Stellarioides chartacea (Hyacinthaceae, Ornithogaloideae), a new species from the Eastern Cape Province in South Africa

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Abstract

Within the framework of a taxonomic revision of the genus Stellarioides we here describe a new species from the Eastern Cape Province in South Africa. Stellarioides chartacea sp. nov. is at first sight related to S. arida and S. tenuifolia, but it can be clearly differentiated by a number of characters. 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.

Key words: Asparagaceae, distribution, ecology, Hyacintheae, Scilloideae, taxonomy

Introduction

Family Hyacinthaceae (sensu APG 2003) includes about 1000 species of bulbous plants that are segregated in four monophyletic subfamilies (Oziroëoideae, Ornithogaloideae, Urgineoideae and Hyacinthoideae). The family is mainly distributed through Europe, Africa and south-west Asia, with a single small genus in South America corresponding to subfamily Oziroëoideae. Alternatively, Hyacinthaceae is treated as subfamily Scilloideae of Asparagaceae, and the subfamilies above are respectively then treated as tribes Oziroëeae, Ornithagaleae, Urgineae and Hyacintheae (e.g. APG 2009, Chase et al. 2009), though we favour the former treatment based on morphological grounds.

Generic circumscription within Ornithogaloideae has been a matter of controversy in the last decades. After diverse and contrasting taxonomic treatments proposed in the group in recent years, the latest comprehensive study in Ornithogaloideae (Martínez-Azorín et al. 2011a) demonstrates the existence of up to 19 monophyletic genera which are characterized by a clear syndrome of morphological characters, making genus concepts intuitive, homogeneous in floral and fruit morphology, and therefore easy to define and to work with.

Among these genera, Stellarioides Medikus (1790: 369) was described to include a single species, Stellarioides canaliculata Medikus (1790: 369). This genus was overlooked by most modern authors for more than two centuries until Speta (1998) accepted its status and Martínez-Azorín et al. (2011a) corroborated its autonomy. Unfortunately, the taxonomy of Stellarioides is still unsatisfactory and a comprehensive revision in the genus is required. Moreover, a remarkable controversy exists regarding the number of species in the genus. The most conservative treatments (cf. Obermeyer 1978, Manning et al. 2009) accept only 2 species [S. tenuifolia (Delaroche 1811: 6) Speta (2001: 174) as Ornithogalum tenuifolium F.Delaroche, and S. longibracteata (Jacquin 1776: 18) Speta (2001: 173) as O. longibracteatum Jacq.] with 3 additional subspecies (cf. Manning et al. 2009), whereas the more analytical treatment of Speta (2001) recognizes ca. 25 different species. It is worth mentioning that Obermeyer (1978), in her synthetic taxonomic revision of Ornithogalum sensu lato in southern Africa, included 18 synonyms in O. tenuifolium and 4 synonyms in O.