

A. guttata N.E.Br.

Herb • HAB: gentle slope; near running fresh water • GEO: Setap Shales; stony • ALT: 60–70 m

TEM: Amo, Batu Apoi Forest Reserve, *Poulsen* 43; Amo, Batu Apoi Forest Reserve, *Poulsen* 108 • Borneo: Sabah

A. longiloba Miq.

Without prov.: *Hotta* 12495; *Hotta* 12601; *Hotta* 13589 • ?Indochina, Thailand, Malaya, Java, Borneo

A. lowii Hook.f.

Herb • HAB: near running fresh water • GEO: Setap Shales • ALT: 60 m

TEM: Amo, Batu Apoi Forest Reserve, *Poulsen* 18 • Borneo

A. macrorrhizos (L.) G.Don

Seen in cultivation (P.C.B.) but not collected • SE Asia and Malesia to Australia; cultivated

A. peltata M.Hotta

Herb • HAB: gentle slope, steep slope • GEO: sandstone

TEM: Amo, *Wong* 1903; Amo, Bt. Retak, *Wong* 838. Without prov.: *Poulsen* 213 • Borneo: Sarawak

A. reginae N.E.Br.

Without prov.: *Hotta* 13227 • Borneo

~~**A. sp. A**~~

Herb • VEG: Degraded LMDF, Lower Montane Forest, Secondary Forest • HAB: near running fresh water • GEO: Setap Shales • ALT: 20–800 m

TEM: *Johns* 6733; Amo, K. Belalong, *Boyce* 384a; Bangar, Bt. Biang, *Forman* 897; Bangar, Bt. Biang, *Forman* 931 • Endemic

~~**A. sp. B**~~

Herb; on ground • VEG: LMDF, Degraded LMDF • HAB: steep slope, ridge; near running fresh water • GEO: Setap Shales • ALT: 20–100 m

BEL: Sungai Liang, Sungei Liang, *Forman* 1082. TEM: Amo, Bt. Belalong, *Wong* 1417; Amo, K. Belalong, *Boyce* 359; Amo, K. Belalong, *Boyce* 384. TUT: Lamunin, Ladan Hills, *Coode* 7332 • Endemic

~~**A. sp. C**~~

• VEG: Lower Montane Forest • ALT: 800 m

TEM: *Johns* 6721. Without prov.: *Kessler* 404 • Endemic

~~**A. sp. D**~~

• GEO: Lambir formation • ALT: 30 m

BEL: Labi, Rampayoh, *Atkins* 441 • Endemic

~~**A. sp. E**~~

Without prov.: *Poulsen* 235 • Endemic

~~**A. sp. F**~~

Without prov.: *Poulsen* 264 • Endemic

~~**A. sp. G**~~

Without prov.: *Poulsen* 79 • Endemic

A. spp. indet.

BEL: Labi, *Boyce* 343; Melilas, Kuala Ingei, *Thomas* 216; Melilas, Ulu Ingei, *Cowley* 144. TEM: Amo, K. Belalong, *Boyce* 418. Without prov.: *van Niel* 4247.

AMORPHOPHALLUS

A. paeoniifolius (Dennst.) Nicolson

Seen in cultivation (P.C.B.) but not collected • SE Asia and Malesia to Australia; cultivated

A. pendulus Mayo & Bogner

BEL: Labi, *Boyce* 247. **TEM:** Amo, Apoi Forest Reserve, *Sands* 5788; Amo, K. Belalong, *Boyce* 376; Amo, K. Belalong, *Boyce* 437.

AMYDRIMUM

A. medium (Zoll. & Mor.) Nicolson — *Sipak* (Dus.)

Herb, climber; on ground • VEG: Freshwater Swamp Forest, LMDF, HDF • HAB: gentle slope, steep slope, terrace, ridge; periodically flooded; near running fresh water • GEO: Belait formation, White sand, Sand/clay, Setap Shales; alluvial deposits • ALT: 10–350 m • USES: Edible leaves

BEL: Labi, Bt. Teraja, *Simpson* 2135; Labi, Kpg. Tenajor, *Haslani-Mohd. A.* 15; Melilas, Ulu Ingei, *Cowley* 145; Sungai Liang, Labi road, *Boyce* 449. **BRM:** Kota Batu, *Boyce* 220. **TEM:** Amo, Batu Apoi Forest Reserve, *Poulsen* 173; Amo, K. Belalong, *Boyce* 403; Amo, K. Belalong, *Boyce* 408; Labu, Bukit Patoi, *Hussain Hj. Osman* 37; Labu?, *Boyce* 347. **TUT:** Rambai, Tasek Merimbun, *Bernstein* 159; Rambai, Tasek Merimbun, *Bernstein* 384. **Without prov.:** *Poulsen* 236; *Poulsen* 364 • ?Indochina, Thailand, Malaya, Sumatra, Java, Borneo, Philippines

ANADENDRUM

A. affine Schott

Without prov.: *Hotta* 13337 • Sumatra

A. cordatum Schott

Climber • VEG: Alluvial Forest, Secondary Forest • HAB: valley bottom • GEO: alluvial deposits • ALT: 20–80 m

BEL: Labi, Sg. Rampayoh, *Dransfield S.* 1280. **TEM:** Bangar, Bt. Biang, *Forman* 901 • Sumatra

A. latifolium Hook.f.

Climber • VEG: Alluvial Forest • HAB: valley bottom • GEO: alluvial deposits

BEL: Labi, Sg. Rampayoh, *Dransfield S.* 1284. **Without prov.:** *Kessler* 355 • Malaya

A. lobbii Schott

Climber • VEG: LMDF • HAB: near running fresh water • GEO: Belait formation • ALT: 30–40 m

BEL: Labi, *Boyce* 249 • ?Indochina, Thailand, Malaya, Sumatra, Java, Borneo, Sulawesi

A. marginatum (Wall.) Schott

Without prov.: *Boyce* 249a • Malaya

A. microstachyum (de Vriese & Miq.) Baker

Climber • VEG: Degraded Peatswamp Forest, LMDF • GEO: clay soil, sandy soil • ALT: sea level–50 m

BEL: Labi, Kpg. Teraja, *Forman* 1073. **TUT:** *Forman* 989. **Without prov.:** *Hotta* 13517 • Sumatra, Java

A. spp. indet.

TEM: Amo, K. Belalong, *Boyce* 374; Batu Apoi, *Kirkup* 320.

ARIDARUM

A. caulescens M.Hotta

Rheophyte; herb • VEG: LMDF • HAB: near running fresh water • GEO: Belait formation, Lambir formation • ALT: 20–40 m

BEL: Labi, *Boyce* 250; Labi, Sg. Mendaram, *Sands* 5506 • Borneo: Sarawak

A. caulescens M.Hotta var. **angustifolium** Bogner & Nicolson

Rheophyte; herb • VEG: LMDF, Secondary Forest • HAB: waterfall spray zone, near running fresh water • GEO: Lambir formation • ALT: 90–20 m

BEL: Labi, *Johns* 6813; Labi, Sungai Rampayoh, *Atkins* 605. Without prov.: *Boyce* 250a; *van Niel* 3492 • Borneo: Sarawak

A. sp. indet.

BEL: Labi, *Kirkup* 352.

ARISAEMA**A. filiforme** (Reinw.) Blume

Herb • VEG: HDF • HAB: near running fresh water • ALT: 350 m

BEL: Labi, Bt. Teraja, *Simpson* 2062 • Malaya, Sumatra, Java, Borneo

A. umbrinum Ridl.

Herb • VEG: Lower Montane Forest • GEO: Meligan formation • ALT: 800 m

TEM: Amo, Bt. Retak, *Sands* 5347 • Borneo: Sarawak

BUCEPHALANDRA →**B. noteyana** Schott (*Microcasia oblanceolata* M.Hotta)

Lithophyte, rheophyte; acaulescent, herb • VEG: LMDF, HDF • HAB: flat ground, valley bottom, gentle slope, ridge; seasonal watercourse, periodically flooded; near running fresh water, in • GEO: Belait formation, shale, Setap Shales; alluvial deposits; bare rock and boulders; grey clay soil • ALT: 130 m

BRM: Lumapas, Bukit Lumapas, *Bygrave* 45. TEM: *Johns* 7130; *Johns* 7149; Amo, Apoi Forest Reserve, *Sands* 5821; Amo, Batu Apoi Forest Reserve, *Nielsen* 1012; Amo, Batu Apoi Forest Reserve, *Poulsen* 109; Amo, Batu Apoi F.R., K Belalong FSC, *Hansen* 1625; Amo, Bt. Belalong, *Wong* 1514; Amo, K. Belalong, *Boyce* 377; Amo, K. Belalong, *Boyce* 386; Amo, K. Belalong, *Boyce* 416; Amo, Sg. Belalong, *Wong* 1179; Amo, Sg. Temburong, *Coode* 6549; Amo, Sg. Temburong, *Coode* 6636; Amo, Temburong river, *Atkins* 484; Bangar, Bt. Biang, *Simpson* 148; Batu Apoi, Bt. Gelagas (Bt. Suang), *Simpson* 2425; Batu Apoi, Kpg. Selapon, *Dransfield* S. 1170; Labu, *Sands* 5647. TUT: Rambai, Tasek Merimbun, *Bernstein* 399a. Without prov.: *Argent* 9142a; *Coode* 6584a; *Hotta* 13586; *Hotta* 13855 • Borneo

CALADIUM**C. bicolor** Vent.

Seen in cultivation (P.C.B.) but not collected • Central and S America; naturalised in Malasia and elsewhere in tropics

COLOCASIA**C. esculenta** (L.) Schott

Seen in cultivation (P.C.B.) but not collected • Pantropic; widely cultivated and naturalised across the tropics and subtropics, native distribution uncertain

CRYPTOCORYNE**C. ciliata** (Roxb.) Schott

Not yet recorded but presumably present • SE Asia and Malasia to Australia

C. longicauda Engl.

Herb • VEG: Peatswamp Forest, LMDF • HAB: flat ground, ridge; impeded drainage; near still fresh water • GEO: Belait formation • ALT: 30–50 m

BEL: Labi, *Boyce* 459; Melilas, *Wong* 983 • Malaya, Sumatra, Borneo: Sarawak

CYRTOSPERMA

C. zonata de Wit

Herb • VEG: Peatswamp Forest, LMDF • HAB: flat ground, ridge; impeded drainage; near still fresh water • GEO: Belait formation • ALT: 30–50 m

BEL: Labi, *Boyce* 458. Without prov.: *Richards* 5601; *van Niel* 3395 • Malaya, Sumatra, Borneo: Sarawak

CYRTOSPERMA

C. ferox Linden & N.E.Br.

Herb • HAB: flat ground; impeded drainage; near still fresh water

BEL: Labi, *Wong* 1003. Without prov.: *Hotta* 13592 • Borneo

EPIPREMNUM

~~**E. talibatum**~~ Engl.

Epiphytic; climber • VEG: Degraded Peatswamp Forest, LMDF • HAB: gentle slope • GEO: Setap Shales; clay soil • ALT: sea level–150 m

TEM: Amo, Batu Apoi Forest Reserve, *Poulsen* 172. TUT: *Forman* 986. Without prov.: *Poulsen* 233; *Poulsen* 363 • Endemic

HAPALINE

~~**H. mixta**~~ P.C.Boyce in press

Herb; on ground • VEG: LMDF, Degraded LMDF • HAB: impeded drainage; near running fresh water • GEO: Setap Shales • ALT: 20–30 m

TEM: Amo, K. Belalong, *Boyce* 358; Amo, K. Belalong, *Boyce* 417 ~~Endemic~~ regional.

HOMALOMENA

H. aromatica (Roxb.) Schott (*H. cordata* (Houtt.) Schott)

Herb • VEG: LMDF • HAB: ridge • GEO: Setap Shales • ALT: 250 m

TEM: Amo, Batu Apoi Forest Reserve, *Poulsen* 25. Without prov.: *Hotta* 13951 • Indochina, Thailand, Malaya, Borneo, Moluccas, ?New Guinea

H. geniculata M.Hotta

Herb • VEG: LMDF • HAB: steep slope • GEO: sandstone; yellow clay soil • ALT: 450 m

TEM: Amo, Ulu Belalong, *Dransfield* J. 7401. Without prov.: *Poulsen* 322 • Borneo: Sarawak

H. hostifolia Engl. — *Kelemuyang* (Ib.), *Latu* (Dus.)

Lithophyte, rheophyte; herb • VEG: LMDF, HDF • HAB: gentle slope, ridge; impeded drainage; near running fresh water • GEO: Belait formation, Setap Shales; stony; clay soil • ALT: 20–40 m

BEL: Labi, *Boyce* 253. TEM: Amo, *Wong* 1894; Amo, Apan, *Cowley* 74; Amo, Bt. Belalong, *Wong* 1516; Amo, K. Belalong, *Boyce* 433; Batu Apoi, Bt. Gelagas (Bt. Suang), *Simpson* 2493; Batu Apoi, Selapon, *Dransfield* J. 7478; Batu Apoi, Selapon, *Dransfield* J. 7479. Without prov.: *Poulsen* 168; *Poulsen* 268 • Borneo: Sarawak, Kalimantan

H. humilis (Jack) Hook.f.

Rheophyte; herb • VEG: Degraded LMDF • HAB: near running fresh water • GEO: Setap Shales; bare rock and boulders • ALT: 20–60 m

TEM: Amo, Batu Apoi Forest Reserve, *Poulsen* 190; Amo, K. Belalong, *Boyce* 399. Without prov.: *Hotta* 12581; *Hotta* 13131; *Hotta* 13279 • Malaya, Sumatra

H. minutissima M.Hotta

Lithophyte; herb • VEG: LMDF • HAB: ridge • GEO: Belait formation • ALT: 50–150 m

BEL: Melilas, Bt. Batu Patam, *Boyce* 301. Without prov.: *Hotta* 12857 • Endemic

H. modesta Schott

Herb • VEG: LMDF • HAB: gentle slope • GEO: Setap Shales • ALT: 150 m

H. pseudogenuiculata

TEM: Amo, Batu Apoi Forest Reserve, *Poulsen* 177 • Borneo: Kalimantan

H. propinqua Schott

Lithophyte; herb • VEG: Kerangas • GEO: Belait formation • ALT: 180–200 m

BEL: Melilas, Bt. Batu Patam, *Boyce* 276 • Borneo

H. pygmaea (Hassk.) Engl. — *Latu Biasa* (Dus.)

Epiphytic, lithophyte, rheophyte; herb • VEG: Kerangas, LMDF, Degraded LMDF, Lower Montane Forest • HAB: gentle slope, ridge; waterfall spray zone, near running fresh water • GEO: Belait formation, Meligan formation, shale, Setap Shales; stony • ALT: 20–200 m

BEL: Labi, *Boyce* 255; Labi, *Boyce* 266; Labi, *Wong* 533; Melilas, Bt. Batu Patam, *Boyce* 284; Melilas, Bt. Batu Patam, *Boyce* 285. TEM: Amo, Bt. Retak, *Sands* 5322; Amo, K. Belalong, *Boyce* 356; Amo, K. Belalong, *Boyce* 378; Amo, Sg. Temburong, *Coode* 6584. TUT: Rambai, Tasek Merimbun, *Bernstein* 399. Without prov.: *Jacobs* 5603 • Malaya, Sumatra, Java, Borneo, Sulawesi, Philippines

H. rostrata Griff.

• HAB: near running fresh water

TEM: Bukok, Kpg. Temada, *Simpson* 155. Without prov.: *Hotta* 12785; *Hotta* 12972; *Hotta* 13457 • Borneo: Sarawak, ?Kalimantan

H. cf. rostrata Griff.

Herb • VEG: Peatswamp Forest • HAB: flat ground; impeded drainage; near still fresh water

BEL: Melilas, *Wong* 986.

H. sagittifolia Schott

Without prov.: *Hotta* 12690; *Hotta* 13320; *Hotta* 13466; *Hotta* 13658; *Hotta* 13850 • Malaya, Borneo

H. subcordata Engl.

Without prov.: *Hotta* 13457a • Borneo: Sarawak

H. vagans P.C. Boyce

Herb, on ground • VEG: LMDF, Secondary Forest • HAB: gentle slope; near running fresh water • GEO: Lambir formation • ALT: 20–150 m

BEL: Labi, Rampayoh, *Cowley* 180. TUT: Rambai, Sg. Tutong, *Coode* 6365. Without prov.: *Jacobs* 5615; *Poulsen* 47; *Poulsen* 273 • Endemic

H. sp. A

Herb; on ground • VEG: LMDF • HAB: impeded drainage; near running fresh water • GEO: Belait formation; alluvial deposits • ALT: 100–120 m

TUT: Lamunin, Ladan Hills, *Cowley* 29; Lamunin, Ladan Hills F.R., *Sands* 5728 • Endemic

H. cf. sp. A

Herb • HAB: ridge • GEO: shale • ALT: 800 m

TEM: Amo, Bt. Belalong, *Wong* 1463.

H. sp. B

Herb • VEG: LMDF • HAB: near running fresh water • GEO: Belait formation • ALT: 20–40 m

BEL: Labi, *Boyce* 244 • Endemic

H. sp. C — *Ratun Latu* (Dus.)

• VEG: HDF • ALT: 390 m

BEL: Labi, *Johns* 6875. TUT: Rambai, Tasek Merimbun, *Bernstein* 199 • Endemic

H. sp. D

Herb; on ground • VEG: LMDF, Secondary Forest • HAB: gentle slope, steep slope • GEO: Lambir formation, Setap Shales; clay soil • ALT: 80 m

BEL: Labi, Teraja, *Atkins* 615. TEM: Amo, K. Belalong, *Boyce* 400; Amo, Kuala Belalong F.S.C., *Argent* 9185; Batu Apoi, Selapon, *Dransfield* J. 7482; Batu Apoi, Sg. Selapon, *Wong* 2083 • Endemic

in Sarawak: only: *H. expedita*

HOTTARUM

~~H. sp. E~~

Herb; on ground • VEG: LMDF, Degraded LMDF • HAB: steep slope; near running fresh water • GEO: Belait formation • ALT: 20–90 m

BEL: Labi, *Boyce* 252; Labi, *Boyce* 263. TUT: Lamunin, Ladan Hills, *Coode* 7328. Without prov.: *Coode* 6370a • Endemic

~~H. sp. F~~

• VEG: HDF • HAB: near running fresh water • GEO: Setap Shales • ALT: 40 m
TEM: Amo, Apan, *Cowley* 78 • Endemic

~~H. sp. G~~

BEL: Labi, Rampayoh, *Sands* 5742; Labi, Sungai Rampayoh, *Kirkup* 792; Melilas, Bt. Batu Patam, *Boyce* 339. BRM: Lumapas, Bukit Lumapas, *Bygrave* 47. TEM: Amo, Batu Apoi Forest Reserve, *Poulsen* 181; Amo, Batu Apoi F.R., K Belalong FSC, *Hansen* 1614; Amo, K. Belalong, *Boyce* 361; Amo, K. Belalong, *Boyce* 369; Amo, K. Belalong, *Boyce* 381; Amo, K. Belalong, *Boyce* 422; Bangar, Bt. Biang, *Simpson* 147. Without prov.: *Poulsen* 234; *Poulsen* 315; *van Niel* 3447.

H. sp. nov. I

Herb; on ground • VEG: LMDF, HDF • HAB: impeded drainage; near running fresh water • GEO: Setap Shales • ALT: 20–40 m

TEM: Amo, Apan, *Cowley* 79; Amo, K. Belalong, *Boyce* 420.

HOTTARUM

H. truncatum (M.Hotta) Bogner & Nicolson

Rheophyte • VEG: Degraded LMDF • HAB: near running fresh water • GEO: Setap Shales • ALT: 20 m

TEM: Amo, K. Belalong, *Boyce* 399A • Borneo: Sarawak

~~H. strictum~~ P.C. Boyce in press *not in ipmi*
based on a Johns collection from Brunei, label lost • Endemic

~~H. dactylon~~ P.C. Boyce in press *not in ipmi*
Herb • VEG: Lower Montane Forest • GEO: Meligan formation • ALT: 800–900 m
TEM: *Johns* 6743; Amo, Bt. Retak, *Sands* 5375 • Endemic

H. sp. indet.

TEM: Temburong R., Sungai Wong, *Coode* 6549a.

LASIA

L. spinosa (L.) Thwaites — Bungor (Dus.)

Herb • VEG: Peatswamp Forest, Degraded Peatswamp Forest, Degraded LMDF • GEO: Belait formation; clay soil • ALT: sea level–40 m • USES: Edible leaves, cooked as a vegetable

BEL: Labi, *Boyce* 340. TUT: *Forman* 975; Rambai, Sg. Medit, *Simpson* 2592; Rambai, Tasek Merimbun, *Bernstein* 35. Without prov.: *Hotta* 12560; *Hotta* 13461 • Continental SE Asia: India to China, Sumatra, Java, Borneo, New Guinea

PHYMATARUM

~~P. borneense~~ M.Hotta

Rheophyte; herb • VEG: Degraded LMDF • HAB: flat ground; near running fresh water • GEO: Belait formation, Setap Shales; alluvial deposits; stony • ALT: 10–40 m

BEL: Labi, *Boyce* 341. TEM: Amo, K. Belalong, *Boyce* 398; Batu Apoi, Kpg. Selapon, *Dransfield* J 6919. Without prov.: *Hotta* 13314; *Hotta* 13722 • Borneo: Sarawak, Kalimantan

~~P. crassum~~ P.C. Boyce in press

• HAB: near running fresh water • GEO: Setap Shales • ALT: 10 m
TEM: Batu Apoi, Kpg. Selapon, *Dransfield* S. 1150 • Endemic

PIPTOSPATHA

P. burbridgei (N.E.Br.) M.Hotta

Rheophyte; herb • VEG: Degraded LMDF • HAB: periodically flooded; near running fresh water • GEO: Setap Shales; bare rock and boulders • ALT: 20–70 m

TEM: Amo, Wong 1329; Amo, Batu Apoi Forest Reserve, Poulsen 19; Amo, K. Belalong, Boyce 355; Amo, Sungai Temburong, Argent 9142. Without prov.: Hotta 13721; Hotta 13735 • Borneo

P. elongata (Engl.) N.E.Br.

Rheophyte; herb • HAB: flat ground; near running fresh water • GEO: Setap Shales; alluvial deposits; stony • ALT: 10–20 m

TEM: Batu Apoi, Kpg. Selapon, Dransfield J. 6918 • Malaya, Borneo

P. spp. indet.

TEM: Amo, K. Belalong, Boyce 414; Amo, K. Belalong, Boyce 432; Amo, K. Belalong, Boyce 436.

PISTIA

P. stratiotes L.

Seen in cultivated rice-fields (P.C.B.) but not collected • Pantropic

POTHOS

P. atropurpurea M.Hotta

Climber • HAB: ridge; near running fresh water • GEO: sandstone • ALT: 120–150 m

BEL: Labi, Wong Kadir, Coope 7181 • Borneo: Sarawak endemic to N. Borneo.

P. barberianus Schott

Epiphytic; climber • VEG: Kerangas, LMDF, HDF • HAB: gentle slope, steep slope, ridge • GEO: Belait formation, sandstone, Setap Shales; clay soil, yellow clay soil • ALT: 70–850 m

BEL: Melilas, Bt. Batu Patam, Boyce 302; Melilas, Bt. Batu Patam, Boyce 304; Melilas, Bt. Batu Patam, Boyce 316. TEM: Amo, Bt. Belalong, Dransfield J. 7176; Amo, Ulu Belalong, Dransfield J. 7405; Batu Apoi, Selapon, Kirkup 944b • Malaya, Sumatra, Borneo: Kalimantan

P. beccarianus Engl.

Climber • VEG: HDF • HAB: steep slope • GEO: Setap Shales • ALT: 820 m

TEM: Amo, Bt. Belalong, Dransfield J. 7169. Without prov.: Poulsen 174 • Borneo: Sarawak

P. brevistylus Engl.

Climber • VEG: LMDF, Degraded LMDF • HAB: gentle slope • GEO: Setap Shales • ALT: 20–80 m

BEL: Labi, Jln. Melayan, Dransfield J. 7269. TEM: Batu Apoi, Dransfield J. 6944 • Borneo: Sarawak endemic to N. Borneo.

P. hosei Rendle

Climber • VEG: Kerapah, LMDF • HAB: ridge • GEO: Setap Shales • ALT: 30–210 m

TEM: Amo, K. Belalong, Boyce 440; Amo, K. Belalong, Boyce 445; Batu Apoi, Dransfield J. 6955 • Borneo: Sarawak

P. insignis Engl.

Climber • VEG: LMDF • HAB: impeded drainage • GEO: Setap Shales • ALT: 20–30 m

TEM: Amo, K. Belalong, Boyce 438. Without prov.: Poulsen 183 • Borneo: Sarawak

P. auritulus P.C. Boyce in press

Climber • VEG: Alluvial Forest • HAB: valley bottom • GEO: alluvial deposits

BEL: Labi, Sg. Rampayoh, Dransfield S. 1282 • Endemic

P. leptostachyus Schott

Climber • VEG: LMDF • HAB: gentle slope • GEO: sandstone; clay soil • ALT: 150 m

P. longevaginata
Telopea 9

ascens

RHAPHIDOPHORA

TEM: Batu Apoi, Selapon, *Dransfield J. 7465*. Without prov.: *Poulsen 147* • Borneo: Kalimantan

P. aff. leptostachyus Schott

Climber • VEG: LMDF • HAB: gentle slope • GEO: Setap Shales • ALT: 20–40 m
TEM: Batu Apoi, *Dransfield J. 6934*.

P. oxyphyllus Miq.

Without prov.: *Poulsen 180; Poulsen 208* • Sumatra, Java, Borneo

P. scandens L.

Climber • GEO: vertical tree trunk

BRM: Gadong, Kpg. Rimba, *Wong 1635* • India to Indochina and Malaya, Sumatra, Java, Borneo, Sulawesi, Moluccas

P. volans P.C. Boyce in press

Epiphytic; climber • VEG: HDF • HAB: ridge • GEO: sandstone; yellow-red clay soil; Leaf litter • ALT: 620 m

TEM: Amo, Bt. Belalong, *Wong 1488*; Amo, Ulu Belalong, *Dransfield J. 7419*. Without prov.: *Dransfield J. 7169a* • ~~Ende~~ also Sarawak

P. cf. volans P.C. Boyce in press

Climber • VEG: LMDF • HAB: ridge • GEO: Belait formation • ALT: 30–50 m
BEL: Labi, *Boyce 248*.

P. sp. indet.

TEM: Amo, Bt. Belalong, *Dransfield S. 1226*.

RHAPHIDOPHORA

+ R. *lateraginata***R. angustifolia** Schott

Climber • VEG: LMDF • HAB: ridge • GEO: Setap Shales • ALT: 250 m
TEM: Amo, Batu Apoi Forest Reserve, *Poulsen* • Java, Borneo: Kalimantan

R. beccarii Engl.

Rheophyte; herb • VEG: LMDF, Degraded LMDF • HAB: near running fresh water • GEO: Belait formation, Setap Shales • ALT: 20–40 m

BEL: Labi, *Boyce 245*. TEM: Amo, K. Belalong, *Boyce 396*; Amo, Sg. Temburong, *Wong 242*. Without prov.: *Hotta 13463; Jacobs s.n.* • Thailand, Malaya, Sumatra, Borneo

R. foramanifera (Engl.) Engl.

Climber • VEG: LMDF • HAB: near running fresh water • GEO: Belait formation; sandy soil • ALT: 30–40 m

BEL: Labi, *Boyce 235*; Labi, Rampayoh Sg., *Joffre 15*. Without prov.: *Hotta 13324* • Malaya, Sumatra, Borneo

R. korthalsii Schott

Epiphytic, lithophyte; climber • VEG: LMDF • HAB: steep slope • GEO: Belait formation • ALT: 50–350 m

BEL: Melilas, Bt. Batu Patam, *Boyce 322*. TEM: Labu?, *Boyce 349* • Thailand, Malaya, Sumatra, Java, Borneo, Philippines to New Guinea

R. lobbii Schott

Climber • VEG: Peatswamp Forest • HAB: flat ground; periodically flooded • GEO: Belait formation; alluvial deposits • ALT: 20 m

BEL: Melilas, Ulu Ingei, *Sands 5919* • Thailand, Malaya, Sumatra, Java, Borneo

R. minor Hook.f.

Epiphytic; climber • VEG: LMDF • HAB: gentle slope • GEO: Setap Shales; sandy soil • ALT: 10–200 m

BEL: Sukang, Sg. Keduan, *Forman 1174*. TEM: Amo, Batu Apoi Forest Reserve, *Poulsen 153* • ?Indochina, Thailand, Malaya, Sumatra, Java, Borneo, Sulawesi

gerruginata:
area 9

Rhaphidophora typha Wong 242

R. nigrescens Ridl.

Climber • VEG: Kerangas • HAB: ridge • GEO: Belait formation • ALT: 170–200 m
 BEL: Melilas, Bt. Batu Patam, *Boyce* 298 • Borneo: Sarawak, Sabah

R. sylvestris (Blume) Engl.

Climber • VEG: Alluvial Forest • HAB: flat ground; periodically flooded • GEO: alluvial deposits • ALT: 10 m

TEM: Batu Apoi, *Dransfield* J. 6917. Without prov.: *Hotta* 13214 • Java, Borneo, Moluccas, New Guinea

R. cf. sylvestris (Blume) Engl.

Without prov.: *van Niel* 3944.

R. tenuis Engl.

Epiphytic; climber • VEG: LMDF • HAB: gentle slope, steep slope; near running fresh water • GEO: Belait formation; vertical tree trunk • ALT: 80 m

BEL: Melilas, Bt. Batu Patam, *Boyce* 312. TEM: Amo, *Wong* 1727; Amo, Sungai Temburong, *Argent* 9136 • Borneo: Sarawak

R. sp. A

Climber • VEG: Degraded LMDF • GEO: Belait formation • ALT: 10–40 m

BEL: Labi, *Boyce* 345 • Endemic

R. sp. B

Climber • VEG: LMDF • HAB: steep slope • GEO: White sand, Setap Shales • ALT: 20–100 m

BRM: Kota Batu, *Boyce* 221. TEM: Amo, K. Belalong, *Boyce* 372 • Endemic

R. sp. C

Climber • VEG: LMDF • HAB: steep slope • GEO: Setap Shales • ALT: 20–80 m

TEM: Amo, K. Belalong, *Boyce* 402 • Endemic

R. sp. D

Without prov.: *Poulsen* 362 • Endemic

R. sp. E

Without prov.: *Poulsen* 207 • Endemic

R. spp. indet.

BEL: Labi, *Boyce* 243; Melilas, Bt. Batu Patam, *Boyce* 271; Melilas, Bt. Batu Patam, *Boyce* 325; Melilas, Bt. Batu Patam, *Boyce* 330; Melilas, Bt. Batu Patam, *Boyce* 332. TEM: Amo, Batu Apoi Forest Reserve, *Poulsen* 152; Amo, Batu Apoi Forest Reserve, *Poulsen* 165. Without prov.: *Poulsen* 211; *van Niel* 4138; *van Niel* 4250.

SCHISMATOGLOTTIS

S. beccariana Engl.

Lithophyte; herb; on ground • VEG: LMDF, Degraded LMDF • HAB: ridge; near running fresh water • GEO: Belait formation • ALT: 20–40 m

BEL: Labi, *Boyce* 238; Labi, *Boyce* 242; Labi, *Boyce* 257. TEM: *Johns* 6979. TUT: *Johns* 7107; Ukong, Bt. Besong, *Dransfield* S. 1146; Rambai, Tasek Merimbun. *Wong* s.n. Without prov.: *Hotta* 13211; *Hotta* 13212 • Borneo: Sarawak, Kalimantan

S. aff. beccariana Engl.

Herb; on ground • VEG: LMDF • HAB: ridge • GEO: Setap Shales • ALT: 50–210 m

TEM: Amo, K. Belalong, *Boyce* 446.

S. brevicuspis Hook.f.

Lithophyte; herb • VEG: Kerangas • HAB: steep slope, ridge; near running fresh water • GEO: Belait formation, Setap Shales; bare rock and boulders • ALT: 180–200 m

BEL: Melilas, Bt. Batu Patam, *Boyce* 283. TEM: Amo, Batu Apoi Forest Reserve, *Poulsen* 139 • Malaya, Java, Borneo: Sarawak

+ ⁱⁿ *S. tecturata*

SCHISMATOGLOTTIS

S. calyptrata (Roxb.) Zoll. & Mor.

Herb • VEG: Degraded LMDF • HAB: valley bottom, gentle slope; near running fresh water
• GEO: Setap Shales • ALT: 20–60 m
TEM: Amo, Batu Apoi Forest Reserve, *Poulsen* 192. TUT: Lamunin, *Dransfield J.* 6886 •
Widespread across SE Asia and Malesia to New Guinea

S. P.C. Boyce

Climber • HAB: valley bottom
TEM: Amo, Kuala Belalong F.S.C., *Argent* 91203 • Endemic

S. ferruginea Merr.

Herb • VEG: Degraded LMDF, HDF • HAB: gentle slope; periodically flooded; near running
fresh water • GEO: Belait formation, sandstone; alluvial deposits; sandy soil • ALT: 150 m
TUT: Lamunin, Ladan Hills, *Sands* 5764; Lamunin, Ladan Hills F.R., *Dransfield J.* 6871 •
Borneo: Sabah

S. gillmanii P.C. Boyce

Rheophyte; herb; on ground • VEG: LMDF • HAB: flat ground; impeded drainage; near
running fresh water • GEO: Belait formation, shale, Setap Shales; alluvial deposits; bare rock and
boulders, stony • ALT: 10–130 m
BEL: Labi, *Boyce* 254. TEM: Amo, K. Belalong, Sg. Belalong, *Dransfield J.* 7041; Amo, K.
Belalong, *Boyce* 424; Amo, Sg. Temburong, *Coode* 6665; Batu Apoi, Kpg. Selapon, *Dransfield*
J. 6920. TUT: Rambai, Sg. Tutong, *Coode* 6313. Without prov.: *Poulsen* 47a • Endemic

S. hottae Bogner & Nicolson (*S. cordifolia* M. Hotta)

Lithophyte; herb • VEG: Kerangas, HDF • HAB: ridge • GEO: Belait formation • ALT:
180–200 m
BEL: Labi, *Johns* 6872; Melilas, Bt. Batu Patam, *Boyce* 279. Without prov.: *Hotta* 12886 •
Endemic

S. monoplacenta M. Hotta

Cited by Hotta but not seen at Kew • Borneo: Sarawak

S. aff. monoplacenta M. Hotta

Herb • VEG: LMDF • HAB: ridge • GEO: Setap Shales • ALT: 250 m
TEM: Amo, Batu Apoi Forest Reserve, *Poulsen* 86.

S. parviflora M. Hotta

Without prov.: *Hotta* 12582; *Hotta* 12585; *Hotta* 12672 • ?Endemic

+ *pedicularis*
+ *petri*

S. platystigma M. Hotta

Without prov.: *Hotta* 13132; *Hotta* 13321 • ?Endemic

S. schottii Bogner & Nicolson — *Latu Payoh* (Dus.)

Herb; on ground • HAB: seasonal watercourse; near running fresh water • GEO: sandstone,
shale; alluvial deposits; sandy soil; fallen logs • ALT: 300 m • USES: Used to catch spirit of new
rice

BEL: Labi, Sg. Rampayoh, *Coode* 7297 = *Hertia longifolia* •
BRM: Lumapas, Bukit Lumapas, *Bygrave* 46.
TEM: Amo, Sg. Temburong, *Coode* 6696. TUT: Rambai, Tasek Merimbun, *Bernstein* 228
Without prov.: *Poulsen* 365 • Borneo: Sarawak, Kalimantan

S. wallichii Hook. f.

Herb; on ground • VEG: Alluvial Forest, LMDF, Degraded LMDF • HAB: valley bottom,
ridge; near running fresh water • GEO: Belait formation, Lambir formation; alluvial deposits •
ALT: 20–40 m

BEL: Labi, *Boyce* 239; Labi, *Boyce* 259; Labi, Rampayoh, *Atkins* 434; Labi, Sg. Rampayoh,
Dransfield S. 1277. TUT: Ukong, Bt. Besong, *Dransfield S.* 1147 • Malaya

S. cf. wallichii Hook. f.

Rheophyte; herb; on ground • VEG: Degraded LMDF • GEO: Belait formation • ALT: 20–
50 m

Seb. Motley

BEL: Labi, *Boyce* 267; Labi, *Boyce* 270.

S. sp. A

BEL: Labi, *Boyce* 240; Labi, *Boyce* 241; Labi, *Boyce* 251; Labi, *Boyce* 256; Labi, *Boyce* 258; Labi, *Boyce* 265; Labi, Sg. Rampayoh, *Dransfield S.* 1283; Labi, Wong Kadir, *Coode* 7194. **TEM:** *Johns* 6734; Amo, Apan, *Cowley* 85; Amo, Apoi Forest Reserve, *Cowley* 96; Amo, K. Belalong, *Boyce* 357; Amo, K. Belalong, *Boyce* 385; Amo, K. Belalong, *Boyce* 415; Amo, K. Belalong, *Boyce* 419; Amo, K. Belalong, *Boyce* 434; Batu Apoi, Selapon, *Dransfield J.* 7485. **TUT:** Lamunin, Ladan Hills F.R., *Sands* 5730; Ukong, Bt. Besong, *Dransfield S.* 1145. **Without prov.:** *Poulsen* 143; *Poulsen* 237; *Poulsen* 238; *Poulsen* 239; *Poulsen* 296.

S. cf. sp. A

TEM: Amo, K. Belalong, *Boyce* 354; Amo, K. Belalong, *Boyce* 421.

SCINDAPSUS

S. beccarii Engl. — *Lukut* (Dus.)

Epiphytic • GEO: White sand • ALT: 20 m

BRM: Kota Batu, *Boyce* 222. **TUT:** Rambai, Tasek Merimbun, *Bernstein* 24. **Without prov.:** *Hotta* 13590 • Malaya, Sumatra, Borneo

S. borneensis Engl. & K. Krause

• VEG: LMDF • GEO: sandy soil • ALT: 50 m

BEL: Labi, *Forman* 1060A • Borneo: Sabah, Kalimantan

S. hederaceus Schott

Climber • VEG: Lower Montane Forest • HAB: ridge • ALT: 150 m

TEM: *Johns* 7352 • Thailand, Malaya, Sumatra, Java, Borneo

S. latifolius M. Hotta

Climber • VEG: LMDF • HAB: steep slope • GEO: Belait formation • ALT: 150–350 m

TEM: Labu ?, *Boyce* 351. **Without prov.:** *Hotta* 13512 • Borneo: Sarawak

S. longipes Engl.

Climber • VEG: LMDF • HAB: steep slope, ridge • GEO: Belait formation, Setap Shales • ALT: 150–350 m

TEM: Amo, Batu Apoi Forest Reserve, *Poulsen* 313; Labu ?, *Boyce* 353 • Borneo: Sarawak

S. perakensis Hook. f.

Climber • HAB: steep slope • GEO: vertical tree trunk • ALT: 90 m

TUT: Lamunin, Ladan Hills, *Coode* 7331. **Without prov.:** *Hotta* 12584 • Thailand, Malaya, Borneo

S. pictus Hassk.

Climber • VEG: Degraded Kerangas • GEO: White sand • ALT: 10–20 m

TUT: Telisai, *Boyce* 225. **Without prov.:** *Poulsen* 206 • Thailand, Malaya, Sumatra, Java, Borneo, Sulawesi, Philippines

S. rupestris Ridl.

Epiphytic, rheophyte; herb, climber; on ground • VEG: Kerangas, LMDF, Lower Montane Forest • HAB: steep slope • GEO: Belait formation, sandstone, shale, Setap Shales • ALT: 20–300 m

BEL: Melilas, Bt. Batu Patam, *Boyce* 275. **TEM:** *Johns* 7261; Amo, *Wong* 1834; Amo, K. Belalong, *Boyce* 413; Amo, Sg. Temburong, *Coode* 6694. **TUT:** Rambai, Bt. Bahak, *Coode* 7009; Rambai, Tasek Merimbun, *Bernstein* 38. **Without prov.:** *Nielsen* 1013; *Poulsen* 205 • Thailand, Malaya, Sumatra, Borneo

S. spp. indet.

BEL: Labi, Sg. Rampayoh, *Dransfield S.* 1279; Melilas, Bt. Batu Patam, *Boyce* 318. **Without prov.:** *Hotta* 13516; *van Niel* 4095.

SYNGONIUM

SYNGONIUM

S. podophyllum Schott

Seen in cultivation (P.C.B.) but not collected • C & S America; naturalised in many parts of tropics

TYPHONIUM

T. blumei Nicolson & Sivadasan

Seen in cultivation (P.C.B.) but not collected • Native to China & Japan; elsewhere introduced across tropical and sub-tropical areas

T. roxburghii Schott

Seen in cultivation (P.C.B.) but not collected • Native to W & C Malesia; introduced in S America, Africa, India, Philippines and New Guinea

XANTHOSOMA

X. sagittifolium (L.) Schott

Seen in cultivation (P.C.B.) but not collected • Native to C & S America; cultivated and widely naturalised throughout SE Asia

BURMANNIACEAE

E.J. COWLEY

Jonker in Fl. Males. 4: 13-26 (1948)

BURMANNIA

B. championii Thwaites

BEL: Labi, Wong Kadir, *Coode* 7201.

B. coelestis D. Don

Parasitic; herb • VEG: Kerangas, HDF, Roadsides • HAB: ridge • GEO: White sand; sandy clay soil, sandy soil • ALT: 20 m

BEL: Jln. Labi, *Wong* 31; Bt. Sawat, UBD plot, *Thomas* 224; Seria, Kpg. Badas, *Fuchs and Diederix* 21188. TEM: Batu Apoi, Bt. Gelagas (Bt. Suang), *Simpson* 2294; Bukok, Kpg. Simbatang, *Simpson* 158. TUT: Tanjong Maya, *Forman* 830; Tefisai, *Sands* 5418. Without prov.: *De Vogel* 8892; *van Niel* 3435 • Tropical Asia to Pacific

B. longifolia Becc.

Herb • VEG: Lower Montane Forest • HAB: ridge

TEM: Amo, Bt. Pagon, *Wong* 1781 • Malesia

B. spp. indet.

BEL: Labi, Sungai Rampayoh, *Coode* 7782; Melilas, Paleh Bangawong, *Thomas* 133. TEM: Amo, Bt. Retak, *Wong* 807; Amo, Bt. Retak, *Wong* 892; Amo, Bukit Tudal, *Bygrave* 17; Amo, G. Pagon, *Coode* 7464.

GYMNOSIPHON

G. aphyllus Blume

Saprophytic • VEG: Kerangas, Degraded Kerangas • HAB: ridge • GEO: Belait formation, White sand • ALT: 10-200 m

BEL: Melilas, Bt. Batu Patam, *Boyce* 300. TUT: Telisai, *Boyce* 226 • S Thailand, Malesia

G. sp. indet.

TEM: Amo, Bt. Belalong, *Dransfield* S. 1264.