NOMENCLATURAL NOTES IN EUPHORBIACEAE

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ABSTRACT

The present paper discusses name changes of five species in Indian Euphorbiaceae. They are: Bridelia crenulata Roxb. (B. roxburghiana Gehrm.), Croton roxburghii Bal. nom. nov. (C. oblongifolius Roxb.), Croton zeylanicus Muell.-Arg. (C. reticulatus Heyne ex Muell.-Arg.), Jatropha heynei Bal. nom. nov. (J. heterophylla Heyne ex Hook. f.) and Jatropha villosa Wight (J. wightiana Muell.-Arg.).

During the study of Indian Euphorbiaceae, the author has come across a few names which, in accordance with the *International Code of Botanical Nomenclature* (1956), should be changed. The present paper discusses such name changes in five Indian species of the Euphorbiaceae.

- 1. Bridelia crenulata Roxb. Fl. Ind. 3: 734, 1832; Wall. Cat. 7880, 1847, nomen nudum.
 - B. retusa Spreng. var. roxburghiana Muell.-Arg. in DC. Prodr. 15(2): 493, 1866; Hook. f. Fl. Brit. Ind. 5: 268, 1887; Prain, Beng. Pl. 927, 1903.
 - B. roxburghiana (Muell.-Arg.) Gehrm. in Engler, Bot. Jahrb. 41: 30, 95, 1908; Jablonsky in Engler, Pflanzenr. 65: 70, 1915; Gamble, Fl. Pres. Madras 1280, 1925.
 - B. roxburghiana var. caduca Gehrm. ex Jablonsky loc. cit. 70, pro syn.

Roxburgh described *Bridelia crenulata* from a live plant, originally collected from near the river Megna in East Bengal and cultivated in the Botanic Garden, Sibpur, where it flowered. The Wallichian specimen 7880 (in Central National Herbarium, Sibpur) was collected from the above Garden and bears the name *Bridelia crenulata* on the original label. This has been again labelled by K. Gehrmann as *B. *oxburghiana* (Muell.-Arg.) Gehrm. var. caduca Gehrm. This specimen must have been collected from the original tree on which the name of Roxburgh is based and I select this as the LECTOTYPE of this taxon.

The oldest valid name for the present plant is Bridelia crenulata Roxb., which should be reinstated. Mueller made the present taxon a variety of B. retusa, but gave the epithet var. roxburghiana; in the varietal rank the plant had no valid name, and in consequence Mueller was justified in coining his own name. When, however, Gehrmann in 1908 raised this variety to specific rank, he should have used the oldest specific epithet, crenulata of Roxburgh; instead he selected the name roxburghiana, and this is clearly against the provisions of Art. 56(2) of the Code. It is difficult to understand how Jablonsky in 1915 retained the name roxburghiana.

2. Croton roxburghii Bal. nom. nov.

C. oblongifolius Roxb. [Hort. Beng. 69, 1814, nomen nudum; et] Fl. Ind. 3: 685, 1832 (non Delile, 1814; nec Siebr. ex Spreng. 1826); Dalz. & Gibs. Bomb. Fl. 231, 1861; Muell.-Arg. in DC. Prodr. 15(2): 573, 1866; Gamble, Man. Ind. Timb. 614, 1881; Hook. f. Fl. Brit. Ind. 5: 386, 1887; Talbot, Trees Bomb. ed. 2. 331, 1902; Prain. Beng. Pl. 943, 1903; Cooke, Fl. Pres. Bomb. 2: 599, 1906; Talbot, For. Fl. 2: 471, 1911; Duthie, Fl. U. Gang. Pl. 3: 103, 1915; Haines, Bot. Bih. Or. 2: 104, 1921; Gamble, Fl. Pres. Madras 1315, 1925; Kanjilal et al. Fl. Assam 4: 192, 1940.

In accordance with Art. 64(2) of the Int. Code Bot. Nom. (1956), the name Croton oblongifolius Roxb, is illegitimate and should be rejected. Roxburgh first mentioned this name in Hortus Bengalensis (1814) as a nomen nudum, without any description or diagnosis. The first description of this taxon appears in Flora Indica, vol. 3 (1832). But by this time this name had become a later homonym of two species described by two different authors for two different taxa. Delile in 1814 published the name Croton oblongifolius (as 'Croton oblongifolium') in his Florae Aegyptiaceae Illustratio (p. 283, t. 51, f. 1), based on an entirely different plant. Again in 1826, Sprengel published this binomial in his Systema Vegetabilium (vol. 3, p. 850), for another plant. Art. 64 (2) states, ". even if the earlier homonym is illegitimate or is generally treated as a synonym on taxonomical grounds, the later homonym must be rejected." Apart from the epithet oblongifolius, no other specific epithet has been used for this taxon. Therefore, a new name has to be given and I call it Croton roxburghii Bal. nom. nov.

- 3. Croton zeylanicus Muell.-Arg. in Linnaea 34: 107, 1865; et in DC Prodr. 15(2): 581, 1866.
 - C. reticulatus Heyne [in Wall. Cat. 7724B, 1847, nomen nudum] ex Muell.-Arg. in DC. Prodr. 15(2): 580, 1866 (non Willd. 1805); Hook. f. Fl. Brit. Ind. 5: 386, 1887; Talbot, Trees Bomb. ed. 2. 311, 1902; Cooke, Fl. Pres. Bomb. 2: 599, 1906; Talbot, For. Fl. 2: 469, 1911; Gamble, Fl. Pres. Madras 1314, 1925.

C. hypoleucus Dalz. in Hook. Kew J. Bot. 3: 123, 1851 (non Schlecht. 1847); Dalz. & Gibs. Bomb. Fl. 231, 1861; Thwaites, Enum. Pl. Zeyl. 276, 1864.

In determining the specimens of Croton reticulatus. I agree with Hooker's statement: "I find no character whereby to separate Mueller's C. zeylanicus; the fem. sepals enlarge in all the forms, and though largest in the Ceylon specimen are not otherwise different; the styles are too variable to found a character upon, and I find no difference in the capsule." Therefore, it is clear that these two species should be united.

Heyne's first reference to this plant is in Wallich's Catalogue as C. reticulatus which is a nomen nudum; the first description was made by Mueller in De Candolle's Prodromus. But the binomial Croton reticulatus Heyne ex Muell.-Arg. is a later homonym of that of Willdenow (Sp. Pl. 4: 545, 1805) and must be rejected. Willdenow's C. reticulatus is based on an entirely different type, and is generally considered synonymous with Mallotus rhamnifolius Muell.-Arg. The next name given for this plant is Croton hypoleucus by Dalzel, and this also is a later homonym of that of Schlechtendal (in Linnaea 12: 246, 1847) and is therefore illegitimate. The only name validly published for this taxon is Croton zeylanicus Muell.-Arg. which is therefore the only correct name.

4. Jatropha heynei Bal. nom. nov.

J. heterophylla Heyne ex Hook. f. Fl. Brit. Ind. 5: 382, 1887 (non Steudel 1840); Pax in Engler, Pflanzenr. 42: 70, 1910; Gamble, Fl. Pres. Madras 1339, 1925; Mooney, Suppl. Bot. Bih. Or. 247, 1950.

Heyne's name published by J. D. Hooker is a later homonym of Jatropha heterophylla Steudel in Nom.

Bot. ed. 2. 1: 799, 1840, and therefore illegitimate and to be rejected in accordance with the Rules. *J. heterophylla* Steudel is considered synonymous with *Manihot heterophylla* Pohl. Apart from the epithet *heterophylla*, no other specific epithet has been so far published for the present taxon and hence, a new name *Jatropha heynei*, is given for it.

- 5. Jatropha villosa Wight, Ic. Pl. Ind. Or. 4(1): 1, 1848 (non Baillon 1863; nec Muell.-Arg. 1866).
 - J. peltata Wight, Ic. Pl. Ind. Or. 4(1): t. 1169, 1848 (non Cerv. 1794; nec Steudel 1840).
 - J. wightiana Muell.-Arg. in DC. Prodr. 15(2): 1080, 1866; Hook. f. Fl. Brit. Ind. 5: 383, 1887; Pax in Engler, Pflanzenr. 42: 80, 1910; Gamble, Fl. Pres. Madras 1340, 1925.

Wight's Icon 1169 is named Jatropha peltata R. W., which happens to be a later homonym of J. peltata Cerv. and therefore illegitimate. Wight himself understood this mistake and in his Explanation to Plates (p. 1) in the same volume, he changed the name to Jatropha villosa, giving J. peltata as a synonym and also giving reference to his plate 1169; this is also accompanied by a short description. This sufficiently serves to validate the name Jatropha villosa in accordance with the Rules, and therefore, it should be reinstated.

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