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Novelties in *Meriania* (Melastomataceae: Merianieae) from Andean rainforests of Colombia

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Abstract

Two new species of *Meriania* (Melastomataceae: Merianieae) are described from the Andean region of Colombia (Northern Andes) in the departments of Caldas, Cauca and Putumayo. *Meriania barbosae,* known only from one locality in Selva de Florencia National Park, is characterized by its calyptrate flowers, calyptras with obtuse apex, dimorphic stamens and presence of a glandular pubescence on the vegetative organs. *Meriania fantastica,* from the departments of Cauca and Putumayo, is characterized by its few flowered inflorescences (up to 12 flowers), large flowers (ca. 15 cm in diameter) with bright orange petals and the presence of a scutum at the petiole apex. Both species are Colombian endemics and are only known from a few specimens. Each species is illustrated, compared with presumed relatives, and provided with a conservation assessment using IUCN guidelines.

Resumen

Se describen e ilustran dos nuevas especies de *Meriania* de Colombia procedentes de la región andina (Andes del Norte) en los departamentos de Caldas, Cauca y Putumayo. *Meriania barbosae*, conocida solo de una localidad del Parque Nacional Natural Selva de Florencia, se caracteriza principalmente por sus flores caliptradas, caliptras de ápice obtuso, estambres dimórficos y presencia de tricomas glandulares en las partes vegetativas. *Meriania fantastica*, de los departamentos de Putumayo y Cauca, se caracteriza principalmente por sus inflorescencencias con pocas flores (hasta 12 flores), grandes flores (ca.15 cm de diámetro) de pétalos color naranja y ápice del pecíolo con escutelo. Ambas especies son endémicas de Colombia y solo se conocen de unos pocos registros. Para cada especie se incluye una ilustración, comparación con las presuntas especies cercanas, y una evaluación del estado de conservación con base en los criterios de la UICN.

Introduction

Meriania Swartz (1798: 823), a neotropical genus of shrubs and trees (rarely liana-like shrubs) with about 93 species, is distributed from southern Mexico, Central America, the Greater Antilles, Andean South America, the Guayana Highlands, and south to southeastern Brazil, from sea level to lower páramos at about 3500 m (Wurdack 1973; Mendoza & Ramírez 2006; Chiavegatto & Baumgratz 2009; Mendoza-Cifuentes & Fernández-Alonso 2010, 2012, Mendoza-Cifuentes in prep.). Colombia is the country with the highest diversity for this genus with 37 species, followed by Ecuador (26), Brazil and Peru (14 each), and Venezuela (10) (Almeda *et al.* in press; Baumgratz *et al.* 2013; Chiavegatto & Baumgratz 2009; Calderón & Mendoza 2000; Mendoza-Cifuentes in prep.; Michelangeli & Cotton 2008; Neill & Ulloa-Ulloa 2011; Renner 1999).

The genus is characterized by the following suite of characters: woody plants, large 5−6(−8)-merous, diplostemonous flowers (petals >1 cm long), non-geniculate stamens, anther pores prevailingly dorsally inclined in antepetalous stamens (rarely apical), superior (3−)5−6-locular ovary, capsular fruits, and seeds with a straight embryo (Almeda 1993; Mendoza-Cifuentes & Fernández-Alonso 2010, 2011, 2012).

Recent collecting trips to Colombia for the Miconieae Planetary Biodiversity Inventory project (http://sweetgum.nybg.org/melastomataceae/) and a review of Colombian *Meriania* that is currently in progress made possible the discovery and collection of flowering/fruiting material of two undescribed species of *Meriania,* as well as material of close relatives for comparison. We describe here two new species of *Meriania* that are endemic to Colombia.

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Discussion

The distinguishing features of *Meriania fantastica* are the scutum at the adaxial petiole apex (Fig. 3C; 5G), the revolute auricles at the blade base abaxially (Fig. 3B; 4E,F), the large flowers (ca. 15 cm in diameter), bright orange petals that are blunt-lacerate or irregularly lobed (Fig. 3D; 4C), and the dimorphic stamens (3H; 4D). This species most closely resembles *M. hernandoi* (Uribe 1969: 292), a species known from Colombian and Ecuador that also has orange flowers with widely spreading petals at anthesis. However, the latter has a subpeltate blade (Fig. 5H) that lacks the conspicuous auricles on the abaxial foliar base (Fig. 5D), and has a longer multiflowered inflorescence (to 30 cm long with 19−50 flowers). *Meriania hernandoi* also has calyx teeth modified into conspicuous callosities below the truncate calyx but they are much less prominent and often difficult to see on dry material. The much smaller petals (2−2.5 × 1.5−2 cm) of *M. hernandoi* are essentially entire and unlobed (Fig. 5A, B, D), and the stamens are uniformly isomorphic (Fig. 5D). In *M. hernandoi* the texture of the leaf blade and abaxial leaf base also differ; the leaves are coriaceous (vs. membranaceous) and the primary nerve is modified at the base into a thickened bilobed appendage or callosity that superficially resembles a domatium (Fig. 5D).

Meriania pastazana (Wurdack 1974: 142−143) of Colombia and Ecuador is another orange-flowered species with spreading petals. It is readily separated from *M. fantastica* by its smaller coriaceous leaves (11−18 × 5.3−9.3 cm) that are basally acute to obtuse, absence of a petiolar scutum at the adaxial petiole apex and revolute auricles at the blade base abaxially, smaller hypanthia (5−6 mm long) with well developed calyx (4−4.5 mm long) that is conspicuously expanded above the hypanthium, lack of external calyx teeth, smaller petals (2.5−3.4 × 2.0−2.4 cm) that are entire, and isomorphic stamens.

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