



## *Verbascum ibrahim-belenlii* (Scrophulariaceae), a new species from East Anatolia, Turkey

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The genus *Verbascum* Linnaeus (1753: 177) (Scrophulariaceae) includes about 360 species (Mabberley 2008). In Turkey, the genus is represented by 246 species, 130 hybrids and 6 imperfectly known or doubtful records (Huber-Morath 1978, Davis *et al.* 1988, Karavelioğulları 2012, 2014a, 2014b).

*Verbascum* is divided into two sections (Murbeck 1933): *Aulacospermae* Murbeck (1933: 593) and *Bothrospermae* (Murbeck 1933: 82). The most important difference between them is the seed morphology. In sect. *Aulacospermae*, the seeds are longitudinal corrugated, while in sect. *Bothrospermae* the seeds are transversal corrugated alveolate. All Turkish species of *Verbascum*, belong to sect. *Bothrosperma* (Murbeck 1925, 1933; Huber-Morath 1971).

During field exploration in Kars province, Turkey, during 2002, an unusual population of *Verbascum* was discovered. At the first glance, it seemed to be close to *V. ponticum* (Boissier 1860: 11) Kuntze 1891: 469) and *V. bornmuellerianum* (Huber-Morath 1973: 10). However, there are consistent differences that warrants that the aforementioned population belongs to a different species that is described here before.

### Materials and methods

The specimens were cross-checked with the keys provided by Huber-Morath (1978, 1981) and the *Verbascum* accounts given in various relevant publications such as Fedtschenko (1997), Feinbrun-Dothan (1978a, 1978b), Meikle (1985) and Boulos (2009). As well as, all specimens of this new species have been cross-checked with the material kept at various herbaria including GAZI, EGE, HUB, ISTE, BRNO, G and E (photo) herbaria (acronyms follow Thiers 2015). The threat category assessment of the new species was defined according to IUCN criteria (IUCN 2013).

### Description of the new species

#### *Verbascum ibrahim-belenlii* Karavel. sp. nov. (Fig. 1)

It differs from *V. ponticum* stem upper part branched (vs. simple), basal leaves broadly ovate to oblong, double serrate, acute to acuminate, petiole absent (vs. broadly ovate, cordate, crenate, acute; with petiole 3–7.5 cm. long), bracts cordate, irregular serrate, acuminate (vs. ovate-lanceolate, lanceolate, cordate, serrate or entire, acuminate), corolla stellate and articulate hair outside (vs. glabrous outside, ). It differs from *V. bornmuellerianum* plant stem upper part branched (vs. sometimes branched at base), basal leaves broadly ovate to oblong, double serrate, acute to acuminate, petiole absent (vs. broadly ovate, cordate, irregular dentate, acute; with petiole 8–11 cm. long), bracts cordate, irregular serrate, acuminate (vs. cordate-ovate to ovate-lanceolate, cordate, crenulate to entire, acute to acuminate), corolla stellate and articulate hair outside (vs. glandular and articulate eglandular hair outside).

**Type:**—TURKEY. Kars: Tuzluca-Kağızman 10 km., 1300–1400 m., riverside, meadows, 2 June 2002, F.A.Karavelioğulları 3267, M. Ekici & H. Akan (holotype GAZI!, isotype ANK!).

Perennial, 30–70 cm long, with greenish densely stellate, articulate and stalked glandular hairs. Stem cylindrical, upper part branched. Basal leaves broadly ovate to oblong, double serrate, acute to acuminate, 18–35 × 8–10 cm, petiole absent. Cauline leaves ovate to oblong, semi-amplexicaule, serrate, acute to acuminate, 6–15 × 4–10 cm,