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WANDERING THROUGHOUT SOUTH AMERICA: TAXONOMIC REVISION OF *TRADESCANTIA* SUBG. *AUSTROTRADESCANTIA* (D.R.HUNT) M.PELL. (COMMELINACEAE)

BY

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*Tradescantia fluminensis* Vell.

PhytoKeys 101 ♦ 2018
Special Issue

<http://phytokeys.pensoft.net>

This study provides the first complete taxonomic revision for one of the five subgenera of *Tradescantia*, proposed by Pellegrini (2017). A taxonomic revision for *T. subg. Austrotradescantia* is presented, based on extensive field, cultivation, and herbarium studies. Thirteen species are recognized, most of them being widely distributed and presenting considerable morphological variation. The observations on dried and living specimens suggest that most variation in the genus might be ecologically related, with some changes being also putatively controlled by epigenetics and cytology. Out of the 13 accepted species, three of them (i.e., *T. atlantica*, *T. bertweckii*, and *T. tucumanensis*) are described as new. An identification key, distribution maps, descriptions, comments, conservation assessments, and illustrations for all species are provided. *Tradescantia* subg. *Austrotradescantia* as a whole seems to be in need of little conservationist attention. Most species possess wide native distribution, with only *T. atlantica*, *T. chrysophylla*, *T. bertweckii*, and *T. seubertiana* possessing narrower distributions, and thus meriting some conservationist attention. The troublesome weed *T. fluminensis* has its specific limits clarified and its native range is presented so it can serve as a basis to better understanding its ecological requirements and to help control it throughout its invasive range. After careful examination of herbarium specimens collected outside the groups' native distribution range, it has been concluded that several records of *T. fluminensis* as a invasive weed actually represent misidentified specimens of *T. mundula*, or more rarely specimens of *T. cymbispatha* and *T. crassula*. *Tradescantia mundula* might also represent a troublesome weed worldwide. This species has been widely introduced in cultivation under the name *T. albiflora* and seems to have also escaped from cultivation. However, due to the hitherto poorly understood specific limits of *T. fluminensis*, *T. mundula* has been regarded as a mere cultivar of *T. fluminensis* s.s. *Tradescantia cerinthoides* is also widely cultivated worldwide, especially its pink and lilac-flowered morphs. Despite not having observed any unquestionable records that indicate that *T. cerinthoides* has escaped from cultivation, this species also possesses intense vegetative growth, and thus a great potential to become an invasive species if not properly monitored. All invasiveness accessions done so far for *T. fluminensis* must urgently be redone in order to properly understand the extension of this species' invasion, discount records now known to represent other species from the subgenus, and appropriately assess the threat of invasiveness of the other species of *T. subg. Austrotradescantia* which also possess records outside their native range.

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