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***Miconia indicoviolacea* (Melastomataceae: Miconieae): a new Colombian species from the western flanks of the cordillera Occidental**

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Abstract

Miconia indicoviolacea is described from the western slopes of the western cordillera in the Chocó biogeographic region of Colombia, illustrated, and compared with superficially similar species that are also endemic to the country. It is readily recognized by its prevalingly purple to dark blue inflorescence branches, peduncles, and internodes, minute glandular-puberulent vegetative and hypanthial indumentum, caudate foliar apex, dorsally inclined anther pores, glabrous rounded to truncate dorso-basal staminal appendages, and seeds with a conspicuous appendage at the chalazal end and a raphal zone that is approximately double the size of the seed corpus.

Resumen

Miconia indicoviolacea es una especie descrita de la vertiente occidental de la cordillera Occidental en la región del Chocó biogeográfico de Colombia, es ilustrada y comparada con especies superficialmente similares y también endémicas para el país. Se reconoce fácilmente por sus pedúnculos y ramas de la inflorescencia de color morado a azul oscuro, indumento diminutamente glandular-puberulento en órganos vegetativos e hipanto, ápice foliar caudado, poros de las anteras dorsalmente inclinados, apéndices estaminales glabros y redondeados a truncados dorso-basalmente, y semillas con un apéndice conspicuo en el extremo calazal y una zona rafal que es aproximadamente el doble del tamaño del cuerpo de la semilla.

Introduction

Within the neotropics, Colombia stands out as a major center of diversity for the Melastomataceae, with over 985 species in 61 genera (Almeda *et al.* in press, Mendoza-C. & Ramírez 2006). Over half of the species recorded for the country belong to the Miconieae, a diverse group of berry-fruited species that represents the largest monophyletic group in the family (Goldenberg *et al.* 2008).

The new species of *Miconia* Ruiz & Pavón (1794: 60) described here was discovered during recent collecting expeditions to Colombia for the Miconieae Planetary Biodiversity Inventory project (<http://sweetgum.nybg.org/melastomataceae/>). It is superficially similar to rare and little-known Colombian species that were described in the genus *Clidemia* D. Don (1823: 306). Because the latter genus is nested in *Miconia* based on DNA sequence data and difficult to differentiate based on morphological characters, we adopt the expanded *Miconia* approach employed in several recent papers that have addressed this issue (e.g. Gamba & Almeda in press, Ionta *et al.* 2012, Judd & Majure 2013, Majure & Judd 2013, Michelangeli & Meier 2013, Ocampo & Almeda 2014).

Miconia indicoviolacea Gamba, Almeda & Alvear, sp. nov.

Distinguished by the dark blue inflorescence peduncle and branches, aristate-caudate leaf apices, minute glandular-puberulent vegetative and hypanthial indumentum, dorsally appendiculate stamens, and seeds with a conspicuous appendage at the chalazal end and a raphal zone that is approximately the double the size of the seed corpus.

Type:—COLOMBIA. Valle del Cauca: municipio de Dagua, corregimiento El Queremal, Parque Nacional Natural Farallones de Cali, Alto Anchicayá, trail off of (upslope) Quebrada La Riqueza, cordillera Occidental, vertiente occidental, 03°39.998'N, 76°53.609'W, 650–810 m, 6 February 2011, F. Almeda, M. Alvear, D. Penneys, G. Ocampo, D. Alvear, I. Alegría 10277 (holotype: COL!; isotypes: CAS!, CUVC!, HUA!, NY!).

Clidemia aguacclarensis has an overall stellulate-furfuraceous indumentum, petioles with one side (adaxially) that is densely setose with barbellate trichomes 0.4–1 mm long, leaves with a cordate base and gradually blunt-acute apex, smaller oblong petals (1.7–1.8 × 1.1–1.3 mm), smaller and inconspicuous dorso-basal anther appendages that are alternately slightly unequal in size, a setulose torus, and a 3-locular ovary. The seeds of *C. aguacclarensis* are similar in size to those of *M. indicoviolacea* but differ notably in being ovate to galeiform, unappendaged, essentially smooth on the antiraphal side and with a raphal zone that pretty much extends the length of the seed.

Clidemia diguensis has an overall dense indumentum of spreading smooth trichomes (0.5–1 mm long) on cauline internodes, petioles, primary and higher order veins, inflorescence and hypanthia, intermixed with some stellulate caducous trichomes, conspicuously bullate leaves with a cordate base and bluntly-acute apex, smaller and obovate to rounded petals, unappendaged anther connective, and 3-locular ovary.

Miconia indicoviolacea is also superficially similar to *M. neomicrantha* Judd & Skee (1991: 62) in leaf shape (ovate to elliptic-ovate) and flower morphology (with oblong-lanceolate petals, and oblong thecae). The latter lacks the bright blue-purple coloration of the inflorescence peduncle and branches, and has a different indumentum consisting of hyaline or brownish stellate-lepidote trichomes. The hypanthia of *M. neomicrantha* are bluntly 8-ribbed, the stamens have deflexed dorso-basal appendages that are copiously gland-edged, the seeds lack appendages, and the ovary is 4-locular.

Based on indumentum details and seed morphology, the systematic position of this new species within the Miconieae is not clear at this time.

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