

REDUCTIONS IN ELAEOCARPUS.

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SUMMARY.

90 published names under *Elaeocarpus* are reduced to synonymy.

Elaeocarpus Linn. is a genus characteristic of the Old World tropics, a few species only occurring in subtropical and even in subtemperate regions. The generic range is tropical Africa and Madagascar to Japan, southward through Malaysia to eastern Australia, New Caledonia and New Zealand, eastward to Hawaii. Speciation within the limits of the Malay Archipelago (including the Philippines and Papuasia) is remarkable. As in all large genera in this vast region that are characteristic of the primary forests, there are a few widely distributed and more or less variable species, but everywhere, particularly in the insular areas, there is a very highly developed local endemism; and a high percentage of these local endemics are very sharply defined species.

Up to 1900 about 220 binomials had been published under *Elaeocarpus*, yet Bentham and Hooker f., in 1862, most conservatively estimated the number of distinct species as about 50; and 28 years later K. Schumann surmised that the number might be more than 60. In the past 50 years about 330 new *Elaeocarpus* binomials have been published, mostly for optimistically proposed "new species." Anyone now attempting to work in this particular group is faced with approximately 550 published binomials under *Elaeocarpus* alone.

It was clear that in the proposals made in the past 50 years there was a considerable amount of duplication of work, due to one cause or another, but chiefly, it is suspected, because a systematist working in one place, be it Buitenzorg, Singapore, Manila, London, Berlin, or any other taxonomic center, did not have access to authentically named specimens representing many of the proposed species. The accepted priority and homonym rules are also involved. There is evidence that sometimes ample validly published descriptions were not critically studied, and in at least one case, that it was not even scanned. The situation is further complicated because too many of the proposed and described "new species" were based on fruiting specimens, or on those where only juvenile flower buds were present. Added to the confusion is the unsatisfactory work of Knuth*, who between the years 1938 and 1941, described no less than 80 new species without in any case indicating the subgenus or section, and rarely suggesting specific alliances; twenty-two of these eighty species are herein reduced to synonymy on the basis of an actual study of excellent isotype material in each case. The Knuth holotypes were all destroyed in the Berlin disaster in 1943.

Fortunately, during the summer of 1949, I was able to examine most of the actual types of species described by Blume and by Miquel in the Leiden and Utrecht herbaria, and those of the British botanists preserved at Kew. I have, hence, in practically every case, been able to reach my conclusions on the basis of an actual examination of the types, isotypes,

* Knuth, R. Elaeocarpaceae novae. Decades 1-2, Repert. Sp. Nov. 44 : 124-132 (1938); Decades 3-4, op. cit. 48 : 72-79 (1940); Decades 5-6, op. cit. 49 : 66-73 (1940); Decades 7-8, op. cit. 50 : 81-88 (1941).

and other historical specimens. All of the original, and many of the repeated descriptions have been studied. In difficult groups which need a thorough and critical revision on the basis of very ample collections, such as the *Elaeocarpus sphaericus* (Gaertn.) K. Schum. and *E. stipularis* Blume complexes, some future monographers may not agree with all of my proposed reductions. I am, however, confident that in the vast majority of the cases listed below, the indicated reductions will be upheld.

The net result of my studies to date is the reduction of 90 proposed binomials to synonymy; 17 of these were published before 1900, the others within the past fifty years. It is evident, as studies and comparisons are continued, that still other reductions will inevitably be made. Yet at the same time one will find in all of the large herbaria a certain number of sharply defined species which have never been studied, and which remain unnamed and undescribed. The number of these increases as collections come in from previously inadequately explored regions, and especially from those large areas which have not previously been visited by a botanist or even a botanical collector.

- E. ACUMINATUS Koord. & Val. Meded. Lands Plant. **11** : 258 (1894) (Bijdr. **1** : 258), non Wall. (1830, 1874) = **E. oxypyren** Koord. & Val. op. cit. **33** : 419 (1900); Ic. Bogor. **3** : pl. 420 (1914). Java.
- E. AEMULUS A. C. Sm. in Jour. Arnold Arb. **25** : 232 (1944) = **E. multiscaissus** Knuth in Repert. Sp. Nov. **50** : 86 (1941). *Clemens* 5019 typifies both. New Guinea.
- E. ARGYROIDES Hance in Jour. Bot. **15** : 330 (1877) = **E. griffithii** (Wight) A. Gray; see Merrill in Jour. Arnold Arb. **19** : 50 (1938). Indo-China; range Siam, Malay Peninsula, Sumatra, Borneo.
- E. AUGUSTUS Knuth in Repert. Sp. Nov. **44** : 125 (1938) = **E. dolichobotrys** Merr. in Jour. Straits Br. Roy. As. Soc. **77** : 198 (1917). Borneo.
- E. BACLAYANENSIS Elm. Leafl. Philip. Bot. **4** : 1188 (1911) = **E. sphaericus** (Gaertn.) K. Schum. fide Van Steenis in Bull. Jard. Bot. Buitenz. III, **17** : 409 (1948). Philippines; range India to New Guinea and Samoa, i.e., *sensu lat.*
- E. BARAMENSIS Knuth in Repert. Sp. Nov. **44** : 126 (1938) = **E. brevipes** Merr. in Jour. Straits Br. Roy. As. Soc. **86** : 327 (1922); see Airy Shaw in Kew Bull. **1949** : 165 (1949). Borneo.
- E. BARBULATUS Knuth, l.c. **44** : 126 (1938) = **E. nitidus** Jack (1920); see Airy Shaw, l. c. Borneo; range Malay Peninsula, Sumatra.
- E. BATAANENSIS Merr. in Philip. Jour. Sci. **10** : Bot. **41** (1915) = **E. calomala** (Blanco) Merr. Philippines.
- E. BELLUS Knuth in Repert. Sp. Nov. **49** : 67 (1940) = **E. merrittii** Merr. in Philip. Jour. Sci. **2** : Bot. **280** (1907). *Merrill* 5582 typifies both. Philippines.
- E. BORNEENSIS Knuth, op. cit. **44** : 127 (1938) = **E. ferrugineus** (Jack) Steud.; see Ridley in Kew Bull. **1938** : 234 (1938), and Airy Shaw, op. cit. **1949** : 165 (1949). Borneo; range Malay Peninsula, Sumatra.

- E. BECCARII Warb. in Repert. Sp. Nov. **18** : 328 (1922), non Aug. DC. (1903) = **E. euneurus** Stapf ex Ridl. in Kew Bull. **1938** : 234 (1938). Borneo.
- E. BRACHYPHYLLUS Knuth, op. cit. **50** : 82 (1941) = **E. hainanensis** Oliv. in Hook. Ic. **25** : pl. 2462 (1896). (*E. hainanensis* Oliv. var. *brachyphyllus* Merr. in Lingnan Sci. Jour. **5** : 123 (1927). Hainan; range Kwangtung, Indo-China, Siam, Malay Peninsula).
- E. CELEBESIANUS Baker f. in Jour. Bot. **62** : Suppl. 14 (1924) = **E. teijsmannii** Koord. & Val. in Koord. Meded. Lands Plant. **19** : 368 (1898), nom., Ic. Bogor. **2** : pl. 128 (1904), descr.; see Van Steenis in Bull. Jard. Bot. Buitenz. III. **18** : 210 (1949). Celebes.
- E. CLEMENSIAE Knuth in Repert. Sp. Nov. **44** : 128 (1938) = **E. clementis** Merr. in Jour. Straits Br. Roy. As. Soc. **77** : 195 (1917). The basic specimens are *Clemens* 2766, 51312. Borneo.
- E. DALLASENSIS Knuth, op. cit. **49** : 69 (1940). = **E. elliptifolius** Merr. op. cit. 193 (1917). The basic specimens are *Clemens* 10783, 26231. Borneo.
- E. DECORUS A. C. Sm. in Jour. Arnold Arb. **25** : 242 (1944) = **E. densiflorus** Knuth, op. cit. **50** : 82 (1941). *Clemens* 2420 typifies both. New Guinea.
- E. DECURVATUS Diels in Notizbl. Bot. Gart. Berlin **11** : 214 (1931) = **E. varunna** Buch.-Ham. in Wall. List. no. 2666 (1830), nom., Mast. in Hook. f. Fl. Brit. Ind. **1** : 407 (1874), descr. China (Kwangsi); range Southern China and Indo-China to Burma and Northern India.
- E. DIOICUS Turecz. in Bull. Soc. Nat. Mosc. **19** (2) : 493 (1846) = **E. japonicus** Sieb. and Zucc. (1845). Japan; range central, western and southern China.
- E. ELLIPTICUS Nakai in Bot. Mag. Tokyo **18** : 67 (1904), non Sm. (1809) = **E. decipiens** Hemsl. in Jour. Linn. Soc. Bot. **23** : 95 (1886); see Metcalf in Sunyatsenia **6** : 178 (1941). Japan; range Riu Kiu Islands, Formosa.
- E. FAGACEUS Knuth in Repert. Sp. Nov. **44** : 128 (1938) = **E. cupreus** Merr. in Jour. Straits Br. Roy. As. Soc. **77** : 193 (1917). Borneo.
- E. FERRUGINEUS Bedd. Fl. Sylv. South. Ind. pl. 112 (1869), non *E. ferrugineus* (Jack) Steud. (1840) = **E. recurvatus** Corner in Gard. Bull. Straits Settl. **10** : 319, 325 (1939). India.
- E. FISSISTIPULUS Miq. Fl. Ind. Bat. **1** (2) : 210 (1859) = **E. stipularis** Blume Bijdr. 120 (1825), *sensu lat.* Sumatra; range Malay Peninsula, Sumatra, Java, and Borneo.
- E. FUSICARPUS Elm. Leafl. Philip. Bot. **4** : 1174 (1911) = **E. procerus** Aug. DC. in Elm. Leafl. Philip. Bot. **2** : 636 (1909); see Airy Shaw in Kew Bull. **1949** : 165 (1949). Philippines.
- E. GAMBIR Becc. Nelle Foreste di Borneo 594 (1902), nom. = **E. stipularis** Blume (1825), *sensu lat.* Borneo; range Malay Peninsula, Sumatra, Java.

- E. **GLABRIPETALUS** Merr. in Philip. Jour. Sci. **21** : 501 (1922) = **E. sylvestris** (Lour.) Pers. Kwangtung ; range southern China, Hainan, and Indo-China.
- E. **GRACILIPES** Knuth in Repert. Sp. Nov. **49** : 70 (1940) = **E. nitidus** Jack Mal. Misc. **1** (5) : 41 (1820). Borneo ; range, Malay Peninsula, Sumatra.
- E. **HENRYI** Hance in Jour. Bot. **23** : 322 (1885) = **E. sylvestris** (Lour.) Pers. China, Kwangtung ; range, southern China and Indo-China.
- E. **HOLOSERICEUS** Blume ex Koord. & Val. in Meded. Lands Plant. **33** : 422 (1900) (Bijdr. **5** : 422) = **E. obtusus** Blume Bijdr. **123** (1825) ; see Adelbert in Blumea **6** : 312 (1949). Java ; range Sumatra, Borneo.
- E. **HOSEI** Merr. in Jour. Straits Br. Roy. As. Soc. **77** : 197 (1917) = **E. glaber** Blume Bijdr. 122 (1825). Borneo ; range Sumatra, Java.
- E. **HULLETTII** King in Jour. As. Soc. Bengal **60** (2) : 132 (1891) (Mater. Fl. Malay Penin. **1** : 242) = **E. palembanicus** (Miq.) Corner in Gard. Bull. Straits Settl. **10** : 323 (1939). Malay Peninsula ; range Sumatra.
- E. **INTEGERRIMUS** Lour. Fl. Cochinch. 338 (1790) = **Ochna integerrima** (Lour.) Merr. in Trans. Am. Philos. Soc. II. **24** (2) : 265 (1935) (*Discladium harmandii* Van Tiegh. ; *Ochna harmandii* H. Lecomte). Indo-China ; range Hainan.
- E. **ISOTRICHUS** F.-Vill. Novis. App. Fl. Filip. 31 (1880) (*Monocera isotricha* Turcz.) = **E. calomala** (Blanco) Merr. in Philip. Jour. Sci. **10** : Bot. 43 (1915). Philippines.
- E. **KAJEWSKII** Guillaumin in Jour. Arnold Arb. **12** : 232 (1931) = **Aceratium braithwaitei** (F. Muell.) Schltr. in Bot. Jahrb. **54** : 103 (1916) (*Aristoteleia braithwaitei* F. Muell. in South. Sci. Record **1** : 149 (1881)). The type of F. Mueller's species was from Tanna, that of Guillaumin's from Aneityum, New Hebrides, and both descriptions apply to a single species.
- E. **KWANGTUNGENSIS** Hu in Jour. Arnold Arb. **5** : 229 (1924), Contr. Biol. Lab. Sci. China **1** (2) : 3 (1925) = **E. sylvestris** (Lour.) Pers. Kwangtung ; range southern China and Indo-China.
- E. **LACEI** Craib in Kew Bull. **1925** : 23 (1925) = **E. hainanensis** Oliv. (1896) fide Gagnepain in Lecomte Fl. Gen. Indo-Chine Suppl. **1** : 478 (1945). Siam ; range Hainan, Indo-China, Malay Peninsula.
- E. **LAGUNENSIS** Knuth in Repert. Sp. Nov. **50** : 85 (1941) = **E. sessilis** Knuth, op. cit. 87. Philippines.
- E. **LEPTOPUS** A. C. Sm. in Jour. Arnold Arb. **25** : 234 (1944) = **E. albiflorus** Knuth in Repert. Sp. Nov. **50** : 81 (1941). Clemens 1022 typifies both. New Guinea.
- E. **LEPTOSTACHYS** Wall. List no. 2672 (1830), nom., C. Muell. Anot. Fam. Elaeoc. 23 (1849), descr. = **E. tectorius** (Lour.) Merr. North-eastern India ; range Burma to Indo-China and the Malay Peninsula.
- E. **LEPTOMISCHUS** Ridl. in Jour. Fed. Malay States Mus. **5** : 30 (1913) = **E. palembanicus** (Miq.) Corner in Gard. Bull. Straits Settl. **10** : 323 (1939). Malay Peninsula ; range Sumatra.

- E. LEYSENSIS Merr. in Philip. Jour. Sci. **8**: Bot. 383 (1913) = **E. multiflorus** (Turcz.) F.-Vill. Novis. App. Fl. Filip. 31 (1880) (*Monocera multiflora* Turcz. in Bull. Soc. Nat. Mosc. **19** (2) : 495 (1846). Philippines.
- E. LINEARIFOLIUS Knuth in Repert. Sp. Nov. **49** : 66 (1940) = **E. hainanensis** Oliv. (1896). Indo-China ; range Kwangtung, Hainan, Siam, Malay Peninsula.
- E. LONGIFOLIUS Blume var. FUSIFORMIS Corner in Gard. Bull. Straits Settl. **10** : 321 (1939) = **E. submonoicus** Miq. Fl. Ind. Bat. Suppl. 407 (1862). Malay Peninsula, Borneo ; range Sumatra.
- E. LONGIPETIOLATUS C. T. White in Bot. Bull. Queensl. Dept. Agr. **21** : 3 (1919), non Merr. (1917) = **E. michaelii** C. T. White in Kew Bull. **1933** : 45 (1933). Queensland.
- E. LURIDUS Stapf ex Ridl. in Kew Bull. **1938** : 232 (1938) = **E. pachyophrys** Warb. in Repert. Sp. Nov. **18** : 327 (1922). Borneo.
- E. MACLUREI Merr. in Lingnan Sci. Jour. **13** : 63 (1934) = **E. limitaneus** Hand.-Maz. in Sinensis **3** : 193 (1933). Hainan ; range Southern China, Indo-China.
- E. MACROCARPUS Ridl. Fl. Malay Penin. **1** : 32 (1922) = **E. robustus** Roxb. (1814, 1832) fide Corner in Gard. Bull. Straits Settl. **10** : 325 (1939) = **E. tectorius** (Lour.) Merr. in Trans. Am. Philos. Soc. II. **24** (2) : 256 (1935) (**Craspedum tectorium** Lour. Fl. Cochinch. 336 (1790).) Malay Peninsula ; range north-eastern India to Indo-China and the Malay Peninsula.
- E. MACROPUS Warb. ex Knuth in Repert. Sp. Nov. **48** : 76 (1940) = **E. petiolatus** (Jack) Wall. Celebes ; range Indo-China and Siam to the Malay Peninsula, Sumatra and Borneo.
- E. MAGNIFOLIUS Knuth in Repert. Sp. Nov. **44** : 129 (1938), non Christoph. (1935) = **E. gustaviifolius** Knuth, op. cit. **50** : 84 (1941), Clemens 29481, in flower, 28078, in fruit. Borneo.
- E. MAKINOI Kaneh. & Hatus. in Rept. Forest. Exp. Sta. Kyushu Univ. **3** : 119 (1933), Formosan Trees, ed. 2, 433 (1936), in syn. = **E. ellipticus** Nakai = **E. japonicus** Sieb. & Zucc. Formosa ; range central and southern China, Indo-China.
- E. MAQUILINGENSIS Elm. Leafl. Philip. Bot. **8** : 3080 (1919) = **E. pendulus** Merr. in Govt. Lab. Publ. **29** : 27 (1905). Philippines.
- E. MATANGENSIS Knuth in Repert. Sp. Nov. **44** : 130 (1938) = **E. pedunculatus** Wall. List no. 2678 (1830), nom. ; Mast. in Hook. f. Fl. Brit. Ind. **1** : 408 (1874), descr. Borneo ; range Malay Peninsula, Sumatra.
- E. MEGACARPUS Elm. Leafl. Philip. Bot. **7** : 2627 (1915) = **E. monocera** Cav. Ic. **6** : pl. 501 (1801). Philippines.
- E. MEGACARPUS Schltr. in Bot. Jahrb. **54** : 131 (1916), non Elm. (1915) = **E. schlechterianus** A. C. Sm. in Jour. Arnold Arb. **25** : 256 (1944). New Guinea.
- E. MERRILLII Elm. ex Merr. Enum. Philip. Fl. Pl. **3** : 14 (1923), nom. in syn., Leafl. Philip. Bot. **10** : 3729 (1939), descr. anglice = **E. argenteus** Merr. in Govt. Lab. Publ. **29** : 26 (1905). Philippines.

- E. MICRANTHUS Vieill. in Bull. Soc. Linn. Normandie **9** : 392 (1865) = **E. rotundifolius** Brongn. & Gris in Bull. Soc. Bot. France **8** : 261 (1861), fide Guillaumin in Not. Syst. **2** : 92 (1911). New Caledonia.
- E. MICROPHYLLUS Warb. in Repert. Sp. Nov. **18** : 328 (1922), non Elm. (1911) = **E. octantherus** Aug. DC. in Bull. Herb. Boiss. II. **3** : 367 (1903). Borneo.
- E. MIQUELII Hochr. Pl. Bogor. Exsic. 27 (1904), excl. spec. cit. = **E. obtusus** Blume Bijdr. 123 (1925). Java ; range Malay Peninsula, Sumatra, Borneo. (No. 50 Hochreutiner, Pl. Bogor. Exsic., is actually *E. pedunculatus* Wall., not at all the species that Miquel described and which Hochreutiner renamed.)
- E. MOLLOIDES Knuth in Repert. Sp. Nov. **49** : 71 (1940) = **E. canipes** Knuth, op. cit. **44** : 127 (1938). Clemens 20039, 32147, one in flower, one in fruit. Borneo.
- E. MYRTILLUS Schltr. in Bot. Jahrb. **39** : 180 (1906) = **E. vaccinioides** F. Muell. ex Brongn. in Bull. Soc. Bot. France **12** : 301 (1865). See Guillaumin in Not. Syst. **2** : 94 (1911). New Caledonia.
- E. NIGROPUNCTATUS Merr. in Jour. Straits Branch Roy. As. Soc. **77** : 196 (1917) = **E. nitidus** Jack (1820) ; see Airy Shaw in Kew Bull. **1949** : 165 (1949). Borneo ; range Sumatra, Malay Peninsula.
- E. NUTANS Knuth, op. cit. **44** : 131 (1938) = *E. tomentosus* Blume Bijdr. 121 (1825) = **E. stipularis** Blume, l. c., *sensu lat.* Borneo ; range Malay Peninsula, Sumatra, Java.
- E. OCHRACEUS Ridl. in Trans. Linn. Soc. II. Bot. **9** : 21 (1916) = **Aceratium ochraceum** Schltr. in Bot. Jahrb. **55** : 194 (1918). New Guinea.
- E. OCHRACEUS Stapf ex Ridl. in Kew Bull. **1938** : 230 (1938), non Ridl. (1916) = **E. cupreus** Merr. in Jour. Straits Branch Roy. As. Soc. **77** : 193 (1917). Borneo.
- E. OMEIENSIS Rehd. & Wils. in Sargent Pl. Wils. **2** : 260 (1915) = **E. sylvestris** (Lour.) Pers. Szechuan ; range central and southern China and Indo-China.
- E. OVALIFOLIUS Wall. List no. 2665b (1830), *nom.*, C. Muell. Anot. Fam. Elaeoc. 21 (1849), *descr.* = **E. tectorius** (Lour.) Merr. India ; range Burma to Indo-China and the Malay Peninsula.
- E. OXYADENIUS Warb. in Repert. Sp. Nov. **18** : 327 (1922) = **E. beccarii** Aug. DC. in Bull. Herb. Boiss. II. **3** : 367 (1903). *Beccarii* 540 typifies both. Borneo.
- E. PAPUANUS Knuth in Repert. Sp. Nov. **50** : 86 (1941) = **E. brassii** Knuth, op. cit. **48** : 73 (1940) ; see A. C. Smith in Jour. Arnold Arb. **25** : 240 (1944). New Guinea (*Brass* 7450, 7566).
- E. PATENS Knuth, op. cit. **48** : 77 (1940) = **E. viscosus** Warb. in Bot. Jahrb. **18** : 201 (1893) ; see A. C. Sm. in Jour. Arnold Arb. **25** : 246 (1944). New Guinea.
- E. PHILIPPINENSIS Warb. in Perk. Frag. Fl. Philip. **100** (1904) = **E. calomala** (Blanco) Merr. ; see Merr. Enum. **3** : 15 (1923) for synonymy. Philippines.

- E. POLYCARPUS Stapf ex Ridl. in Kew Bull. **1938** : 230 (1938) (Aug. 15)
 = **E. multinervosus** Knuth in Repert. Sp. Nov. **44** : 130 (1938) (June 30). Beccari 2698 typifies both. Borneo.
- E. POLYCHISTUS Schltr. in Bot. Jahrb. **40** : Beibl. **92** : 28 (1908) =
E. persicifolius Brongn. & Gris in Bull. Soc. Bot. France **8** : 202 (1861). New Caledonia.
- E. QUERCIFOLIUS Gagnep. in Not. Syst. **1** : 124 (1910), non Baker (1883)
 = **E. viguieri** Gagnep., op. cit. **3** : 133 (1915). Indo-China.
- E. RAMOSII Knuth in Repert. Sp. Nov. **44** : 131 (1938) = **E. floribundus** Blume Bijdr. 120 (1925). Borneo (*Ramos* 1227); range British India to Indo-China southward to Sumatra, Java, and Borneo.
- E. REJANGENSIS Knuth, l.c. = **E. brevipes** Merr. (1922); see Airy Shaw in Kew Bull. **1949** : 165 (1949). Borneo.
- E. RETICULATUS Ridl. in Jour. Straits Br. Roy. As. Soc. **61** : 2 (1912), non Sm. (1809) = **E. nanus** Corner in Gard. Bull. Straits Settl. **10** : 322 (1939). Malay Peninsula.
- E. RIVULARIS Vieill. ex Britten in Forbes, Nat. Wand. East. Archipel. 501 (1885), *nom.*; Guillaumin in Not. Syst. **2** : 92 (1911), *nom.*; Baker f. in Jour. Bot. **62** : Suppl. 14 (1924), *nom.* in nota, non Gagnep. (1910) = **E. rotundifolius** Brongn. & Gris in Bull. Soc. Bot. France **8** : 201 (1861). New Caledonia.
- E. ROBUSTUS Roxb. Hort. Beng. 42 (1814), *nom.*, G. Don Gen. Syst. **1** : 559 (1831), *descr.*, Roxb. Fl. Ind. ed. 2, **2** : 597 (1832), *descr.* = **E. tectorius** (Lour.) Merr. in Trans. Am. Philos. Soc. II. **24** (2) : 256 (1935) (*Dicera craspedum* J. F. Gmel. ex DC. Prodr. **1** : 520 (1824); *Craspedum tectorium* Lour. Fl. Cochinch. 336 (1790)). India; range Burma, Siam, Indo-China, the Malay Peninsula and Sumatra. See, however, Corner in Gard. Bull. Straits Settl. **10** : 325 (1939) for a rather strange dissenting opinion, considering that Loureiro's type is still extant and has been examined.
- E. RUMPHII Merr. Interpret. Herb. Amb. 347 (1917) = **E. crenatus** (Raf.) Merr. Jour. Arnold Arb. **29** : 212 (1948) (*Ayparia crenata* Raf. Sylva Tellur. 154 (1838)). Amboina. An *E. sphaericus* (Gaertn.) K. Schum., *sensu lat.*?
- E. SADIKANENSIS Knuth in Repert. Sp. Nov. **49** : 71 (1940) = **E. petiolatus** (Jack) Wall. Borneo; range Sumatra, Malay Peninsula, Indo-China, Hainan.
- E. SCORTECHINII King in Jour. As. Soc. Bengal **60** (2) : 132 (1891) (Mater. Fl. Malay Penin. **1** : 233) = **E. stipularis** Blume, *scnsu lat.* Malay Peninsula; range Sumatra, Borneo, Java.
- E. SERICEUS Stapf in Trans. Linn. Soc. II. Bot. **4** : 137 (1894), non Baker (1883) = **E. congestifolius** Knuth in Repert. Sp. Nov. **49** : 68 (1940). The two species were independently published. Borneo (Mount Kinabalu).
- E. STENOPHYLLUS Merr. in Pap. Michigan Acad. **19** : 168 (1934) = **E. salicifolius** King in Jour. As Soc. Bengal **60** (2) : 125 (1891) (Mater. Fl. Malay Penin. **1** : 234). Sumatra; range Malay Peninsula.

- E. SUBDENTICULATUS Miq. Fl. Ind. Bat. Suppl. 408 (1862) = **E. petiolatus** (Jack) Wall. Sumatra ; range Malay Peninsula, Indo-China, Hainan, Borneo.
- E. SUBGLOBOSUS Merr. in Philip. Jour. Sci. 4 : Bot. 290 (1909) = **E. sphaericus** (Gaertn.) K. Schum., fide Corner in Gard. Bull. Straits Settl. 10 : 326 (1939), et Van Steenis in Bull. Jard. Bot. Buitenzorg III. 17 : 409 (1948). Philippines ; range (*sensu lat.*) India to Southern China through Malaysia to Samoa.
- E. SUBSESSILIS Hand.-Maz. in Symb. Sin. 7 : 614, pl. 21, fig. 5 (1933) = **E. sylvestris** (Lour.) Pers. Hunan, Fukien, Chekiang ; range western and southern China and Indo-China.
- E. VALETONII Hochr. Pl. Bogor. Exsicc. 29 (1904) = **E. subpuberulus** Miq. Fl. Ind. Bat. Suppl. 406 (1862). Sumatra ; range Bangka, Billiton, cultivated at Buitenzorg, Java (VI. C. 97) from which apparently came no. 55 of the Hochreutiner exsiccatae.
- E. VERSICOLOR Elm. Leafl. Philip. Bot. 4 : 1178 (1911) = **E. cumingii** Turcz. in Bull. Soc. Nat. Mosc. 19 (2) : 491 (1846). Philippines.
- E. YENTANGENSIS Hu in Jour. Arnold Arb. 5 : 229 (1924) = **E. japonicus** Sieb. & Zucc. (1845). China (Chekiang) ; range Japan to southern and western China.
- E. YENTANENSIS Hu in Contr. Biol. Lab. Sci. Soc. China 1 (2) : 4 (1925) = praec.
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