Rajeev Kumar SINGH: Notes on Author Attribution and Typification of Two Names of Impatiens (Balsaminaceae)

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Summary: Two names of genus Impatiens L. (Balsaminaceae), namely I. bracteata and I. scapiflora are typified and correct author for these two species are clarified.

The genus Impatiens L. consists of about 1000 species, distributed in the tropical and subtropical regions of the Old World as well as in the northern temperate regions (Mabberley 2008). In India, there are about 215 species of Impatiens recorded so far, of which 142 species are endemic and the major centers of diversity occur in the Eastern Himalayas and the Western Ghats. During taxonomic study of this genus for India, I realized confusion in the author citation of Impatiens scapiflora and I. bracteata, and found the need for lectotypification also. After a thorough examination of literature and type specimens, I proceeded to clarify the correct author of these two species and to designate their neotype and lectotype, respectively. While designating neotype and lectotype, I followed the guidelines of Art. 9.2 and 9.7 and recommendations 9A, 9B and 9C of the ICN (McNeill et al. 2012).

The author citation for Impatiens scapiflora in the works of Hooker and Thomson (1860), Hooker (1874), Ramamoorthy (1978), Vivekananthan et al. (1997), Dessai and Janarthanam (2011) and Bhaskar (2012) are incorrect (as ‘B. Heyne ex Roxb’). Moreover, in IPNI the authorship for I. scapiflora is attributed to B. Heyne and in The Plant List 2013 as ‘B. Heyne ex Roxb’. Impatiens scapiflora was validly described by Wallich in Roxburgh’s Flora Indica; or Descriptions of Indian Plants (1824) on the basis of specimens collected by B. Heyne (1770–1819). In this book only the first three species from page nos. 453–455 (‘I. Balsamina, Willd. spec. i. 1175; I. tripetala, R. and I. natans, Willd. spec. i. 1175’) were described by Roxburgh and that is also clear from the original manuscript of Roxburgh published later in 1832, which includes three species only. The species nos. 4–16 (‘I. cristata, Wall.; I. urticifolia, Wall.; I. sulcata, Wall.; I. heterophylla, Wall.; I. bracteata, Colebr. Mss.; I. bicornuta, Wall.; I. mollis, Wall.; I. longicornu, Wall.; I. calycina, Wall.; I. scapiflora, Heyn.; I. scabriuscula, Heyn.; I. umbellata, Heyn. and I. grandis, Heyn.’) were described by Wallich and are clearly mentioned as ‘Additional species by N. W.’ on page no. 456. Though, Wallich attributed this species to B. Heyne but according to ICN the correct citation is considered to be ‘Impatiens scapiflora B. Heyne ex Wall.’. Similarly for Impatiens bracteata the author citation is given as ‘Colebr. ex Roxb.’ in Indian flora, IPNI and The Plant List. Impatiens bracteata was described by Wallich (1824) based on the live plants that grow in Company’s Botanic Garden (Acharya Jagadish Chandra Bose Indian Botanic Garden, Howrah) and these plants were introduced to the garden in 1814 by Mr. Smith from Sylhet, Bangladesh. Although, Wallich attributed this species to H. T. Colebrooke (1765–1837) but according to ICN the correct citation is considered to be ‘Impatiens bracteata Colebr. ex Wall.’.
Fig. 1. Neotype of *Impatiens bracteata* Colebr. ex Wall. (K000639520, ©The Board of Trustees of the Royal Botanic Gardens, Kew).
Fig. 2. Lectotype of *Impatiens scapiflora* B. Heyne ex Wall. (K001039835, ©The Board of Trustees of the Royal Botanic Gardens, Kew).
Typification

1. *Impatiens bracteata* Colebr. ex Wall. in Roxb., Fl. Ind. 2: 459 (1824).  

Type citation: ‘A native of Silhet, and from thence introduced into the Hon. Company’s botanic garden in 1814, by the late Mr. Smith. It blossoms during the rainy season.’

Neotype (here designated): BANGLADESH. Mont. Silhet (Mountain Sylhet), July 1820, De Silva & Blinkworth 119 [Wallich cat. n. 4760] (K000639520!, Fig. 1; CAL–isoneotype!).

Distribution: Bangladesh, Bhutan, China and India (Assam, Meghalaya, Sikkim and West Bengal).

Notes: Wallich (1824) described *Impatiens bracteata* on basis of the living specimens which flowered in the Company’s Botanic Garden (presently Acharya Jagadish Chandra Bose Indian Botanic Garden, Howrah) but no type was indicated. These plants were introduced to the garden in 1814 by Mr. Smith from Sylhet, Bangladesh. Wallich’s Indian type collections are known to exist mainly at K-W and CAL, some at BM, BR, CAL, DD, E, G, LIV, M, MANCH, NY, P, PH and W, but after contacting the curators of these herbaria, no herbarium specimen of the living specimens on which the description of *I. bracteata* was drawn could be traced. This indicates that either herbarium specimens were not made at all from the living specimens that flowered in the Company’s Botanic Garden or, if made, they are not extant now. Since no original material of the species appears to be extant, the specimen at K (K000639520), collected by De Silva and Blinkworth from type locality in July 1820 and also incorporated by Wallich in his catalogue in 1831 (A Numerical List of dried specimens of plants in the East India Company’s Museum) is chosen here as the neotype. The specimen selected is well preserved, has mature leaves and well developed flowers.

2. *Impatiens scapiflora* B. Heyne ex Wall. in Roxb., Fl. Ind. 2: 464 (1824).  

Type citation: ‘Specimens are preserved in Dr. Heyne’s hortus siccus, without any habitat.’

Lectotype (here designated): Without locality, likely south India, without date, B. Heyne s.n. [Wallich cat. n. 4758 A] (K001039835!, Fig. 2; CAL–isolectotype!).

Distribution: India, endemic (Karnataka, Kerala and Tamil Nadu).

Notes: Wallich (1824) described *Impatiens scapiflora* based on the specimens collected by B. Heyne. At present, two specimens of *I. scapiflora* collected by B. Heyne (1770–1819) are extant, one each at K and CAL. Of these, the best preserved specimen, K001039835 bears mature plant with bulb, roots, leaves, stems, buds and flowers, is designated here as the lectotype as it agrees well with the protologue.

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References


R. Kr. Singh：ツリフネソウ属（ツリフネソウ科）2種の著者とタイプ選定

ツリフネソウ属（ツリフネソウ科）2種の著者とタイプに関して考察した。Impatiens bracteataの著者はColebr. ex Wall.であり、バングラデシュから得られたDe Silva & Blinkworth 119 (K000639520)をネオタイプとして選定した。Impatiens scapifloraについては著者が

B. Heyne ex Wall.であることを明らかにし、産地についてコメントはないものの南インドから得られたと推定されるB. Heyne s.n. (K001039835)をレクトタイプとした。

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