

## (2333) Proposal to conserve the name *Tweedia* (Apocynaceae: Asclepiadoideae) with a conserved type

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(2333) *Tweedia* Hook. & Arn. in J. Bot. (Hooker) 1: 291. Jan 1835 [Asclepiad. / Apocyn.], nom. cons. prop.

Typus: *T. birostrata* (Hook. & Arn.) Hook. & Arn. (*Cynanchum birostratum* Hook. & Arn.), typ. cons. prop.

When Hooker & Arnott (l.c.) originally described *Tweedia*, they validly published three species names, *T. birostrata*, *T. brunonis* Hook. & Arn. and *T. macrolepis* Hook. & Arn., but they doubted if the second should be placed within *Tweedia* (“*Tweedia? brunonis* ... This will probably be a distinct Genus ...”). Hooker & Arnott did not indicate a type. Meyer (in Descole, Gen. Sp. Pl. Argentin. 2: 102. 1944) cited *T. brunonis* as type. However, we and others (Rua in Parodiana 5: 383–384. 1989; John McNeill, pers. comm.) consider that *T. brunonis* cannot serve as type because it was not **definitely included** (see Art. 10.2; McNeill & al. in Regnum Veg. 154. 2012) in the original circumscription of *Tweedia*, the authors (Hooker & Arnott, l.c.) having associated its assignment to *Tweedia* with a question mark. McNeill (pers. comm.) noted that the only other use of “definitely included” in the *Code* was in Art. 52.1, defining a nomenclaturally superfluous name, and this was accompanied by a Note (Art. 52 Note 1) that established that “citation of a name with a question mark, does not make the name of the new taxon nomenclaturally superfluous”, i.e., a name associated with a question mark is not definitely included for the purposes of Art. 52.1, so he presumed that the same should apply in Art. 10.2. Others (Fred Barrie, Gerry Moore, pers. comm.), however, conclude that *T. brunonis* was definitely included (definite inclusion being effected by citation of a validly published species name; see Art. 10.3) in the original circumscription of *Tweedia* and, therefore, able to serve as type, as, under Art. 36.1, the combination *T. brunonis* is validly published, despite Hooker & Arnott’s question mark which they, therefore, did not consider critical, noting also that the supposition of *T. brunonis* not being in *Tweedia* was based on a hypothetical splitting of *Tweedia*.

Later Bullock (in Kew Bull. 13: 99. 1958) selected *Tweedia macrolepis* as type of the genus name “because it was the only species collected by John Tweedie ...” Rua (l.c.) rejected the typification by Bullock on the grounds that it had been selected by a mechanical method (contrary to Art. 10.5(b)) and selected *T. birostrata* as the type of *Tweedia*. We agree with Rua’s conclusion and further point out that Rec. 9A.2 of the *Code* regarding lectotypification of species and infraspecific names gives as an example of mechanical method “the automatic selection ... of a specimen collected by the person after

whom a species is named”, a method similar to Bullock’s. Others (Fred Barrie, John McNeill, pers. comm.) disagree and would not regard Bullock’s method of selection as mechanical as this is conceived in Art. 10.5(b).

Based on molecular phylogenetic studies we confirmed the morphological integrity and monophyly of *Tweedia* as comprising six species, including *T. birostrata* and *T. brunonis* (Calviño & al. in Taxon 63: 1265–1274. 2014). Thus, were Meyer’s (l.c.) type selection considered effective, it would maintain the current application of the generic name. On the other hand, *Tweedia macrolepis* was transferred to *Oxypetalum* by Decaisne (in Candolle, Prodr. 8: 585. 1844) soon after its original description, and never again treated within *Tweedia*. If Bullock’s (l.c.) selection of the type of *Tweedia* is not considered against the ICN rules (following Barrie & McNeill’s interpretation of what a mechanical method of selection is) (and Meyer’s selection is also discounted) then the name *Tweedia* will be synonymized under *Oxypetalum*, and the seven species until now treated within *Tweedia* would need to be transferred to *Turrigera* Deene., resulting in the creation of six new combinations. *Turrigera* has been treated under the synonymy of *Tweedia* since 1904 (Malme in Ark. Bot. 2(7): 1–18. 1904) and never used again in any scientific publication. On the contrary, authors in all publications (more than 15) since 1904 have used the name *Tweedia* for this group of *Asclepiadoideae* species from southwestern South America (see Calviño & al., l.c.), the most important being: Malme (l.c.); Meyer (l.c.); Marticorena & Quezada (in Gayana Bot. 42: 1–157. 1985); Rua (l.c.); Ezcurra in Zuloaga & al. (Cat. Pl. Vasc. Argentina 2: 78–98. 1999, in Correa, Fl. Patagonia 6: 58–77. 1999); Liede-Schumann & al. (in Syst. Bot. 30: 184–195. 2005); Ezcurra & al. (Cat. Pl. Vasc. Cono Sur 2: 1090–1143. 2008); and Rapini & al. (in Phytotaxa 26: 9–16. 2011).

In summary, we reject Meyer’s (l.c.) selection of *Tweedia brunonis* and Bullock’s (l.c.) selection of *T. macrolepis* and accept Rua’s (l.c.) selection of *T. birostrata* as the type of *Tweedia*. However, we acknowledge that others would accept either Meyer’s or Bullock’s typification, thus rendering Rua’s typification superfluous, and compromising the stability of the nomenclature of the group. Because the typification of *Tweedia* is rooted in divergent but defensible interpretations of the ICN, resolution of this particular case seems only possible by means of conservation of the name *Tweedia* with the conserved type of *T. birostrata* under Art. 14 of the ICN. This will preserve the current usage of the name and avoid disadvantageous nomenclatural changes.