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Scrophularia gracilis Blakelock (Scrophulariaceae): a new record for the flora of Turkey

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Abstract

Some outstanding chasmophytic *Scrophularia* L. specimens having characteristic long corolla tube have been collected from Şırnak, SE Turkey. The specimens were identified as *Scrophularia gracilis* Blakelock. They are closely allied to *Scrophularia farinosa* Boiss. This species is a new record for the flora of Turkey. Description of the species and a composed photograph taken from the field are supplied with a distribution map.

Key words: : Scrophularia, Scrophulariaceae, Turkey, Flora

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Scrophularia gracilis Blakelock (Scrophulariaceae): Türkiye florası için yeni bir kayıt

Özet

Uzun korolla tüpü ile karakteristik, kayalıkta yetişen ilginç *Scrophularia* L. örnekleri Şırnak'tan (güneydoğu Türkiye) toplanmıştır. Bu örnekler, *Scrophularia farinosa* Boiss.'ya yakın *Scrophularia gracilis* Blakelock olarak teşhis edilmiştir. Bu tür Türkiye florası için yeni bir kayıttır. Türün betimi, araziden çekilmiş fotografların düzenlemesi yayılış haritası ile birlikte verilmiştir.

Anahtar kelimeler: Scrophularia, Scrophulariaceae, Türkiye, Flora

1. Introduction

Because of the floristic richness and insufficient works of the Turkish flora, various publications on the flora; such as description of the new taxa, new records and new distribution patterns of the various taxa have been appearing in various journals (Karavelioğulları, 2009; Yıldırım , H. & Gemici, 2010; Doğru Koca and Yıldırımlı, 2010; Aslan et al., 2010).

2. Materials and methods

During several successive botanical excursions to southeast Turkey, interesting *Scrophularia* L. specimens have been collected. The long corolla tube is one of the prominent characters at the first glance. This unusual character for the *Scrophularia* specimens was first realised by the first author. The specimens have been then carefully examined and photographed in the field.

Further studies on the specimens based on the various floristic books and the studies in the Geneva herbarium were carried out by the first author. It has been identified as *Scrophularia gracilis* Blakelock (Figure 1). Specimens of this new record for the flora of Turkey have been collected from another location, close to the first location, in 2009.

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3. Results

Scrophularia gracilis Blakelock, Kew Bull. 1949, 531-532 (1950).

Dwarf perennial herbs, indumentum long stipitate glandular pubescence, 5-15 cm in length. Root woody, thick, many branched. Stems slender, erect, simple, glandular pubescent, grayish-green, slightly fleshy. Leaves dentate, obtuse or rarely acute at apex, lamina 0.5- 2.7×0.4 -2 cm; petioles 1-7 mm. Inflorescence glandular pubescent, bracts linear, 7 mm in length, not foliose. Calyx glandular-pubescent, \pm purplish tinged, lobes ovate, widely membranaceous at margin, c. 1.5×1.5 mm. Corolla oblong, ventricose-inflated, moderately glandular outside, 7-8 mm in length, 2-3 mm wide at base, 3.5-4 mm wide at middle, c. 2 mm wide at apex, lobes c. 1 mm in length, upper lobes slightly longer. Stamens included or subexerted, filaments glandular pubescent. Staminodes absent. Styles sparingly glandular-pubescent, c. 7 mm in length. Capsule globular, 3×3 mm, glandular pubescent, mucronate.

Type: N. Iraq: Jindian nr. Rowanduz, c. 600 m., on rocky cliff wall of Sayyid Taha's cave, damp cool situation above a spring, 18.4.32, *E. R. Guest* 2039 (type); on cliff face by a spring at Sayyid Taha's cave, 25.3.30, *E.R. Guest* 730.

Turkey: C9 Şırnak: Uludere, above Taşdelen village, 37° 23' 550" K, 042° 52' 458" D, 1007 m, limestone crevices, 25. 05. 2004, *A.A.Dönmez* 11884; 28.06.2009, *A.A.Dönmez* 15484; Uludere, 2 km from Dağdibi village to Şırnak-Hakkari road, limestone crevices, 37° 22' 320'' N 043° 07' 784'' E, 1124 m, 28. 06. 2009, *A.A.Dönmez* 15487 (HUB).



Figure 1. A view of Scrophularia gracilis from field

4. Conclusions

S. gracilis is closely allied to S. farinosa Boiss. which is an endemic species of Iran. Both of the species are characteristic with long corolla tube. Among the Scrophularia species growing in Turkey, S. chrysantha Jaub. & Spach and S. kotschyana Bentham have so long corolla tubes. But they are clearly different from this new record with respect to basically colour of corolla and the other characters.

Two collections (*Guest* 2039 and *Guest* 730) of the species were cited in the original publication (Blakelock, 1949), and one of them (*Guest* 2039) is cited as type in parenthesis. This specimen will be accepted as holotype and the rest is paratype. Beside this, both of the authors have not got opportunity to examine these original specimens and probable isotypes. Selection of holotype, isotype and paratype will be carried out in the future after careful examination of these materials and probably distributed isotypes.

Based on restricted herbarium specimens, *S. gracilis* is distributed in northern Iraq and southeastern SE of Turkey (Figure 2). In consideration of the poorly botanized of the area, especially in point of the cliffs, it is highly possible to find new locations for this species. Therefore, it is not evaluated against to the threat categories of IUCN (2001).

The genus *Scrophularia* is represented by 59 species in Turkey (Lall & Mill, 1978) and it is reached to 60 by adding this new record. The specimens of the taxon have been kept at HUB.



Figure 2. Distribution of *Scrophularia gracilis* in Iraq (★) and Turkey (■).

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