lim, **L22** 261; herb to 30 cm tall; lowland and hill forest; Jh; endemic.
- 248.11.15b **Globba variabilis** Ridl. ssp. **variabilis**, **FMP4** 239, **H41** 37, **L22** 261; *Globba malaccensis* Ridl., **FMP4** 237; *Globba perakensis* Ridl., **FMP4** 239; herb to 50 cm tall; damp shady places in lowland and hill forest; Pk southward; endemic.
- 248.12.1 **Haniffia cyanescens** (Ridl.) Holttum, **H41** 124; *Kaempferia cyanescens* (Ridl.) Ridl., **FMP4** 246; herb to 80 cm tall; montane forest; Kd, NS.
- 248.13.1 **Hedychium chrysoleucum** Hook., **H41** 74; herb about 1 m tall; Kl, Pg; possibly escapes from cultivation.
- 248.13.2 **Hedychium collinum** Ridl., **FMP4** 241, **H41** 75; herb about 1 m tall; rocky places in montane forest at about 1300 m; Kd, Ph; endemic.
- 248.13.3 **Hedychium hirsutissimum** Holttum, **H41** 76; herb possibly epiphytic; montane forest 1200 m; only known from type; Taiping Hill, Pk; endemic.
- 248.13.4 **Hedychium longicornutum** Baker, **FMP4** 242, **H41** 77; herbaceous epiphyte about 60 cm tall; low down on trees in lowland and hill forest; throughout except Sp.
- 248.13.5 **Hedychium macrorrhizum** Ridl., **FMP4** 242, **H41** 76; herbaceous epiphyte; on tall trees; only known from type; Semangkok Pass, Sl; endemic.
- 248.13.6 **Hedychium malayanum** Ridl., **FMP4** 241, **H41** 75; herb; montane forest at 1200–1500 m; Ph; endemic.
- 248.13.7 **Hedychium paludosum** M.R. Hend., **H41** 77; herb to 1.5 m tall; *Sphagnum* bogs in the mountains at about 1500 m; Cameron Highlands, Ph; endemic.
- 248.14.1 **Hornstedtia conica** Ridl., **FMP4** 268, **H41** 175; herb 2–3 m tall; lowland and hill forest; Tg, Sl, Jh, Sp; ? endemic.

- 248.14.2 **Hornstedtia leonurus** (J. König) Retz., **FMP4** 269, **H41** 177; herb to 5 m tall; lowland forest; Ph, Ml, Jh, Sp; endemic.
- 248.14.3 **Hornstedtia ophiuchus** (Ridl.) Ridl., **FMP4** 268, **H41** 176; herb to 4 m tall; lowland forest; known only from type; Sg Tahan, Ph; endemic.
- 248.14.4 **Hornstedtia phaeocoana** (K. Schum.) K. Schum., **H41** 174; herb to 2 m tall or more; lowland forest; once collected at Sg Sedili, Jh.
- 248.14.5 **Hornstedtia pusilla** Ridl., **FMP4** 269, **H41** 174; herb about 40 cm tall; lowland forest; known only from type; Kuala Tembeling, Ph; endemic.
- 248.14.6a **Hornstedtia scyphifera** (J. König) Steud. var. **fusiformis** Holttum, **H41** 171; stilt-rooted herb 2–3 m tall; lowland forest; Kl, Tg, Sl; endemic variety.
- 248.14.6b **Hornstedtia scyphifera** (J. König) Steud. var. **grandis** (Ridl.) Holttum, **H41** 172; *Hornstedtia grandis* Ridl., **FMP4** 268; stilt-rooted herb about 3 m tall; montane forest at about 1200 m; Pk, Ph.
- 248.14.6c **Hornstedtia scyphifera** (J. König) Steud. var. **scyphifera**, **H41** 170; *Hornstedtia scyphus* Retz., **FMP4** 267; herb 2–5 m tall; lowland and montane forest to 1100 m; Tg, Ph, Sl, Jh, Sp.
- 248.14.7 **Hornstedtia striolata** Ridl., **FMP4** 268, **H41** 173; herb; montane forest; known only from type; Ulu Semangkok, Sl; endemic.
- 248.15.1 **Kaempferia elegans** (Wall.) Baker, **FMP4** 245, **H41** 123; few-leaved herb; on limestone rocks; Kd, P. Langkawi.
- 248.15.2 **Kaempferia pulchra** (Ridl.) Ridl., **FMP4** 245, **H41** 122; small flat few-leaved herb; on limestone rocks; P. Langkawi.
- 248.16.1 **Plagiostachys albiflora** Ridl., **FMP4** 273, **H41** 164; herb to 2 m tall (Ridl.); moist lowland forest; Tg, Pk, Jh; endemic.
- 248.16.2 **Plagiostachys lateralis** Ridl., **FMP4** 273, **H41** 161; herb about 2 m tall; lowland forest; Ph, Jh, Sp; endemic.
- 248.16.3 **Plagiostachys mucida** Holttum, **H41** 162; herb to 3 m tall; wet lowland forest; Kl, Pk, Sl, NS, Ml, Jh, Sp; endemic.
- 248.17.1 **Scaphochlamys atroviridis** Holttum, **H41** 93; herb about 25 cm tall; lowland forest; Tg, Ml; endemic.
- 248.17.2a **Scaphochlamys biloba** (Ridl.) Holttum var. **biloba**, **H41** 89; *Gastrochilus bilobus* Ridl., **FMP4** 251; creeping herb about 30 cm tall; shady lowland forest; Kl, Ph; endemic.

- 248.17.2b **Scaphochlamys biloba** (Ridl.) Holttum var. **lanceolata** (Ridl.) Holttum, **H41** 90; *Gastrochilus minor* (*non* Baker) Ridl., **FMP4** 252; creeping herb about 30 cm tall; shady lowland forest; Pk; endemic.
- 248.17.3 **Scaphochlamys breviscapa** Holttum, **H41** 95; creeping herb to 20 cm tall; hill forest; only known from type; Ulu Bendong, Tg; endemic.
- 248.17.4 **Scaphochlamys burkillii** Holttum, **H41** 102; stilt-rooted herb to 30 cm tall; lowland forest; Ph; endemic.
- 248.17.5 **Scaphochlamys concinna** (Baker) Holttum, **H41** 94; *Gastrochilus concinnus* (Baker) Ridl., **FMP4** 251; creeping herb to 20 cm tall; only known from type; Ulu Bubong, Pk; endemic.
- 248.17.6 **Scaphochlamys erecta** Holttum, **H41** 99; herb to 60 cm tall; in thick litter of lowland forest; only known from Sg Sedili, Jh; endemic.
- 248.17.7 **Scaphochlamys grandis** Holttum, **H41** 101; stilt-rooted herb about 1 m tall; swampy lowland forest; only known from type locality; Ulu Bendong, Tg; endemic.
- 248.17.8a **Scaphochlamys klossii** (Ridl.) Holttum var. **glomerata** Holttum, **H41** 101; creeping herb; lowland forest; only known from Gg Panti, Jh; endemic species and variety.
- 248.17.8b **Scaphochlamys klossii** (Ridl.) Holttum var. **klossii**, **H41** 100; *Gastrochilus klossii* Ridl., **FMP4** 248; creeping herb; lowland forest; only known from S.E. Jh; endemic.
- 248.17.8c **Scaphochlamys klossii** (Ridl.) Holttum var. **minor** Holttum, **H41** 101; creeping herb; lowland and hill forest; only known from S.E. Jh; endemic.
- 248.17.9a **Scaphochlamys kunstleri** (Baker) Holttum var. **kunstleri**, **H41** 96; *Hitcheniopsis kunstleri* (Baker) Ridl., **FMP4** 252; creeping herb about 20 cm tall; lowland and hill forest; Pk; endemic.
- 248.17.9b **Scaphochlamys kunstleri** (Baker) Holttum var. **rubra** (Ridl.) Holttum, **H41** 97; *Hitcheniopsis kunstleri* (Baker) Ridl. var. **rubra** Ridl., **FMP4** 253; creeping herb; lowland forest; Pk; endemic.
- 248.17.10 **Scaphochlamys lanceolata** (Ridl.) Holttum, **H41** 99; *Gastrochilus lanceolatus* Ridl., **FMP4** 250; creeping herb to about 15 cm tall; lowland forest; known only from type; Gg Panti, Jh; endemic.
- 248.17.11 **Scaphochlamys longifolia** (Ridl.) Holttum, **H41** 91; *Gastrochilus longifolius* Ridl., **FMP4** 252; creeping herb about 25 cm tall; hill forest; only known from Ulu Gombak, Sl; endemic.

- 248.17.12 **Scaphochlamys malaccana** Baker, **H41** 104; *Gastrochilus scaphochlamys* Ridl., **FMP4** 250; *Gastrochilus lancifolius* Ridl., **FMP4** 250; stilt-rooted herb to 20 cm tall; lowland and hill forest to 800 m; NS, MI, Jh; endemic.
- 248.17.13 **Scaphochlamys oculata** (Ridl.) Holttum, **H41** 92; *Gastrochilus oculatus* Ridl., **FMP4** 251; creeping herb about 10 cm tall; hill forest at 250–500 m; SI, Jh; endemic.
- 248.17.14 **Scaphochlamys pennipicta** Holttum, **H41** 93; creeping herb to 30 cm tall; montane forest at about 1200 m; known only from type; Fraser's Hill, Ph; endemic.
- 248.17.15 **Scaphochlamys perakensis** Holttum, **H41** 97; *Hitcheniopsis lanceolata* (Ridl.) Ridl., **FMP4** 253; creeping herb to 50 cm tall; wet spots in forest; Pk; endemic.
- 248.17.16 **Scaphochlamys rubromaculata** Holttum, **H41** 103; stilt-rooted herb to 30 cm tall; lowland forest at 200 m; known only from type locality; Ulu Bendong, Tg; endemic.
- 248.17.17 **Scaphochlamys sub-biloba** (Burkill ex Ridl.) Holttum, **H41** 105; *Gastrochilus sub-bilobus* Burkill ex Ridl., **FMP4** 250; creeping herb to about 30 cm tall; lowland and hill forest to 600 m; known only from P. Tioman, Ph; endemic.
- 248.17.18 **Scaphochlamys sylvestris** (Ridl.) Holttum, **H41** 91; *Hitcheniopsis sylvestris* (Ridl.) Ridl., **FMP4** 253; creeping herb about 40 cm tall; hill forest at 400–800 m; Ph; endemic.
- 248.17.19 **Scaphochlamys tenuis** Holttum, **H41** 98; herb to 30 cm tall; lowland forest; known only from type; Sg Nipa, Tg; endemic.
- 248.17.20 **Scaphochlamys sp.**, **H41** 89; creeping herb; lowland forest; only known from Karak F. R., Ph; endemic.
- 248.18.1 **Zingiber chrysostachys** Ridl., **FMP4** 260, **H41** 55; herb to 1 m tall; lowland and hill forest to 900 m; Kd, Pk; endemic.
- 248.18.2 **Zingiber curtisii** Holttum, **H41** 54; herb to 1 m tall; hill forest; only known from type; Gg Bujong Malacca, Pk; endemic.
- 248.18.3a **Zingiber gracile** Jack var. **aurantiacum** Holttum, **H41** 65; herb to 2 m tall; hill and montane forest to 1100 m; Ph, SI, NS; endemic.
- 248.18.3b **Zingiber gracile** Jack var. **elatio** Ridl., **FMP4** 260, **H41** 64; herb to 1.5 m tall; hill and montane forest to 1100 m; Pn, Pk, SI, Jh; endemic.
- 248.18.3c **Zingiber gracile** Jack var. **gracile**, **FMP4** 260, **H41** 63; herb to 1 m tall; lowland forest; Kd, Pn, Ph, SI, NS, Jh; endemic.

- 248.18.3d **Zingiber gracile** Jack var. **petiolatum** Holttum, **H41** 64; herb to 2.5 m tall; lowland forest to 300 m; Kd, Ph, Sl; endemic.
- 248.18.4 **Zingiber griffithii** Baker, **FMP4** 260, **H41** 60; *Zingiber citrinum* Ridl., **FMP4** 260; herb to 70 cm tall; lowland forest; common in south of the Peninsula.
- 248.18.5 **Zingiber kunstleri** King, **FMP4** 258, **H41** 52; herb to 2 m tall; lowland and hill forest; Tg, Pk, Ph; endemic.
- 248.18.6a **Zingiber multibracteatum** Holttum var. **multibracteatum**, **H41** 57; herb to 3 m tall; montane forest about 1200 m; Ph; endemic.
- 248.18.6b **Zingiber multibracteatum** Holttum var. **viride** Holttum, **H41** 58; herb to 3 m tall; montane forest about 1200 m; known only from type; Tanah Rata, Ph; endemic.
- 248.18.7a **Zingiber puberulum** Ridl. var. **chryseum** (Ridl.) Holttum, **H41** 62; *Zingiber chryseum* Ridl., **FMP4** 260; herb to 3 m tall; damp lowland forest; Jh, Sp; endemic variety.
- 248.18.7b **Zingiber puberulum** Ridl. var. **ovoideum** Holttum, **H41** 63; herb 1–3 m tall; lowland forest; Kl, Pk, Ph; endemic variety.
- 248.18.7c **Zingiber puberulum** Ridl. var. **puberulum**, **FMP4** 261, **H41** 61; *Zingiber griffithii* Baker var. *major* Ridl., **FMP4** 261; herb 1–3 m tall; lowland forests; common in south; Kl, Tg, Pn, Pk, Ph, Sl, Sp; endemic variety.
- 248.18.8 **Zingiber spectabile** Griff., **FMP4** 258, **H41** 56; herb about 2 m tall; lowland forests; NS northward.
- 248.18.9 **Zingiber sulphureum** Burkill ex I. Theilade, Curtis's Bot. Mag. 12 (1995) 75; herb to 0.7 m tall; lowland forest on limestone or granite; Ph; endemic.
- 248.18.10 **Zingiber wrayi** Prain ex Ridl., **FMP4** 259, **H41** 53; herb to 2 m tall; lowland forest; Tg, Pk, Ph, Jh; endemic.