

A new taxon of *Anthemis* L. (Asteraceae) from Turkey: *Anthemis pauciloba* Boiss. var. *alba* Hamzaoglu & Budak var. *nova*

Ergin HAMZAOĞLU*, Ümit BUDAK, Murat KOÇ

Department of Biology, Faculty of Science and Arts, Bozok University, 66200 Yozgat - TURKEY

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Abstract: *Anthemis pauciloba* Boiss. var. *alba* Hamzaoglu & Budak var. *nova* (Asteraceae) is described as a new variety from Niğde province. A Latin diagnosis, a taxonomic description, and an illustration are given.

Key words: Asteraceae, Anthemideae, *Anthemis*, new variety, Niğde, Turkey

Anthemis L. cinsinin (Asteraceae) Türkiye'den yeni bir taksonu: *Anthemis pauciloba* Boiss. var. *alba* Hamzaoglu & Budak var. *nova*

Özet: *Anthemis pauciloba* Boiss. var. *alba* Hamzaoglu & Budak var. *nova* (Asteraceae) Niğde'den yeni bir varyete olarak tanımlandı. Yeni varyetenin Latince kısa ayrımı, taksonomik betimlemesi ve resmi verildi.

Anahtar sözcükler: Asteraceae, Anthemideae, *Anthemis*, yeni varyete, Niğde, Türkiye

Introduction

Anthemideae is one of the largest tribes of *Asteraceae*, comprising about 110 genera and ca. 1800 species. *Anthemis* L. is the second largest genus in *Compositae*, tribe *Anthemideae*. It includes more than 210 species (Bremer & Humpries, 1993). The total geographical range of *Anthemis* encompasses most of western Eurasia, the Mediterranean region, and a small part of eastern Africa. While central Europe is inhabited by an archaeophytic species, the main centre of diversity is found in south-western Asia,

where 150 of the 210 species occur, including all of the presently accepted subgenera and sections (Oberprieler, 2001).

The first revision of *Anthemis* in Turkey was performed by Grierson and Yavin (1975), who recognised 80 taxa and 1 doubtful species. Since then, 2 new taxa, *A. karacae* Güner and *A. kotschyana* Boiss. var. *gypsicola* H.Duman, have been described from Turkey (Güner, 2000). The total number of the taxa in the genus *Anthemis* has now reached 83 together with these records.

* E-mail: erginhamzaoglu@yahoo.com

Some *Anthemis* specimens were collected from Niğde (Ulukışla, Aktoprak) during a project to revise *Minuartia* L. After a comparison with the literature (Grierson & Yavin, 1975; Chater & Walters, 1976; Shishkin, 1995; Özhatay et al., 2009; Güner, 2000) the authors identified a new variety.

Measurement of vegetative characters was made with ruler accurate to 0.5 mm and floral characters were measured with an ocular micrometer fitted to an Olympus SZ61 microscope.

Species Description

Anthemis pauciloba Boiss. var. *alba* Hamzaoglu & Budak var. nova (Figure).

Type: Turkey. C5 Niğde: Ulukışla, around Aktoprak village, 1380 m, 21.06.2009, M.Koç 388-A, E.Hamzaoglu & Ü.Budak (holotype: Bozok Univ. Biology Dept. Herbarium, isotypes: Bozok Univ. Biology Dept. Herbarium, ANK, GAZI).

Diagnosis: Affinis *A. paucilobae* var. *microstephanae* et var. *sieheanae*, sed ligulis albis (non flavis) differt.

Description: Perennial herb. Stem scapiform, simple or branched near at base, 14-50 cm tall, each branched with 1 capitulum, lower part densely adpressed sericeous, upper part glabrescent to densely adpressed sericeous. Basal leaves petiolate; petiole 0.5-

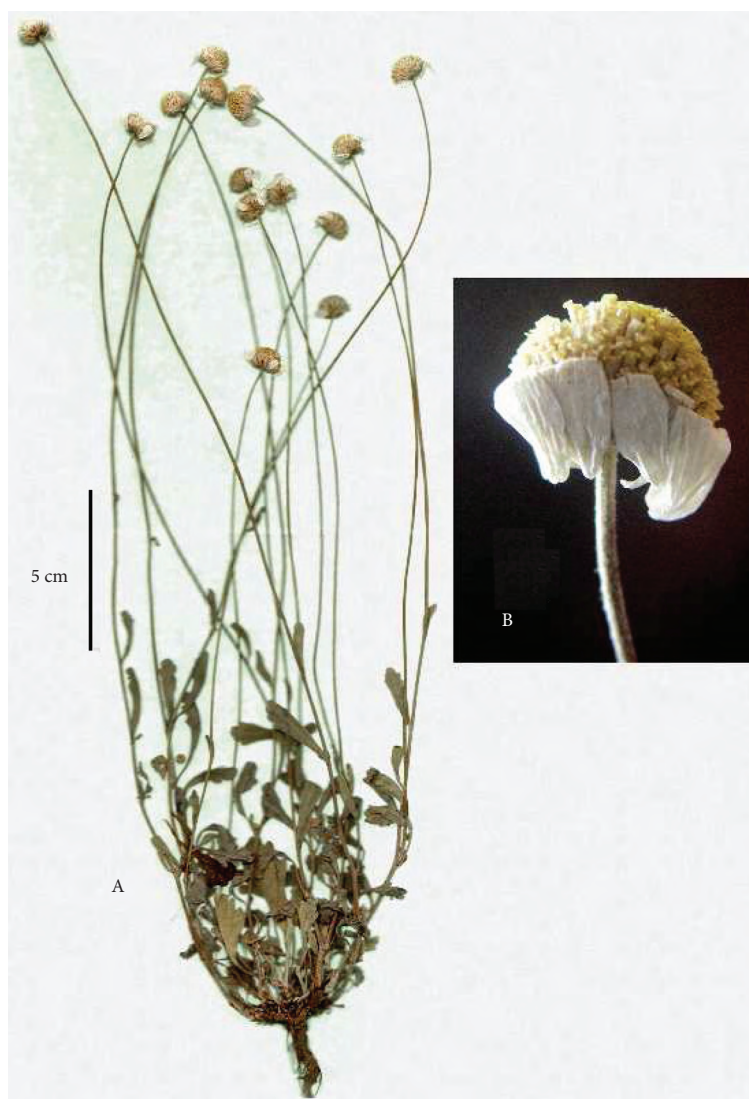


Figure. *Anthemis pauciloba* var. *alba*: A-Habit, B-Capitulum showing white ligules.

3.5 cm long, winged; lamina entire to slightly or deeply pinnatifid with 4 or 5 pairs of lateral lobes, linear-oblong to linear-obovate in outline, 0.5-2.5 × 0.5-1.5 cm, densely adpressed sericeous on both surfaces, attenuate-cuneate at base. Cauline leaves similar but sessile, cuneate-spatulate, entire or a few toothed near apex. Capitula radiate. Involucre 1-1.5 cm wide; phyllaries ovate-lanceolate, 3-5 mm long, margin scarious, apex acute. Ray flowers 14-22; ligules white, broadly obovate, 6-9 × 3.5-6 mm. Disc flowers 2.5-3 mm long, not inflated at base. Paleae ± oblong, 3-4 mm long, apex acuminate. Achenes angular, ribbed, 1.5-2 mm long; corona usually trilobate, up to 0.5 mm long.

Fl. 6-7, Gypsum slopes, between 1350 and 1400 m.

Specimens Examined: –*Anthemis pauciloba* var. *pauciloba*: Turkey. **C3** Antalya: Akseki, Geyran Yaylası, south of Kocaoluk, 1300-1400 m, 09.6.1995, A.Duran 2555 (GAZI); **C5** Niğde: Ulukışla, around Aktoprak village, 1380 m, 21.06.2009, M.Koç 388-B, E.Hamzaoğlu & Ü.Budak (Bozok Univ. Biology Dept. Herb.); **C6** Gaziantep: around Gaziantep, ca. 780 m, 20.5.1956, H.Birand 56 (ANK); *ibid.*, Narlı, ca. 760 m, 24.5.1934, E.K.Balls & W.Balfour Gourlay 1152 (ANK); **C7** Şanlıurfa: between Şanlıurfa and Hilvan, 32 km, ca. 700 m, 18.5.1956, P.H.Davis 28216 & I.C.Hedge (ANK); **C8** Mardin: Mardin castle, 1200 m, 20.5.1957, P.H.Davis 28349 & I.C.Hedge (ANK). –*Anthemis pauciloba* var. *sieheana*: Turkey. **C3** Antalya: Akseki, Güzelsu, Yazıcı vicinity, 1000 m, 03.6.1996, A.Duran 3877 (GAZI).

Conservation Status: The new variety is endemic to Niğde, (Inner/South Anatolia), and is an Irano-Turanian element. This variety is known from only a single locality with an area of occupancy estimated to be less than 10 km² (criterion B2a), and so it should be

classified as ‘Critically Endangered’ (CR) (IUCN, 2001).

Ecology: *Anthemis pauciloba* var. *alba* grows on gypsum slopes with *A. pauciloba* var. *pauciloba*, *Asperula* sp., *Bupleurum* sp., *Haplophyllum* sp., *Helichrysum noeianum* Boiss., *Linaria antilibanotica* Rech.fil., and *Onobrychis* sp. at altitudes between 1350 and 1400 m.

Discussion and conclusion

Anthemis pauciloba var. *alba* can be easily distinguished from var. *pauciloba* by having ray flowers, and from var. *microstephana* (Eig) Grierson and var. *sieheana* (Eig) Grierson by its ligules being white (not yellow). The key of the 4 varieties of *Anthemis pauciloba* is given below.

1. Ray flowers absent var. **pauciloba**
1. Ray flowers present
 2. Ligules white var. **alba**
 2. Ligules yellow
 3. Ligules short, c. 2 mm long var. **microstephana**
 3. Ligules prominent, 4-7.5 mm long var. **sieheana**

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