



Massonia dentata (Asparagaceae, Scilloideae), a new species from the Nuweveldberge, and typification of the Sneeuberg endemic *M. calvata* (southern Great Escarpment, South Africa)

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Abstract

As part of a taxonomic revision of the genus *Massonia* Houtt., a new species, *Massonia dentata* Mart.-Azorín, V.R.Clark, M.Pinter, M.B.Crespo & Wetschnig, is here described from the Nuweveldberge on South Africa's southern Great Escarpment. This new species is, at first sight, related to *M. calvata* Baker and *M. echinata* L.f., but it differs in floral and vegetative characters, such as the dentate perigone segments and bracts, leaves with numerous emergences, each bearing a thickened trichome, as well as in its ecology and distribution. A complete description of the new species and data on its biology, habitat, and distribution are presented. The close relative *Massonia calvata* Baker, an overlooked endemic from the Sneeuberg Centre of Floristic Endemism in South Africa, is lectotypified.

Key words: Flora of Southern Africa, Hyacinthaceae, Massonieae, Taxonomy.

Introduction

Hyacinthaceae *sensu* APG (2003) comprises ca. 1000 species of bulbous plants distributed through Africa and Europe extending to Asia, with only *Oziroë* Rafinesque (1837: 53) occurring in South America (Speta 1998a, b, APG 2003). Four monophyletic clades are accepted as the subfamilies Hyacinthoideae, Ornithogaloideae, Oziroëoideae and Urgineoideae within Hyacinthaceae (Speta 1998b, Pfosser & Speta 1999, Manning *et al.* 2004, Martínez-Azorín *et al.* 2011). Alternatively Hyacinthaceae is treated as Asparagaceae subfamily Scilloideae, and consequently the former subfamilies are reduced to the tribes Hyacintheae, Ornithogaleae, Oziroëeae and Urgineae (APG 2009, Chase *et al.* 2009). However, we favour Hyacinthaceae at family rank based on morphological grounds.

As in other groups in Hyacinthaceae, generic circumscription within tribe Massonieae has been a matter of controversy during the last decades (see Wetschnig *et al.* 2014 for a general overview on this point). The taxonomic history of the genus *Massonia* and the species concepts are discussed in Pinter *et al.* (2013) and Martínez-Azorín *et al.* (2013).

Baker (1878) described *Massonia calvata* Baker (1878: 321) (Fig. 1). This species was characterized as follows: “Leaves 2, [...] face when young tuberculato-hispid, when older smooth and glabrous” an uncommon behavior reflected in the specific epithet. A single collection was cited in the original description, *Bolus* 749! from the “Cape Colony, eastern district”. The study of the type collection *Bolus* 749, which was mounted on two herbarium sheets with different labels (K 000257142!, K 000257143!), evidence that it includes plants collected from at least two different localities and at different elevations, and probably collected at different times. Therefore, lectotypification of this species is required, and is effected below.

Massonia calvata has been synonymized into *Massonia echinata* Linnaeus (1782: 193) by Jessop (1976), Van der Merwe (2002) and Summerfield (2004), in which the latter taxon included 24, 17 and 19 names respectively under synonymy. In those concepts, *Massonia echinata* was circumscribed as extremely variable in morphology, including a very large variation on leaf morphology and indumentum, and therefore being very difficult to characterize. Müller-Doblies & Müller-Doblies (1997) circumscribed *M. echinata* in a much narrower sense, citing the following

and CapeNature kindly granted permissions to collect material in the Karoo National Park and Western Cape Province respectively. Mr. Richard Wilmot of the Farm 'Grootvlei' is thanked for permission to access and collect specimens on his property. We also thank Neil Crouch for sharing with us photographs of wild populations of *Massonia calvata*.

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