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Allium aladaghense (Amaryllidaceae, Allieae), a new species of section *Asteroprason* from northeast of Iran

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Abstract

Allium aladaghense is described as a new species from North Khorassan province in NE Iran. It is closely related to *A. kuhsorkhense*, another recently described endemic species. Diagnostic morphological characters, illustrations and notes on habitats and conservation of the new species as well as an identification key and distribution maps of the species of sect. *Asteroprason* are provided.

Key words: subg. *Melanocrommyum*, biodiversity, distribution, Kopetdagh

Introduction

The genus *Allium* Linnaeus (1753: 294) is a member of Amaryllidaceae *sensu* APG III (2009), subfamily Allioideae, tribe Allieae (Chase *et al.* 2009, Reveal & Chase 2011). Some *Allium* species are economically important food crops, and also several species have significant medicinal and horticultural values. *Allium* is a perennial geophytic genus comprising approximately 900 species (WCSP 2012) widely distributed over the holarctics from dry subtropics to boreal zone. The genus has a main center of diversity in Southwest and Central Asia (Fritsch & Friesen 2002, Friesen *et al.* 2006). The Iranian plateau is located in this center and *Allium* is a typical genus for Irano-Turanian floristic region and displays a high level of specific endemism there (Matin 1992).

Wendelbo (1971), in his revision of the genus in "Flora Iranica" area, recorded 75 species from Iran and stated that the number of *Allium* species in the area is likely to be considerably increased in the future. Since the low number of recognizable characters in dried *Allium* specimens presents difficulty in *Allium* taxonomy (Fritsch 1996, Fritsch *et al.* 2002), in recent taxonomical researches, mainly focusing on living plants in nature and under cultivation, several *Allium* species were recorded as new for Iran and rather many new species and subspecies were described as new to science from the Iranian territory (Kamelin & Seisums 1996, Akhani 1999, Fritsch *et al.* 2001, 2002 & 2006, Mashayekhi *et al.* 2005, Khassanov & Memariani 2006, Khassanov *et al.* 2006, Memariani *et al.* 2007, Fritsch & Abbasi 2008, Neshati *et al.* 2009, Fritsch & Maroofi 2010, Razyfard *et al.* 2011). Thus, altogether the number of Iranian *Allium* taxa increased up to 126 species and subspecies.

About one-third of Iranian *Allium* species are native in the Khorassan-Kopetdagh floristic province, located in the northeast of Iran and partly in southern Turkmenistan. The area (Fig. 2 and 3) is a transitional zone connecting different floristic provinces of Irano-Turanian region. Several *Allium* species occur in the eastern- or westernmost limits of their distribution ranges in Khorassan-Kopetdagh as well as many narrow and local endemics (Wendelbo 1971, Memariani *et al.* 2007). Recent floristic investigations in different areas of Khorassan revealed range extensions for some Iranian *Allium* species and detected some unknown taxa. In this paper we describe a new *Allium* species from Aladagh and Salook Mountains in North Khorassan province based on living plants and fresh herbarium materials in FUMH.

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