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A new *Sideritis* species (*Labiatae*) from Turkey

Abstract

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A new *Sideritis* species is described and illustrated. The new taxon, belonging to the sect. *Empedoclia* (Raf.) Benth., is endemic to Turkey.

Introduction

The genus *Sideritis* L. mainly occurs in Mediterranean region, i.e. Turkey, Spain, Morocco, Greece, Syria, Italy (Greuter 1986). In Turkey it is represented by 45 species (Huber-Morath 1982, Davis & al. 1988, Duman & al. 1995, Bafler & al. 1995, Duman & al. 1998), which belong to section *Hesiodia* Benth. and *Empedoclia* (Raf.) Benth. The section *Hesiodia* has four annual species with a large distribution. The section *Empedoclia* includes perennial species, 36 of them are endemic; therefore the rate of endemism is 93%.

Since the genus *Sideritis* was revised by A. Huber-Morath (1982) for Flora of Turkey, some other new species and records, such as *S. huber-morathii* Greuter & Burdet, *S. athoa* Papan. & Kokkini, *S. akmanii* Aytaç, Ekici & Dönmez, *S. gulendamii* Duman & Karaveliogullari, *S. vuralii* Duman & Bafler, *S. caesarea* Duman Aytaç & Bafler, *S. scardica* Griseb., have been added. In this paper a new *Sideritis* species is described and illustrated, so that 46 *Sideritis* species are known from Turkey now. This new taxon was found during field collections carried out within the "Taxonomic and karyologyc study of Turkey *Ebenus* L." project which is supported by the University of Gazi (Project no: 05/96-5). It belongs to the section *Empedoclia* (Raf.) Benth. and is described below.

***Sideritis ozturkii* Aytaç & Aksoy species nova** (Fig 1).

Typus — B3 Konya: Derebucak; Kizildag, 3 km N. of Çamlık town, 1450-1700 m, rocky place on serpentine and clearings of *Pinus nigra* forest, 14. Vii. 1997, Z. Aytaç 7719 & A. Aksoy, para. Aksoy 2312 (holotypus: GAZI; isotypus: ANK, HUB).

Planta affinis *S. rubriflorae* Hub.-Mor. Sed bracteis mediis 17 × 17 mm (non 12 × 15)

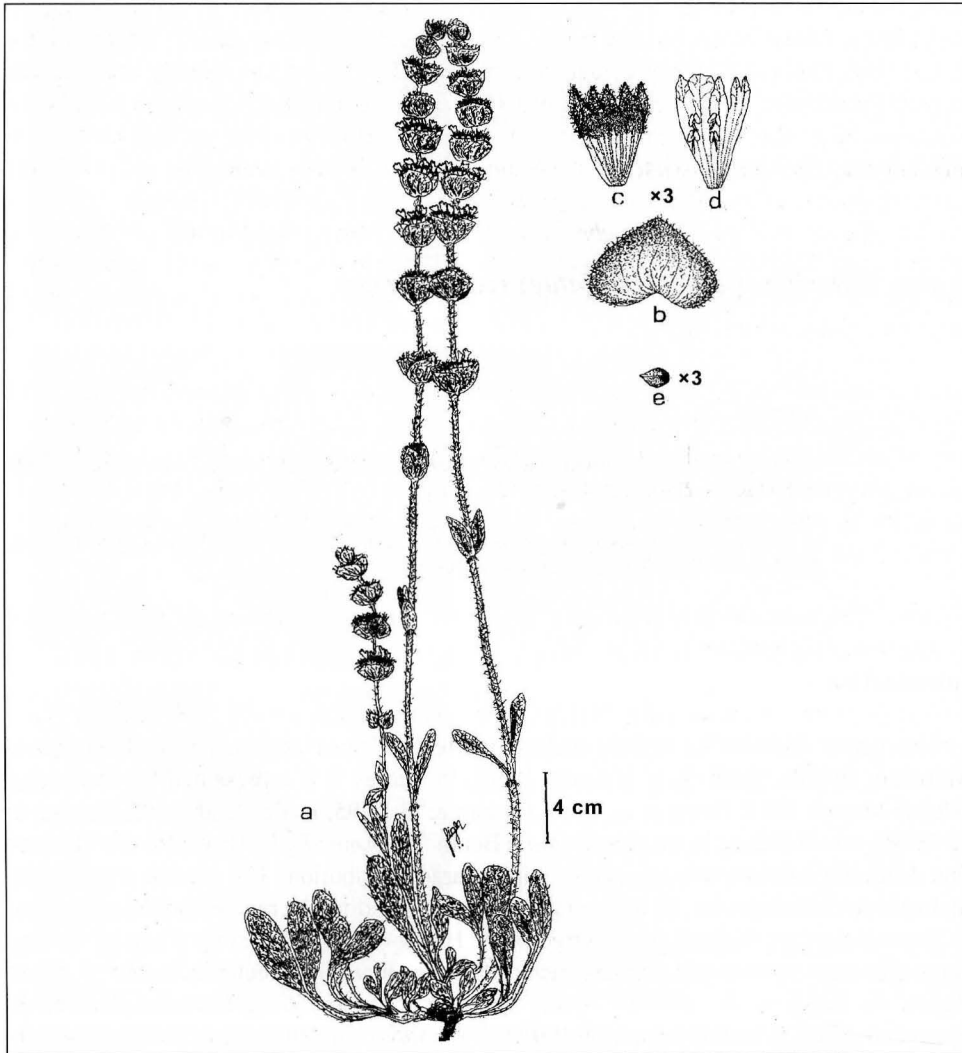


Fig. 1. *Sideris ozturkii*, b: bract; c: calix; d: corolla; e: nutlest.

et acutis (non acuminatis); calycibus dentibus dense villosis, tubi glandibus longis et simplicibus (non villosis) differt.

Perennial; 40-90 cm, erect, stem simple or slightly branched at the base; densely adpressed cobwebby woolly eglandular hairy. Steril leaves oblong, to 7.5×1.5 cm, lower leaves adpressed white woolly hairy, petiolate, petiol to 2 cm; oblong or oblong-lanceolate, 3×1 cm; margins of the leaves slightly denticulate-serrate, obtuse at the apex and yellowish; middle cauline leaves oblong to oblong-lanceolate, obtuse at the apex, woolly tomentose, $2-4 \times 1$ cm, with a 0.5-1.5 cm long winged petiole; upper leaves sessile, linear to lanceolate. Inflorescence simple or rarely a few branched. Verticillasters 6-13, 6-flow-

ered, the lowest to 3 cm distant; middle and upper verticillasters crowded with short glandular hairs. Lower bracts broadly ovate-cordate, 1-1.5 × 1.5-2 cm, shortly acute. Middle bracts (Fig. 1b) broadly ovate-cordate to orbiculate, 1-1.5 × 1.5 cm, slightly acute. Bracts shorter than verticillasters. Calyx 9-10 mm (Fig. 1c), tube glandular; teeth 2-3 mm, lanceolate and long villose. Corolla (Fig. 1d) purple-violet, 10-12 mm, longer than calyx, simple long hairy and brownish striate inside, limb 2-3 mm. Nutlets ovoid (Fig. 1e), 3 × 2 mm, blackish-brown, tuberculate and winged above, Flowering-time: July - August.

This species is similar to *S. rubriflora* Hub.-Mor., which occurs in İçel province (Fig. 2); but apart from some the same flower colour, it mainly differs by middle leaves obtuse not acutish, bracts bigger than it, not acuminate, shortly acute, corolla, with long simple hairy not glabrous or papillous.

Distribution and ecology — *S. ozturkii* is endemic to Konya in South Anatolia (Fig. 2), on the Kizildag mountain at 1450-1750 m altitude (E. Mediterranean mountain element). It grows on serpentine rocks and is a member of the *Pinus nigra* forest, together with *Eryngium palmito* Boiss. & Heldr., *Pimpinella tragioides* Vill., *Saponaria pamphylica* Boiss. & Heldr. *S. pinetorum* Hedge, *Polygonum setosum* Jacq., *Pelargonium endlicherianum* Fenzl., *Asplenium* sp., *Bornmuellera* sp.

Uses — This new *Sideritis* has been used for making tea and known as “ada çayı” from indigenous people around Çamlık village.

Status — In the unique locality where it has been found, *S. ozturkii* suffers from heavy grazing and people gathering since it is used for tea. Therefore it's could be regarded as **CR** category (IUCN 1994).

Etymology — Species is named in honour of Prof. Dr. Münir Öztürk who is a senior botanist at Ege University.

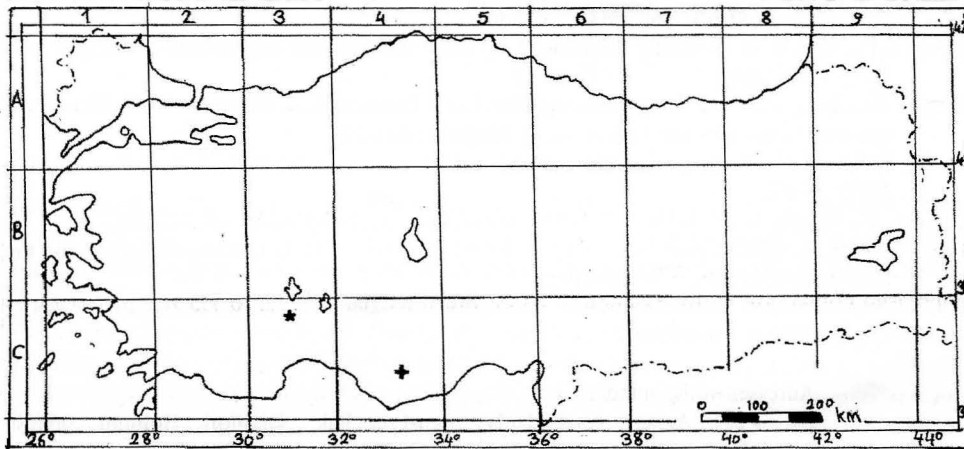


Fig. 2. Distribution of *S. ozturkii* (*) and *S. rubriflora* (+) in Turkey.

Three *Sideritis* taxa have purple flowers in Turkey: These are *S. rubriflora*, *S. libanotica* Labill. subsp. *violascens* (P. H. Davis) P. H. Davis, and *S. erythrantha* Boiss. & Heldr. subsp. *erythrantha*.

S. ozturkii has also the same general feature. Nevertheless, in all of the Turkish *Sideritis* species the calyx hairs are uniform, whereas in this new species, calyx hairs are glandular on the tube and only simple long and densely villose hairy on the teeth.

Key to *Sideritis* species with purple flowers in Turkey according to Huber-Morath (1982) could be changed as follows:

6- Corolla purple-violet

7-Verticillasters 7-15, the median ones 15-20 mm wide incl. bracts

8-Median bracts acuminate, tube of calyx sparsely villose*rubriflora*

8-Median bracts acutish, tube of calyx glandular.....*ozturkii*

7-Verticillasters 2-8, the median ones 6-12 mm wide incl. bracts

9-Cauline leaves linear-lanceolate to oblong, 2-4 × 0.3-1 cm;
internodes 5-8 cm.....*libanotica*

9-Cauline leaves oblong-lanceolate to ovate, 1-4 × 0.3-1.5 cm;
internodes 3-4 cm.....*erythrantha*

6-Corolla yellow or whitethe others

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