



## A new species of *Gypsophila* (Caryophylloideae, Caryophyllaceae) from Iran

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### Abstract

As a result of the recent revision of the genus *Gypsophila* of Iran, a new species, *Gypsophila alvandica* sp. nov. (sect. *Dichoglottis*) is here described and compared with the related *G. polyclada*. These two species differs by number of stems, type of indumentum, shape and color of the petals and size and coat of the seeds. *G. alvandica* is endemic to the central-western of Iran.

### Introduction

*Gypsophila* Linnaeus (1753: 406) includes about 150 species representing the fourth biggest genus of Caryophyllaceae Juss. (see e.g., Mabberley 2008) and one of the most polymorphic genera of the subfamily Caryophylloideae Rabeler & Bittrich (1993). *Gypsophila* has mainly an Eurasian distribution inhabiting the north temperate part of the Old World (Barkoudah 1962). The main diversity center of *Gypsophila* includes the Black Sea region, Turkey, Caucasus, north Iraq and Iran (Barkoudah 1962).

Since *Gypsophila* is a critical genus from the taxonomical and nomenclatural points of view, the number of species occurring in Iran have changed over the time. Linnaeus (1753) published eight species in *Gypsophila*, of which only one is currently known from Iran, *G. perfoliata* Linnaeus (1753: 408). Boissier (1867) listed 56 *Gypsophila* species in *Flora Orientalis*, of which 17 from Iran. 7 species from Iran were recorded by Schischkin (1936). Parsa (1951) recorded 32 species from Iran. The comprehensive revision by Barkoudah (1962) list a total of 126 species of *Gypsophila* over the world, of which 31 were recorded for Iran including *G. heteropoda* Freyn (1903: 865). The last revision of *Gypsophila* in Iran (Rechinger 1988) reports 33 species. Huber-Morath (1967), Davis (1988) and Ataşlar (2000) recorded 55 species of *Gypsophila* in the Flora of Turkey of which 11 are known from Iran. Mozaffarian (1991: 33, 2008: 89) described two new species, *G. rupestris* Mozaff. and *G. elymaitica* Mozaff. from Iran. Thus *Gypsophila* includes 36 species for Iran, of which 17 are endemic.

The present paper is part of the ongoing study of the genus *Gypsophila* in Iran by A. N. Falatoury.

### Materials and Methods

Specimens preserved in the herbaria FAR, FUMH, IRAN, T, TARI and TUH were examined using an Olympus SZH stereomicroscope, while photographs from the virtual herbaria E, G, KEW, P and W were seen (acronyms according to Thiers 2015). Samples of seeds and flowers were scanned with a Dino-Lite digital microscope AM413T model. Pollen and seed samples were scanned with a KYKY SEM, EM3200 model. The pollen and spore morphology follows the terminology by Punt *et al.* (2007), while for the seeds we considered Yildiz (2002) and Amini *et al.* (2011). Important literatures were also considered (Schischkin 1936, Barkoudah 1962, Huber-Morath 1967, Davis *et al.* 1988, Rechinger 1988, Ataşlar 2000).