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

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Received: 07.03.2010  
Accepted: 29.08.2010

**Abstract:** *Anthemis pauciloba* Boiss. var. *alba* Hamzaoğlu & 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

**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 & Humphries, 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. kotschyyana* 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.

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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* Hamzaoğlu & Budak var. *nova* (Figure).


**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-
3.5 cm long, winged; lamina entire to slightly or deeply pinnatilobate with 4 or 5 pairs of lateral lobes, linear-oblanccolate to linear-ovobate 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 ± oblanccolate, 3-4 mm long, apex acuminate. Achenes angular, ribbed, 1.5-2.0 mm long;(2,9),(996,992)

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

Specimens Examined:

- Anthemis pauciloba var. pauciloba: Turkey. C3 Antalya: Akseki, Geyran Yazi, south of Kocaoluk, 1300-1400 m, 09.6.1995, A.Duran 2555 (GAZI); C5 Niğde: Uluşla, around Aktoprak village, 1380 m, 21.06.2009, M. Koç 388-B, E.Hamzaoğlu & Ü.Budak (Bozok Univ. 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).


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 noeannum Boiss., Linaria antilibanotica Rech.f., 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
2. Ray flowers present
   1. Ligules white ......................... var. alba
   2. Ligules yellow
      1. Ligules short, c. 2 mm long .......... var. microstephana
      2. Ligules prominent, 4-7.5 mm long .... var. sieheana

Acknowledgements

We are indebted to Bozok University for its financial support (Project no: AFFF-2009-5) and also thank GAZI and ANK for allowing us to study their Anthemis specimens.

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