



New data on *Albuca crispera* (Hyacinthaceae, Ornithogaloideae), an erect-flowered *Albuca* from South Africa

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Abstract

Within the framework of a taxonomic revision of the genus *Albuca* we here present new data on *Albuca crispera*, a species described as having undulate-crispulate leaves and white-green nodding flowers, it being included in *A.* subgen. *Falconera* section *Trianthera* (as series *Trianthera*). After studying both herbarium specimens and living plants from the type locality and other locations, it is clear that the protologue of *A. crispera* includes remarkable inaccuracies that make the understanding of that species very difficult, and that therefore are in need of correction. Furthermore, the new data would support the transfer of *Albuca crispera* to *A.* subgen. *Mitrotepalum*, a group characterized by the erect flowers and strongly hooded inner tepals. A complete description is presented for this species, and data on morphology, ecology, and distribution are reported. Affinities and divergences with other close allies are also discussed, and evidence is shown to propose amendment of author citation.

Key words: Asparagaceae, distribution, ecology, Hyacintheae, nomenclature, Scilloideae, South Africa, taxonomy

Introduction

The family Hyacinthaceae includes ca. 1000 species of bulbous plants which are mainly distributed throughout Europe, Africa and south-western Asia, with a single small genus in South America (Speta 1998a, APG 2003). Four monophyletic subfamilies are proposed within Hyacinthaceae: Hyacinthoideae, Ornithogaloideae, Urgineoideae and Oziroëoideae (Speta 1998b, Pfosser & Speta 1999, Manning *et al.* 2004). Alternatively, Hyacinthaceae can be treated as subfamily Scilloideae of Asparagaceae, and the subfamilies above are then treated as tribes Hyacintheae, Ornithogaleae, Oziroëeae and Urgineae (e.g. APG 2009, Chase *et al.* 2009). However, we favour the former treatment based on morphological grounds.

Ornithogaloideae are widely distributed in Europe, south-western Asia and Africa. In the last decades a number of morphologic and phylogenetic studies were undertaken in the group, focussing on circumscriptions of genera (Speta 1998a, Manning *et al.* 2004, 2009, Martínez-Azorín *et al.* 2011a). The latest comprehensive study in the subfamily accepts 19 independent genera based on monophyletic groups and is supported by a clear syndrome of morphologic characters and peculiar biogeographic patterns (cfr. Martínez-Azorín *et al.* 2011a). All those reasons make that latter treatment highly consistent, and therefore it is followed here.

The genus *Albuca* Linnaeus (1762: 438) was characterized by “*petalis alternis patentibus, interioribus erectis*”, differing from *Ornithogalum* Linnaeus (1753: 306) which had all tepals equal and spreading. This very distinct flower structure was accepted by most of recent authors to recognize *Albuca* as a distinct genus. However, Manning *et al.* (2009) merged in *Albuca* taxa belonging to other genera traditionally included in *Ornithogalum*, such as *Battandiera* Maire (1926: 125), *Coilonox* Rafinesque (1837: 28), *Stellarioides* Medikus (1790: 369) and *Trimelopter* Rafinesque (1837: 24). Therefore *Albuca sensu lato* was circumscribed