



Austinia, a new genus of Convolvulaceae from Brazil

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Abstract

Austinia, a new genus of Convolvulaceae is described and its relationship with other genera is discussed. Two species previously placed in *Jacquemontia* are referable to the genus. However, a revision of species delimitation demonstrates that the two are conspecific. *Austinia* therefore comprises a single species, endemic to Brazil.

Key words: Morning glory, *Jacquemontia*, *Jacquemontia montana*, *Jacquemontia serrata*

Resumo

Austinia, um novo gênero de Convolvulaceae é descrito e discutido o seu relacionamento com outros gêneros. Duas espécies anteriormente incluídas em *Jacquemontia* foram são associadas ao gênero. Entretanto, a revisão da delimitação das espécies demonstrou que as duas pertenciam a mesma espécie. *Austinia* portanto compreende uma única espécie, endêmica ao Brasil.

Palavras-chave: Convolvuláceas, *Jacquemontia*, *Jacquemontia montana*, *Jacquemontia serrata*

Introduction

Convolvulaceae is a well-supported monophyletic family (Stefanovic *et al.* 2002), comprising 58 genera and approximately 1.900 species, distributed worldwide (Staples & Brummitt 2007). Traditional classifications have been based largely on ovary characters, style number, stigma shape, pollen characters, fruit dehiscence, and obvious differences in habit and leaf form (Staples & Brummitt 2007). Tribal groupings delimited using these traits have been partially supported by molecular analyses (Stefanovic *et al.* 2002, 2003).

Genera in Convolvulaceae have sometimes been defined by a single character and this is potentially problematic due to reticulate and/or convergent evolution. Many genera contain species or groups of species that are clearly not related to others in the genus, and these discordant elements need to be placed in other existing genera or in new genera (Robertson 1982).

During the taxonomic revision of the Brazilian species of *Jacquemontia* (Buril & Alves 2011, 2012a, 2012b, 2013, Buril *et al.* 2012, Buril 2013), two species, namely *J. montana* (Moric.) Meisn. and *J. serrata* (Choisy) Meisn. stood out, not least because they are the only two species in the genus to possess yellow rather than blue or white corollas. Other characteristics of the species were also inconsistent with *Jacquemontia* more widely. Thus, they possess simple trichomes in contrast to the branched trichomes found in other species of *Jacquemontia*, globose rather than dorsiventrally flattened or ellipsoidal stigma lobes, and the fruit is a four- rather than an eight-valvate capsule (Robertson 1971, Buril 2013).

Jacquemontia montana and *J. serrata* were described originally in *Ipomoea* L. (Choisy 1837, Moricand 1837). Later, in *Flora Brasiliensis*, Meisner (1869) transferred both species to *Jacquemontia*, and placed them in *J.* sect. *Capitatae*, that included a group of species characterized mainly by the multi flowered and capituliform globose or hemispherical inflorescences.

House (1906) transferred all species in *Jacquemontia* Sect. *Capitatae*, together with *Ipomoea carnosae* R. Br.,

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