

BROMUS CATHARTICUS AND BROMUS DANTHONIAE VAR. UNIARISTATUS (POACEAE), TWO NEW RECORDS FROM IRAN

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Bromus catharticus Vahl and *Bromus danthoniae* Trin. var. *uniaristatus* Melderis are reported as two new records from Iran. Exact localities based on herbarium specimens are given and geographical distribution of the species are explained.

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Key words. Poaceae, *Bromus catharticus*, *Bromus danthoniae* var. *uniaristatus*, new record, Iran.

گونه *Bromus catharticus* Vahl و واریته *Bromus danthoniae* Trin. var. *uniaristatus* Melderis به

عنوان دو گزارش جدید از ایران

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گونه *Bromus catharticus* Vahl و واریته *Bromus danthoniae* Trin. var. *uniaristatus* Melderis از تیره گندم

به عنوان دو گزارش جدید از ایران ذکر می‌گردند. رویشگاه دقیق این دو گونه بر اساس محل جمع‌آوری نمونه‌های هرباریومی مشخص و پراکندگی آنها در دنیا توضیح داده می‌شود.

Introduction

In a study of the genus *Bromus* L., herbarium materials of Tehran University (TUH) and Research Institute of Forests and Rangelands (TARI) were examined. Among the plants investigated, *Bromus catharticus* Vahl and *Bromus danthoniae* Trin. var. *uniaristatus* Melderis were recognized. As these taxa have not been previously reported from Iran, geographical distribution of the species are explained.

Bromus catharticus Vahl

Lorestan: Khorramabad, 1400 m, Rouhani, 6.7.1971, 23888-TARI.

This plant was mentioned in Manual of the Grasses of the United States (Hitchcock 1950), Flora of Pakistan (Cope 1982) and Flora Palaestina (Feinbrun--Dothan 1986) as *Bromus catharticus* Vahl, in Flora Iranica (Bor 1970) as *Bromus unioides* Kunth, in Grasses of the Soviet Union (Tsvelev 1976) as *Ceratochloa cathartica* (Vahl) Herter and in Flora Europaea (Smith 1980) as *Bromus willdenowii* Kunth. *Bromus unioides* Kunth, *Ceratochloa cathartica*

(Vahl) Herter and *Bromus willdenowii* Kunth are synonymous with *Bromus catharticus* Vahl in Flora Palaestina (Feinbrun-Dothan 1986). The species belongs to Sect. *Ceratochloa* (Beauv.) Griseb. ex Ledeb. A short description of the species is as follows. Annual or biennial; culms erect, to 43 cm tall; sheaths glabrous or pubescent; blades to 23 cm long and to 4 mm wide, glabrous or sparsely pilose; panicle open, to 17 cm long, the branches to 2 cm long; spike late ovate, to 2.5 cm long, 7 flowered, strongly laterally compressed; glumes lanceolate, acuminate, keeled; the lower 8.5 mm long, 5 nerved, the upper 9.5 mm long, 9 nerved; lemmas glabrous, scabrous, lanceolate, acuminate, 14 mm long, 9 nerved, closely overlapping, sharply keeled, awnless or with an awn 1-3 mm long; palea 9 mm long, ciliate on the keels; caryopsis to 7 mm long.

A South American species widely introduced as a winter forage species under the "Rescue Grass", and now found as an escape in most temperate countries (Cope 1982). Wild plants found along roads, on borders of fields (Tsvelev 1976) and in places where there is sufficient humidity in the soil (Bor 1970).



Fig. 1. *Bromus catharticus* (x 0.7); lemma and Palea (x 2.4)

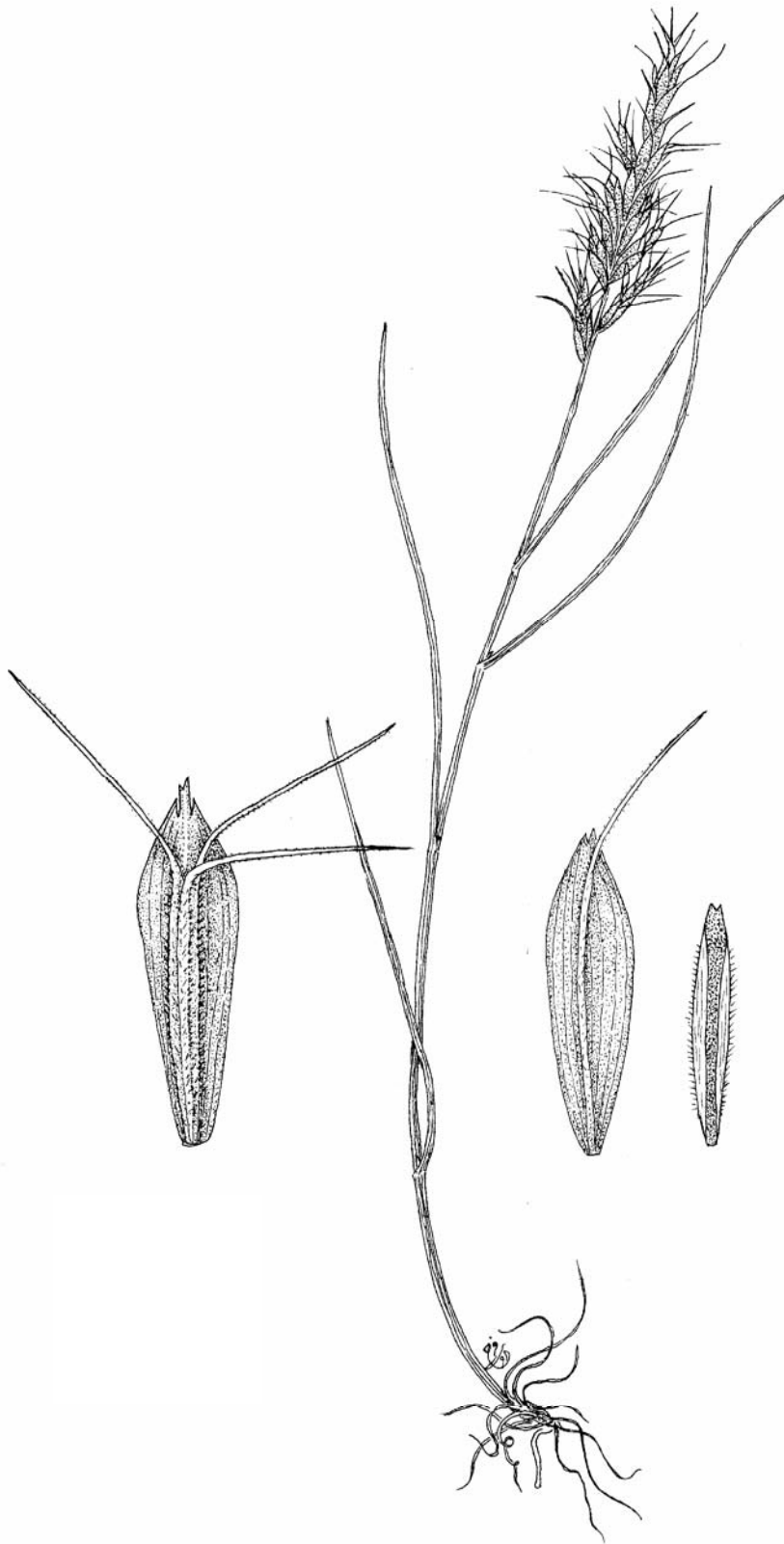


Fig. 2. *Bromus danthoniae* var. *uniaristatus* (x 0.7); lemmas and palea (x 5.2).

The species is native in South America but introduced into many nontropical countries such as India, West Pakistan, South Europe, Caucasus and Central Asia (Bor 1970; Tsvelev 1976).

Bromus danthoniae Trin. var. uniaristatus Melderis

Khuzestan: Mahshahr, road of Ghazaleh Station, 32759-TUH.

According to the descriptions given in Flora Iranica (Bor 1970) and Grasses of the Soviet Union (Tsvelev 1976), the plant is recognized with small spikelets (1.5-2 cm long) and lateral awns very much reduced or absent on lower lemmas.

Its general distribution is Iraq (Bor 1970). It is also found on sands in the southern parts of Karakum (Tsvelev, 1976).

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References

Bor, N. L. 1970: Bromus. In: Rechinger, K. H. (ed.), Flora Iranica. 70: 107-141. -Akademische Druck-U. Verlagsanstalt, Graz-Austria.

- Cope, T. A. 1982: Bromus. In: Nasir, E., Ali, S. I. (eds.), Flora of Pakistan. 143: 559-583. - Herbarium Royal Botanic Gardens Kew, England.
- Feinbrun-Dothan, N. 1986: Flora Palaestina. 4: 184-195. -The Israel Academy of Science and Humanities.
- Hitchcock, A. S. 1950: Bromus. In: Manual of the Grasses of the United States: 31-56 (second edition revised by A. Chase). -United States Government Printing Office Washington.
- Smith, P. M. 1980: Bromus. In: Tutin, T. G., Heywood, V. H., Burges, N. A., Moore, D. M., Valentine, D. H., Walters, S. M., Webb, D. A. (eds.), Flora Europaea. 5: 182-189. -Cambridge University Press.
- Tsvelev, N. N. 1976: Grasses of the Soviet Union. part 1: 298-343. -Nauka Publishers, Leningrad (English translation published by Amerind Publishing Co., New Delhi, 1983).