

## AN ADDITION TO THE FLORA OF TURKEY: *SALVIA REUTERIANA* (LAMIACEAE), WITH CONTRIBUTIONS TO ITS TAXONOMY

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*Salvia reuteriana* Boiss. (Lamiaceae), a new record for the flora of Turkey, is described. It is collected in Şırnak province, southeastern Anatolia. *Salvia reuteriana* was previously known from Iraq and Iran, with the type specimen of the species from Iran. Morphological description, photographs and distribution map of the new record are presented.

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**Key words:** Lamiaceae; *Salvia reuteriana*; Şırnak; new record; Turkey

گونه *Salvia reuteriana* گزارشی جدید برای فلور ترکیه با توضیحاتی در مورد تاکسونومی آن

مهمت فیرات: دپارتمان بیولوژی، دانشکده آموزش و پرورش، دانشگاه یوزونکویل، ترکیه

گونه *Salvia reuteriana* به عنوان گزارش جدیدی برای فلور ترکیه شرح داده می‌شود. این گونه از استان سیرناک در جنوب شرق ترکیه جمع‌آوری شده و قبلاً از عراق و ایران شناخته می‌شد و نمونه تیپ آن از ایران است. مشخصات ریخت‌شناسی، تصاویر و نقشه پراکنندگی گزارش جدید ارائه می‌گردد.

### INTRODUCTION

*Salvia* L. is the largest genus of Lamiaceae and is composed of nearly 950-1000 species and widely distributed in five regions of the world: central and south America (ca. 500-550 spp.), western Asia (ca. 200-220 spp. particularly in Turkey, Iran, Afghanistan and Russia), eastern Asia (ca. 100 spp., mainly in China and Japan), Africa (ca. 60 spp.), and Europe (ca. 36 spp.) (Alziar 1988-1999; Walker & Sytsma 2007; Celep & al. 2014). Recent molecular studies (Walker & Sytsma 2007, Will & Claßen-Bockhoff 2014) have shown that *Salvia* is non-monophyletic. Will & al. (2015) argued that the genus should be split into *Salvia* and several additional genera. Based on this concept, Will & al. (2015) elevated *Salvia* sect. *Eremosphace* Bunge to the level of genus as *Pleudia* Raf.. Turkey is one of the centers of diversity for *Salvia* in Old World (Celep & al. 2014). Boissier (1879), in his *Flora Orientalis*, recognized 75 species in Turkey. Hedge (1982a) recognized 86 species in the Flora of Turkey. Since then, eight new species and two new varieties have been described, two species were re-evaluated, three new records have been added from Turkey (Celep & al. 2014). In addition, *Salvia hasankeyfense* a new

species, described by Celep & al. (2015), Turkey is now home to 101 *Salvia* species, 53 (53%) of which are endemic.

### MATERIALS AND METHODS

During floristic surveys in Şırnak/Gabar Mountain (Çıyayê Gabar) (fig. 1), May 2014, specimens were collected of one unidentified species from genus *Salvia*, therefore decided to analyze the morphological characters of the species. Then collected some other specimens and examined using a wide range of literature for identification (e.g. Hedge, 1982a, b). As a result of this effort and with the light of new characters observed, the new specimens belong to *Salvia reuteriana* Boiss. which is a new record for the Flora of Turkey.

Images of the living material were taken with a Sony DSCR1 digital camera. Geographical positions were identified using a Magellan eXplorist 710 GPS, and insert in the fig. 1. A total of 10 herbarium specimens of the new species were collected from three adjacent localities and deposited in the herbaria VANF (acronyms according to Thiers 2020), and in the personal herbarium of the author (Herb. Firat).

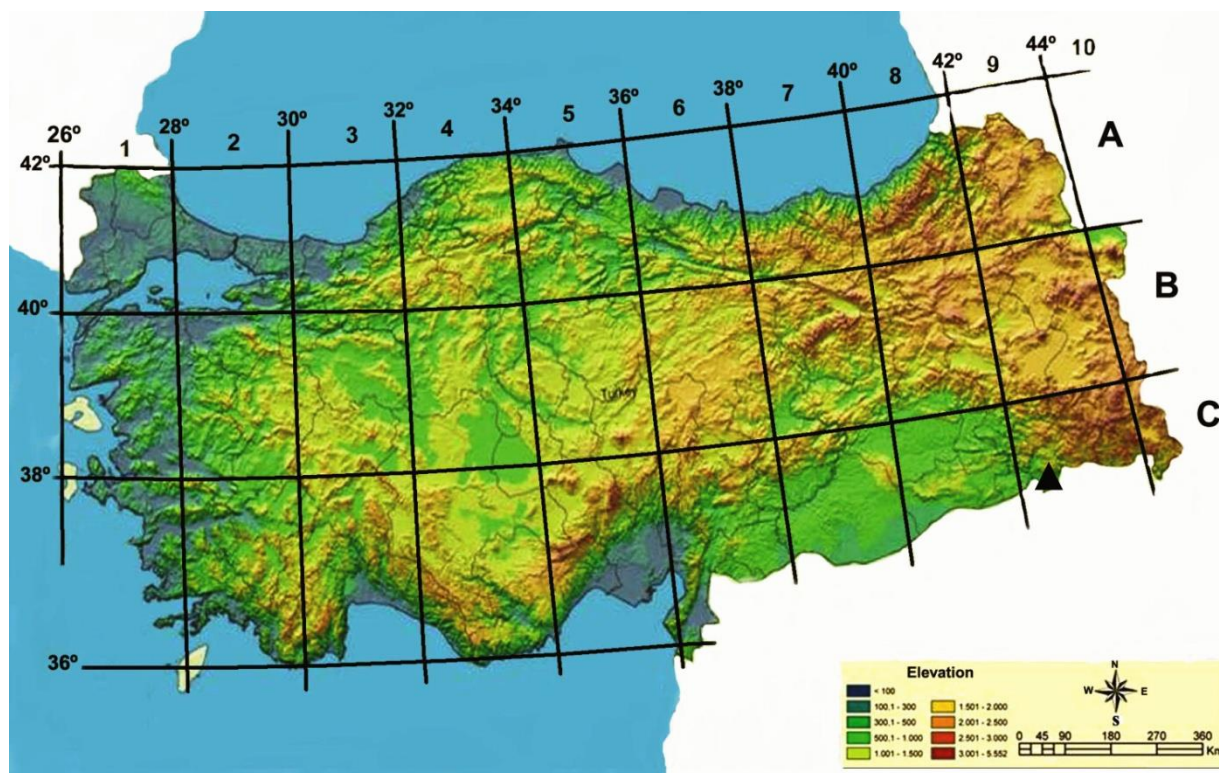


Fig. 1. Distribution map of *Salvia reuteriana* (▲) in Turkey.

## RESULTS

*Salvia reuteriana* Boiss. Pl. Or. Nov. Ser. 1, 5: 10 (1844), (fig. 2).

Typus: Aucher-Eloy 5205, holotypus G!

Perennial herbs with a woody rootstock at the base, stems erect, 20-100 cm, branched above, densely eglandular pilose to tomentose below, densely glandular pilose above. Leaves simple,  $\pm$  thin-textured, ovate-oblong to suborbiculate, 5-27 cm long, 3-13 cm wide, cordate to rotundate, densely adpressed eglandular-pilose, or sessile glandular margins irregular, serrate to erose. Petiole 3-15 cm long. Inflorescence panicle, densely glandular pilose. Verticillasters 2-6-flowered, clearly distant, internodes 2-4 cm. Bracts ovate, acuminate, 15-28 $\times$ 14-25 mm, eglandular-pilose, or sessile glandular, membranaceous, yellowish-green; bracteoles absent. Pedicels 2-3 mm, glandular hairy, rigid, erecto-patent. Calyx tubular, 18-23 mm long, 4-5 mm diameter, scarcely expanding in fruit 25-30 mm long, covered by capitata glandular hairs and some sessile glands, pilose, teeth spiny; upper lip tridentate, less spiny in fruit. Corolla white, 20-33 mm;

tube straight below, slightly widening above, 15-23 mm; upper lip falcate, non-squamulate. Stamens 2, staminal connectives clearly longer than filaments; filaments 2.6-3.8 mm, fertile anthers 1.2-1.8 mm, upper thecae 1.2-1.6 mm. Style glabrous 18-34 mm long, exerted from corolla lips and divided in 2 parts at apex. Nutlets 3  $\times$  2.8 mm, subsphaerical.

**Examined specimen:** TURKEY. C9 Şırnak: Cizre Province, Gabar Mountain, Open oak forest and stony slopes, 1701 m, 37°31'26" N, 42°08'20" E, coll. 5 May 2014, M. Firat 30631 (VANF, Herb. M. Firat).

**Habitat:** Open oak forest and stony slopes, 500-2800 m.

**Phenology:** Flowering from April to May and fruiting from July to August.

**General distribution:** Iraq, Iran and Turkey.

**Vernacular name:** *Salvia reuteriana* is called as "Ça gabar" by the local people of the Şırnak province.

## ACKNOWLEDGEMENTS

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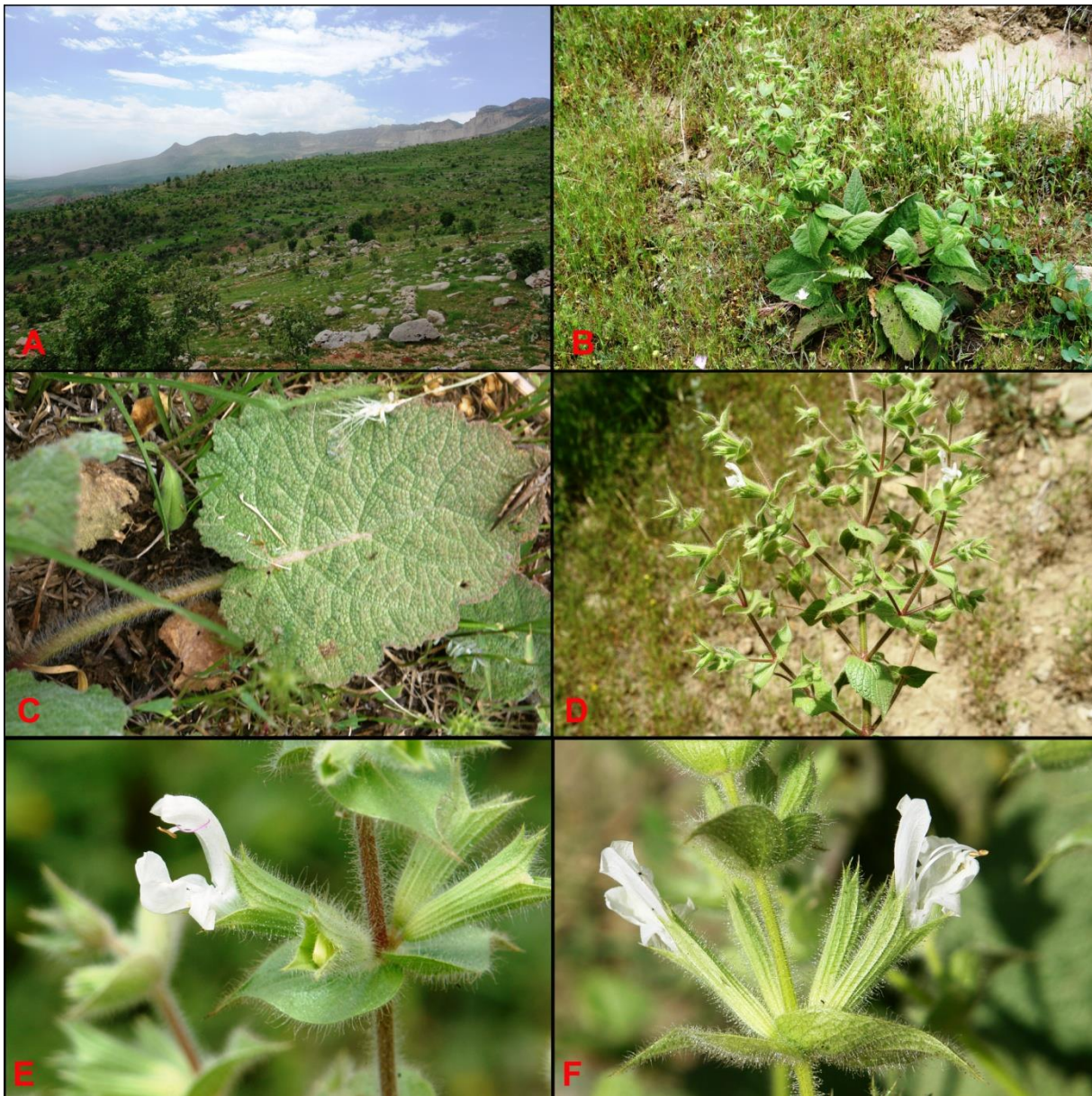


Fig. 2. *Salvia reuteriana*: A. Gabar mountain; B, habitus; C, basal leaf; D, E, F, flowers.

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