Ceylon J. Sci., Biol. Sci. Vol. 16 (1&2) December 1983

EUPHORBIACEAE OF CEYLON. NOMENCLATURAL NOTES*

Louis Cutter Wheeler**

ABSTRACT

Nomenclatural problems in *Acalypha*, *Agynaia*, *Aporosa*, *Breynia*, *Croton*, *Euphorbia*, *Gelonium*, *Givotia*, *Glochidion*, *Hevea*, *Phyllanthus*, *Podadenia*, *Putranjiva*, etc. are summarized. It is shown among other things that *Suregada* must be used instead of *Gelonium*, that *Synostemon* is to be used instead of *Agynaia*, *Putranjiva* is reduced to *Drypetes*, and that the Ceylon species of *Ostodes* belong to *Fahrenheitia*.

Acalypha paniculata Miq., Fl. Ned. Ind. (Fl. Ind. Bat., alternate title) 9 (2): 406.1859. In place of this name, Abeywickrama, Ceylon J. Sci. Bio. Sci. 2: 184.1959, took up "*A. racemosa* Wall. ex Baill." Unfortunately, Baillon, Etude Gen. Euphorb., 433. 1858, provided no description of *A. racemosa* Herb. Heyne ex Wall., Numerical List ("Cat.") 7784c. 1847 (Date according to Stafleu, Taxonomic Lit., 490. 1969) so it remained a nomen nudum. Therefore *A. paniculata* is the valid name. The addition of "*A. racemosa* Heyne ex Wall. Cat. no. 1784 (1828)" to the synonymy of *A. paniculata* by Alston in Trimen, Fl. Ceylon 6: 265. 1931, is puzzling. Had his citation been right, then he should have taken up *A. racemosa*, as it, on the face of it, was prior, but Alston misquoted the number of the species in Wallich's 'Numerical List' and failed to note that the name was without description. Alston's listing of "*Usteria racemosa* Dennst. Schluess Hort. Malab. p. 31 (1818)" presumably was intended to indicate that *Usteria racemosa* 1818 preoccupied *Acalypha racemosa* 1828, otherwise the entry seems pointless, which it is anyway under any known code of nomenclature.

Agynaia Ventenat, 1800 (spelled "*Agyneya*" in Trimen), is preoccupied by *Agyneia* L., 1771, according to Grady L. Webster, specialist in the subfamily Phyllanthoideae, writing in Taxon 9: 25-26. 1960. Consequently the Ceylon *Agyneia bacciformis* (L) A. Juss., Tent. Euphorb., 24. 1824, based on *Phyllanthus bacciformis* L., Syst., ed. 13, 707. 1774, is placed in the earliest available genus as

---

** The late Louis Cutter Wheeler, Flora of Ceylon Project, Peradeniya.

* Critical Notes on Ceylon Plants XXV.

Ceylon J. Sci., Biol. Sci. Vol. 16 (1&2) December 1983

Synostemon bacciforme (L.) Webster, Taxon 9: 26. 1960. Webster further pointed out that *Agyneia* L., 1771, is synonymous with and prior to *Glochidion* Forster 1776. Since fewer than ten of the 200-odd species of *Glochidion* have received valid names under *Agyneia* L., Webster, l.c., proposed the conservation of *Glochidion*, and the general committee on conservation accepted the recommendation as recorded in Taxon 17: 329. 1968. Therefore, the continued use of *Glochidion* is authorized, and the names of the Ceylon species remain in the customary genus *Glochidion*.

Aporosa Blume, Bijdr., 514. 1825, was corrected to *Aporusa* in Blume & Fischer, Fl. Jav. 1: Praef. vi. 1828, in note. Croizat, Bull. Bot. Gard. Buitenzorg, ser. 3, 17: 217-218. 1942, discussed the derivation of the generic name and showed that the derivation would logically require the corrected spelling of *Aporusa*. Airy Shaw, Kew Bull. 20: 380. 1966, and op. cit. 21: 357.1968, concurs. However, Croizat, l.c., p. 209, in his summary at the beginning of the article, clearly proposed that the original and customary spelling of *Aporosa* be conserved. Unfortunately the wording of the concluding sentence of his discussion, p. 218, is ambiguous, and his proposal for conservation has, so far as I have discovered, been ignored. Of course in reality no conservation is required for an original spelling.

Breynia rhamnoides (Retzius) Muell. Arg., DC. Prodr. 15 (2): 440. 1866, based on *Phyllanthus rhamnoides* Retzius, Obs. Bot. 5: 30. 1788, (and Willd., Sp. Pl. 4: 580. 1805), has an earlier valid name, *Breynia vitis idaea* (N. L. Burman) C. E. C. Fischer, Kew Bull. 1932: 65. 1932, based on *Rhamnus vitis idaea* N. L. Burman, Fl. Ind., 16. 1768. (Date according to Stafleu, Taxonomic Lit., 389, 1967). As a matter of fact, *Phyllanthus rhamnoides* was avowedly and actually superfluous when published, for both Retzius and Willdenow cited the earlier *Rhamnus vitis idaea* in synonymy of *Phyllanthus rhamnoides*. Although Merrill, Phil. J. Sci. 19: 388. 1921, was uncertain as to the identity of *Rhamnus vitis idaea*, Fischer, l.c., concluded on the basis of the type of *Phyllanthus rhamnoides* Retzius that it is identical with the earlier *Rhamnus vitis idaea* N.L. Burman. How Fischer established the identity of *Rhamnua vitis idaea* is obscure. It is virtually impossible, judging by the chronology given by Fischer for Koenig's residence in India beginning in 1768, for N. L. Burman to have seen a specimen of Koenig's and published it in 1768. N. L. Burman mentions a specimen which he has seen in Hermann's herbarium, so probably the type of *Rhamnus vitis idaea* is in Hermanns herbarium at the British Museum (Natural History), and Fischer may have examined this.

Ceylon J. Sci., Biol. Sci. Vol. 16 (1&2) December 1983.

Phyllanthus vitis idaea Koenig ex Roxburgh, Flora Indica 3: 665. 1832. is probably identical with *Rhamnus vitis idaea*, but was proposed without reference to it.

Croton bonplandianus Baillon, Adansonia 4: 339. 1863-4. Croizat, Darwiniana 5:436. 1941, reported his conclusion that this is conspecific with *Croton sparsiflorus* Morong, Ann. N.Y. Acad. Sci. 7: 221. 1892. I have examined the type at Paris and concur with Croizat's conclusion. Muell. Arg., DC. Prodr. 15 (2): 661. 1866, relegated *C. bonplandianus* to synonymy under the related *Croton persicaria* Baillon. -- This weedy annual from South America was first reported from Ceylon by Senaratna, Ceylon J. Sci., Sect. A Botany, 12: 212, 214. 1947, (as *C. sparsiflorus*). It is now widespread in Ceylon in the Dry and Arid zones, and occasional in the Intermediate Zone, at low elevations in disturbed sites. It is somewhat salt tolerant as shown by its growing in close proximity to the upper high tide line at Trincomalee. It is unpalatable to stock, and on over-grazed pastures it is sometimes the dominant plant.

Croton hirtus (as *hirtum)* L'Heritier, Stirp. Nov. 1: 17. 1785; Lam., Encyc. Meth. Bot. 2: 213. 1786; Willd., Sp. Pl. 4: 540. 1805; Geiseler, Croton. Monogr., 62. 1807. -- *Croton glandulosus* L. var. *mirtus* (L'Heritier) Muell. Arg., DC Prodr. 15(2): 684. 1866. -- *Brachystachys hirta* (L'Heritier) Klotzsch, Hooker's London J. Bot. 2: 47. 1843; Baillon, Etude Gen. Euphorb. Atlas, t. XVII, f.5. 1858.

Croton glandulosus L. sensu Senaratna, Ceylon J. Sci. (Bio. Sci.) 2: 182. 1959.

Though very closely related to *C. glandulosus*, *C. hirtus* seems distinct.

This weedy annual is spreading rapidly. It is better adapted to the cooler moister regions of Ceylon than *C. bonplandianus*, and reaches the immediate coast only in the Wet Zone, much in contrast to *C. bonplandianus* which thrives in the Dry Zone especially along the coast and at Trincomalee grows barely above high tide.

Croton oblongifolius (as "oblongifolium") Roxburgh, Fl. Ind. 3: 685. 1832; Thwaites, Enum. Pl. Zeyl., 276. 1861; notDelile, Fl. Egypte Explicatio, 139. 1814. N. P. Balakrishnan, Bull. Bot. Surv. India 3(1): 39, 1962, renamed this *C. roxburghii*.

There is an earlier name applicable to the plant of Ceylon, *C. persimilis* Muell. Arg., Linnaea 34: 116. 1865, and DC. Prodr. 15(2): 618. 1866. Included in this by Muell. Arg. at the time of first publication were 2 collections from Ceylon, *Walker*, and

Ceylon J. Sci., Biol. Sci. Vol. 16 (1&2) December 1983.

C.P. 2114, as well as 3 colections from India. I am interpreting this taxon in the light of the collections from Ceylon because the emphasis in Muell. Arg.'s publishing *C. persimilis* was to provide a name for the plant called *C. oblongifolius* by Thwaites. J. D. Hooker disposed, Fl. Brit. India 5: 387. 1887, of *Croton persimilis* in the following way under *Croton joufra:* "Mueller's *C. persimilis* (α) *genuina* is a mixture of this with *C. oblongifolius* from Khasia, Assam, and Ceylon." There is, therefore, no obstacle to applying the name *C. persimilis* to the plant of Ceylon.

Croton thwaitesianus Muell. Arg., Linnaea 34: 116. 1865. This was a renaming of the plant to which Thwaites, Enum. Pl. Zeyl., 276. 1861. had applied the name *Croton klotzschianus* (R. Wight) Thwaites, l.c., based on *Tiglium klotzschianum R.* Wight, Ic. 5(2): 31. (as *klotcheanum)*,t. 1914 (as *klotchianum)*. 1852. Mueller considered application of Wight's binomial to the Ceylon plant an error, so Mueller named the Ceylon plant *Croton thwaitesianus*.Having had no opportunity to review the taxonomy of the plant involved I accept Mueller's judgement in this matter, and apply *Croton thwaitesianus* Muell. Arg. to the taxon represented by *C. P. 2113*, the only collection which Mueller cited. J.D. Hooker, Fl. Brit. India 5: 392. 1887, rejected Mueller's view and cited *C. thwaitesianus* in synonymy under *C. klotzschianus*.

Alston in Trimen, Fl. Ceylon. 6: 264. 1931, rejected *Croton klotzschianus* (Wight) Thwaites which both Thwaites, l.c. and Trimen, Fl. Ceylon 4: 49. 1898, had applied to the plant, and instead of returning to the undoubtedly applicable *C. thwaitesianus*, applied *C. officinale* (Kl.) Alston, Fl. Ceylon 6: 264. 1931, based on *Tiglium officinale* Kl., Nov. Acta Acad. Nat. Cur. 19 (Suppl. 1): 418. 1843, which in turn is based on *Croton tiglium*L., to avoid a tautonym. Therefore, *Croton officinale* is typonymous with *Croton tiglium*,is superfluous, and furthermore is not applicable to the plant to which Alston applied it, but instead is a synonym of *Croton tiglium*.

Croton zeylanicus Muell. Arg., Linnaea 34: 107. 1865; Muell. Arg., DC. Prodr. 15(2): 581. 1866; Alston in Trimen, Fl. Ceylon 6: 264. 1931, based on *C. hypoleucos*(sic) Dalzell, Hooker's London J. Bot. 3: 123, 1851, sensu Thwaites, Enum. Pl. Zeyl., 276. 1861 (not *C. hypoleucus* Schlecht., Linnaea 19: 246, 1847). There is an uncertainty as to the typification of this species. If Thwaites' Ceylon plant is deemed distinct from Dalzell's of southern India, then some collection from Ceylon, probably *C. P. 2110*would be taken as lectotype, but if the plants of Ceylon and southern India are conspecific, then presumably the type of *C. hypoleucos* Dalzell should be taken as type. Both J.D. Hooker, Fl. Brit. India 5: 386. 1887, and N.P. Balakrishnan, Bull. Bot. Surv. Ind. 3(1): 40. 1962

Ceylon J. Sci., Biol. Sci. Vol. 16 (1&2) December 1983.

("1961") agree that *C. zeylanicus* and *C. zeylanicus* Heyne are indistinguishable. As the name *C. reticulatus* Heyne ex Wall., Numerical List ("Cat.") n. 7724B. 1847, is a nomen nudum and long before it was first mentioned by Wallich in 1847 it was preoccupied by *C. reticulatus* Willd., Sp. Pl. 4: 545. 1805, (which Muell. Arg., DC. Prodr. 15(2): 979. 1866, placed in synonymy under *Mallotus rhamnifolius* (Willd.) Muell. Arg., l.c., based on *Croton rhamnifolius* Willd.). (The date of 1828 given by Trimen for Wallich n. 7724B is an error; Stafleu, Taxonomic Lit., 490. 1967, gives 1847). Therefore, the name being preoccupied the description of *Croton reticulatus* Heyne ex Wall. by J.D. Hooker, Fl. Br. India 5: 386. 188 could not validate it.

Formerly the International Rules of Botanical Nomenclature allowed use of a later homonym if the preoccupying earlier homonym were universally considered a synonym of some other name, but this unworkable rule is no longer in the current International Code of Botanical Nomenclature.

It is appropriate at this juncture to inveigh against the habit of botanists of citing Wallich's "A Numerical List of Dried plants in the East India Company's Museum," as Wallich's "Cat." or "Catalogue," which word appears nowhere in the title. While this practice is one of long-established custom, there is no justification for using a non-existent title in bibliographic references.

Euphorbia thymifolia L., Sp. Pl., 454. 1753, is commonly used in the sense of the small-leaved prostrate pubescent plant in which the capsule is only partially exserted from the involucre so that the involucre is distended by the capsule. This pantropic weed unfortunately has nomenclatural problems: it was designated by Linnaeus as the unnamed variety beta. Authors have, in general, dealt with the problem in three ways: 1) Employed the binomial attributing it to Linnaeus (e.g., Trimen, Fl. Ceylon 4: 8. 1898) ignoring the fact that they are employing it in the sense of variety beta. 2) Used the binomial but attributed it to Burman, presumably N.L. Burman, author of Flora Indica, following the example set by Boissier, DC. Prodr. 15(2): 47. 1862. The plant is well-illustrated by J. Burman, Thes. Zeyl., 225 t. 105, f. 3. 1737, but unfortunately, the specimen is missing from J. Burman's herbarium at the Institute de France, Paris, so J. Burman's plate will have to serve as the lectotype for *Euphorbia thymifolia* variety beta. 3) Used the name *Euphorbia burmanniana* J. Gay in Webb & Berthelot, Phyt. Canar. 3(2): 239. 1844, based on *Euphorbia thymifolia* L. variety beta.

Ceylon J. Sci., Biol. Sci. Vol. 16 (1&2) December 1983

The first two procedures are plainly illogical unless procedure 1 assumes that *E. thymifolia* and variety beta are identical, which is unlikely for reasons given below. Unfortunately, the earliest binomial for the taxon originally designated as variety beta is not Gay's, but instead *Euphorbia rubicunda* Blume, Cat. Gew. Buitenzorg, 73. 1823, which was proposed independently as a new species, not a new name. I have examined Blume's specimen, the type, at Leiden.

Examination on July 3, 1974 of Linnaeus' specimen of *Euphorbia thymifolia* revealed that it is identical with the North American plant long known in floras as *E. maculata* and of recent years in some floras as *E. supina* Raf. This identification disposes of the name *E. thymifolia* as misapplied to the pantropic weed. This leaves *E. rubicunda* Blume as the earliest name for the pantropic weed.

Flueggea microcarpa Blume is mentioned by Trimen, Fl. Ceylon 4: 33. 1898, as having been reported in "Fl. B. Ind." from Ceylon on the basis of a collection made by Kelaart, but Trimen reported that, "I searched in vain in Herb. Kew for a specimen." The specimen is at Kew filed under *Margaritaria indica* as it was so determined by Airy Shaw.

Flueggea virosa was the name under which several collections have been distributed through the Flora of Ceylon Project. Grady L. Webster has kindly identified my collections as *Phyllanthus pinnatus* (R. Wight) Webster. This shrub is common but local in Ruhuna National Park and westward as far as Weligatta near Hambantota.

Gelonium Roxburgh ex Willd., Sp. Pl. 4(2): 831. 1806, of the Euphorbiaceae was proposed without reference to *Gelonium* J. Gaertner, Fruct. 2: 271. 1791, of the Sapindaceae.*Gelonium* Roxburgh ex Willd., being a later homonym and not conserved, must be rejected. Croizat, Bull. Bot. Gard. Buitenzorg, Ser. 3, 17: 212-217. 1942, reviewed the history of *Gelonium*, and, agreeing with Kuntze, Rev. Gen., 619. 1891, correctly took up *Suregada* Roxburgh ex Rottler, Gesell. Natur. Freunde, Neue Schrifte 4: 206. 1803, for the euphorbiaceous plants. As the article in which *Suregada* was published had been heavily edited by Willdenow, it is not clear why Willdenow published his synonymous *Gelonium* after *Suregada* had appeared. Perhaps Willdenow did not realize that the two genera were identical.

Givotia W. Griffith, Calcutta J. Natural History 4(15): 388. 1843 (Oct.)[1]. No species was assigned to the genus by W. Griffith in 1843; it was nine years later that a species was first assigned to the genus: *Givotia rottleriformis* W. Griffith ex R. Wight,

[1] See p. 305 of Calcutta J. Natural History 4 (15) for date of this number.

Ceylon J. Sci., Biol. Sci. Vol. 16 (1&2) December 1983

Icones Pl. Ind. Or. 5(2): 24, t. 1889. 1852. Obviously *Givotia rottleriformis* is automatically the type species. However, as was concluded by both Prain, Kew Bull. Misc. Inform. 1918: 67-69. 1918, and E. D. Merrill, Enum. Philipp. Fl. Pl. 2: 431. 1923, *Croton moluccanum L.* is the same as *Givotia rottleriformis*. Prain rejected transfer of the name of *Croton moluccanum* as geographically erroneous because *Givotia rottleriformis* does not occur in the Moluccas.

From Prain's discussion it appears that Prain was unware that Linnaeus studied Hermann's herbarium: "We know that Linnaeus had no knowledge of the plant when he named it; there was no specimen in the herbarium, written up as *Croton moluccanum*, in 1753." However, it is now well-known that Linnaeus used Hermann's herbarium in preparing Linnaeus' Flora Zeylanica.

A. R. Smith, Kew Bull. 22(3): 504-505. 1968, in his monograph of the genus *Givotia*, agreed that Hermann's specimen was involved in the Linnaean concept of *Croton moluccanum* L., Sp. Pl., 1005. 1753, but as there was also another element (which is *Aleurites moluccana* (L.) Willd. based on *Jatropha moluccana)* cited by Linnaeus, 1753 under *Croton moluccanum*, Smith, rather than lectotypifying *Croton moluccanum*, continued to use the traditional name of *Givotia rottleriformis*. Presumably Smith was unaware of both Prain's and Merrill's prior lectotypification of *Croton molucannum*.

In order to establish that the specimen in Hermann's herbarium was involved in the concept of *Croton moluccanum* L. it is necessary to establish a connection between the entry in Linnaeus, Species Plantarum, for this species and the specimen in Hermann's herbarium. It is easy to establish this relationship because Linnaeus, Sp. Pl., 1005. 1753, cited under *Croton moluccanum* "Fl. Zeyl. 346." In Linnaeus, Flora Zeylanica, 165. 1747, there appears number 346 followed by a description beginning with *Croton* and including the folk name "Kathakaekuna." Thanks to the kind assistance of members of the staff, including especially P. I. Edwards and E. H. Grove, of the Department of Botany, British Museum (Natural History) the following connection was established: In the copy of Flora Zeylanica at BM (NH) there are pencilled marginal numbers by each species referred to in Hermann's herbarium which is preserved bound in large volumes. These marginal annotations form an index to Hermann's herbarium. However, in these annotations 5 is the number used to refer to volume 1 (for reasons unknown). There in volume 1 is specimen 346 on page 33 and written by it is the folk name "Kathakaekuna." This is the specimen chosen by Prain as lectotype for *Croton moluccanum*.

Trimen, Fl. Ceylon 4: 51. 1898, states in reference to this specimen: "The specimens in Herb. Hermann to which Linnaeus gave the name *Croton moluccanum* are only leaves, but almost certainly belong

Ceylon J. Sci., Biol. Sci. Vol. 16 (1&2) December 1983

to this species." This statement is the basis which Merril gave in his "Interpretation of Rumphius' Herbarium," 319, 1917, for Merrill's statement concerning the character of the specimen involved. It is clear from Merrill's statement in his preface on page ten that he did not confirm this statement as he did not consult the European herbaria in connection with preparation of his "Interpretation." Trimen's statement is totally in reverse of the facts: there is only one specimen of "Kathkaekuna" in Hermann's herbarium and it consists of a leafy branch bearing a large staminate inflorescence. There is a flowerless specimen, a branch bearing leaves only, in Hermann's herbarium but it is the one flowerless specimen of three of *Jatropha moluccana (Aleurites moluccana)* in Hermann's herbarium. Twice I have examined the specimens in Hermann's herbarium which are involved: first in 1972, then, after I discovered the discrepancy between my note and Trimen's statement, I reexamined the specimens in Hermann's herbarium in 1974 and confirmed the fact that Trimen had erred.

Comparison of Linnaeus' description in Flora Zeylanica with specimen 346 shows unmistakably that this is the specimen on which he based his description. It is true that in his 'Species plantarum' Linnaeus had an element in *Croton moluccanum* of *Aleurites moluccana (Jatropha moluccana)* but the major element was *Givotia moluccana* (L.) Sreemadhavan, Taxon, 24: 696, 1975, based on *Croton moluccanum* L., Sp. Pl., 1005. 1753. The valid name for the tree long kown as *Givotia rottleriformis* is *Givotia moluccana*.

Glochidion J. R. & G. Forster, Char. Gen., 113 t. 57. 1776, a taxonomic synonym of *Agyneia* L., 1771, has, as noted above under *Agynaia* Ventenat, been conserved, hence the continued use of *Glochidion* for the plants of Ceylon is correct. As the genus *Glochidion* was monotypic when published, including only the single species *G.ramiflorum*, l.c. 114, it is automatically the type species. The designation by Alston, Ann. Roy. Bot. Gard. Perad. 11: 1. 1928, of *G. australe* as the type species is an error. *Glochidion* sect. *Hemiglochidion* Muell. Arg., Linnaea 32: 58. 1863, was described but no species assigned. But in DC. Prodr. 15 (2): 287 et. seq. 1866, the first place in which species were assigned to this section, *G. ramiflorum* was included. Therefore, since the type of *Glochidion* was included in the section, *Hemiglochidion*, *Hemiglochidion* is an absolute or obligate or nomenclatural synonym of *Glochidion* whether *Hemiglochidion* is used in sectional or generic rank. I am indebted to Grady Webster in litt. for this information about the nomenclatural status of *Hemiglochidion*. As some Ceylon species have been assigned to the section *Hemiglochidion*, inclusion of this information here is appropriate.

Ceylon J. Sci., Biol. Sci. Vol. 16 (1&2) December 1983

Glochidion montanum Thw. var.? *glaberrima* (sic) Alston, Ann. Roy. Bot. Gard. Perad. 11: 6. 1928, is not described, the citation of "C.P. 342" does not constitute description, nor does the citation of"G. coriaceum Thw. Enum. p. 285 (1861) pp." Since only part of *G. coriaceum* Thwaites and subsequent authors is separated as var. *glaberrima* and,as there is no indication of what part of the descriptions of those authors applies to the new variety; it stands as a nomen nudum unless the illustration published by Alston, Ann. Roy. Bot. Gard. Perad. 11: 10, t. 1, f. 8. 1928, with only the explanation "Female flower of *G. montanum* var. *glaberrima*" validates it. Later Alston in Trimen, Fl. Ceylon 6: 261. 1931, mentioned the variety, again without description.

Glochidion moonii Thw., Enum. Pl. Zeyl., 288. 1861. It is not clear from the synonymy given by Thwaites why he did not transfer *Gynoon hirsutum* Wight, Icones 5: 29. t. 1909. 1852, to *Glochidion*, but the specific epithet was preoccupied under *Glochidion* by *G. hirsutum* (Roxb.) Voigt, Hort. Suburb. Calc., 153. 1845, based on *Bradleia hirsuta*, a native of Prince of Wales! Island. As *Phyllanthus pubescens* Moon, Cat., 65. 1824, is a nomen nudum, the type of *Glochidion moonii* is the same as the type of *Gynoon hirsutum* Wight.

Glochidion nervosum Alston in Trimen, Fl. Ceylon 6: 260. 1931, in clavis, had been overlooked by Index Kewensis because the publication was very obscure. Alston failed to mark it as a new species, supplied no Latin description which it was his custom to provide, made no mention of it in the accompanying general text, and cited no specimen. Examination of the material at PDA revealed that Alston has written "*Glochidion nervosum* Alston" on the labels of two sheets of CP. 342 which had been labelled by Thwaites "*Glochidion coriaceum* Thw." Subsequently Alston crossed out his specific epithet and substituted "*montanum* var. *glaberrima* Alston."

Glochidion pachycarpum Alston, Ann. Roy. Bot. Gard. Perad. 11: 5. 1928. In synonymy there are cited two names one of which was "*G. pycnocarpum* var. *elliptica* Hk f." Alston in Trimen, Fl. Ceylon 6 260. 1931, again intends to cite this name in synonymy, but unfortunately by a lapsus calami wrote it anachronistically as "*G. pachycarpum* var. *elliptica* Hk. f."

Hevea brasiliensis. From time to time threre is published a challenge to the validity to this name as applied to the Para rubber tree, source of most of the world's natural rubber. These

Ceylon J. Sci., Biol. Sci. Vol. 16 (1&2) December 1983

challenges are based on the mistaken belief that the publication of *Siphonia brasiliensis* Willdenow ex A. Jussieu, Euphorb. Gen. Tent., 113, t. XII 38B. 1824, was invalid and therefore the name *Siphonia brasiliensis* belongs to the tree of the Orinoco described by Humboldt, Bonpland & Kunth, Nov. Gen. et Sp. Pl. (quarto) 7: 171. 1825, which is not the commercially cultivated para rubber tree. As shown by Richard Evans Schultes, preeminent authority on *Hevea*, in Botanical Museum Leaflets, Harvard University 14: 79-86. 1950, the publication of *Siphonia brasiliensis* Willdenow ex A. Jussieu, Euphorb. Gen. Tent., 113, t. XII 38B. 1824, is valid and Humboldt, Bonpland & kunth did not publish a new species when they described the tree of the Orinoco. Therefore, *Hevea brasiliensis* (Willdenow ex A. Jussieu) Muell. Arg. Linnaea 34: 204. 1865 based on *Siphonia brasiliensis* Willdenow ex A. Jussieu is the valid name for the cultivated Para rubber tree.

Ostodes Blume. According to Airy Shaw in his article "Realignments in the Ostodes -- Dimorphocalyx Complex." Kew Bull. 20: 409-413. 1966, the species of Ceylon which customarily have been placed in the genus *Ostodes* Blume belong instead in the genus *Fahrenreitia* Reichb. f. & Zoll. The Ceylon species then become *F. zeylanica* (Thwaites) Airy Shaw, Kew Bull. 20: 410. 1966, based on *Desmostemon zeylanicus* Thwaites, Enum. Pl. Zeyl., 278. 1861, and *Fahrenheitia minor* (Thwaites) Airy Shaw, Kew Bull. 20: 410. 1966, based on *Desmostemon zeylanicus* var. *minor* Thwaites, Enum. Pl. Zeyl. 278. 1861.

Phyllanthus zeylanicus Muell. Arg., Linnaea 32: 49. 1863, based on *Reidia polyphylla* R. Wight, Icones Pl. Ind. Or. 5(2): 28. (as *polyphilla)*, t. 1904, f. IV (as *polyphylla)*. 1852, not *Phyllanthus polyphyllus* Willd. 1805. (Although Muell. Arg. cited *Epistylium zeylanicum* Baillon, Etude Gen. Euphorb. 648. 1858, in synonymy, this cannot be the basionym as it was a nomen nudum.) Subsequently Muell. Arg., DC. Prodr. 16(2): 281. 1866, transferred *Glochidion zeylanicum* Adr. Juss. to *Phyllanthus* as *P. zeylanicus* (Adr. Juss.) Muell. Arg., but as Muell. Arg. had already, in 1863, preoccupied this name, this later transfer was invalid. Hence, the new name for *P. zeylanicus* 1863, not *P. zeylanicus* 1866, *P. anabaptizatus* Muell. Arg., DC. Prodr. 15(2): 421. 1866, however clever this name is for a plant growing in streams and subject to inundation, was superfluous when published. This name *anabaptizatus* is a double pun: it means twice baptized, an appropriate epithet for a plant growing in streams, hence subject to inundation, but it also means twice christened, which was appropriate for a plant which had been named twice before.

Ceylon J. Sci. Biol. Sci. Vol. 16 (1&2) December 1983

Podadenia sapida Thw., Enum. Pl. Zeyl., 274. 1861, was rejected by both Alston, in Trimen, Fl. Ceylon. 6: 266. 1931, and Muell. Arg., DC. Prodr. 15 (2) 791. 1866, in favor of *Podadenia thwaitesii* Baillon based allegedly on *Rottlera thwaitesii* Baillon, Etude Gen. Euphorb., 426. 1858, on the ground that Thwaites had cited Baillon's earlier name in synonymy. It is true that Thwaites cited "*Rottlera (Stylanthus) Thwaitesii,*" Baillon in synonymy, but Baillon did not publish the binomial in this form. Instead he published it as "S. *(tylanthus) Thwaitesii.*" The "*S.*" stood for *Rottlera* section. D. *Stylanthus* Baillon. The use of a sectional or other infrageneric name as the first name of a binomial is an aberrant system of nomenclature proscribed by the code. Citation of an invalid name in synonymy of a new name neither validates the invalid prior name nor invalidates the proposed new name. Therefore *Podadenia sapida* is the valid name for this remarkable endemic tree.

This publication by Baillon of a binomial using a sectional name as the first name of the binomial was not a casual lapsus calami on Baillon's part. He followed the same system of using the initial of the section of *Rottlera* for section B. *Plagianthera* and C. *Trilotra* as well as for section D. *Stylanthus*. In fact the only sections in which he followed conventional nomenclature were A. *Eurottlera* and E. *Pseudo-Rottlera*. Baillon also had binomials the first word of which was a sectional name under the genera *Alchornea*, *Croton*, *Pera*, *Sajorum*, *Stillingia*, and *Tragia*. However, Baillon did not consistently follow this practice, for under *Dalechampia* he followed the customary procedure of using the generic name for the first name of the binomial under this genus regardless of the sectional names.

Putranjiva Wallich. In the Addenda and Corrigenda to Backer and van den Brinck Jr., Flora of Java 3: 648. 1968, Airy shaw merges *Putranjiva* with *Drypetes*, and *Putranjiva roxburghii* Wallich, Tent. Fl. Nap., 61. 1826, becomes *Drypetes roxburghii* (Wallich) Airy Shaw, and *Putranjiva zeylanica* (Thwaites) Muell. Arg., DC. Prodr. 15 (2): 444. 1866, based on *Palenga zeylanica* Thwaites, Hooker's J. Bot. & Kew Garden Misc. 8: 271, t. 7, fC. 1856, becomes *Drypetes zeylanica* (Thwaites) Wheeler, comb. nov. The types of *Palenga zeylanica* are *C.P. 3349*(PDA) : Sheet 1, pistillate, flowering, Ambagamuwa, s. coll., Mars (?) 1856 lectotype, and sheet 2, staminate, buds only, Ambagamuwa s. coll., Mars (?) 1856, staminate syntype. There is a third sheet, fruiting, Ambagamuwa, s. coll., Dec. 1854 (or ?) 1856.