Taxonomy and Typification of Endangered Lithophytic Herb

Belosynapsis kewensis (Commelinaceae)

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(Accepted on October 12, 2018)

Belosynapsis kewensis Hassk. (Commelinaceae) is endemic to three districts of southern Western Ghats, India. For this species, a detailed description is provided here along with the neotypification, and the lectotypification of its synonym Erythrotis beddomei Hook f.

Key words: Endangered, Endemic, Erythrotis beddomei, Kerala, lectotype, neotype, Tamil Nadu.

The genus Belosynapsis Hassk. (Commelinaceae) is represented by six recognized species of epiphytic and lithophytic herbs (cf. The Plant List 2013), namely, Belosynapsis ciliata (Blume) R. S. Rao, B. epiphytica (Blatt.) C. E. C. Fisch., B. kawakamii (Hayata) C. I. Peng & Y. J. Chen, B. kewensis Hassk., B. moluccana (Roxb.) C. E. C. Fisch. and B. vivipara (Dalzell) C. E. C. Fisch., distributed in tropical and subtropical Asia to South Pacific Islands. Except B. kawakamii, five remaining species are found in India and of which three are endemic to Western Ghats (B. epiphytica, B. kewensis, and B. vivipara). The diversity and the level of endemism suggest that India is the centre for evolution and diversification for the genus Belosynapsis. Out of the three endemic species, B. kewensis and B. vivipara are included in Red Data Books of India Plants (Kammathy 1987), where B. kewensis is kept under the Endangered category and B. vivipara as Vulnerable. While studying the species, it was found that B. kewensis was taxonomically poorly characterized and its description is meagre in preceding works including protologue (Hasskarl 1871, Hooker 1875, 1892, Clarke 1881, Fischer 1931, Kammathy 1987, Mohanan and Henry 1994, Sasidharan 2004). Authors critically studied B. kewensis (Fig. 1) and described it in detail here along with the neotypification, and the lectotypification of its synonym Erythrotis beddomei Hook. f. While designating neotype and lectotype, we followed the guidelines of Art. 9.3, 9.8 and recommendations 9A, 9B of the ICN (Turland et al. 2018).

Belosynapsis kewensis Hassk., Flora 54: 259 (1871). Neotype (designated here): INDIA. Tamil Nadu, Kanyakumari district, Myhendra (Mahendragiri) hill, 3000 ft., s.d., R. H. Beddome s.n. (MH00048788!, Fig. 2; K000854209!–iso., Fig. 3); C. E. C. Fisch. in Gamble, Fl. Madras: 1551 (1931); Kammathy in M. P. Nayar & Sastry, Red Data Book of Indian Plants I: 120 (1987). – Cyanotis kewensis (Hassk.) C. B. Clarke, Monogr. Phan. [A. DC.
Director, Botanical Survey of India, Kolkata for facilities. We are also grateful to the Curators of B, BO, E, H, K, L and MANCH for information regarding type specimens.

References