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A New Genus (*Brossardia* Boiss.) Record For Turkey

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Abstract: *Brossardia papyracea* Boiss. (*Cruciferae* / *Brassicaceae*) is recorded for the first time from Turkey. This is also a new genus record (*Brossardia* Boiss.) for Turkey.

Key Words: Flora of Turkey, Van, *Brossardia*, Brassicaceae, new record.

Türkiye İçin Yeni Bir Cins (*Brossardia* Boiss.) Kaydı

Özet: *Brossardia papyracea* Boiss. (*Cruciferae* / *Brassicaceae*) Türkiye'den ilk defa kaydedilmektedir. Aynı zamanda bu, Türkiye için yeni bir cins kayıdır.

Anahtar Sözcükler: Türkiye Florası, Van, *Brossardia*, Brassicaceae, yeni kayıt.

Introduction

During his floristic investigations, the second author collected many interesting specimens from the province of Van (East Anatolia). He sent specimens of *Aethionema* R. Br. to the first author, who has been studying Turkish *Aethionema* species. During the first attempt identification of these materials, the first author realised that one of the specimens might belong to a different genus. After working on this subject in details, she decided that this species must be *Brossardia papyracea* Boiss., which is hitherto unknown from the Turkish territories.

During a visit to Edinburgh herbarium, the syntype of *Brossardia retusa* Boiss. (1) which is synonymous with *B. papyracea*, the other specimens of *B. papyracea* were checked and examined. The records of *B. papyracea* from Iran, Iraq and Turkey were compiled from the published data (2, 3) and the materials were studied. We have redescribed *Brossardia papyracea* below making use of previous descriptions (2-4) and the materials examined.

Brossardia papyracea Boiss. in Ann. Sci. Nat. Ser. 2, 16: 380 (1841). Syns.: *B. papyracea* Boiss. var. *kotschyi* Boiss., Diagn. Ser. 1, 8: 41 (1849). *B. retusa* Boiss., Fl. Or. 1: 336 (1867).

Glabrous perennial, erect, usually unbranched, 10-30 cm in flower, elongating slightly in fruit. Basal leaves entire, spatulate, petiolate, petiolar remains usually persisting; cauline leaves ovate to ovate-lanceolate, cordate, amplexicaul, auriculate, acute at apex. Calyx bisaccate at the base; sepals 4.5-5 mm, membranous margined. Petals spatulate, rose-purple, 8-10 x 2-3.5 mm. Filaments free, linear, outer 4.5-5 mm, inner 5-5.5 mm. Ovary oblong, adpressed; style apiculate, ± as long as ovary. Fruiting pedicels 4-14 mm, ± deflexed. Silicula broadly ovate or circular, papery, broadly winged, bilocular, not or scarcely dehiscent, reticulately nerved, (16-)30-35 x (13-)30-40 mm; wings 3-7 mm; sinus 0-2 mm; style 0-1.5(-3.5) mm. Seed 1-3, orbicular, c. 4 x 3 mm; radicle accumbent. Fl. April-May, Fr. June onwards. Rocky mountain slopes, on limestone, serpentine, in oak forest, among thorn-cushion shrubs or on open mountainsides, 1300-2350 m.

Turkey. East Anatolia. B9 Van: Gevaş, west slopes of Artos mountain, 2000-2350 m, 25 v 1997, M. Koyuncu, N. Demirkuş, A. Kaya, (M. K. 11712).

The distribution based on this record and previously published records (2, 3) is given in figure 1. The herbarium specimens are deposited at GAZI.

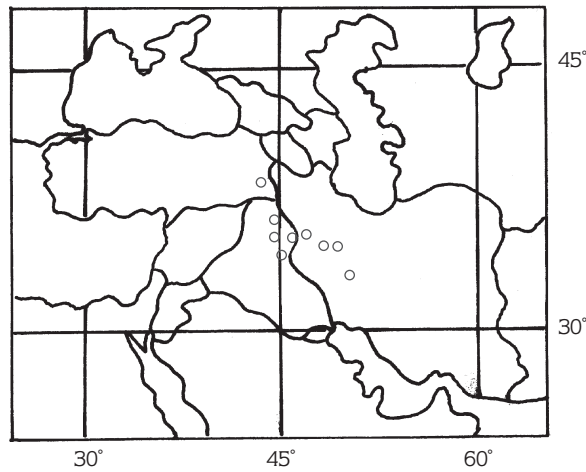


Figure 1. Global distribution of *Brossardia papyracea* Boiss.

Result and Discussion

According to Schulz's classification, the *Cruciferae* family has 360 genera throughout the world (5). The family is distributed most abundantly in temperate and arid regions of the northern hemisphere. The important areas of diversity are in Southwest Asia, and Central Asia, around the Mediterranean. The Irano-Turanian region has about 150 genera, and the rate of generic endemism is very high, 40 %, (6). The *Cruciferae* is represented by 86 genera in Turkey (7-9). With the new record *Brossardia* Boiss., this number reaches 87.

The monotypic genus *Brossardia* is one of the endemic genera of the *Cruciferae* in the Western Asiatic subregion

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of the Irano-Turanian region (10). It is distributed in S.W. Iran, N. Iraq and E. Turkey. *B. papyracea* was originally described by Boissier in 1841 from Ispahan (Iran). The genus was also described by Boissier at the same time and dedicated to Josef Brossard, the author of a noted etymological dictionary of plant genera.

Brossardia is close to the genera *Aethionema* and *Thlaspi* L. taxonomically, which belong to the tribe *Lepidieae*. It differs from the *Aethionema* in its free and linear filaments; larger, papery, broader-winged, pendant fruits; and orbicular seeds. It differs from the *Thlaspi* in its larger, papery, broader-winged, pendant fruits; orbicular and fewer seeds.

B. papyracea is not common in the area (Van Province) and its natural habitat is under high grazing pressure. The recommended IUCN Red Data Category is Vulnerable (VU) (11).

In its locality, the following taxa were dominant at the time of collection: *Aethionema grandiflorum* Boiss. & Hohen., *Ae. trinervium* (DC.) Boiss., *Ranunculus munzurenensis* S. Erik & Yıldırım, *Hesperis persica* Boiss., *Fritillaria minima* Rix, *Tulipa humilis* Herbert, *T. armena* Boiss., *Puschkinia scilloides* Adams and *Corydalis rutifolia* (Sibth. & Sm.) DC. subsp. *kurdica* Cullen & Davis.

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