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 herbaria 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. hertweckii, 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. hertweckii, 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 do 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 access the threat of invasiveness of the other species of T. subg. Austrotradescantia which also possess records outside their native range.

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BY MARCO O.O. PELLEGRINI



Tradescantia fluminensis Vell.

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