



A new giant *Vellozia* (Velloziaceae) from Minas Gerais, Brazil with comments on the *V. compacta* complex and conservation

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Abstract

A new giant *Vellozia* species from the Ouro Branco range, Minas Gerais, is described and compared morphologically to the other dracenoid species. Leaf-anatomical characters and a unique suite of chemical constituents which help to separate the new species from *V. compacta*, sympatric in the range, are provided. Furthermore we discuss the circumscription of *V. compacta* and argue that this binomial is applied to a species complex in need of further taxonomic study.

Resumo

Uma nova espécie gigante de *Vellozia* da Serra do Ouro Branco, Minas Gerais é descrita e morfologicamente comparada às demais espécies dracenoídes. São descritos caracteres de anatomia foliar e um conjunto único de constituintes químicos que ajudam a separar a espécie nova de *V. compacta* que é simpátrica na Serra. Adicionalmente discutimos a circunscrição de *V. compacta*, argumentando que esse binômio é aplicado a um complexo de espécies que necessita estudos taxonômicos mais detalhados.

Key words: Pandanales, endemism, Neotropics, monocotyledons, dracenoid habit

Introduction

The Velloziaceae are a relatively small, amphiatlantic family with about 250 species (Mello-Silva 2005). Despite many recent studies the delimitation of genera and many species of Velloziaceae remains controversial [e.g. *Nanuza* Smith & Ayensu (1976: 38): Alves (2002) vs. Mello–Silva *et al.* (2011)]. While some species of *Vellozia* can be easily distinguished by morphology, many require complementary leaf anatomic and chemical studies. Several species complexes occur in *Vellozia* which are in need of more thorough investigations (e.g. Barbosa *et al.* 2012, Mello–Silva 2010). One such complex is *V. compacta* Martius (1829: 293), a group of tall shrubby species dubbed “dracenoid” by Mello–Silva & Menezes (1999). The new species described herein based on morphology, anatomy and chemistry is one of the tallest in the genus and grows in the Ouro Branco mountain range which represents the southernmost limit of distribution of the *V. compacta* species complex (*viz.* Lousada *et al.* 2013).

Material and Methods

Plant material was repeatedly collected between 1992 and 2007 in the Ouro Branco range, Minas Gerais. Between 1989 and 2006, vegetation surveys were conducted annually by the first author, mostly with students, in several mountain

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