Lectotypification of Four Names for Indian Psychotria (Rubiaceae)

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Four names of three recognized species of Indian Psychotria L. (Rubiaceae), P. bisulcata Wight & Arn., P. connata Wall., P. denticulata Wall. and P. laevigata Wight & Arn., are lectotypified.

Key words: Lectotype, Psychotria, Rubiaceae, syntype, typification.

The genus Psychotria L. (Rubiaceae) consists of about 1850 species worldwide (Mabberley 2008). In India, 45 species, one subspecies and six varieties are recognized (Deb and Gangopadhyay 1989, Gangopadhyay and Chakrabarty 1989, Murugan and Gopalan 2007), of which 29 species, one subspecies and six varieties are endemic. During systematic studies of Psychotria in south India, I realized the necessity for typification of some names which were not lectotypified earlier by Deb and Gangopadhyay (1989) in their revisionary work on this genus. Therefore, I designate here the lectotypes for four binomials of Psychotria, according to Art. 9.2 and Recommendations 9A, 9C and 9D of the Melbourne Code (McNeill et al. 2012).

1. Psychotria bisulcata Wight & Arn., Prodr. Fl. Ind. Orient. 1: 434 (1834). Lectotype (here designated): INDIA. Peninsula Ind. orientalis [Peninsular India], without date, Wight Cat. no. 1351 (E00174844!, Fig. 1; K000031714!–isolectotype).

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

Wight and Arnott (1834), while describing Psychotria bisulcata, formally mentioned the gathering of Wight Cat. no. 1351 as type. In keeping with the practice of those times, they did not designate a holotype nor did they mention the name of the herbarium where the specimens were housed. At present only two herbarium sheets of Wight Cat. no. 1351 are extant, one each at E (E00174844) and K (K000031714). The best preserved specimen E00174844, is designated here as the lectotype as it agrees well with the protologue.

2. Psychotria connata Wall. in Carey & Wall., Fl. Ind. 2: 163 (1824). Lectotype (here designated): INDIA. Without date, Heyne s.n. [Wallich Cat. no. 8347 A] (K000031709!, Fig. 2; BR00000005743995!, GZU0000091627!, K001125288!, P04020412!, P04020413!–isolectotypes).

Psychotria laevigata Wight & Arn., Prodr. Fl. Ind. Orient. 1: 433 (1834). Lectotype (here designated): INDIA. Peninsula Ind. orientalis [Peninsular India] Cootalum [Courtallam, Tirunelveli district, Tamil Nadu state], no date, Wight Cat. no. 1349 (E00174839!, Fig. 3).
Fig. 1. Lectotype of *Psychotria bisulcata* Wight & Arn. (Wight Cat. no. 1351, E00174844).
Fig. 2. Lectotype of *Psychotria connata* Wall. (Wallich Cat. no. 8347 [A], K000031709).
Fig. 3. Lectotype of *Psychotria laevigata* Wight & Arnh. (Wight Cat. no. 1349, E00174839).
Fig. 4. Lectotype of *Psychotria denticulata* Wall. (Wallich Cat. no. 8326, K001125253).
Residual syntype: INDIA. Peninsula Ind. orientalis [Peninsular India], without date, Wight Cat. no. 1349 (E00174840!, E00174842!, K000031711!, P04020409!); INDIA. Without date, Wight Cat. no. 1349 (K000031710!, K000031712!, K000031713!, MH!); INDIA. Hort. trip, May 1810, as Vitex laevigata, J. G. Klein s.n. (E00174841!).

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

Wallich (1824) described Psychotria connata with a citation, “Specimens of this species are preserved in the late Dr. B. Heyne’s herbarium, without any name, dated 26th July, 1818”. B. Heyne (1770–1819) collected many plant specimens from India and he distributed the specimens to different workers like A. W. Roth (1757–1834), J. P. Rottler (1749–1836), W. Roxburgh (1751–1815) and N. Wallich (1786–1854). Later Wallich included the specimens of herbarium B. Heyne in his Catalogue (A Numerical List of Dried Specimens of Plants in the East India Company’s Museum). Six specimens of Herb. Heyne included by Wallich in his catalogue (Wallich Cat. no. 8347 A), but without date of collection, were traced in different herbaria (BR0000005743995, GZU000091627, K000031709, K001125288, P04020412 and P04020413). It implies that the date 26 July 1818 as mentioned in the protologue might have been missed during inclusion of these specimens in the Wallich herbarium. Of these, the best one K000031709, is designated here as the lectotype as it agrees well with the protologue.

In the protologue of Psychotria laevigata, Wight and Arnott (1834) cited the type collection information as “Wight! Cat. n. 1349.—Vitex laevigata, herb. Madr.—Courtallum”, but no type was indicated nor did he mention the name of herbarium where the specimens were housed. Pertaining to the type citation given in protologue by Wight and Arnott, 10 specimens were traced (E00174839–00174842, K000031710–000031713, MH, P04020409). Of these, E00174839, is better preserved and more complete than the other specimens, hence is here designated as the lectotype as it agrees well with the protologue.

3. Psychotria denticulata Wall. in Carey & Wall., Fl. Ind. 2: 166 (1824). Lectotype (here designated): NEPAL. Sanko, anno 1821, Wallich Cat. no. 8326 (K001125253!, Fig. 4; CAL, K000031730!, K001125254!–isolectotypes).

Distribution: Bangladesh, Bhutan, India (Arunachal Pradesh, Assam, Manipur, Nagaland, Sikkim and West-Bengal), Myanmar and Nepal. Psychotria denticulata was described by Wallich (1824) based on the specimens collected from Sanko, Nepal, but no type was indicated in the protologue. At present, four specimens collected from Sanko, Nepal in 1821 by Wallich were extant, three at K (K000031730, K001125253 and K001125254) and one at CAL. Of these, the better preserved specimens K001125253 from Wallich herbarium, is designated here as the lectotype as it agrees well with the protologue.

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References
McNeill J., Barrie F. R., Buck W. R., Demoulin V., Greuter W., Hawksworth D. L., Herendeen P. S., Knapp S.,
R. K. Singh：インド産ボチョウジ属（アカネ科）4種のレクトタイプ選定

アカネ科のボチョウジ属植物Psychotriaは多くが常緑の低木あるいは亜高木で、世界の亜熱帯から熱帯地域に広く分布する。この属は1500種以上あるともいわれているが、今もなお研究の途上にある。インドには45種1亜種6変種が認められており、そのうち29種1亜種6変種が固有である。本研究ではインド産ボチョウジ属の4種、Psychotria bisulcata Wight & Arn., P. connata Wall., P. denticulata Wall., P. laevigata Wight & Arn.についてレクトタイプを選定した。

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