



Two new species of *Graffenrieda* (Melastomataceae: Merianieae) from Colombia and Panama

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Abstract

Two new species of *Graffenrieda* (Melastomataceae: Merianieae) are described from Colombia and Panama. *Graffenrieda jefensis*, a Panamanian endemic from Cerro Jefe, is characterized by a calyptrate calyx that falls away as a unit at anthesis, 5-merous flowers, 3-locular ovary, and conspicuous persistent calyx teeth. *Graffenrieda maklenkensis*, a Colombian endemic from the Cordillera Oriental in the northern Andes of Colombia, has a calyx that is fused in bud but ruptures into four (rarely three) lobes at anthesis that lack external calyx teeth, 4–(5)-merous flowers, a 3–(4)-locular ovary, and hypanthial indumentum (at anthesis) that is minutely lepidote intermixed with glandlike or resinous scurfy trichomes. Each species is illustrated, compared with presumed relatives, and provided with a conservation assessment using IUCN guidelines.

Resumen

Se describen dos nuevas especies de *Graffenrieda* (Melastomataceae: Merianieae) de Colombia y Panamá. *Graffenrieda jefensis*, endémica de Panamá de Cerro Jefe, se caracteriza por el cáliz caliptrado que es dehiscente como una unidad en antesis, flores 5-meras, ovario 3-locular, y dientes del cáliz persistentes y conspicuos. *Graffenrieda maklenkensis*, endémica de Colombia de la Cordillera Oriental en los Andes del norte, se caracteriza por tener el cáliz fusionado en botón, pero que es dehiscente en cuatro (raramente tres) lóbulos en antesis sin dientes externos, flores 4–(5)-meras, ovario 3–(4)-locular, indumento del hipanto (en antesis) diminutamente lepidoto entremezclado con tricomas glandulares o escamas resinosas. Para cada especie se incluye la ilustración, comparación con las presuntas especies cercanas, y una evaluación del estado de conservación utilizando criterios de la UICN.

Introduction

Graffenrieda Candolle (1828: 105), a neotropical genus of shrubs and trees (rarely woody climbers), is distributed from southern Mexico, Central America, and the West Indies to Andean South America (Venezuela south to Bolivia), east to the Guianas and Venezuelan tepuis, and south to southeastern Brazil between sea level and 3200 m (Wurdack 1973, 1980, Almeda 2009, Mendoza-Cifuentes & Fernández-Alonso 2010). Like other woody members of the neotropical tribe Merianieae, it is characterized by capsular fruits, narrow seeds that lack conspicuous sculpturing, and appendiculate anther connectives. In many ways it is a streamlined member of the Merianieae clade with small to medium sized white flowers (petals mostly 0.5–1.5 cm long), isomorphic yellow anthers, anther connectives modified dorso-basally into small deflexed toothlike appendages, dorsally arcuate anthers with mostly ventrally inclined pores, and cuneiform, filiform, or linear-pyramidate seeds with straight embryos (Almeda 1984, Mendoza-Cifuentes & Fernández-Alonso 2011).

Graffenrieda is the second largest genus in the tribe Merianieae. A majority of its species is centered in two main regions of South America: the Andes and the Guayana Highlands. Venezuela and Colombia, with 31 and 25 species respectively (Almeda *et al.* submitted, Michelangeli & Cotton 2008), collectively harbor about 70% (44) of the known species and also have a larger number of endemic species (17) than any other area of the neotropics.

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