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Research Note

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A New Record for the Flora of Turkey: *Crambe hispanica* L. (Brasssicaceae)

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Abstract: *Crambe hispanica* L., collected during the floristic study of Anamurium Antique City (Anamur, Mersin province), is reported as a new record for the flora of Turkey. The new record is described and illustrated, and a distribution map is presented.

Key Words: Cruciferae, *Crambe hispanica*, new record, Anamur, Turkey

Türkiye Florası için Yeni Bir Kayıt: *Crambe hispanica* L. (Brasssicaceae)

Özet: *Crambe hispanica* L., Anamurium Antik Kentinde (Mersin–Anamur) yapılan floristik çalışma sırasında Türkiye Florası için yeni bir kayıt olarak bildirilmiştir. Yeni kaydın (*Crambe hispanica*) tanıtıcı özellikleri, resmi ve bunun yanı sıra yayılış haritası verilmiştir.

Anahtar Sözcükler: Cruciferae, *Crambe hispanica*, yeni kayıt, Anamur, Türkiye

Introduction

Specimens of *Crambe* L. were collected during the floristic study of Anamurium (Anamur, Mersin province). At first, we were not able to identify these specimens using the *Flora of Turkey* (Hedge 1965, Davis et al., 1988, Güner et al., 2000). Subsequently, the plant specimens were identified as *Crambe hispanica* L. according to *Flora Europaea* (Ball, 1964), *Flora Iranica* (Hedge, 1968), *Flora Palaestina* (Zohary, 1966), *Flora Iberica* (Gomez Campo, 1993), and *Flora Hellenica* (Tan, 2002). After thorough examinations of all the specimens and the relevant literature (Greuter et al., 1986; Khalilov, 1993; Özhatay et al., 1999; Özhatay & Kültür, 2006; Prina, 2000; Yıldırımlı, 2001; Tan, 2002; Donner, 2007), it was decided that this species is a new record for Turkey.

Crambe hispanica L., Sp. Pl. 2: 671 (1753).

Syn.: *Crambe glabrata* DC., Prodr. 1: 226 (1824). *C. hispanica* L. var. *major* Moris, *Fl. Sard.* 1: 110 (1837). *C. hispanica* L. var. *glabrata* (DC.) Cout., Fl. Portugal: 272 (1913). *Crambe gracillima* Rech. fil., *Phyton* 3: 45 (1951).

Lectotype: Herb. Linn. No. 849.5 (LINN)

Provenance: Habitat in Hispania.

Annual herbs, 25-70 cm Stem erect, ribbed, densely hispid at base, sparsely hairy and branched on the upper half. Basal and lower leaves with petiolate, lyrate-pinnatisect, terminal lobe reniform to heart-shaped, irregularly crenata, and 1-2 pairs of lateral lobes. Upper leaves frequently undivided, sessile to petiolate. All

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leaves densely hispid on both surfaces. Sepals 1.5-2 mm. Petals white, spathulate, 3-3.5 mm long, shortly clawed. Fruiting pedicels 5-7 mm, slender, glabrous. Inner filaments with teeth near apex, anthers c. 0.5 mm. Lower segments of silicula c. 1 mm; upper segment 2-2.5 mm, globose (Figure 1).

C4 Mersin; Anamur District, Anamurium Antique City, stony place and roadside, 0-5 m, 17.05.2007, *E.Yıldıztugay* 1230. The plant specimens are deposited in KNYA Herbarium.

Discussion

The genus *Crambe* L. is represented in Turkey by five taxa (Hedge, 1965; Davis et al., 1988). The total number of *Crambe* taxa rises to six with the addition of *Crambe hispanica*.

The plant grows in the Mediterranean region of South Europe and North-west Africa (Portugal and Morocco to West Syria) (Tan, 2002). *C. hispanica* grows in a very limited area (in Turkey), where it is under high grazing pressure (Figure 2).

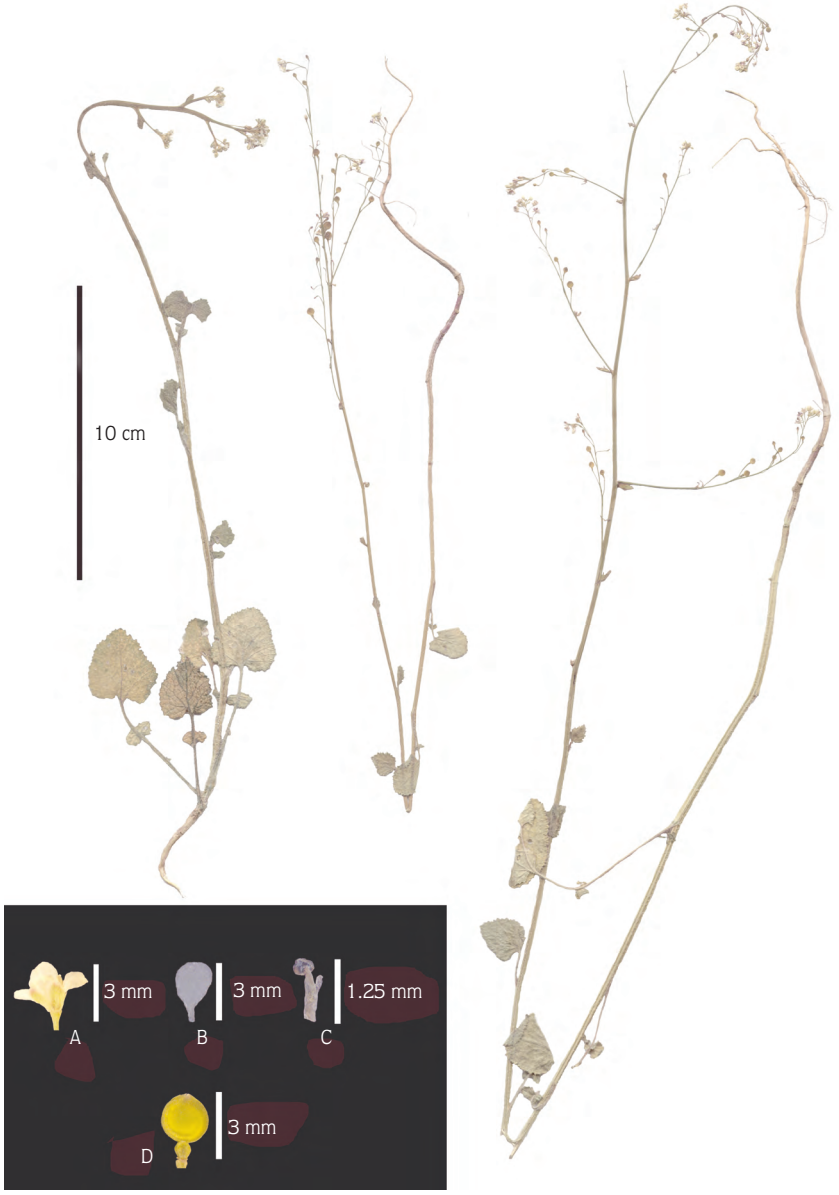

Figure 1. *Crambe hispanica*: A- Flower, B- Petal, C- Stamen (inner filament with teeth), D- Fruit.

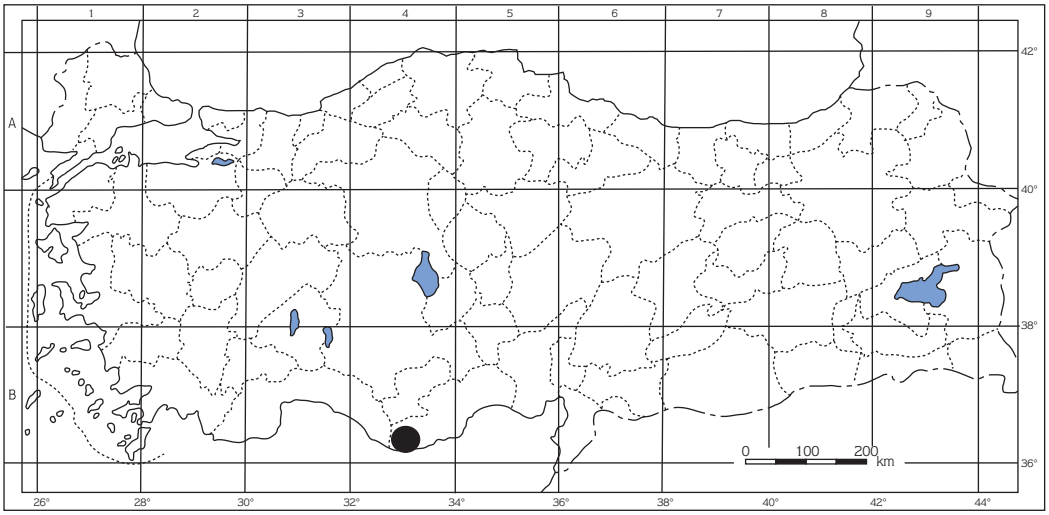

Figure 2. Distribution map of *Crambe hispanica* in Turkey (●).

Table. Differences in characteristics between *Crambe hispanica* and *C. orientalis* L. var. *orientalis*.

C. hispanica	*C. orientalis* var. *orientalis*
Annual	Perennial
Plant slender	Plant stout
Stem densely hispid haired	Stem glabrous
Leaves densely hispid haired	Leaves scabrous haired

Taxonomically *C. hispanica* is the closest taxon to *C. orientalis* var. *orientalis* distributed in Turkey. It differs from *C. orientalis* var. *orientalis* as indicated in the Table.

The plant grows on rocky and stony places at the seaside. Taxa distributed along with *Crambe hispanica* are as follows: *Sarcopoterium spinosum* (L.) Spach, *Cistus laurifolius* L., *Lupinus varius* L., *Allium neopolitanum* Cyr., *Malcolmia chia* (L.) DC., *Muscari comosum* (L.) Mill., *Verbascum levanticum* I.K.Ferguson, and *Ononis variegata* L.

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References

Ball PW (1964). *Crambe* L. In: Tutin TG, Heywood VH, Burges NA, Valentine DH, Walters SM & Webb DA. *Flora Europaea*, Vol. 1, pp. 344-345. Cambridge: Cambridge University Press.

Davis PH, Mill RR & Tan K (eds) (1988). *Flora of Turkey and the East Aegean Islands,* Vol. 10, (Supplement 1), pp. 31. Edinburgh: Edinburgh University Press.

Donner J (2007). Türkiye bitkileri yayılış haritaları. In: Çolak AH (ed.), *Türkiye Bitkileri Yayılış Haritaları*, pp. 97, Ankara: Lazer Ofset Matbaa.

Gomez Campo C (1993). *Crambe* L. In: Castroviejo S et al., eds. *Flora Iberica* 4: 429-431, Real Jardin Botanico. Madrid: CESIC.

Greuter W, Burdet HM & Long G (1986). Med-Checklist 3. *Conservatoire et Jardin Botaniques de la Ville de Geneve*.

Güner A, Özhatay N, Ekim T & Başer KHC (eds) (2000). *Flora of Turkey and The East Aegean Islands*, Vol. 11, (Suppl. 2), pp. 527. Edinburgh: Edinburgh University Press.

Hedge IC (1965). *Crambe* L. In: Davis PH (ed.). *Flora of Turkey and the East Aegean Islands*, Vol. 1, pp. 272-273. Edinburgh: Edinburgh University Press.

Hedge IC (1968). *Crambe* L. In: Rechinger KH (ed.). *Flora Iranica*. No: 57/28. 2. pp. 45-48. Akademische Druck–u. Verlagsanstalt Graz-Austria.

Khalilov II (1993). Conspectus of the genus *Crambe* (Brassicaceae). *Bot. Zhurn.* 78: 107-115.

Özhatay N, Kültür Ş & Aksoy N (1999). Check-List of additional taxa to the supplement Flora of Turkey II. *Turk J Bot* 23: 151-169.

Özhatay N & Kültür Ş (2006). Check-list of additional taxa to the supplement Flora of Turkey III. *Turk J Bot* 30: 281-316.

Prina A (2000). A taxonomic revision of *Crambe*, sect. *Leptocrambe* (*Brassicaceae*). *Bot J Linn Soc* 133: 509-524.

Tan K (2002). *Crambe* L. In: Strid A & Tan K (ed.). *Flora Hellenica*, Vol. 2, pp. 294. Koeltz Scientific Books.

Yıldırımlı Ş (2001). The chorology of the Turkish species of *Brassicaceae, Buddlejaceae* and *Buxaceae* families. *Ot Sist Bot Derg* 8: 141-171.

Zohary M (1966). *Crambe* L. In: *Flora Palaestina* 1: 322-323. Jerusalem: The Israel Academy of Sciences and Humanities.