



***Gundelia dersim* and *Gundelia munzuriensis* (Compositae), two new species from Turkey**

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Abstract

Two new species of *Gundelia* (Compositae) are described from Turkey, *G. dersim* Vitek, Yüce & Ergin *sp. nov.* and *G. munzuriensis* Vitek, Yüce & Ergin *sp. nov.*

Key words: Asteraceae, Flora of Turkey, Compositae, *Gundelia*, new species

Introduction

Gundelia has been treated as monospecific genus with *Gundelia tournefortii* L. (1753: 814) in most recent floras (Nikitin 1960, Vasilchenko 1961, Sofieva 1961, Kupicha 1975, Feinbrun-Dothan 1978, Rechinger 1981, Avetisian 1995 etc.), declaring all other names synonymous. The recent discovery and publication of *Gundelia aragatsi* Vitek, Fayvush, Tamanyan & Gemeinholzer (Vitek *et al.* 2010: 92) has directed a renewed attention to this genus.

Following Vitek *et al.* (2010), important characters within the genus *Gundelia* are the number of flowers forming one cephaloid (= flower complex, heads of second order, pseudocephalia) in the synflorescence (terms used following Classen-Bockhoff *et al.* 1989), size and shape of the fruit complex (disseminule), the colour of the flowers, and the indumentum in the synflorescence. Nersesyan (2013) added the shape of the involuclers of the central and lateral flowers. Additional diagnostic characters confirmed during our field work are the size of the whole plant, the habitat and the indumentum of leaves.

A DNA-analysis of *Gundelia* has shown a wide genetic variability and the existence of several evolutionary lines (Vitek *et al.* 2010). This was confirmed in a broader analysis including material from Tunceli collected in 2011 (Vitek *et al.* in prep.). For several reasons it is not easy to apply existing names to the species of *Gundelia* as we could identify them in the field. Type specimens show only part of the necessary characteristics (e. g. fruits are missing), have no information on flower colour or are completely missing. It took several collecting trips in 2011–2013 to find the plants in different stages for getting a clear picture.

Material and Methods

During field work in Turkey, prov. Tunceli (= Dersim), numerous populations of *Gundelia* have been visited; specimens and leaves for DNA-analyses have been collected. Existing old names and their types have been checked (Vitek & Jarvis 2007, Vitek *et al.* in prep., Vitek in prep.). All herbaria mentioned are referred to by their abbreviations in Index Herbariorum (Thiers, continuously updated).

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