

A New Generic Records For Turkey

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Abstract: The monotypic *Clastopus* Bunge ex Boiss. (*Cruciferae*) is recorded for the first time from south-east Turkey. The diagnostic characters of *C. vestitus* (Desv.) Boiss. are described and its ecology and conservation discussed.

Key Words: Flora of Turkey, Van, *Clastopus*, *Cruciferae*, new record

Türkiye İçin Yeni Bir Cins Kaydı

Özet: Monotipik bir cins olan *Clastopus* Bunge ex Boiss. (*Cruciferae*) Türkiye'den ilk defa kaydedilmektedir. *C. vestitus* (Desv.) Boiss.'in tanıttıcı özellikleri, yetiştirme ortamı ve koruma durumu belirtilmektedir.

Anahtar Sözcükler: Türkiye Florası, Van, *Clastopus*, *Cruciferae*, yeni kayıt

Introduction

During floristic investigations the first author collected many interesting specimens belonging to *Cruciferae* from Başet Mountain (Van, East Anatolia, Turkey). Initial attempts to name one specimen using the Flora of Turkey (Davis, 1965; Davis, et al., 1988; Güner et al., 2000) were not successful. It was eventually concluded that it must be *Clastopus vestitus* (Desv.) Boiss. var. *eriocarpus* Blakelock, not previously recorded from Turkey.

Clastopus Bunge ex Boiss. is monotypic and *C. vestitus* has two varieties: *C. vestitus* (Desv.) Boiss. var. *vestitus*, with glabrous fruits, and *C. vestitus* var. *eriocarpus* Blakelock, with canescent fruits. The variety *vestitus* is confined to Iran (Townsend, 1980); the variety *eriocarpus* was known only in the mountains above the tree line in N Iraq (Rowanduz, Sulaimaniya and Penjwin districts) and in West and Central Iran (around Nahavand and on Kharzan Mountain) (Townsend, 1980; Rechinger, 1968).

***Clastopus* Bunge. ex Boiss.**

Caespitose perennial herb, ± densely tomentose with stellate and irregularly branched hairs. Leaves simple, entire, attenuate below. Flower yellow or purple (in

Turkey purple), in terminal racemes. Sepals erect, ± fused, finally free and persistent around the ripe fruit, the inner not saccate at the base. Petals cuneate-spatulate, entire or retuse, tapering to a long claw. Inner filaments broader, toothed near the apex, the shorter outer filaments toothed at about halfway. Ovules 4-9, but two of them mature as seed only; style slender, stigma shortly bilobed with decurrent lobes. Silicula inflated but firm, slightly compressed, the valves with fine median nerves, septum thin and membranous. Radicle accumbent (description as given by Townsend, 1980).

Clastopus vestitus* (Desv.) Boiss. var. *eriocarpus Blakelock in Kew Bull. 10: 529 (1956); Rewi in Dep. Agr. Iraq Tech. Bull. 14: 29 (1964).

C. erubescens Hausskn. in Mitt. Thür Bot. Ver. N. F. 15: 6 (1900) nomen nudum, ex Bornm., Feddes Rep. 3: 114 (1906); Rech fil. in Fl. Iran 57: 140 (1968).

Type: Iran, Kuh-i Garri prope Nahavand, STR., JE.

Dwarf, compact perennial herb, 3-10 (-20) cm, with a tough woody rootstock and numerous lateral sterile rosettes at the densely foliose base, thickly clad below with the withered remains of previous years' leaves; stems numerous, simple and erect, whole plant densely tomentose with short stellate and long unequally

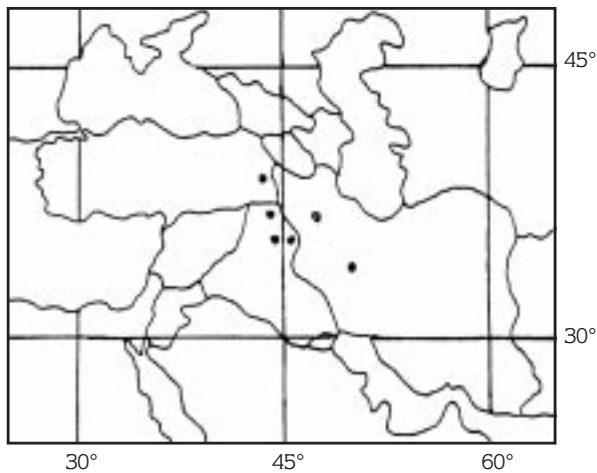


Figure 1. Global distribution of *Clastopus vestitus* var. *eriocarpus*.

branched whitish hairs. Leaves linear to linear-oblongate, 20–40 x 1–3.5 mm, subacute, the stem leaves generally longer. Racemes few-flowered, elongating in fruit; pedicels 10–15 (–20) mm, patent, densely tomentose. Sepals erect, narrowly to lanceolate-oblong, scarious margined to 0.3 mm width, dorsally tomentose, initially ± fused above (often free at the base), (–6) 7–12 mm, ± accrescent and inflated in fruit. Petals purple (in Turkey), yellow or yellow with a purple base, 13–18 mm, lamina up to 4 mm in width. Silicula ovoid 6–8 mm, terminated by the 5 mm style (in Iran and Iraq style 1–2 (–3) mm), inflated but firm, persistently stellate–canescent (in the variety *vestitus* fruit glabrous), ± enclosed by the persistent calyx; seed solitary in each loculus, (the other ovules immature) suborbicular compressed, c. 3 mm, smooth and brownish. Fl. & Fr. May–June. Rocky mountain slopes, on rocky, stony barren soils, in cushion formation, 1600–2500 m.

Turkey, East Anatolia, B9 Van: Gürpınar district, south-east slopes of Başet Mountain above Koçğüden village, 2200–2500 m, L.Behçet & M.Ünal (B 6483).

The herbarium specimens are deposited at VANF and GAZI.

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Results and Discussion

The *Cruciferae* were represented by 89 genera in Turkey (Davis, 1965; Davis et al., 1988; Güner et al., 2000). With the new record *Clastopus* (Desv.) Boiss., the total reaches 90. *Clastopus* is close to *Physoptychis* Boiss. and *Farsetia* Turra, of the tribe *Alysseae*. It differs from *Physoptychis* in its firm, hard fruits; non-saccate (inner sepals), persistent sepals; short stellate and long unequally branched whitish hairs on the stems, leaves and calyx. It differs from *Farsetia* in its hairs on leaves not all medifixed, at least some 3- or more furcate, irregularly branched or stellate; persistent sepals; winged, toothed filaments, inflated, firm slightly compressed silicula.

C. vestitus var. *eriocarpus* grows in a very limited area (in Turkey), where it is under high grazing pressure. The recommended IUCN Red Category is Vulnerable (VU) (Anonymous, 1994). In its locality, the following taxa exist abundantly: *Thymus kotchyanus* Boiss. et Hohen subsp. *kotchyanus*, *Astragalus lineatus* Lam var. *longidens* (Freyn) Matthews, *A. persicus* (DC.) Fisch. & C.A.Mey., *Acontholimon acerosum* (Willd.) Boiss. var. *acerosum*, *Veronica orientalis* Mill. subsp. *orientalis*, *Koeleria cristata* (L.) Pers., *Dactylis glomerata* L. subsp. *glomerata*, *Bromus tomentellus* Boiss., *Centaurea virgata* Lam., *Euphorbia virgata* Waldst. & Kit., *Fritillaria crassifolia* Boiss. & Huet. subsp. *kurdica* (Boiss. & Née) Rix, *Aethionema trinervium* (DC.) Boiss., *Bornmuelleria cappadocica* (DC.) Cullen & Dudley, *Anchonium elichrysifolium* (DC.) Boiss. subsp. *elichrysifolium*, *Pedicularis caucasica* M.Bieb., *Salvia xanthochelia* Boiss. & Benth. *Tulipa humilis* Herb., *Centaurea vanensis* Wagenitz, *Scutellaria orientalis* L. subsp. *sosnowskyi* (Takht.) Fed., *Sanguisorba minor* Scop. subsp. *muricata* (Spach) Briq., *Agropyron cristatum* (L.) Gaertner subsp. *incanum* (Nábelek) Melderis, *Alopecurus textilis* Boiss. subsp. *textilis*, *Potentilla bifurca* L., *Rosularia radiflora* Boriss., subsp. *kurdica* (Bornm.) D.F.Chamb. & Muirhead, *Draba brunifolia* Stev. subsp. *brunifolia*, *Sterigmostemum incanum* M. Bieb., *Thalictrum isopyroides* C.A.Mey.

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