

A preliminary checklist of the Zingiberaceae of Thailand

KAI LARSEN*

21 genera with about 200 species

This checklist has been worked out in order to stimulate the research in Zingiberaceae prior to the final revision of the family for Flora of Thailand which is carried out by Puangpen Sirirugsa, Supee Saksuwan Larsen, Ida Theilade, and Rosalind Searle with the author as coordinator. For the genera the stage of revision is mentioned; where nothing is added after the generic name, it indicates that the genus has been revised. Any additional information or corrections will be greatly appreciated by the author.

1. *Alpinia* ca 12 species (*not revised*)

assimilis Ridl., J. Str. Br. Roy. Asiat. Soc. 32 (1899) 166.

Type: Ridl. s.n. 1891, Malaysia, Pahang (Lectotype ?)

Syn.: *Catimbium assimile* (Ridl.) Holtt., Gard. Bull. Sing. 13 (1950) 152.

blepharocalyx K. Schum., Pflanzenr. Zing. (1904) 334.

Type: Henry 11962, China (Lectotype K, check)

Syn.: *A. bracteata* Roxb., Fl. Ind 1 (1820) 61, non *A. bractea* Rosc., Trans. Linn. Soc. 11 (1814) 281.

conchigera Griff., Not. Pl. Asiat. 3 (1851) 424, t.354.

Type: Griffith 5700 (K)

Syn.: *Languas conchigera* (Griff.) Burk., Kew Bull. (1930) 37.

galanga (L.) Willd., Sp. Pl. (1797) 12.

Type: not typified

Basionnym: *Maranta galanga* L., Sp. Pl. ed. 2 (1762) 3.

Syn.: *Languas galanga* (L.) Stuntz, U.S. Dept Agr. Bull. 261 (1912) 21.—
Languas vulgare Koenig in Retz., Obs. 3 (1783) 64.—
Amomum medium Lour. Fl. Cochinch. (1790) 4.—
Languas galanga (L.) Merr., Lingn. Sc. J. 5 (1927) 51.

javanica Bl., Enum. Pl. Java (1827) 59.

*Institute of Biological Sciences, Department of Systematic Botany, University of Aarhus, Denmark.

- Type:** Blume s.n. (Lectotype L)
Syn.: *A. involucrata* Griff., Notul. 3 (1851) 422.— *Costus malaccensis* Koenig, Retz. Obs. 3 (1791) 71.— *A. campanaria* Ridl., J. Str. Br. Roy. Asiat. Soc. 86 (1922) 308.— *Languas javanica* (Bl.) Burk., Kew Bull. (1935) 318.
- macroura* K. Schum., Bot. Tidsskr. 24 (1902) 268.
Type: Schmidt 642, Thailand (K, sterile), imperfectly known.
- malaccensis* (Burm.) Roscoe, Trans. Linn. Soc. 8 (1808) 345.
Type: *Galanga malaccensis* Rumphius, Herb. Amboin. 5 (1747) Tab. 71. f.1.
Basionym: *Maranta malaccensis* Burm., Fl. Ind. (1768) 2.
Syn.: *Catimbium malaccense* (Burm.) Holtt., Gard. Bull. Sing. 13 (1950) 155.— *Languas malaccensis* (Burm.) Merr., Philip. J. Sci 19 (1921) 343.
- mutica* Roxb., Asiat. Res. 11 (1810) 354.
Type: Cult. Calcutta, from Penang—see Roscoe Mon. Pl. (1824) t.69.
Syn.: *Catimbium muticum* (Roxb.) Holtt., Gard. Bull. Sing. 13 (1950) 150.— *Languas mutica* (Roxb.) Degener, Fl. Hawaii, Fam. 76 (1932).
- nigra* (Gaertn.) Burtt, Edinb. J. Bot. 47 (1990) 52.
Type: Hermann, Parad. Bot. (1689) 320, descr.
Basionym: - *Zingiber nigrum* Gaertn., Fruct. 1 (1788) 35, t.12.
Syn.: *Heretiera allughas* Retz., Obs. Bot 6 (1791) 17, t.1.— *A. allughas* (Retz.) Roscoe, Trans. Linn. Soc. 8 (1807) 346. **Type:** Koenig s.n., Ceylon.— *Languas allughas* (Retz.) Burtt, Kew Bull. (1935) 317.— *L. chinensis* Koenig in Retz. Obs. 3 (1783) 65.
- nutans* (L.) Roscoe, Smith, Exot. Bot. 2 (1805) 93.
Type: Rumph., Herb. Amb. 6 (1750) 140. t.62, 63, see Notes RBG Edinb. 34 (1975) 160.
Basionym: *Globba nutans* L., Mant. 2 (1771) 170. This species does not occur in Thailand, it is endemic to Moluccas, not the same as *Catimbium speciosum* (Wendl.) Holtt 1950 = *A. zerumbet* (Pers.) Burtt. & R. M. Smith.
- oxymitra* K. Schum., Bot. Tidsskr. 24 (1902) 268.
Type: Schmidt s.n., Thailand
Syn.: *Cenolophon oxymetram* (K. Schum.) Holtt., Gard. Bull. Sing. 13 (1950) 134.— *A. comosa* Ridl., J. Str. Br. Roy. Asiat. Soc. 32 (1899) 170 non Jacq.
- siamense* K. Schum., Pflanzenr. Zing. (1904) 357.
Type: Schomburgk 123, Thailand
Syn.: *A. conchigera* K. Schum., Engl. Bot. Jahrb. 27 (1899) 290. t.3, Fig. L. non Griff.
- zerumbet* (Pers.) Burtt & R.M. Smith, Notes Roy. Bot. Gard. Edinb. 31 (1972) 204, f. 10.
Type: Wendl., Sert. Hannov. 4 (1798) 3, t.19.
Basionym: *Costus zerumbet* Pers., Syn. 1 (1805) 3.
Syn.: *Zerumbet speciosum* Wendl., Sert. Hann. 4 (1798) 3, t. 19.— *A. speciosa* (Wendl.) K. Schum. Pflanzenr. Zing. (1904) 334.— *Languas speciosum* (Wendl.) J.K. Small, Fl. S.E.U.S. ed. 2 (1913) 307.— *Catimbium speciosum* (Wendl.) Holtt., Gard. Bull. Sing. 13 (1950) 152.

2. *Amomum* ca. 15 species (*not revised-at least 4 new species*)

aculeatum Roxb., *Asiat. Res.* 2 (1810) 344, t.6.

Type: cult. Calcutta (Lectotype ?)

Syn.: *A. flavum* Ridl., *J. Str. Br. Roy. Asiat. Soc.* 32 (1909) 133.—? *A. aurantiacum* Ridl., *Flora Mal. Pen.* 4 (1924) 262.

biflorum Jack, *Mal. Misc.* 1 (1820) 2; Holttum, *Gard. Bull. Sing.* 13 (1950) 199.

Type: to be selected at K

Syn.: *A. elettarioides* Bak. in Hook.f., *Fl. Brit. Ind.* 6 (1892) 240.—*Elettariopsis pubescens* Ridl., *J. Str. Br. Roy. As. Soc.* 32 (1899) 155.—*E. chmidtii* K. Schum., *Bot. Tidsskr.* 24 (1902) 167.—*Cyphostigma schmidtii* (K. Schum.) K. Schum., *Pflanzenr. Zing.* (1904) 274.—*A. schmidtii* (K. Schum.) Gagnep., *Fl. Gén. Indoch.* 6 (1904) 111.

dealbatum Roxb., *Fl. Ind.* 1 (1820) 43.

Type: to be selected at K

globba C. F. Gmelin in Linn. *Syst. Nat* 1 (1791) 5.

Type: König, (C ?)

Syn.: *A. echinatum* Willd., *Sp. Pl.* 1 (1797) 8. *Type*: König (C ?) Thailand

hastilabrum Ridl., *J. Str. Br. Roy. Asiat. Soc.* 32 (1899) 137.

Type: Ridley - check protologue

Syn.: *A. holttumii* Ridl., *Fl. Mal. Pen.* 4 (1924) 264.—? *A. xanthoglossum* Ridl., *l.c.* 263.

hirticalyx K. Schum., *Bot. Tidsskr.* 24 (1902) 269.

Type: J. Schmidt (K) Thailand, Koh Chang

koenigii Gmelin, *L. Syst. Nat. ed.* 13 (1791) 6.

Type: Koenig (K)

Distrib.: Thailand

lappaceum Ridl., *J. Str. Br. Roy. Asiat. Soc.* 32 (1899) 134.

Type: Ridley 7802, Malaysia, Selangor (Lectotype SING)

Syn.: *A. perakense* Ridl., *l.c.*: 135.

ovoideum Pierre ex Gagnep., *Bull. Soc. Bot. Fr.* 53 (1906) 140.

Type: to be selected in P

pierreanum Gagnep., *Bull. Soc. Bot. Fr.* 53 (1906) 143.

Type: Pierre 591, Cambodia (Holotype P)

rivale Ridl., *Fl. Mal. Pen.* 4 (1925) 338.

Type: Burkill & Haniff, SFN 16945a, Pahang (SING)

siamensis Craib, *Kew Bull.* (1912) 338.

Type: Kerr 597 (Holotype K, isotype BK)

testaceum Ridl., *J. Str. Br. Roy. Asiat. Soc.* 32 (1899) 135.

Type: Ridley-check protologue

Syn.: *A. krervanh* Pierre ex Gagnep., *Bull. Soc. Bot. Fr.* 53 (1906) 138.

uliginosum Koenig in Retz., *Obs.* 3 (1783) 56.

Type: Koenig s.n., Thailand, Phuket (type C check)

3. Boesenbergia 15 species

acuminata Sirirugsa, Nord. J. Bot. 7 (1987) 421.

Type: Shimizu et al. T-7917, Thailand (holotype KYO)

angustifolia (Hall. f.) Schltr., Fedd. Rep. 12 (1913) 315.

Type: Jaheri s.n. cult. in Buitenzorg. Indonesia, Sumatra (Lectotype BO ?)

Syn.: *Gastrochilus angustifolium* Hall. f., Bull. Herb. Boiss. 6 (1898) 357, Tab. 10, fig. 1a-b.

basispicata K. Larsen ex Sirirugsa, l.c. 432.

Type: Kerr 15575, Thailand (holotype K)

curtisii (Bak.) Schltr., Fedd. Rep. 12 (1913) 316.

Type: ?

Syn.: *Gastrochilus curtisii* Bak., Not. Mag. (1894) t.7363.— *G. acuta* Ridl., J. Str. Br. Roy. Asiat. Soc. 32 (1911) 202.— *G. javanus* K. Schum., Pflanzenr. Zing. (1904) 95.

longipes (Ridl.) Schltr., Fedd. Rep. 12 (1913) 316.

Type: ?

Syn.: *Gastrochilus longipes* King & Prain ex Ridl., J. Str. Br. Roy. Asiat. Br. 32 (1899) 113.

ochroleuca Ridl., J. Asiat. Soc. Bengal (1899) 110, se Schumann (1904) 75 ?????

parvula (Wall. ex Bak.) Ktze., Rev. Gen. (1891) 685.

Type: Gomez. Wallich Cat. No. 6590. Myanmar, Tavoy (Lectotype K. check)

Syn.: *Gastrochilus parvula* Wall. ex Baker in Hook.f., Fl. Brit. Ind. 6 (1890) 218.

petiolata Sirirugsa, Nord. J. Bot. 7 (1987) 423.

Type: Maxwell 74-631, Thailand (Holotype BK)

plicata (Ridl.) Holtt., Gard. Bull. Sing. 13 (1950) 109.

Type: ?

Syn.: *Gastrochilus plicata* Ridl., J. Str. Br. Roy. Asiat. Soc 44 (1905) 196.

prainiana (Bak.) Schltr., Fedd. Rep. 12 (1913) 316.

Type: ?

Syn.: *Kaempferia prainiana* Bak. in Hook. f., Fl. Brit. Ind. 6 (1892) 220.— *Gastrochilus prainiana* (Bak.) Ridl., J. Str. Br. Roy. Asiat. Soc. 32 (1899) 115.— *G. albo-sanguinea* Ridl., l.c. 111.— *B. albosanguinea* (Ridl.) Schltr., l.c. 315.

pulcherrima (Wall.) Ktze., Rev. Gen. Pl. (1891) 685.

Type: Wallich

Syn.: *Gastrochilus pulcherrima* Wall., Pl. Asiat. Rar. 1 (1829) 22, Tab. 24.

rotunda (L.) Mansf., Kulturpfl., 6 (1958) 239.

Type: Rhede, Hort. Malabar. 11 (1692) t.10.

Basionym: *Curcuma rotunda* L., Sp. Pl. 1 (1753) 2.

Syn.: *Gastrochilus rotundus* (L.) Alston, Trimen, Handb. Fl. Ceylon 6 (1931) 281.— *K. pandurata* Roxb., Asiat. Res. 11 (1810) 328, t.2.— *Gastrochilus panduratus* (Roxb.) Ridl., J. Asiat. Soc. Bengal 32 (1899) 110, 114.— *B. pandurata* (Roxb.) Schltr., Fedd. Rep. 12 (1913) 316.

siamensis (Gagnep.) Sirirugsa, Nord. J. Bot. 7 (1987) 425.

Type: den Hoed 238, Thailand (Lectotype P)

Syn.: *Gastrochilus siamense* Gagnep., Not. Syst. 14 (1950) 36.
tenuispicata K. Larsen, Nord. J. Bot. 13 (1993) 281.

Type: Larsen et al. 43446, Thailand (Holotype AAU),
thorelii (Gagnep.) Loes., Nat Pflanzenfam. ed. 2, 15a (1930) 568.

Type: Laos, check protologue

Syn.: *Gastrochilus thorelii* Gagnep., Bull. Soc. Bot. Fr. 54 (1907) 163.

4. *Caulokaempferia* 5 species

alba K. Larsen & R. M. Smith, Not. Roy. Bot. Gard. Edinb. 31 (1972) 288, 289, f.1.

Type: Larsen et al. 949, Thailand (Holotype AAU)

kuapii K. Larsen, Bot. Tidsskr. 60 (1964) 174, 174 f.5.

Type: Put 3026, Thailand (Holotype C)

saksuwaniae K. Larsen, Bot. Tidsskr. 68 (1973) 157, 158, f.1.

Type: Larsen et al. 30832, Thailand (Holotype AAU)

saxicola K. Larsen, Bot. Tidsskr. 60 (1964) 171, 172–173, f.3–4.

Type: Larsen 10160, Thailand (Holotype C)

thailandica K. Larsen, Bot. Tidsskr. 68 (1973) 157, 159, f.2.

Type: Smitinand 336, Thailand (Holotype BKF)

5. *Cautleya* 1 species

gracilis (Smith) Dandy, J. Bot. 70 (1923) 328.

Type: ?

Basionym: *Roscoea gracilis* Smith, Trans. Linn. Soc. 13 (1822) 46.

Syn.: *R. lutea* Royle, Ill. Pl. Himal. (1839) 361, t.89. fig. 2 *C. lutea* (Royle) Hook.f., Curtis' Bot. Mag. (1888) t.6991.

6. *Curcuma* ca 34 species (*under revision*)

aeruginosa Roxb., Asiat. Res. 11 (1810) 335.

Type: ?

albiflora Thw., Enum. 316. - or sp. nov. several Maxwell collections

alismatifolia Gagnep., Bull. Soc. Bot. Fr. 49 (1902) 259.

Type: (Lectotype P)

amada Roxb., Asiat. Res. 11 (1810) 341.

Type: ?

angustifolia Roxb., Asiat. Res. 11 (1810) 338, Tab. 3.

Type: ?

aromatica Salisb., Parad. Lond. (1807) Tab. 96.

Type: ?

attenuata Wall. ex Bak. in Hook f., Fl. Brit. Ind. 6 (1890) 213.

Type: Wallich. Cat. No. 6692, Burma, Banks of Irrawaddy (Lectotype K)

aurantiaca van Zijp., Rec. Trav. Bot. Néerl. 12 (1915) 345.

Type: ?

- brog* Val. or other species cf. *leucorrhiza* Roxb.
cochinchinensis Gagnep., Bull. Soc. Bot. Fr. 54 (1907) 404.
Type: Talmy 122, Vietnam, Baria (Holotype P)
colorata Val. **Not this species.** *Coma narrow tubular, dark almost black, not 10 cm diam. sp. nov.: Curcuma obscura*
ecomata Craib, Kew Bull. (1912) 401.
Type: Kerr 1155, Thailand
elata Roxb., Hort. Beng. (1814) 1.
Type: Wallich Cat. No. 6610, Myanmar, Carey.
gracillima Gagnep., Bull. Soc. Bot. Fr. 50 (1903) 161.
Type: Harmand s.n. 1875–77, Laos, Mt. La-khou (Holotype P)
gracillima var. *elatior* Gagnep. l.c.
Type: Godefroy 386, Laos
harmandii Gagnep., Bull. Soc. Bot. Fr. 54 (1907) 404.
Type: (Lectotype to be selected at P)
Syn.: C. *burtii* K. Larsen & R.M. Smith, Not. Roy. Bot. Gard. Edinb. 36 (1978) 271.
longa L., Sp. Pl. (1757) 2 check correct name
Type: ?
oligantha Trimen *aff.* J. Bot. (1894) 245. - probably sp. nov.
parviflora Wall., Pl. Asiat. Rar. 1 (1830) 47, Tab. 57.
Type: Wallich, Myanmar, Prome (Lectotype K)
petiolata Roxb., Fl. Ind. 1 (1820) 36.
Type: Carey, HB Calcutta from Myanmar, Pegu
plicata Wall. ex Baker in Hook. fil., Fl. Brit. Ind. 6 (1890) 213.
Type: Wallich Cat. No. 6611, Myanmar
roscoeana Wall., Pl. As. Rar. 1 (1829) 8. Tab. 9.
Type: Wallich, Myanmar
sessilis Gage, Rec. Bot. surv. India 3 (1902 ?) 106. -check again
Type: ?
singularis Gagnep., Bull. Soc. Bot. Fr. 54 (1907) 407.
Type: Thorel 3194, Laos, Pissay (Holotype P)
sparganifolia Gagnep., Bull. Soc. Bot. Fr. 49 (1902) 260.
Type: Hahn 30, Camdodia, Kampot (Lectotype, P)
stenochila Gagnep., Bull. Soc. Bot. Fr. 52 (1905) 543.
Type: (Holotype P)
thorelii Gagnep., Bull. Soc. Bot. Fr. 54 (1907) 406.
Type: Thorel 2132, Laos, Stung-treng (Lectotype P)
thichosantha Gagnep., Bull. Soc. Bot. Fr. 54 (1907) 407.
Type: Harmand s.n. 1877, Laos (Holotype P)
viridiflora Roxb., Fl. Ind. 1 (1820) 34.— according to Schumann 1904 this is symonymous with *C. longa* L.
Type: ?
xanthorrhiza Roxb., Fl. Ind. 1 (1820) 25.
Type: Cult. B.G. Calcutta from Amboina (Lectotype ?)
zedoaria (Berg) Rosc., Monandr. Pl. (1828) Tab. 109.

*Type: ?*sp. 1, aff. *flaviflora* Tongsp. 2, aff. *oligantha* (different from the species mentioned above)sp. 3, aff. *australasica* Hook.f.

There may be more species

7. *Curcumorpha* (to transfer to *Boesenbergia*)*longiflora* (Wall.) A.S. Rao & D.M. Verma, *Bul. Bot. Surv. India* 13 (1974) 339.*Type:**Basionym:* *Gastrochilus longiflora* Wall., *Pl. Asiat. Rar.* 1 (1829) 22, Tab. 25.*Syn:* *Boesenbergia longiflora* (Wall.) O. Ktze., *Rev. Gen.* (1891) 685.8. *Elettaria* 1 species*cardamomum* (L.) Maton, *Trans. Linn. Soc.* 10 (1811) 254, t.5.*Type:* *Elettari* Rheede, *Hort. Mal.* 11 (1692) 9, t.5 (Lectotype)*Basionym:* *Amomum cardamomum* L., *Sp. Pl.* (1753) 1.*Syn.:* *Cardamomum officinale* Salisb., *Trans. Hort. Soc.* 1 (1812) 282.— *Alpinia cardamomum* (L.) Roxb., *Asiat. Res.* 11 (1810) 355.9. *Elettariopsis* 3 species (*under revision*)*curtisii* Bak. in Hook.f., *Fl. Brit. Ind.* 6 (1892) 252.*Type:* Curtis 1578, Malaysia, Penang (Lectotype K ?)*Syn.:* *E. serpentina* Bak., l.c.*smithiae* Kam, *Not. Roy. Bot. Gard. Edinb.* 40 (1982) 148, 149, Fig. 4.*Type:* Beltran 110, Cult. from Malaysia, Selangor (Holotype KLU, isotype E)*triloba* (Gagnep.) Loes., *Engl. & Pr., Nat. Pflanzenfam.* 15a (1930) 603.*Type:* Lectotype to be selected at P*Basionym:* *Amomum trilobum* Gagnep., *Bull. Soc. Bot. Fr.* 51 (1904) 453.10. *Etlingera* 5 species (*under revision*)*araneosa* (Bak.) R.M. Smith, *Not. Roy. Bot. Gard. Edinb.* 43 (1986) 243.*Type:* Helfer 5754, Myanmar (Lectotype K.check)*Basionym:* *Amomum araneosum* Bak. in Hook.f., *Fl. Brit. Ind.* 6 (1892) 234.*Syn.:* *Hornstedtia araneosa* (Bak.) K. Schum., *Pflanzenr. Zing.* (1902) 196.—*Achasma araneosa* (Bak.) K. Larsen, *Nord. J. Bot.* 1 (1981) 45.*elatior* (Jack) R. M. Smith, l.c. 244.*Type:* Sumatra, Jack s.n. (lost ?)*Basionym:* *Alpinia elatior* Jack, *Mal. Misc.* 2, (1822) 7: 2.*Syn.:* *Geanthus speciosus* Reinw. in *Bl. Cat. Gew. Buitenz.* (1823) 29 nom. nud.— *Elettaria speciosa* Bl., *Enum. Pl. Jav.* (1827) 51.— *Phaeomeria imperialis* Lind., *Nat. Syst. ed. 2.* (1836) 446.— *Nicolaia speciosa* (Bl.) Horan., *Monogr. Scit.* (1862) 32.— *Nicolaia imperialis* Horan., l.c.— *Phaeomeria*

magnifica (Rosc.) K. Schum., Pflanzenr. Zing. (1904) 262.— *Nicolaia intermedia* Val., Bull. Jard. Bot. Buitenz. ser. 3, 3 (1921) 133, t.44; Backer & Bakh.f., Fl. Java 3 (1968) 64. ?— *Phaeomeria speciosa* (Bl.) Merr., Enum. Pl. Philipp. 1 (1922) 241.

littoralis (Koenig) Giseke, Prael. Ord. Nat. Pl. (1792) 209, 229, 251.

Type: Koenig, Thailand, Phuket. (Holotype C)

Basionym: *Amomum littorale* Koenig in Retz., Obs. 3 (1783) 52.

Syn.: *Achasma megalocheilos* Griff., Not. Pl. Asiat. 3 (1851) 426, t.355. Type: Griffith s.n. (lost ?), Malaysia, Mt. Ophir

maingayi (Baker) S.M. Smith, Not. Roy. Bot. Gard. Edinb. (1986) 247.

Type: Maingay 1586, Malaysia, Malacca (to be selected at K)

Basionym: *Amomum maingayi* Bak. in Hook.f., Fl. Brit. Ind. 6 (1892) 235

Syn.: *Hornstedtia maingayi* (Bak.) Ridl., J. Str. Br. Roy. Asiat. Soc. 32 (1899) 150.— *Phaeomeria maingayi* (Bak.) K. Schum., Larsen, Nat. Hist. Bull. Siam Soc. 23 (1970) 574.

punicea (Roxb.) R.M. Smith, l.c. 249.

Type: Ic. Roxb. 2007 (fide R.M. Smith)

Basionym: *Alpinia punicea* Roxb., Fl. Ind. 1 (1820) 72.

Syn.: *Geanthus coccineus* Reinw. in Bl. Cat. Gew. Buitenz. (1823) 29 nom. nud.— *Elettaria coccinea* Bl., Enum. Pl. Jav. (1827) 53. Type: Blume s.n., Java.— *Achasma macrocheilos* Griff., Not. Pl. Asiat. 3 (1851) 429, t.357. Type: Griffith s.n., Malacca.— *Hornstedtia punicea* (Roxb.) K. Schum., Pflanzenr. Zing. (1904) 197.— *Amomum coccineum* (Bl.) K. Schum., Bot. Jahrb. 27 (1899) 305.— *Achasma coccineum* (Bl.) Val., Bull. Inst. Bot. Buitenz. 20 (1904) 93.— *Achasma puniceum* (Roxb.) Loes., Notizbl. Bot. Gart. Mus. Berol. 10 (1927) 62.

venusta (Ridl.) R. M. Smith, l.c. 250.

Type: Ridley 7810, Malay Peninsula (Lectotype ?)

Basionym: *Hornstedtia venusta* Ridl., J. Str. br. Roy. Asiat. Soc. 32 (1899) 149.

Syn.: *Phaeomeria venusta* (Ridl.) K. Schum., Pflanzenr. Zing. (1904) 264.— *Nicolaia venusta* (Ridl.) K. Larsen, Nat. Hist. Bull. Siam Soc. 23 (1970) 575.

11. *Gagnepainia* 2 species

glabra K. & S.S. Larsen in sced.

godefroyi (Baill.) K. Schum., Pflanzenr. Zing. (1904) 130.

Type: Godefroy in Harmand No?, Cambodia (Lectotype P)

Basionym: *Hemiorchis godefroyi* Baill., Bull. Soc. Linn. Paris 1 (1895) 1196

12. *Geostachys* 3 species

angustifolia K. Larsen, Nord. J. Bot. 6 (1986) 31.

Type: K. & S.S. Larsen 33500, Thailand (Holotype AAU)

holttumii K. Larsen, Bot. Tidsskr. 58 (1962) 47.

Type: Kerr 7538, Thailand (Holotype K)

kerrii K. Larsen, Not. Roy. Bot. Gard. Edinb. 31 (1972) 241.

Type: Kerr 15495, Thailand

Syn.: *G. densiflora* K. Larsen, Bot. Tidsskr. 58 (1962) 44. Type as above

13. *Globba* ca 34 species (*not revised*)

albiflora Ridl., J. Roy. As. Soc. Str. Br. 32 (1899) 96.

Type: Curtis 28511, Malaysia, Penang (Lectotype K, isotype SING)

aphanantha K. Larsen, Not. Roy. Bot. Gard. Edinb. 31 (1972) 229, 130, Fig. 1.

Type: Larsen 10411, Thailand (Holotype AAU)

barthei Gagnep., Bull. Soc. Bot. Fr. 48 (1901) 208.

Type: Cumming 1383, Philippines, Manila (Lectotype ?)

bulbifera Roxb., Asiat. Res 11 (1810) 358.

Type: ?

cambodgensis Gagnep., Bull. Soc. Bot. Fr. 48 (1901) 210.

Type: Godefroy 245, Cambodia

cernua Bak. in Hook.f., Fl. Brit. Ind. 6 (1890) 205.

Type: King's Coll. 757, Malaysia, Goping (Lectotype K, isotype SING)

clarkei Bak. in Hook.f., Fl. Brit. Ind. 6 (1890) 201.

Type: Hook.f. & Thompson, Herb. Ind. Or. No 9, India, Sikkim (to be selected at K)

colpicola K. Schum., Pflanzenr. Zing. (1904) 149.

Type: Schomburgk 255, Thailand (Lectotype ?)

fasciata Ridl., J. Str. Br. Asiat. Soc. 57 (1910) 101.

Type: Ridley 14415, Malaysia, Pahang

flagellaris K. Larsen in sced.

fragilis Lim, Not. Roy. Bot. Gard. Edinb. 31 (1972) 252, 253, Fig. 2.

Type: Cheang KLU 4847, Malaysia, Kadah (Holotype KLU, isotype K)

garrettii Kerr, Kew Bull. (1937) 44.

Type: Garrett 983, Thailand

globulifera Gagnep., Bull. Soc. Bot. Fr. 48 (1901) 209.

Type: Harmand 89, Cambodia, Poulo-Condor (to be checked at P)

integra Ridl., J. Asiat. Soc. Beng. (1899) 94.

Type: probably at U

kerrii Craib, Kew Bull. (1912) 398.

Type: Kerr 1278, Thailand

laeta K. Larsen, Not. Roy. Bot. Gard. Edinb. 31 (1972) 234, 232, Fig. 3.

Type: Larsen et. al. 2243, Thailand (Holotype AAU)

leucantha Miq., Fl. Ind. Bat. Suppl. (1860) 612.

Type: to be typified in U or L

macrocarpa Gagnep., Bull. Soc. Bot. Fr. 48 (1901) 205.

Type: Godefroy 488, Cambodia (Holotype P)

magnifica K. Larsen in sced.

marantina L., Mant. 2 (1771) 170.

Type: ?

niesbethiana Craib, Kew Bull. (1912) 398.

Type: Kerr 1219, Thailand

- nuda K. Larsen, Not. Roy. Bot. Gard. Edinb. 31 (1972) 235, 233, Fig. 4.
Type: Sørensen et. al. 2678, Thailand (Holotype AAU)
- obscura K. Larsen, Not. Roy. Bot. Gard. Edinb. 31 (1972) 234, 231, Fig. 2.
Type: Larsen 10161, Thailand (Holotype AAU)
- patens Miq., Fl. Ind. Bat. Suppl. (1860) 613.
Type: H.B. 2038, Indonesia, Sumatra (Lectotype U)
Syn.: *G. aurantiaca* auct.: K. Schum. (1904), Ridl. (1924), Holtt. (1950)
- pendula Roxb., Asiat. Res. 11 (1810) 359.
Type: Ic. Roxburgh l.c.
Syn.: *G. wallichii* Bak. in Hook.f., Fl. Br. Ind. 6 (1890) 205. *Type*: Malaysia Penang Herb Wallich.— *G. uliginosa* Miq., Fl. Ind. Bat. Suppl. (1860) 613
Type: Indonesia, Sumatra (Lectotype U 044077).— *G. aphylla* Miq., l.c.: 614. *Type*: Indonesia, Sumatra (Lectotype U 122298).— *G. kingii* Bak., Fl. Br. Ind. 6 (1890) 204. *Type*: King 715, Singapore (Holotype CAL). — *G. valida* Ridl., J. Fed. Mal. Str. Mus. 4 (1904) 76. *Type*: Ridley 13907, Malaysia, Pahang (Lectotype K)
- purpurascens Craib, Kew Bull. (1912) 399.
Type: Kerr 1316, Thailand
- reflexa Craib, Kew Bull. (1912) 399.
Type: Kerr 616 or 1202, Thailand (Lectotype K)
- schomburgkii Hook.f., Bot. Mag. (1876) Tab. 6298.
Type: Schomburgk 306, Thailand (Holotype K)
- siamensis (Hemsl.) Hemsl., Kew Ind. Suppl. (1901) 4.
Type: Smiles s.n, Thailand (Holotype K)
Basionym: *Achilus siamensis* Hemsl., Kew Bull (1895) 39; Hook. Ic Pl (1995) Tab. 2370.
Syn.: *G. graminifolia* Gagnep., Bull. Soc. Bot. Fr. 48 (1901) 72. *Type*: Harmand s.n. 1875, Cambodia (Holotype P)
- substrigosa King ex Bak. in Hook.f., Fl. Brit. Ind. 6 (1890) 202.
Type: Gallatly 1028, Myanmar, Tenasserim
- unifolia Ridl., J. Str. Br. Roy. Asiat. Soc 44 (1905) 193.
Type: Rostado s.n. 1902, Malaysia, Trengganu (Holotype SING)
- variabilis Ridl., Trans. Linn. Soc. 3 (1893) 378.
Type: Ridley 2405, Malaysia, Pahang (Holotype K)
Syn.: *G. malaccensis* Ridl., J. Str. Br. Roy. Asiat. Soc. 32 (1899) 93. *Type* to be selected at SING—*G. perakensis* Ridl., l.c.: 98. *Type* Curtis 3142 (Holotype SING)
- villosula Gagnep., Bull. Soc. Bot. Fr. 50 (1903) 160.
Type: Harmand s.n. 1875–77, Laos (Lectotype P)
- winitii C.H. Wright, Kew Bull. (1926) 173.
Type: Winit 1228, Thailand
- xantholeuca Craib, Kew Bull. (1912) 399.
Type: Kerr 2031, Thailand
- yetsiana Craib, Kew Bull. (1912) 400.
Type: Kerr 1214, Thailand

14. *Haniffia* ca 3 species (*under revision*)

cyanescens (Ridl.) Holtt., Gard. Bull. Sing 13 (1950) 124.

Type: Napier s.n. 1903, Malaysia, Negri Sembilan (Holotype SING)

Basionym: *Elettariopsis cyanescens* Ridl., J. Str. Br. Roy. Asiat. Soc. 41 (1904) 31.

Syn.: *Kaempferia cyanescens* (Ridl.) Ridl., J. Str. Br. Roy. Asiat. Soc. 86 (1922) 308.

sp. 1 Tom Wood in sced., (see also Holttum, l.c.)

Type: Kiah SFN 24293, Thailand (Holotype SING)

sp. 2 Tom Wood in sced.

15. *Hedychium* ca 25 species (*under revision*)

aureum C.B. Clarke & Mann ex Baker in Hook.f., Fl. Brit. Ind 6 (1892) 229.

Type: to be selected at K

biflorum Sirirugsa & Larsen, Nord. J. Bot. 15 (1995) 303.

Type: Murata et al. T-16946 (Holotype L)

coccineum Buch.-Ham. ex Sm. in Rees Cyclop. 17 (1811) n. 5.

Type: Buch. Ham. s.n., (Lectotype K ?)

Syn.: *H. angustifolium* Roxb., Pl. Coromand. 3 (1815) Tab. 251.

collinum Ridl., J. Str. Br. Roy. Asiat. Soc. 32 (1899) 103.

Type: Ridley s.n., Malaysia, Kedah (Holotype SING ?)

coronarium Koenig in Retz., Obs. 3 (1783) 73.

Type: Koenig s.n., India Or. (Holotype C)

Syn.: *H. sulphureum* Wall. ex Baker in Hook.f., Fl. Br. Ind. 6 (1892) pro syn.

ellipticum Buch.-Ham. ex Sm. in Rees, Cyclop 17 (1811) 2.

Type: to be selected

Syn.: *H. fastigiatum* [Wall. Cat. No. 6340] nom. nud.

flavum Roxb., [Hort. Beng.] Fl. Ind 1 (1820) 12.

Type: Wallich Cat. No. 6542 or Rosc. Mon. Pl. (1828) Tab. 49.

Syn.: *H. urophyllum* Lodd., Bot. Cab. (1833) Tab. 1785.— *H. sulphureum* Wall., Hook. Kew J. 5 (1853) 325 ?

forrestii Diels, Not. Roy. Bot. Gard. Edinb. 5 (1912) 304

Type: to be check coll., China, Yunnan

gardnerianum Roscoe, Monandr. Pl. (1828) Tab. 62.

Type: to be selected at K-Wall.

Syn.: *H. pallidum* Regel in Ind. Sem. Hort. Petropol (1856) 30

gomezianum Wall., Kew J. Bot. 5 (1853) 368.

Type: Gomez, Myanmar, Tavoy (Lectotype K)

gracile Roxb., [Hort. Beng. (1814)]. Coromand. Pl. 3 (1819) 48, Tab. 251.

Type: ? Roxburgh or Wallich (to be selected at K)

griffithianum Wall., Kew J. Bot. 5 (1853) 369.

Type: Griffith 5660, India, Khasia (Lectotype K)

hirsutissimum Holtt., Gard. Bull. Sing. 13 (1950) 76.

Type: Berwick 215, Malaysia, Perak (Holotype SING)

longicornutum Griff. ex Bak in Hook.f., Fl. Brit. Ind. 6 (1892) 228.

Type: Griffith. Malaysia, Malacca (to be checked at K)

Syn.: *H. crassifolium* Bak. in Hook.f., Fl. Brit. Ind. 6 (1892) 228.

samuiense Sirirugsa & Larsen, Nord. J. Bot. 15 (1995) 301.

Type: Kerr 12540, Thailand, Koh Samui (Holotype K)

speciosum Wall. in Roxb., Fl. Ind. 1 (1820) 13.

Type: Gomez in Wallich Cat. No. 6550, India, Silhet (Lectotype K)

Syn.: *Gamochilus speciosus* (Wall.) Lestib., Ann. Sc. Nat. 2. sér. 15 (1841) 341.

spicatum Ham. ex Smith, Rees Cyclop. 17 (1811) 3.

Type: to be selected at K

Syn.: *H. roxburghii* Sieb. ex Lindl., J. hort. Soc. 7 (1852) 281 non Blume.—

H. sieboldii Wall., Hook. Kew J.5(1853) 371.— *H. album* Buch-Ham. ex Wall in Hook.f., J. Bot. Kew Gard. Misc. 5 (1853) 328, pro syn

stenopetalum Lodd., Bot. Cab. (1833) Tab. 1902.

Type: to be selected at K

Syn.: *H. barbatum* Wall., Kew J. Bot. 5 (1853) 373.— *H. elatum* Horan., Monogr. (1862) 25 p.p.— *H. coccineum* Wall., Kew J., l.c.— *H. elatum* R. Br. var. *orgyale* Horan., Monogr. (1862) 25.

tomentosum Siriugsa & Larsen, Nord. J. Bot. 15 (1995) 303.

Type: Beusekom & Phengklai 1348, Thailand, Doi Chiang Dao (Holotype C)

villosum Wall. in Roxb., Fl. Ind 1 (1820) 12.

Type: to be selected at K? see also Hara et al. 1978

16. *Hornstedtia* 1 species

scyphiphora (Koenig) Steud., Nomencl. 2. ed. 1 (1840) 776.

Type: Koenig No 16, "Mont. Mallaceam" (Holotype C)

Basionym: *Amomum scyphiferum* Koenig in Retz., Obs. 3 (1783) 68.

Syn.: *Hornstedtia scyphus* Retz., Obs. 6 (1786) 18.

17. *Kaempferia* 15 species

angustifolia Rosc., Trans. Linn. Soc. 8 (1807) 351.

Type: Roxburgh, Bangladesh (to be checked at K)

elegans (Wall.) Bak. in Hook.f., Fl. Brit. Ind 6 (1890) 222

Type: Wallich Cat. No. 6593, Myanmar, Tenasserim (Lectotype K-Wall.)

Basionym: *Monolophus elegans* Wall., Pl. As. Rar. 1 (1830) 24, Tab. 27.

fallax Gagnep., Bull. Soc. Bot. Fr. 50 (1903) 259.

Type: Harmand s.n., Laos (Holotype P)

filifolia K. Larsen, Bot. Tidsskr. 58 (1962) 201.

Type: Kerr 21500, Thailand (Holotype K)

galanga L., Sp. Pl. (1753) 2.

Type: probably Hort. Cliff.

Syn.: *K. sessilis* Koenig in Retz., Obs. 3 (1783) 67.— *K. humilis* Salisb., Prod. (1796) 6.— *K. plantaginifolia* Salisb., Trans. Hort. Soc. 1 (1808) 286.

glauca Ridl., J. Asiat. Soc. Beng.(1899) 107.

- Type*: Curtis no?, Thailand. (Lectotype K ?)
laotica Gagnep., Bull. Soc. Bot. Fr. 54 (1907) 166.
Type: Spire 309, Laos (Holotype P)
larsenii Sirirugsa, Nord. J. Bot. 9 (1989) 257, Fig. 1, H-P.
Type: Nilviset 19, Thailand, Ubon Ratchathani (Holotype C, isotype BKF)
marginata Carey in Roscoe, Monandr. Pl. (1898) Tab. 93.
Type: Carey no ?, Myanmar (Lectotype K)
pariflora Wall. ex Bak. in Hook. f. Fl. Brit. Ind. 6 (1890) 221.
Type: Wallich Cat. No. 6587, Myanmar: Bank of Attran River (Lectotype K-Wall.)
pulchra Ridl., J. Str. Br. Asiat. Soc. 32 (1899) 32.
Type: ? Thailand (Lectotype K or SING)
roscoeana Wall., Bot. Reg. (1829) Tab. 1212.
Type: Wallich no?, Myanmar, Cult. in K. (Holotype K)
Syn.: K. *roscoei* Wall. Cat. No. 6584 nom. nud.
rotunda L., Sp. Pl. (1753) 3.
Type: Roscoe ill. ?
Syn.: K. *longa* Jacq., Pl. Hort. Schönbr. (1798) Tab. 317.— K. *versicolor* Salisb., Trans. Hort. Soc. 1 (1812) 286.
siamensis Sirirugsa, Nord. J. Bot. 9 (1989) 257.
Type: Yuktathata 33, Thailand, Sakhon Nakhorn (Holotype E, isotype PSU)
spoliata Sirirugsa, Nord. J. Bot. 9 (1989) 259. Fig. 1, Q-V.
Type: Maxwell 76-493, Thailand, Si Sa Ket (Holotype L, isotypes AAU, BK)

18. *Pommereschea* 1 species

- lackneri* Wittmark, Gartenfl. 44 (1895) 141.
Type: ? Lackner s.n., Myanmar. Cult. in Berlin

19. *Scaphoclamys* 3 species (*under revision*)

- biloba* (Ridl.) Holtt., Gard. Bull. Sing. 13 (1950) 89.
Type: Ridley s.n., Pahang: Kuala Tenok (Lectotype K ?)
Basionym: *Gastrochilus bilobus* Ridl., Trans. Linn. Soc. 3 (1893) 115.— *G. calophylla* Ridl., J. Str. Br. Asiat. Soc. 32 (1899) 115.
klossii (Ridl.) Holtt., l.c. 100.
Type: Kloss s.n. 1905, Malaysia (Lectotype SING)
Basionym: *Gastrochilus klossii* Ridl., Mat. Fl. Mal. Pen. 2 (1907) 16.— *Boesenbergia klossii* (Ridl.) Loes., Pflanzenr. ed. 2. 15a (1930) 571.
obcordata Sirirugsa & K. Larsen, Nord. J. Bot. 11 (1991) 93.
Type: Larsen et al. 1173 Thailand, Narathiwat, Bacho Nat. Park (Holotype PSU, isotype AAU)

20. *Stahlianthus* 3 species

- campanulatus* O. Ktze., Rev. Gen. Pl. 2 (1891) 697.

Type: O. Ktze. no ?, Cambodia (Lectotype ?)

Syn.: *Kaempferia campanulata* (O. Ktze.) K. Schum., *Pflanzenr. Zing.* (1904) 85.

macroclamys (Bak.) Craib, *Kew Bull.* (1912) 401.

Type: Parish, cult. in Kew, Myanmar, Tenasserim (Holotype K)

Basionym: *Kaempferia macroclamys* Bak. in Hook.f., *Fl. Brit. Ind.* 6 (1890) 223.

thorelii Gagnep., *Bull. Soc. Bot. Fr.* 54 (1907) 114.

Type: Thorel s.n., Laos (Holotype P)

21. *Zingiber* ca 25 species (*unnder revision*)

bradleyanum Craib, *Kew Bull.* (1912) 403.

Type: Kerr 763, Thailand (Lectotype K?, isotypes BK, BM, E)

chrysostachys Ridl., *J. Asiat. Br. Roy. Asiat. Soc.* 32 (1899) 129.

Type: ? Ridley s.n. 1891 (Lectotype SING or K)

corallinum Hance, *J. Bot.* 18 (1880) 301.

Type: Hancock s.n., China, Hainan (Lectotype ?)

gracile Jack, *Mal. Misc.* 1 (1828) 1

Type: Jack, Malaysia, Penang (Lectotype K)

gramineum Bl., *Enum. Pl. Java* (1827) 45.

Type: ? Indonesia, Java (to be selected at U)

griffithii Bak., in Hook.f., *Fl. Brit. Ind.* 6 (1892) 246.

Type: Griffith 5731, Malaysia, Malacca (Lectotype K)

junceum Gagnep., *Bull. Soc. Bot. Fr.* 53 (1906) 149.

Type: Pierre s.n. 1873, Cambodia (Lectotype P)

kerrii Craib, *Kew Bull.* (1912) 403.

Type: Kerr 1290, Thailand (Lectotype K, isotypes BK, BM, E)

montanum (Koenig) Link ex Dietr., *Sp. Pl.* 1 (1831) 52.

Type: Koenig s.n., Thailand (Holotype C)-see also *Fl. Ceylon* 4 (1983) 495.

Basionym: *Amomum montanum* Koenig in Retz. *Obs.* 3 (1783) 51.

multibracteatum Holtt., *Gard. Bull. Zing.* 13 (1950) 57.

Type: Corner in SFN 33174, Pahang, Frasers Hill

officinale Rosc., *Trans. Linn. Soc.* 7 (1807) 348.

Type: to be selected at K

Syn.: several, check Schumann 1904 and Burtt

ottensii Val., *Bull. Buitenz.* 2. Sér. 27 (1918) 136, Tab. 19.

Type: to be selected at BO or L

panduratum Roxb. [*Hort. Beng.*] *Fl. Ind.* 1 (1820) 55.

Type: Carey, Myanmar, Pegu (Lectotype K)

parishii Hook.f., *Bot. Mag.* (1873) Tab. 6019.

Type: Griffith, Myanmar, Tenasserim (Lectotype K)

pellitum Gagnep., *Bull. Soc. Bot. Fr.* 53 (1906) 150.

Type: Vietnam. (to be selected at P)

puberulum Ridl., *J. Str. Br. Roy. Asiat. Soc.* 32 (1899) 131.

Type: Ridley no ?, Malaysia (Lectotype SING or K)

purpureum Roscoe, Trans. Linn. Soc. London 8 (1807) 348.

Type: Cult. Liverpool B. G., no specimen

Syn.: *Z. casumunar* Roxb., Asiat. Res. 11 (1819) 347, t.5.

rubens Roxb., Asiat. Res. 11 (1810) 348.

Type: Hook.f. & Thomsom Herb. Ind. Or. 10. (to be selected at K)

roseum Rosc., Trans. Linn. Soc. 8 (1807) 348.

Type: ? Roxburgh. India (to be selected at K)

smilesianum Craib, Kew Bull. (1912) 403.

Type: Kerr 1311 A (Lectotype K. isotypes BK, E)

spectabile Griff., Notul. 3 (414) 1853.

Type: Griffth 5762, Malaysia, Malacca (to be selectede at K)

zerumbet (L.) Sm., Exot. Bot. 2 (1804) 103, Tab. 112.

Type: Not typified. no specimen in LINN or BM (Herb. Cliff.)

Basionym: *Amomum zerumbet* L., Sp. Pl. (1753) 1.

Syn.: Lampujang majus Medic., Act. Acad. Theod. Palat. 6, Phys. (1890) 390.

There are several names in Schumann 1904, check!