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Novelties in *Oxypetalum* (Apocynaceae-Asclepiadoideae) for the Argentine Flora

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Abstract

Including the results reported in this paper, there are 41 species of *Oxypetalum* (Apocynaceae, Asclepiadoideae) that occur in Argentina, eight of them endemic: *O. arenicola*, *O. fontellae*, *O. gracile, O. lynchianum, O. longipedunculatum, O. pubescens, O. tucumanense* and *O. teyucuarense*. The last is a new species from the Paraje Teyú Cuaré, San Ignacio, Misiones Province, Argentina, which is described and illustrated here. It shares some morphological features with *O. jorgensenii,* but, overall, it does not closely resemble any other species of the genus morphologically in its unique assemblage of characteristics. In addition to this new species, we here report two additional species for the first time in Argentina.

Keywords: Biodiversity, IUCN Red List, Misiones, new records, new species, *Oxypetalum teyucuarense*, taxonomy

Introduction

Among the provinces of Argentina, Misiones is exceptionally rich in plant species (Zuloaga *et al.* 1999; Ponce *et al.* 2002). Subtropical forest, along with southern savannas, occupies the central and northern parts of Misiones (Cabrera 1976; Biganzoli & Múlgura de Romero 2004). These regions, however, are important for agriculture, with more than half of the native fortest already cleared (Laclau 1994). The conservation areas that have been established in Misiones include Iguazú National Park and Biosphere Reserve, Yaboti, together with other conservation areas that are local or administered by the provincial government. These conservation areas are not sufficient to protect endangered and still unknown biota (Biganzoli & Múlgura de Romero 2004).

One area of Misiones Province that is outstanding for its level of endemism is Teyú Cuaré, located next to the Paraná River on the western boundary of the San Ignacio. Geologically, it is characterized by outcrops of Misiones sandstone,which belong to the Botucatu formation. These outcrops form an undulating landscape that is geologically an extension of the Sierra Amambay of Paraguay (Teruggi 1970; Soria 1996). In Misiones Provinc this is a remarkable feature, since most of the surface of Misiones is covered by laterite soils derived from basalt (Ligier *et al.* 1990). Overall, the geological, pedological and hydrological characteristics of this regions have facilitated the development of a mosaic of vegetation characterized by mixed elements of subtropical rainforest, gallery forest, grasslands and savannas (Biganzoli & Múlgura de Romero 2004), justifying the floristic richness of the region. In 1991 Teyú Cuaré Provincial Park (27º16' S, 55º33' W) was established to conserve a landscaped area, geological, botanical and zoological, historical and ethnological features of great interest and uniqueness (SIFAP 2014). However, with an area of only 78 ha, the park is not of adequate size to protect these features properly. Consequently, there is a proposal to expand the park area to ca. 640 ha, which would be a much sounder plan for conservation (Soria 1996).

The plant family Apocynaceae, comprising the five subfamilies Apocynoideae, Asclepiadoideae, Periplocoideae, Rauvolfioideae and Secamonoideae (Endress & Bruyns 2000), is prominent within the Argentinean flora. Asclepiadoideae, one of the largest of these subfamilies, is mainly tropical and subtropical in distribution, with its greatest diversity in South America. In Argentina, 31 genera with ca. 145 species occur, 58 of them endemic to the country (Ezcurra 1999). The majority of the species of this subfamily are climbers, along with some erect or straggling shrubs or subshrubs. These plants inhabit subtropical forests, open habitats and semi-arid regions, occurring from 300 to 1500 m above sea level.

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Discussion:—The erect habit of *Oxypetalum teyucuarense*, suggests that it belongs to of the clade that includes only erect species of *Oxypetalum* (Farinaccio 2008). It shares some features with *O. jorgensenii* Meyer (1943: 60–63), which also occurs in Missiones: both are erect, unbranched herbs with similar-sized leaf blades, pedicels, pollinia and stylar heads as well as umbeliform inflorescences. Despite this overall similarity, *O. teyucuarense* has a set of features that is unique in the genus. It is the only unbranched erect species that grows up to 1.50 m tall. In addition, its flower morphology is unusual in that the corona lobes present an internal fold that opens at the apex as a cup. The thick apex of the gynoecium is ruminate. The latter feature makes this species easy to recognize in the field. When the tall, slender plants are in flower, they become deflexed.

New Records

1. ***Oxypetalum oblanceolatum*** Farinaccio & Mello-Silva (2006: 236)—*O. oblanceolatum* was described from one collection from the Brazilian State of Paraná (Farinaccio & Mello-Silva 2006). This species was considered as vulnerable according to IUCN (2001) Red List criteria, but the recent study of the one collection of CORD herbarium (Thiers 2008) extends its range into Misiones Province, Argentina. Here it grows in a clearing surrounded by a monoculture of *Pinus*, and thus *O. oblanceolatum* should still be considered as vulnerable (IUCN 2001).

Additional collection:—ARGENTINA. Misiones: San Pedro, Arroyo Liso, unos 5 km pasando San Pedro, desvio por ruta 16 hacia el este, 26º37'35.1"S, 54º01'54.2"W, 590 m, 9 December 2002 (fl), *G. Barboza, F. Chiarini, M. Matesevach & C.l Carrizo García 468* (COR!).

2. ***Oxypetalum wightianum*** Hooker & Arnott (1834: 288)—*O. wightianum* is broadly distributed in south and southeastern region of Brazil, reaching western Paraguay (Farinaccio 2005). One new collection of this species into Argentina was identified in Department Iguazú, at the border with Brazil, thus extending its range to Misiones Province.

Additional collection:—ARGENTINA. Misiones: Iguazú. Paraje Aguaray, Lote APSA, rodal 5–6, 27 December 2001 (fl, fr), *H.A. Keller & D. Colcombet 1528* (CTES!).

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