VERBASCUM OZTURKII (SCROPHULARIACEAE),
A NEW SPECIES FROM EAST ANATOLIA, TURKEY

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Abstract

A new species Verbascum ozturkii Karavel., Uzunh. & S.Celik sp. nov. (Sect. Bothrosperma
Murb.), has been described here. It was collected from East Anatolia in Turkey. The species is
related to V. oocarpum Murb. and thus a comparison was made. It differs from V. oocarpum Murb.
Mainly in its hair situation, basal leaves, inflorescence, pedicels, calyx, corolla, stamens and
capsule features.

Introduction

The genus Verbascum L. (Scrophulariaceae) includes about 360 species (Heywood,
1993). In Turkey, it is represented by 238 species spread over 13 groups, and 129 hybrids
(Huber-Morath, 1978; Davis et al., 1988; Vural & Aydogdu, 1993; Karaveliogullari et
al., 2004; 2006; Sutory, 2001; 2004; Ozhatay, 2006; Kaynak et al., 2006; Parolly & Tan,
2007). Out of these 238 species 190 (80%) are endemic. All Turkish species of
Verbascum and the species described here for the first time belong to sect. Bothrosperma

Materials and Methods

The authors collected some flowering and fruiting specimens of Verbascum in 2005
in Kemaliye, Erzincan province. The specific descriptions of Verbascum in Huber-
Morath (1978), Ferguson (1972), Fedchenko (1955), Huber-Morath (1981), Feinbrun-
Dothan (1978a, 1978b), Meikle (1985), Tackholm (1974), Ekim (2000) were studied as
well as specimens from GAZI, G, ANK and HUB were compared. The abbreviations of
the authors of plant names were checked from Brummitt & Powell (1992) and

Observations: Verbascum ozturkii Karavel., Uzunh & S.Celik sp. nov. (Sect. Bothrosperma
Murb.) (Figs.1 and 2).

Affinis V. oocarpum Murb., sed differt planta dense stellata et sparsim stipitata
glandulifera (non appressa temui stellata); foliis basalis lanceolatis, oblongo-lanceolatis,
crenatis, petiolo 4-10 cm. (non linearo-lanceolatis ad linearis, crenulato-dentatis, petiolo
2-3 cm); corolla sine pellucido-punctata (non pellucido-glandula); filis purpureo-

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violaceis (non filis albido-flavis lanatis); capsulis globosis, 2-6 x 1-5 mm (non ellipticis, 4-4.5 x 3 mm).

**Type:** Turkey. B7 Erzincan: Kemaliye-Divrigi, 35. km, 1200-1300 m, 10.vii.2005, calcareous stony slopes, F. A. Karaveliogullari 3467, M. E. Uzunhisarcikli (holo. GAZI, iso. ANK, HUB).

Usually biennial, 30-60 cm, densely stellate, sparsely stalked glandular. Stem robust, terete, branched. Basal leaves 5-10 x 2-4 cm, mostly congested at base, lanceolate, oblong-lanceolate, crenate, rarely entire, acute, attenuate. Petiole 4-10 cm. Cauline leaves 3-6 x 2-5 cm, lanceolate, entire, acute. Inflorescence loose, simple or branched, numerous clusters of 1-10 flowers (accessory flowers 1). Bracts 5-10 x 1-2 mm, lanceolate to linear-lanceolate, entire, acute. Pedicels 2-10 mm. Bracteoles 3-5, 2-3 x 1-2 mm, linear-lanceolate, entire, acute. Calyx 5-10 mm, divided almost to base, lanceolate to ovate-lanceolate, acute. Corolla 10-20 mm diam., yellow, tube 2 mm, lobes unequal, orbicular, without pellucid-punctate, stellate tomentose outside. Stamens 5, 4-7 mm, filaments 5-6 mm, with purple-violate woolly, two anterior glabrous near apex, anthers reniform. Ovary globose. Stylus 2-3 x 0.5 mm, spathulate. Capsule 2-6 x 1-5 mm, globose, densely stellate.

Fl. 6-7, Fr. 7-8.

**Etymology:** This new species is named in honour of the eminent Turkish botanist and ecologist Prof. Dr. Munir Oztürk

**Results and Discussion**

*Verbascum ozturkii* is allied to *V. oocarpum* which is only known from East Anatolia. *V. Oocarpum* grows alongside the dry banks, scree, between 1200-1750 m altitude (Murbeck, 1933), but differs from *V. ozturkii* by hair situation densely stellate, sparsely stalked glandular (not with adpressed fine stellate hairs); basal leaves lanceolate, oblong-lanceolate, crenate, petiole 4-10 cm (not linear-lanceolate to linear, crenulate-dentate, petiole 2-3 cm); inflorescence numerous clusters of 1-10 flowers, dichasium with 2-9-flowers, stalk of dichasium 5-10 cm (not with clusters 2-7 dichasiums 3-5 flowered, stalk of dichasium 1-6 cm); Pedicels 2-10 mm (not absent or upto 5 mm); calyx 5-10 mm (not 2-3 cm); corolla without pellucid-punctate (not with pellucide glands); filament with purple-violet woolly (no filament with whitish-yellow woolly); capsule 2-6 x 1-5 mm, globose (not 4-4.5 x 3 mm, elliptic). Table 1 presents a brief comparison of these species.

Additional specimens of *Verbascum ozturkii* examined: B7 Erzincan: Kemaliye-Divrigi 35. km, 1200-1300 m, 12-8-2005, F.A.Karaveliogullari 3482, M.E.Uzunhisarcikli & Sezgin Celik

Representative specimens of *Verbascum oocarpum* examined: Turkey. B7 Erzincan: Armenia turcica, Sipikordagh, in subalpinis, 12.8.1890, Sintenis 3344 (Iso G photo); ibid. 1700 m, 17.vii.2005, F.A.Karaveliogullari 3477 et. al. (GAZI); ibid. 13.7. 2004, A.Kandemir 4051, 6 km from Mutu to Erzincan, 1200 m, Hub.-Mor. 10646 (Type of *V. microcymosum*) (ANK).
Figure 1. *Verbascum ozturkii* Karavel., Uzunh & S.Çelik a. habit, b. corolla, c. capsul
Table 1. Diagnostic characters of Verbascum ozturkii with the related V. oocarpum

<table>
<thead>
<tr>
<th>Characters</th>
<th>Verbascum ozturkii</th>
<th>Verbascum oocarpum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hair situation</td>
<td>densely stellate, sparsely stalked glandular</td>
<td>with adpressed fine stellate hairs</td>
</tr>
<tr>
<td>Basal leaves</td>
<td>lanceolate, oblong-lanceolate, crenate, petiole 4–10 cm</td>
<td>linear-lanceolate to linear, crenulate-dentate, petiole 2–3 cm</td>
</tr>
<tr>
<td>Inflorescence</td>
<td>numerous clusters of 1–10 flowers</td>
<td>with clusters 2–7</td>
</tr>
<tr>
<td>Pedicels</td>
<td>2–10 mm</td>
<td>absent or to 5 mm</td>
</tr>
<tr>
<td>Calyx</td>
<td>5–10 mm</td>
<td>2–3 mm</td>
</tr>
<tr>
<td>Corolla</td>
<td>without pellucid-punctate</td>
<td>with pellucide glands</td>
</tr>
<tr>
<td>Stamens</td>
<td>with purple-violate woolly</td>
<td>with whitish-yellow wool</td>
</tr>
<tr>
<td>Capsule</td>
<td>2–6 x 1–5 mm, globose</td>
<td>4–4.5 x 3 mm, elliptic</td>
</tr>
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</table>

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References


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