



Two new species of *Limonium* (Plumbaginaceae) from Rhodes Island (eastern Aegean area, Greece)

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Abstract

Limonium quinnii and *L. rhodense* (Plumbaginaceae) are here described from the maritime cliffs of Rhodes Island (Greece). These new species can be included in the *Limonium palmare* aggregate, a group highly diversified in the eastern Mediterranean but still poorly known. The differences among *L. quinnii* and *L. rhodense* with the related taxa are provided and discussed. Data on the breeding systems, ecology and distribution of both species are also given.

Key words: Apomixis, breeding systems, chorology, ecology, Mediterranean endemics, sea-lavenders, taxonomy

Introduction

Studies on the genus *Limonium* Miller (1754: without page) in the Mediterranean areas (e.g. Pignatti 1972, Erben 1978) considerably clarified the taxonomic position of many poorly known taxa. However, detailed researches carried out in the western (e.g. Crespo 2009), central (e.g. Brullo & Erben 1989, Brullo & Giusso 2006, Erben 2001, Pignatti 1982, Raimondo 1993, Raimondo & Pignatti 1986, among others) and eastern (e.g. Domina *et al.* 2006, 2008; Domina & Raimondo 2012) Mediterranean basin have increased the number of known taxa, which in some territories has grown up to twice as much as believed (e.g. Brullo & Erben 1989, Erben 1993, Pignatti 1982).

As regards the Aegean area, the comprehensive work by Bokhari & Edmondson (1982) improved the knowledge on the genus *Limonium* in these territories. During the last 30 years, several taxonomical studies were published, increasing the number of endemic species (e.g. Artelari 1989a, Artelari & Georgiou 1999, Artelari & Kamari 1995, 2000, Brullo & Guarino 2000, Doğan *et al.* 2008, Kypriotakis & Artelari 1998, Papatsou & Phitos 1975). Currently, over 45 species have been recognized in the Aegean area (Domina 2011a), most of which are polyploid and apomictic according to Artelari & Georgiu (1999).

During several field surveys (September 2011) in the island of Rhodes (eastern Aegean Sea), some populations of taxa belonging to the aggregate of *Limonium palmare* (Smith in Sibthorp & Smith, 1806: 213) Rechinger (1943a: 105) (*sensu* Greuter *et al.* 1989: 335–336) were found. These populations cannot be ascribed to any of the *Limonium* taxa occurring in this area (Domina 2011a), so we propose to describe them as two species new to science, endemic to Rhodes Island.

Material and methods

Living plants, and exsiccata/digital images from the herbaria ABH, B, BM, GZU, K, LI, MA, P, and UPA (acronyms according to Thiers 2013) were examined (a total of 40 plants per population plus about 100 exsiccata for comparison purposes). The herbarium materials were softened by immersion in distilled water