A new combination and new synonym in the Neotropical Heliotropiaceae

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Abstract

A new combination in *Euploca* and a new synonym in *Tournefortia* (Heliotropiaceae) from the Neotropics are proposed here. *Heliotropium purdiei* is combined under the genus *Euploca* and *Tournefortia spicata* is proposed as a synonym of *T. romeroi*.

Key words: Heliotropiaceae, nomenclature, Boraginaceae *sensu lato*

Resumen

Se propone aquí una nueva combinación en *Euploca* y un nuevo sinónimo en *Tournefortia* (Heliotropiaceae) del Neotrópico. *Heliotropium purdiei* es combinada en el género *Euploca* y *Tournefortia spicata* es propuesta como sinónimo de *T. romeroi*.

Introduction

During a revision of Neotropical collections we encountered the type specimen of a species treated under *Heliotropium* Linnaeus (1753: 130) that showed morphological features of the genus *Euploca* Nuttall (1836: 189), as well as the type representing a species of *Tournefortia* Linnaeus (1753: 140) originally circumscribed to another specific name.

Hilger & Diane (2003) reestablished the genus *Euploca* based on molecular and morphological data to accommodate species of *Heliotropium* sect. *Orthostachys* R. Brown (1810: 493), *Hilgeria* Förther (1998: 132), and *Schleidenia* Endlicher (1839: 646). *Euploca* currently includes 53 names, but Diane (2003) observed that it comprises approximately 100 species distributed in tropical, subtropical, and temperate regions, with centers of diversity in Africa, Australia, and tropical America. This author considered *Euploca* a cosmopolitan genus, but Melo & Semir (2010) pointed out that the majority of its species occur in South America and Mexico, where approximately 80 species can be found.

According to Hilger & Diane (2003), the representatives *Euploca* are herbs, small shrubs, often at least basally decumbent; inflorescences ebracteate, bracteate, frondose or reduced to a solitary flower; anthers long protracted with pubescent apex, coherent apically, closing the corolla tube; fruit dry, separating into one-seeded mericarps each with two pits on the abaxial side, rarely dry drupes with 4 one-seeded endocarps, and embryo curved.

In this context, the presence of bracteate inflorescences, anthers apically coherent, fruits separating into four one-seeded mericarps, and embryo curved in *Heliotropium purdiei* I.M.Johnst. (1928: 60), a Neotropical species of Heliotropiaceae native to Colombia and Venezuela (Miller 2015a), suggests its accommodation into *Euploca*. This work proposes the new combination of the above cited species of *Heliotropium* into the genus *Euploca*.

Regarding *Tournefortia*, we verified that one species, described for western Colombia as *T. spicata* J.S.Mill. (1989: 619), encompasses the morphological concepts of *T. romeroi* I.M.Johnst. (1956: 294), a species previously described for the above cited region. Thus, *T. spicata* is proposed here as a synonym of *T. romeroi*. The herbarium acronyms follow Thiers (2015).

1. *Euploca purdiei* (I.M.Johnst.) J.I.M. Melo & Fern. Alonso, *comb. nov.*

Basionym: *Heliotropium purdiei* I.M.Johnst. (1928: 60). Type:—COLOMBIA. Magdalena: “Valle Dupar”, Santa Marta, July 1844, *Purdie s.n.* (holotype K!, isotype GH!).

2. *Tournefortia romeroi* I.M.Johnst. (1956: 294). Type:—COLOMBIA. Nariño: Km 86 Tumaco, El Diviso, 27 Julio 1952, *R. Romero-Castañeda 3317* (holotype A!, isotype COL 50007!).

= *Tournefortia spicata* J.S. Mill., *syn. nov.* (1989: 619–622). Type:—COLOMBIA. Mpio. Tumaco, 80 Km from Tumaco along road to Pasto, in wet area of primary forest, near *Orbignya* palms and streams, “Guayacana”, 19 July 1984, *M. J. Balick, L. E. Forero P., S. R. King & N. Hernández 1667* (holotype MO!, isotype MA 400047!).

Several species of *Tournefortia* sect. *Tournefortia* I.M.Johnst. (1930: 66) are encountered on moist Pacific-facing slopes in Colombia and Ecuador, among which is *T. romeroi*, which grows below 500 m a.s.l. in Nariño Department, Colombia (Johnston 1956, Miller 2015b). Other species were recently described there and are considered endemic to that region, including: *T. spicata*, from the Pacific plains near Nariño; *T. restrepoae* J.S.Mill., from mountain forests near La Planada, Nariño, at 1800 m (Miller 1989, 1995); and *T. gigantifolia* J.S.Mill., widespread throughout western Colombia and Peru (Miller 2000).

The species *Tournefortia restrepoae* and *T. gigantifolia* can be clearly distinguished from *T. romeroi*: the former due to its lax inflorescences with pedicellate flowers, and the latter due to its monocaulous habit, with very large grouped-leaves, with glabrescent blades punctuated on their upper surfaces. The known collections of *T. spicata*, however, are very similar to *T. romeroi* in terms of their sizes, indumentum, leaf features, inflorescences, and floral reproductive whorls. The slight differences in leaf morphologies, inflorescences, and flowers noted in the description of *T. spicata* are within the range of variability of *T. romeroi*. Accordingly, we consider *T. spicata* conspecific with the previously published *T. romeroi*.

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