

(2387) Proposal to conserve the name *Dyschoriste humilis* (Acanthaceae) with a conserved type

Cecilia Ezcurra & Carolina I. Calviño

Dep. Botánica, INIBIOMA, Conicet-Universidad Nacional del Comahue, Quintral 1250, 8400 Bariloche, Argentina

Author for correspondence: Cecilia Ezcurra, ezcurrac@comahue-conicet.gob.ar

DOI <http://dx.doi.org/10.12705/645.23>

(2387) *Dyschoriste humilis* Lindau in Bot. Jahrb. Syst. 19(Beibl. 48): 15. 1894 [*Angiosp.: Acanth.*], nom. cons. prop.
 Typus: Argentina, Córdoba, en la cercanía de la ciudad, 21-XII-1876, *Hieronymus* (CORD), typ. cons. prop.

Dyschoriste humilis (Acanthaceae) was described by Lindau (l.c. 1894) for a small perennial herb that is characterized by its spreading habit, oblong to elliptic, glabrous leaves, and relatively large flowers. It is a common species in eastern Argentina, Uruguay and southern Brazil (Ezcurra & Kameyama in Zuloaga & al., Cat. Pl. Vasc. Cono Sur 2: 990. 2008; Profice & al. in Forzza & al., Cat. Pl. Fung. Brasil 1: 572. 2010; Ezcurra in Darwiniana, n.s., 2: 226. 2014).

Ruellia geminiflora Kunth var. *humilis* published by Grisebach (Pl. Lorentz.: 176. 1874; reprinted from Abh. Königl. Ges. Wiss. Göttingen 19: 224. 1874) is the oldest name used in reference to this species. Grisebach gave no description presenting the name as: “660. *Ruellia geminiflora* Kth. var. *humilis* (Dipteracanthus Ns.)” and referred to a herbarium specimen collected by Lorentz: “Cordoba, in fruticetis campestris pr. Pueblito Nuevo (Amer. Trop.)”. The placement of the generic name *Dipteracanthus* Nees after *Ruellia geminiflora* var. *humilis* can be considered to be an indirect reference to a basionym, *Dipteracanthus humilis* Nees (in Martius, Fl. Bras. 9: 39. Jun 1847), described by Nees from southern Brazil and distinguished by him from *D. geminiflorus* (Kunth) Nees. Grisebach’s name would thus be considered a new combination, *R. geminiflora* var. *humilis* (Nees) Griseb. This is because under Art. 41.3 and 38.14 of the Code (McNeill & al. in Regnum Veg. 154. 2012) to establish a new combination before 1953 only an “indirect reference” is needed, and an indirect reference is defined as “a clear (if cryptic) indication by an author citation or in some other way, that a previously and effectively published description or diagnosis applies”.

On another hand, in his treatment of the Acanthaceae of Argentina in *Plantae Lorentzianae*, Grisebach (l.c. 1874: 176–179 or 224–227) indicated to which segregate genus of Nees (as presented in, for example, l.c.: Jun 1847: 1–164. and Candolle, Prodr. 11: 46–519. Nov 1847) his new species of Acanthaceae, placed in more inclusive genera, belonged. For example, when describing *Dianthera sulcata* Grisebach began the description with “Rhytiglossa, humilis, suffruticosa, a basi fastigiata ramosa ...” and similarly the description of *Justicia xylosteoides* Grisebach (l.c. 1874: 177 or 225) began “Adhatoda, fruticosa, glabrescens, ...” The cryptic reference of Grisebach to “*Dipteracanthus* Ns.” following *Ruellia geminiflora* var. *humilis* might, therefore, be included just to clarify that he considered that the variety belonged to *Dipteracanthus* Nees, the genus to which *R. geminiflora* was assigned by Nees (Nees, l.c. Jun 1847, Nov. 1847). Under that interpretation, “*R. geminiflora* Kunth var. *humilis* Griseb.” would not be validly published as it would be a nomen nudum.

However, the closest parallel in these two protologues to the cryptic reference to “*Dipteracanthus* Ns.” following “*Ruellia geminiflora*

Kth. var. *humilis*” is where Grisebach (l.c. 1874: 177 or 225) distinguishes his *J. xylosteoides* from another species, writing “*J. Tweediana* (Adhatodae Ns.)”. This is reference to *Adhatoda tweediana* Nees (l.c. Nov 1847: 395), and is, in fact, the valid publication of the new combination *J. tweediana* (Nees) Griseb., making it more likely that a new combination was also Grisebach’s intent with *R. geminiflora* var. *humilis*. In addition, following the name of his new taxa, Grisebach invariably added the abbreviation “Gr.”; this is not just the case with the two new species of Acanthaceae just referred to, but also for new varieties, such as *Cardamine axillaris* “var. tucumanensis Gr.” (Grisebach, l.c. 1874: 23 or 71) and *Alternanthera pulchella* “var. ciliata Gr.” (Grisebach, l.c. 1874: 36 or 84). We are also not aware of any case in *Plantae Lorentzianae*, in which Grisebach did not provide a validating description for the name of a new taxon.

After Grisebach (l.c. 1874: 176 or 224; Symb. Fl. Argent.: 259. 1879 or in Abh. Königl. Ges. Wiss. Göttingen 24: 259. 1879), the next author that mentioned this entity was Lindau (l.c. 1894). In identifying and describing plants from Argentina of the same collections that had been studied by Grisebach, Lindau found material, including a specimen collected by Lorentz in Córdoba, that did not belong to the genus *Ruellia* but to *Dyschoriste*, and which he considered recognisable at the rank of species. Therefore, under the heading “*D. humilis* (Griseb.) Lindau. *Ruellia geminiflora* Kth. var. *humilis* Griseb. in Pl. Lor. p. 176 et Symb. p. 259”, he published a detailed description and cited five specimens, including two collected by Lorentz, although not explicitly that cited by Grisebach. Clearly Lindau intended to publish a new combination at a new rank with Grisebach’s *Ruellia geminiflora* var. *humilis* as basionym, but without any mention of *Dipteracanthus humilis* Nees. Indeed, nine years later, Lindau (in Bull. Herb. Boissier ser. 2, 3: 629. 1903) published the new combination *Ruellia humilis* (Nees) Lindau based on *Dipteracanthus humilis* Nees and without any mention of his earlier *Dyschoriste humilis* or of Grisebach’s *R. geminiflora* var. *humilis*.

Were Grisebach’s varietal name not itself considered a new combination, Lindau (l.c. 1894) would have published the first validating description of the taxon originally recognised by Grisebach. For this reason and under this scenario, the name has been cited as *Dyschoriste humilis* Lindau and used as such in several studies (e.g., Lillo in Lilloa 1: 27. 1937; Ezcurra & Kameyama, l.c.; Profice & al., l.c.; Ezcurra, l.c. 2014). Indeed Ezcurra (l.c. 2014) attempted to designate a lectotype for the name. Nonetheless, after studying more duplicates of Lindau’s syntypes (in CORD), the specimen cited above, which is a complete specimen with flowers that better matches the protologue, is proposed here as conserved type.

The balance of evidence, however, supports the interpretation of Grisebach’s varietal name as based on *Dipteracanthus humilis* Nees, meaning that it should be interpreted as *Ruellia geminiflora* Kunth var. *humilis* (Nees) Griseb. This results in Lindau’s name being correctly cited as *Dyschoriste humilis* (Nees) Lindau with the result that

Dyschoriste humilis (Nees) Lindau would be homotypic with *Dipteracanthus humilis* Nees, currently considered a heterotypic synonym of *Ruellia geminiflora* Kunth (Ezcurra in Ann. Missouri Bot. Gard. 80: 833. 1993). Therefore, this interpretation, which appears to be the one more in accord with the rules, would leave without a name the species described by Lindau (l.c. 1894) as “*Dyschoriste humilis* (Griseb.) Lindau”, and a replacement name for this species would be required contrary to current usage.

The combination *Dyschoriste humilis* (Nees) Lindau recognized as being based on *Dipteracanthus humilis* Nees has only appeared in IPNI (<http://www.ipni.org>) and in TROPICOS (<http://www.tropicos.org>). By contrast, all published literature that refers to the species has used the name *Dyschoriste humilis* (Griseb.) Lindau or *D. humilis* Lindau: e.g., Lindau (l.c. 1894), Kobuski (in Ann. Missouri Bot. Gard. 15: 58. 1928), Lillo (l.c.), Moldenke (in Lilloa 6: 436. 1941), Cosa (in Kurtziana 8: 49. 1975), Dawson (in Burkart & al., Fl. Ilustr. Entre Ríos, Argentina 5: 554. 1979), Piovano & Bernardello (in Syst. Bot. 16: 90.

1991), Ezcurra (in Zuloaga & al., Cat. Pl. Vasc. Argentina 2: 4. 1999), Ezcurra & Kameyama (l.c.), Profice & al. (l.c.), and Ezcurra (l.c. 2014). In the interest of botanical stability, preserving current usage, and to avoid the disadvantageous nomenclatural changes that a replacement name would produce, we propose the conservation of the name *Dyschoriste humilis* Lindau with a conserved type under Art. 14.9 of the ICN. As this best reflects current usage, it was preferred to the possible alternatives of proposing for conservation with a conserved type either *Ruellia geminiflora* Kunth var. *humilis* Griseb. (Art. 14.1 final sentence) or even *Dipteracanthus humilis* Nees, a name that has never been applied to the species involved.

Acknowledgements

We appreciate useful comments from John McNeill, Nataly O’Leary and Luis Ariza Espinar on this nomenclatural problem. This work was financed by CONICET PIP 0357, Universidad Nacional del Comahue PIN B180, and ANPCYT PICT 1036 of Argentina.