

MICROMERIA PERSICA BOISS. (LABIATAE): A NEW RECORD FOR TURKEY

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S U M M A R Y

Micromeria persica Boiss. (Labiatae), is a new record for the Flora of Turkey in Hatay province. Illustration and description of the new species are given based on mainly examined specimens and compared with allied species.

Ö Z E T

Hatay'dan toplanan *Micromeria persica* Boiss. (Labiatae) türü Türkiye Florası için yeni bir kayıttır. Bu türe ait tanımlama ve çizimler incelenen örneğe göre yapılmış ve ilgili taksonla karşılaştırması yapılmıştır.

Key words: *Micromeria persica* Boiss., new record, Turkey

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INTRODUCTION

The genus *Micromeria* Benth. (Labiatae) comprises about 90 species in the world (1). It is represented by 14 species of which 6 are endemic (endemism 42.9%) in Turkey (2). *Micromeria* species are usually collected for use as herbal tea in Turkey by local people. The local names of *M. graeca* (L.) Benth. ex Reichb. ssp. *graeca* is "Boğuncuk Çayı" in Hatay/Yayladağı district (3); *M. myrtifolia* Boiss. is called "Adaçayı" in Hatay province.

During collecting trip of the Ph.D thesis titles Pharmaceutical Botanical Investigations on the Species Used as "Kekik" in Turkey which is carried out by one of the authors by N. Sadıkoğlu (4-7), some *Micromeria* specimens collected from Habib-i Neccar mountain that were identified as *Micromeria persica* Boiss..

Herbarium specimens are housed in ISTE (Herbarium of Istanbul University Faculty of Pharmacy). SEM photographs of examined specimens are taken in University of İnönü.

Micromeria persica Boiss., Diagn. Pl. Or. Nov. Sér. 1, 7:48 (1846) (Figure 1-5)

Syntypes: Persia australi Kotschy 882, W; Aucher-Eloy 5190, photo! (8)

Suffruticose perennial, 15-20(-30) cm tall. Stems slender, fragile and numerous, hirsute, recurved-hairy. Leaves 5-7 x 1-2,5(-3) mm, oblong-lanceolate, subsessile or sessile, shortly revolute, acute, upper surface hairy or subglabrous, lower surface shortly hirsute, mid-vein long hirsute, almost patent. Inflorescence 5-10 cm, lax. Verticillasters subglobose, cymules subumbellate, pedunculate, 3-5-flowered, flowers pedicellate. Bracts very similar to leaves, ovate oblong, acute, hairy as leaves. Bracteoles subulate-lanceolate, longer than pedicels. Calyx sub-bilabiate 3-3.5 mm, hispid-plumose on veins and teeth, throat shortly bearded, teeth shorter than tube, 1-1.5 mm, sub-lanceolate, tube cylindrical. Corolla pinkish 5-6 mm, ± densely subadpressed hairy. Nutlets obviously blackish, ovate-oblong, obtuse, 1(-1.5) mm.

Examined specimens: Turkey, C6 Hatay: Antakya, Habib-i Neccar Mountain, slopes, N 37° 33' 03.5" – E 36° 08' 07.2", 250 m, 28.vi.2004, N. Sadıkoğlu, ISTE 81697! *ibid.*, 31.vii.2005, N.Sadıkoğlu & M.Keskin 4470, ISTE 83175!, St. Pierre's church, N 36° 11' 07.2" – E 36° 09' 46.7", 186 m, 31.vii.2005, N.Sadıkoğlu & M.Keskin 4455, ISTE 83192!

Habitat: It grows with *Micromeria myrtifolia* Boiss., *M. graeca* (L.) Benth. ex Reichb. ssp. *graeca*, *M. congesta* Boiss. & Hausskn. ex Boiss., *M. fruticosa* (L.) Druce ssp. *brachycalyx* P.H. Davis, *Satureja thymbra* L., *Thymbra spicata* L. ssp. *spicata*,

Ballota saxatilis Sieber ex J. & C. Presl, *Origanum syriacum* L. var. *bevanii* (Holmes) Ietswaart, *Sarcopoterium spinosum* (L.) Spach, *Trifolium scutatum* Boiss., *T. fragiferum* L. var. *pulchellum* Lange, *Erica manipuliflora* Salisb. etc.

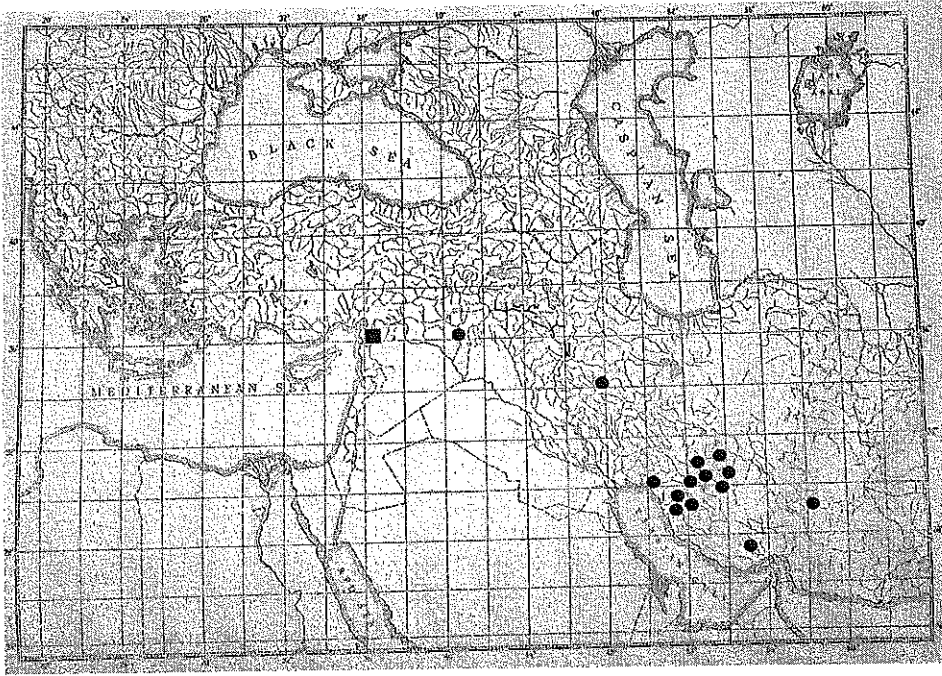


Figure 1. ● Distribution of *Micromeria persica* Boiss. ■ New locality in Turkey

RESULTS AND DISCUSSION

In addition of *Micromeria persica* Boiss., the number of *Micromeria* species in Turkey have become to 15 with *M. persica* Boiss.. The specimen of the locality is maccie shrubs and many specimens are observed in the same area.

Morphological differences between *M. myrtifolia* Boiss. and *M. persica* Boiss. are summarised in the Table 1.

Table 1: The comparison of *Micromeria persica* Boiss. and *M. myrtifolia* Boiss..

Species Characters	<i>M. persica</i>	<i>M. myrtifolia</i>
Leaves	5-7 x 1-2,5(-3) mm, oblong-lanceolate, acute, upper surface hairy or subglabrous, lower surface shortly hirsute, mid-vein long hirsute, almost patent, subsessile or sessile, shortly revolute.	(5-)7-11 x (1.5-)3-5.5 mm, ovate to elliptic, pubescent to shortly hirsute overall, petiole c.1 mm.
Inflorescens	5-10 cm, lax.	(6-)10-20 cm, usually lax.
Verticillasters	subglobose, cymules subumbellate, pedunculate, 3-5-flowered.	densely globose-hemispherical and typically many flowered, cymules subsessile.
Bracteoles	subulate-lanceolate, longer than pedicels, c.as long as calyx tube.	linear-subulate, typically c.as long as calyx tube.
Flowers	pedicellate.	subsessile.
Corolla	pinkish 5-6 mm.	mauve or pink c.5 mm.
Nutlets	deep and long cleft at surface; ridges thick.	shallow and ± small cleft at surface; ridges ± thick.
Starch grains	like golf ball.	coarse reticulate, ± deep hole.

Identification key for the *Micromeria* species grown Habib-i Neccar and St. Pierre's mountain:

1. Leaves 7-35 x 6-15 mm, flat, usually obscurely dentate or dentate, ovate to orbicular

2. Inflorescens dense and pedicels not easily seen; floral leaves mostly shorter than verticillasters; verticillasters lax; nutlets glandular *M. congesta*

2. Inflorescens loose and pedicels usually easily seen; floral leaves 1.5 x verticillates; verticillates dense; nutlets glabrous *M. fruticosa* ssp. *brachycalyx*

1. Leaves 5-12 x 1-5.5 mm, revolute, entire, elliptic-lanceolate

3. Calyx teeth subulate usually curved *M. graeca* ssp. *graeca*

3. Calyx teeth triangular-lanceolate usually porrect

4. Inflorescens globose-hemispherical many flowered; cymules and flowers subsessile; *M. myrtifolia*

4. Inflorescens loose only 3-5-flowered; cymules subumbellate, pedunculate; flowers pedicellate *M. persica*

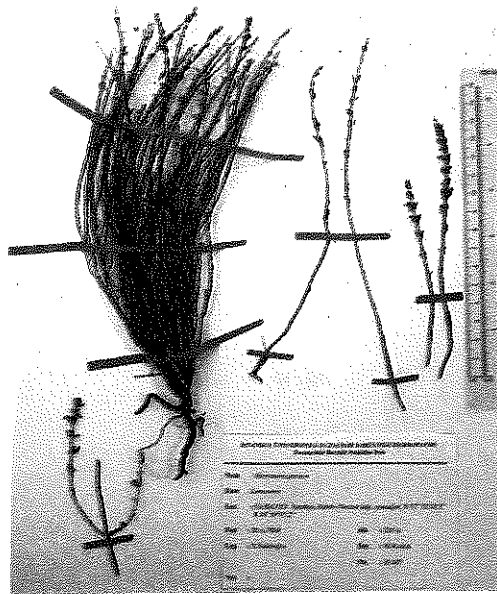
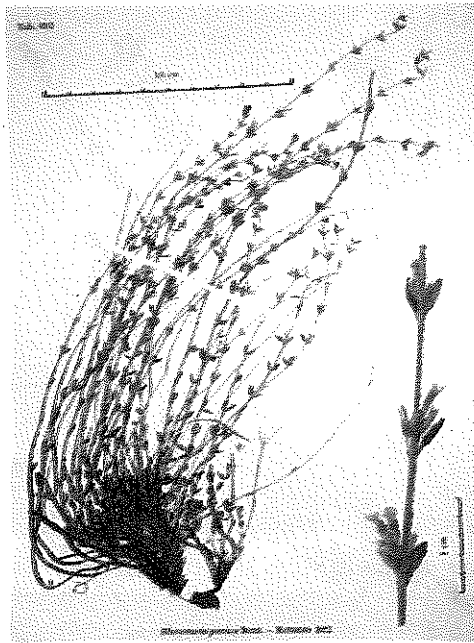


Figure 2. *M. persica*- Iranian specimen (7, above) and ISTE herbarium sheet (below)

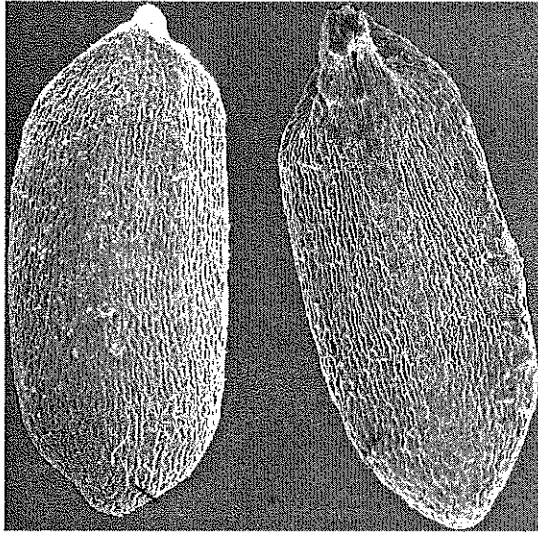


Figure 3: General view of nutlets in SEM: *M. myrtifolia* (left) b-*M. persica* (right) x 85

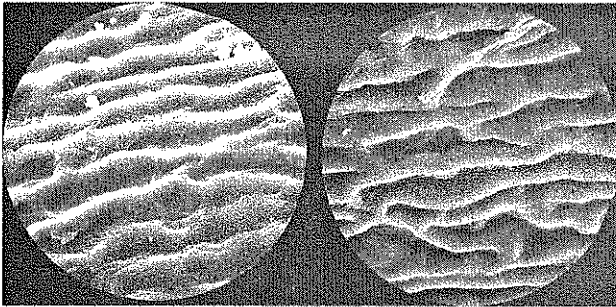


Figure 4: Detailed view of nutlet surfaces in SEM: *M. myrtifolia* (left) b-*M. persica* (right) x 750

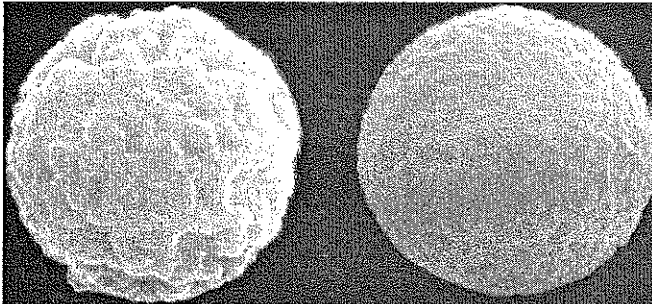


Figure 5: General view starch grains in SEM: *M. myrtifolia* (left) b-*M. persica* (right) x 10.000

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