

A New Record for Turkey: *Lepidium pinnatifidum* Ledeb. (Brassicaceae)*

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Abstract: *Lepidium pinnatifidum* Ledeb. (Brassicaceae) is recorded for the first time (B9 Muş) for the flora of Turkey. The diagnostic characters of *L. pinnatifidum* are described and its ecology and conservation are discussed.

Key Words: Brassicaceae, *Lepidium*, new record, Turkey

Türkiye İçin Yeni Bir Kayıt: *Lepidium pinatifidum* Ledeb. (Brassicaceae)

Özet: *Lepidium pinnatifidum* Ledeb. (Brassicaceae) türü Türkiye'den (B9 Muş) ilk defa kaydedilmiştir. *L. pinnatifidum*'un tanıttıcı özellikleri, yetiştirme ortamı ve koruma durumu belirtilmektedir.

Anahtar Sözcükler: Brassicaceae, *Lepidium*, Türkiye, yeni kayıt

Introduction

During floristic investigations, the authors collected some *Lepidium* L. specimens from around Kırmızı Tuzla (Muş). Further studies on the specimen inferred that it is closely related to *L. ruderale* L. given by Hedge in the *Flora of Turkey* (1965). There were some discrepancies (e.g., pubescent pedicel, basal leaves, and fruit apex) between the description and the specimens (Figure 1); hence it was compared with the *Lepidium* account in *Flora Iranica* (Hedge, 1968). Eventually, using the generic account in *Flora Iranica* (Hedge, 1968), *Flora Europaea* (Vasconcellos, 1964), and *Flora of the USSR* (Busch, 1970), the specimens were identified as *Lepidium pinnatifidum* Ledeb. It was a new record for the flora of Turkey. This record is not surprising since this species also grows in nearby Iran and the Caucasus.

Lepidium pinnatifidum Ledeb., Fl. Ross. 1: 206 (1842); Thellung, Gatt. Lepidium 140; N. Busch in Fl. Cauc. Crit. III, 4 (1907) 103. (Figure 1).

Syn.: *Lepidium neubaueri* Rech. f., Anz. Math.-Nat. Kl. Österr. Akad. Wiss. 1954, 7: 58: (1954), syn. nov. System.

Type: Russia, Hab. In regione Astrachanensi, Blume, LE.

The following description of the species is based on the specimens collected from around Kırmızı Tuzla (Muş).

Annual herb, 13-26 cm, simple or erect or ascending branched from about the base. Stem with simple short hairs. Radical leaves pinnatifid, lobes divergent, notched-dentate, narrowly oblong, cauline leaves usually elliptic, oblanceolate, irregularly dentate, 2-4 cm long, upper usually entire or sparsely slightly toothed, linear or narrowly oblanceolate or sub-spathulate. Sepals ovate or elliptic-lanceolate, white at margin, apetalous. Stamens 2. Fruiting racemes rather loose, with short hairs; pedicels thin, densely pubescent, usually longer than silique. Silique elliptic, oval elliptic or suborbicular, entire or obscurely notched at apex, sparsely pubescent, 2-2.75 × 1.75-2.2 mm; stigma 0.1 mm. Seeds narrowly ovate-elliptic, flattened, slightly tubercled, dark yellow or dark rufous, 1-1.5 × 0.5-0.75 mm. Flowering: May- June, fruiting: June. Saline places, 1500-1650 m.

Turkey. North-east Anatolia. B9 Muş: Bulanık, north-west of Şatırlar village, around Kırmızı Tuzla, saline

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places, 03 vi 2006, 39° 17' 377" N 42° 06' 329" E, 1592 m, L.BEHÇET & F.ÖZGÖKÇE and M.ÜNAL (LFM 742-in flower), 05 vi 2006 (LFM 792-in fruit).

The herbarium specimens are deposited at VANF.

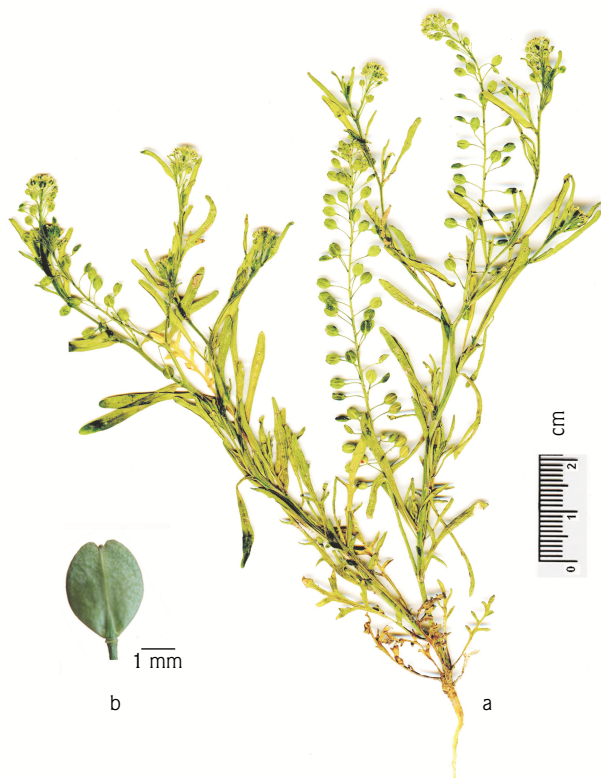


Figure 1. *Lepidium pinnatifidum* Ledeb. a. habitus; b. pedicel and fruit

Discussion

L. pinnatifidum, the distribution of which was not recorded so far in Turkey, is distributed in Europe, C. Asia, Himalayas, the Caucasus, and in parts of Iran

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adjacent to north-eastern Turkey (Vasconcellos, 1964; Busch, 1970; Greuter et al., 1986). For that reason, its distribution in the north-east of Turkey is not surprising.

The number of species of *Lepidium* Ledeb. in Turkey (Hedge, 1965; Davis et al., 1988; Güner et al., 2000; Yıldırım, 2001; Özhatay et al., 2006) now reaches 14 with the addition of *L. pinnatifidum*. The closest species to *L. pinnatifidum* Ledeb. among Turkish *Lepidium* is *L. ruderale* L. It differs from *L. pinnatifidum* as indicated below:

Characters	<i>L. pinnatifidum</i>	<i>L. ruderale</i>
Pedicel	densely pubescent	glabrous
Basal leaves	pinnatifid	2-3-pinnate, long-petiolate
Fruit apex	emarginated	acute

L. pinnatifidum grows in a very limited area (in Turkey), where it is under high grazing pressure and erosion effect. The recommended IUCN Red Category is Vulnerable (VU (B1a)) (IUCN, 2001). In its locality, the following taxa exist abundantly: *Euclidium syriacum* (L.) R.Br., *Crypsis aculeata* (L.) Aiton, *C. schoenoides* (L.) Lam., *Lepidium latifolium* L. *Petrosimonia squarrosa* (Schrenk) Bunge, *Androsace maxima* L., and *Veronica praecox* All.

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