



Dianthus burdurensis (Caryophyllaceae), a new species from South-western Turkey

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Abstract

Dianthus burdurensis is here described as a new species from Burdur province (Turkey). Its distribution, habitat, and IUCN category are also given, as well as a macro- and micromorphological comparison with the related species *D. masmenaeus* Boiss.

Keywords: Burdur, new carnation, section *Dentati*, species description, taxonomy.

Introduction

Dianthus Linnaeus (1753: 409) is the second largest genus, after *Silene* Linnaeus (1753: 416), in the family *Caryophyllaceae* Juss., including approximately 300 species which are mainly distributed in European Mediterranean area and in Asia (Reeve 1967, Bittrich 1993, Vaezi *et al.* 2014).

The more comprehensive study on *Dianthus* species concerning the Turkish flora was carried out about 50 year ago by Reeve (1967), who recognized 67 species. After Reeve (1967) nine new records were added to the flora by Davis *et al.* (1988), Güner (2000) and Özhatay & Kültür (2006). The *Dianthus* species in Flora of Turkey and the East Aegean Islands can be distinguished by the number and structure of epicalyx scales and flower characteristics such as calyx and petal features as reported, e.g., by Reeve (1967), Gemici & Leblebici (1995), Menemen & Hamzaoglu (2000), Aytaç & Duman (2004), Vural (2008), Yılmaz *et al.* (2011), and İlçim *et al.* (2013).

As part of the preparation of the revision of *Dianthus* and *Minuartia Linnaeus* (1753: 89) for TÜBİTAK KBAG-111T873 and KBAG-113Z260, field surveys in Burdur (South-western Turkey) allowed to find an unusual population which appears to be morphologically well different from the other taxa included in *Dianthus* sect. *Dentati* Boissier (1867: 480). Taxonomical investigations carried out on living plants led to establish that the population found can be proposed as a distinct species, named *D. burdurensis*.

Materials and methods

Field surveys in the Province of Burdur are carried out, as well as analysis of literature (Reeve 1967, Davis *et al.* 1988, Güner 2000, Özhatay & Kültür 2006) and examination of specimens preserved at the herbaria ANK, GAZI, and HUB (acronym according to Thiers 2015+). The pictures were prepared using a CANON EOS 60D digital camera, while seed surfaces were displayed through a LEO 440 Scanning Electron Microscope. The vegetative characteristics were measured with a ruler with 0.5 mm accuracy and the floral characteristics were determined using an ocular micrometer.