



A new record *Verbascum szovitsianum* Boiss. var. *szovitsianum* (Scrophulariaceae) from Turkey

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Abstract

Verbascum szovitsianum Boiss. var. *szovitsianum* (Scrophulariaceae) is reported and illustrated for the first time from East Anatolia. This new record is confined to B10 Ağrı- Doğubeyazıt. The diagnostic morphological characters from closely related taxon are discussed.

Key words: *Verbascum*, Scrophulariaceae, New record, Turkey

1. Introduction

The genus *Verbascum* L. (*Scrophulariaceae*) includes about 360 species on Earth (Heywood 1993). In Turkey, it has 242 species in 13 groups, and 129 hybrids (Huber—Morath, 1978; Davis *et al.*, 1988; Vural & Aydoğdu, 1993; Karavelioğullari *et al.*, 2004, 2006, 2008, 2009; Sutorý, 2001, 2004; Özhatay, 2006; Kaynak *et al.*, 2006; Parolly, ve Tan, 2007, 2008; Yilmaz. ve Dane 2008). Partly artificial groups are used in the *Flora of Turkey* (Huber-Morath, 1978) account. All Turkish species of *Verbascum*, belong to sect. *Bothrosperma* Murb. (Murbeck, 1925, 1933; Huber-Morath, 1971). In Turkey, 192 (80%) of the 242 species are endemic.

2. Materials and methods

During one of the field trip in East Anatolia (B10Ağrı -Dogubeyazıt) for Revision of Turkish *Verbascum* (Group A) (Karavelioğullari and Aytaç, 2008), a locally unusual specimen of *Verbascum* was encountered. At first glance, it looked close to *Verbascum szovitsianum* Boiss. var. *adenothyrsum* Murb.. After closer examination and consultation with the Flora of Turkey and other related literatures (Huber-Morath, 1978, 1971; Davis *et al.*, 1988; Ekim, 2000), it was realized that the specimens were different from *Verbascum szovitsianum* var. *adenothyrsum*. The specimens were cross-checked with various *Verbascum* accounts given in relevant literature e.g., Flora of the USSR (Fedchenko, 1955) Flora Iranica (Huber-Morath, 1981), Flora Palaestina (Feinbrun-Dothan, 1978a, b) and Monograph *Verbascum* (Murbeck, 1925, 1933). The specimens have been also crosschecked with the housed-kept at various European and Turkish herbaria E, GAZI, HUB, G, ISTE, K and ERE photo!. All plant name researchers are given according to Brummitt and Powell (1992) and (<http://flwww.ipni.org!index.html>). Eventually, the specimens were identified as *Verbascum szovitsianum* var. *szovitsianum*, which is not previously reported in the literature relating to the Flora of Turkey.

3. Results and Discussion

3.1. Key

Verbascum szovitsianum Boiss.

1. Inflorescence eglandular hairy.....var. *szovitsianum*
1. Inflorescence glandular hairy.....var. *adenothyrsum*

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Verbascum szovitsianum Boiss. var. *szovitsianum* Fl. Or. 4. 333 (1879). Figure 1.
 Syntype. Transcaucasia, Karabagh, Szovits (LE); Persia. Prov. Azerbeidjan, Szovits (LE)

Usually biennial, 20-120 cm. Stem robust, terete, simple, stellate-short stalked eglandular hairs. Basal leaves 5.5-14 (inc. petiole) x 2-2.5 cm, mostly congested at base, lanceolate, crenate, acute, attenuate, densely stellate hairs. Cauline leaves 3-9 x 0.5-1.5 cm, linear-lanceolate, crenate, acute, attenuate, decreasing to flowering part. Inflorescence loose, simple or branched, clusters of flowers pediculate, eglandular hairy or glandular hairy. Bracts 0.5-5 x 0.1-2 mm, elliptic-lanceolate to linear-lanceolate, crenate-entire, acute. Pedicels 2-15 mm. Bracteoles 3-5, 2-10 x 1-3 mm, linear-lanceolate, entire, acute. Calyx 0.5-1 cm, divided almost to base, ovate-lanceolate to elliptic, acute. Corolla 10-30 mm diam., yellow, tube 2 mm, lobes unequal, orbicular, with pellucid-punctate, stellate tomentose outside.



Figure 1. Habit of *Verbascum szovitsianum* Boiss. var. *szovitsianum*

Stamens 5, 4-7 mm, filaments 5-6 mm, with whitish-yellow woolly, two anterior glabrous near apex, anthers reniform. Ovary oblong. Stylus 5-7 mm, filiform. Stigma 2-3 x 0.5 mm, spatulate. Capsule 3-8 x 2.5-4.5 mm, oblong, densely stellate or rarely sparsely glandular. *Fl.* 5-7. *Steppe, limestone slopes, volcanic rock, calcareous stony slopes, 1100-1860 m.*

Fl. 5-7. *Steppe, limestone slopes, volcanic rock, calcareous stony slopes, 1100-1860m.*

3.2 Examined specimens

***Verbascum szovitsianum* var. *szovitsianum*:**

B10Ağrı : Dogubeyazit, Dogubeyazit-Ağrı 15 km, 1750m, 09 vi 2001, calcareous stony slopes, Karaveliogullari 3066, Ekici and Akan; Dogubeyazit, 1860 m, 12 vii 2002, steppe, calcareous stony slopes, Karaveliogullari 3370 and Çelik. Dogubeyazit, San Çavus village, 1100 m, 09 vi 2001, calcareous stony slopes, steppe, Karaveliogullari 3061, Ekici and Akan; *ibid.* 19 vii 2001, Karaveliogullari 3134, Aytaç, Ekici and Akan (GAZI)

***Verbascum szovitsianum* var. *adenothyrsum*:** Turkey, B9 Van: Guzelsu-Guzeldene, 1840 m, 26 vii 1983, steppe, Nyddegger 18482 (GAZI, HUB, G); Toprakkale, hill above Van, 1700m, *Hub-Mor.* 8817 (İSTE); B10 Ağrı : 3-4 km E of Dogubeyazit, 1750 m, D 43956 (ANK, E); SaraySerdarbulak, 06 vi 1930, Schelkovnikov (ERE photo); *ibid.* 12 vii 2002, steppe, calcareous stony slopes, Kanaveliogullani 3373 and Çelik (GAZI)

Verbascum szovitsianum Boiss. var. *szovitsianum*, the distribution of which has not been recorded previously in Turkey, is distributed in Azerbaijan (Huber-Morath, 1978). *Verbascum szovitsianum* Boiss. var. *szovitsianum* is closely related to *Verbascum szovitsianum* Boiss. var. *adenothyrsum* Murb. However, var. *szovitsianum* differing from var. *adenothyrsum* on its eglandular inflorescence.

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