Three new species (Labiatae) from Turkey

Abstract


Introduction

Since the genus Sideritis L. was revised by A. Huber-Morath for Flora of Turkey (1982) two new species have been described from Turkey, S. huber-morathii Greuter & Burdet, S. athoa Papanikolau & Kokkini (Davis, Mill & Tan 1988). S. akmanii and S. guıldamii are described as new species in this paper and this means that 42 Sideritis species are known from Turkey. After the genus origanum L. was revised by J. H. Ietswaart for Flora of Turkey (1982), O. munzurense Kit Tan & Sorger (1988) has been described new to science from eastern Turkey. O. husnucan-baseriı is described as new in this paper, then 23 species are known from Turkey. These new species are collected during the endemic plants project which is supported by State Planning Organization (SPO) by the means of TUBITAK (Project no.: TBAG-DPT/Ç.SEK4).

Sideritis akmanii Z. Aytaç, M. Ekici & A. Dönmez spec. nov. Section: Empedoclia (Rafin) Bentham Fig. 1, Map 1.


Affinis S. condensata Boiss. & Hcldr., sed inferinis et medianus caulibus foliatis oblancoelatis, petiolulatis, petiolis 0.5-3 cm (non oblongis ad ellipticis vel linearobo­longis et sessilibus vel subsessilibus), verticillastris 10-20 (non 6-12), medianis bracteis 15-30 x 5-10 mm (non 9-12 x 8-15 mm) et acuminibus 5-15 mm (non 3-10 mm) differt.

Perennial; 40-50 cm, erect, branched from the base. Stems simple or few branched, long woody tomentose and short glandular pilose.
Map 1. Distribution of *Sideritis* oenanthi. D: *Sideritis* gulelendarii *;* Origanum huwarun-huwareri *p.*
Fig. 1. *Sideritis akmanii*: a. habit; b. flower; c. calyx; d. corolla.
Lower leaves adpressed white-silky hairy, petiolate; petioles 1-3 cm; lamina oblong to oblanceolate, attenuate at the base, margins serrate-serrulate, mucronate at the apex, mucro 0.5 mm and yellowish. Middle cauline leaves petiolate, petiole 0.5-2.5 cm, oblanceolate, margins serrate-serrulate, mucronate at the apex. Upper leaves sessile, lanceolate, margins serrate-serrulate. Inflorescence simple or a few branched. Verticillasters 10-22, 6 flowered, the lowest 1-5 cm distant, middle and upper crowded. Lower bracts ovate-cordate to lanceolate, 2-4 x 0.9-1.2 cm, acuminate, acumen 1-2.5 cm. Middle bracts broadly ovate-cordate 1.5-3 x 0.5-1 cm (including acumen) acumen 0.5-1.5 cm. Lower and middle bracts always longer than verticillaster. All bracts adpressed long simple and short glandular hairy. Calyx 9-15 mm spreading long simple pilose and glandular hairy, teeth 3-5 mm. Corolla yellow, 10-12 mm, spreading simple or stellately tubercles hairy outside, and brown striate inside. Corolla as long as or a little longer than calyx. Seeds ovoid, with wing above, 2.5-3 x 1.5-2 mm, blackish-brown. Fl. August.


This species is similar to S. condensata Boiss. & heldr., which is distributed in Antalya (C3) province. But lower and middle cauline leaves oblanceolate, petiolate and petiole 0.5-3 cm long (not oblong to elliptic or linear-oblong and sessile or subsessile), verticillaster 10-22 (not 6-12), middle bracts 15-30 x 8-10 mm (not 9-12 x 8-15 mm), acumen 5-15 mm (not 3-10 mm) long.

This species is named in honour of Prof. Dr Y. Akman who is a senior botanist at Ankara University and was the first to collect the plant in the same area. His specimens were firstly determined as S. cf. condensata. When we collected our specimens, it was thought they should be S. condensata, but after careful checking, we recognized that its lower and cauline leaves were oblanceolate to oblong and the middle bracts’ acumen much longer than in S. condensata. Then we decided to collect S. condensata from type locality (C3 Antalya: Akseki-Antalya 305 m). One year later we visited Antalya province and collected it just from this locality. We realised that the leaves of S. condensata and the acumen of the middle bract were really different from our specimens and the other important difference was the habitats. While our species grows in Astragalus flavescens steppe, S. condensata grows under the Pinus brutia forest and phrygana.

Sideritis gulendamii H. Duman & F. A. Karaveliogullari spec. nov. Sections Empedoclia (Rafin.) Bentham Fig. 2, Map 1.

**Typus:** Turkey B3 Eskişehir; Sivrihisar-Afyon, Aşağıkepen köyü güneydoğusu, jipsli step, 900-950 m, 20.7.1993, Duman 5219 & Aytaç (holo-GAZI; iso-ANK, HUB).

Affinis S. galactica Bornm., sed medianis caulibus foliatis linearibus, 1-4 x 0.2-0.5 cm (non lanceolatis ad lineari-oblanceolatis, (2) 8-10 x 0.3-2 cm), medianis bracteis 0.6-1.2 x 0.6-0.8 cm (non 1-1.5 x 0.9-1.5 cm), corollis 11-12 mm (non 13-15 mm), intra brunneis signatis differt.

Perennial; stems 20-60 cm simple or branched, densely adpressed white woolly-tomentose, sometimes glabrescent above, eglandular.
Fig. 2. *Sideritis gulendamii*. **a.** habit; **b.** calyx; **c.** corolla.
Leaves densely adpressed white woolly-tomentose; basal leaves numerous, forming a rosette, oblanceolate-spathulate, 1-6 x 0.4-0.6 cm, entire or finely crenate to serrate; middle cauline leaves linear, sessile or shortly petiolate, 1-4 x 0.2-0.5 cm, usually entire, sometimes crenate to serrulate, acute, internodes to 7 cm. Inflorescence simple or few branched, 5-15 cm; verticillasters 2-8, 6 flowered, 1-6 cm distant. Middle bracts orbicular to cordate, acuminate, densely adpressed white woolly-tomentose, 0.6-1.2 x 0.6-0.8 cm, including acumen to 0.6 cm. Calyx 7-9 mm, with dense eglandular arachnoid hairs; teeth triangular-lanceolate, acute, 2-3 mm. Corolla yellow, 11-12 mm, hairy outside and inside, brown markings, limb 3-4 mm. Nutlets triangular-ovate, rounded at apex, brown, glabrous. Fl. July-August.


This species is similar to S. galatic a Bornm. which is distributed in Ankara province, however, S. guendamii differs in its middle cauline linear leaves 1-4 x 0.2-0.5 cm (not lanceolate to linear-lanceolate, 2) 8-10 x 0.3-2 cm); middle bracts 0.6-1.2 x 0.6-0.8 cm, including acumen to 0.6 cm (not 1-1.5 x 0.9-1.5 cm, including to 0.3 cm); corolla 11-12 mm (not 13-15 mm), brown markings inside; habitat is gypsum steppes (not Pinus nigra forest and dry lopes).

This species is named after Assoc. Prof. Gülendam Tumen (pharmacologist) who is working at Balıkesir University and interested in Labiatae.

Origanum husnucan-baserii H. Duman, Z. Aytaç & A. Duran spec. nov. section: Brevifilamentum Ietswaart, Fig. 3, Map 1.


Affinis O. brevidens (Bornm.) Dinsm. scd foliis 3-10 x 2-10 mm (non c.16 x 14 mm), sessilibus, glandibus 10-300 per cm² (non c. 600), floribus pedicellatis, 0.5-2.5 mm (non subsessilibus), bracteis 5-6 x 2-3 mm (non c. 10 x 6 mm). Ab O. bargyli Mouterde caulibus foliis, calycibus, glabris et bracteis brevioribus differt.

Subshrub, stem ascending or erect, 10-30 cm long, purplish or dark brown, glabrous, unbranched. Leaves up to 13 pairs per stem, sessile, cordate, ovate to orbicular 3-10 x 2-10 mm, acute to acuminate, glaucous to purplish, veins conspicuous, more or less leathery, glabrous, sessile gland 100-300 cm². Spicules cylindrical, to 25 x 12 mm, nodding. Bracts elliptic or ovate, 5-6 x 2-3 mm, acute, purple. Flowers 2 per verticillaster; pedicels 0.5-2.5 mm long. Calyx 2 lipped, 6-7 mm, throats pilose otherwise glabrous; upper lips divided into 3 equal lobes, lobes triangular, acute c. 2.5 mm; somewhat shorter than the upper lips. Corolla pink, 13-15 mm, not saccate, outside pilose-sellous; tube slightly curved downwards; 2 lipped for c. 1/5; upper 2 lips c. 0.5 mm; lower 3 lips slightly unequal, lobes c. 1.5 mm.
Fig. 3. *Origaniun hasnacum-baserii*. a. habit; b. leaf; c. flowers; d. calyx; e. corolla.
Stamens: the upper 2 included, the lower 2 included or shortly protruding; filaments c. 0.5 and 2-3 mm long. Styles protruding under the upper lips, c. 16 mm long. Nutlets ovoid c. 1.5 mm, brown. Fl. August. Calcareous rocky places and under Pinus nigra forest.


This species is similar to O. brevidens (Bornm.) Dinsm. which is distributed at Amanos Mt (Hatay); however, O. husnucan-baserii differs in its leaves 3-10 x 2-10 mm (not c. 16 x 14), sessile glands 100-300 per cm² (not c. 600); flowers pedicellate 0.5-2.5 mm (not subsessile), bracts 5-6 x 2-3 mm (not c. 10 x 6 mm). From O. bargylí Mouterd, it differs likewise in its glabrous stems leaves, calyx (not hirtellous or pilose) and smaller bracts.

This species is named after Prof. Dr K. Hüsnü Can Başer who is working at Anadolu University (Dean of Farmacy Faculty at the moment) and interested in the aromatic features of Labiatae as well.

References

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