



Centaurea baseri (Compositae), a new species from Turkey

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Abstract

Centaurea baseri, a new species from limestone rocks in Emirdağ (Afyon), Central Anatolia, Turkey, is described and illustrated. The new species is compared with the most similar species *C. aphrodisea* and *C. dursunbeyensis* (*C. sect. Phalolepis*), from which it differs in its involucre, basal leaves, achenes, appendages and habit. Diagnostic morphological characters are discussed. Notes are presented on its ecology and conservation status.

Key words: Asteraceae, Cardueae, *Centaurea* sect. *Phalolepis*, new species, taxonomy

Introduction

Centaurea Linnaeus (1753: 909), which is an important genus of Asteraceae (Compositae) family, is distributed with its about 700 species in Asia, North Africa, America and Europe (Brummitt 2004).

Turkey is the main centre of diversity of the genus *Centaurea* (Wagenitz 1986). The genus was previously revised by Wagenitz (1975) for the Flora of Turkey, where it was divided into 34 sections. Subsequently, *Centaurea* was sorted into four genera: *Centaurea*, *Rhaponticoides* Vaillant (1754: 165), *Psephellus* Cassini (1826: 488) and *Cyanus* Miller (1754) (Wagenitz & Hellwig 2000, Greuter 2003). This change notwithstanding, many new species of *Centaurea* were published from Turkey in the latest years (Davis *et al.* 1988, Güner 2000, Duran & Duman 2002, Uzunhisarcıklı *et al.* 2005, Vural *et al.* 2006, Wagenitz *et al.* 2006, Kaya & Vural 2007, Uysal *et al.* 2007, Uysal 2008, Aksoy *et al.* 2008, Daşkın & Yılmaz 2009, Dinç *et al.* 2009, Doğan & Duran 2009, Hamzaoğlu & Budak 2009, Uysal & Köse 2009). Therefore, *Centaurea* and its relatives were handled broadly in respect of taxonomy during the last ten years in Turkey.

The sectional classification of *Centaurea* relies heavily on the morphology of the appendage of phyllaries and the achenes (Garcia-Jacas *et al.* 2001). Species belonging to *C. sect. Phalolepis* (Cassini 1827: 248) Candolle (1838: 568) are perennials, biennials or annuals. They inhabit dry and often rocky places in the Mediterranean and Near East mainly in the mountains (Wagenitz & Hellwig 1996). These species are similar in vegetative characters to *C. sect. Acrolophus* (Cassini 1827: 253) Candolle (1838: 581), but their appendages are orbicular, hyaline with the firmer centre, entire or irregularly lacerate (Wagenitz 1975).

We collected some specimens belonging to *C. sect. Phalolepis* in 2009. The specimens were not referable to any known *Centaurea* species. The comparison of these specimens with specimens in different herbaria in Turkey showed that we are dealing with a species new to science.

Centaurea baseri Köse & Alan, *sp. nov.* (Fig. 1)

Centaurea dursunbeyensis affinis, a qua caulibus procumbentibus (nec erectis vel ascendentibus), appendicibus phyllorum decurrentibus, foliorum basaliū segmentis terminalibus 1–2 mm (nec 5–8 mm) latis, involucris 5–10 mm longis et 3–5 mm latis (nec 7–10 mm longis et 5–7 mm latis), acheniis pilosis (nec glabris) differt. A *Centaurea aphrodisea* caulibus procumbentibus (nec erectis), foliis basalibus pinnatisectis (nec pinnatipartitis), involucris 5–10 mm longis et 3–5 mm latis (nec 10–14 mm longis et 5–10 mm latis), acheniis pilosis (nec subglabris) differt.