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New Bromus (Poaceae) Record for the Flora of Iran

¹M. Keshavarzi, ¹N. Khoshnod and ²M.R. Jouharchi
¹Department of Biology, Alzahra University, Vanak, Tehran, Iran
²Ferdousi University, Mashhad, Iran

Abstract: *Bromus danthoniae* var. *uniaristata* Melderis (Poaceae) is recorded for the first time for the flora of Iran.

Key words: *Bromus*, new record, Iran, poaceae

INTRODUCTION

Bromus L. is a genus with about 150 species. These are distributed in north temperate and tropical mountains. Members of this iranotouranian element are distributed in different habitat of Iran. *Bromus* species are significant weed species some of which are cultivated fodder, hay or pasture. In this study *Bromus danthoniae* var. *uniaristata* is recorded for the first time from Iran. There are a lot of similarities between *Bromus danthoniae* Trin. varieties but *uniaristata* is distinguished by awns of uppermost lemma and spike fragility from others. Three varieties have been recorded in this species for Iran Platue (Bor, 1970). From this only one has been recorded in Iran as *B. danthoniae* var. *danthoniae* (Bor, 1970). Scholz (1998) believe that *rogersii* C.E. Hubb. ex H.Scholz could be found in Iran too.

RESULTS

Bromus danthoniae Trin. ex C.A.Mey. var. *uniaristata* Melderis, (Fig. 1).

Material examined: Khorassan Province, Birjand town, Khorashad, Jouharchi and Zangoui 12161 FUMH!; Khorassan Province, 42 km after Torbat heydariéh to Gonabad town, 850 m, Jouharchi and Zangoui 13692 FUMH!; Khorassan Province, Torbat heydariéh town, Jungle road, after Mohamadabad village, Jouharchi and Zangoui 14063 FUMH!; Khorassan Province, Khaf city, BandeOzbak village, Jouharchi and Zangoui 14097 FUMH!; Khorassan Province, Khaf city, Alinaghi to Douchahi village, on sand dunes, Jouharchi and Zangoui 14103 FUMH!; Khorassan Province, Gonabad city, Bimargh to Ahangaran village, 400 m, Jouharchi and Zangoui 23003 FUMH! (Fig. 2).

Annual grass with erect culms; 12 cm long. Leaf-sheaths tubular for much of their length; pubescent.

Ligule an eciliate membrane, its apex is denticulated and in one surface. Leaf-blades 4 cm long; 2 mm wide. Leaf-blade surface pubescent; hairy on both sides. Leaf-blade apex acuminate. Panicle open; hairless under inflorescence, ovate; dense; 5.5 cm long; 3 cm wide. Primary panicle branches simple. Panicle branches scabrous and up to 4 mm. Spikelets solitary. Fertile spikelets pedicelled, comprising 6-16 fertile florets; with diminished florets at the apex. Spikelets Elliptic; laterally compressed; 20 mm long; 5-10 mm wide; breaking up at maturity; disarticulating below each fertile floret. Glumes persistent; unequal; shorter than spikelet. Lower glume lanceolate; 4-5 mm long and 1 mm width; 1 veined. Lower glume apex acute. Upper glume elliptic; 6-8 mm long and

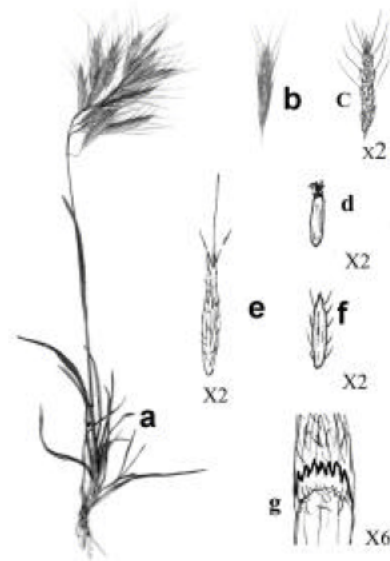


Fig. 1: A-*Bromus danthoniae* var. *uniaristata*, (a) the whole plant, (b and c) parts of inflorescence, (d) caryopsis, (e) the dorsal part of glume, (f) the margins of palea and (g) ligule

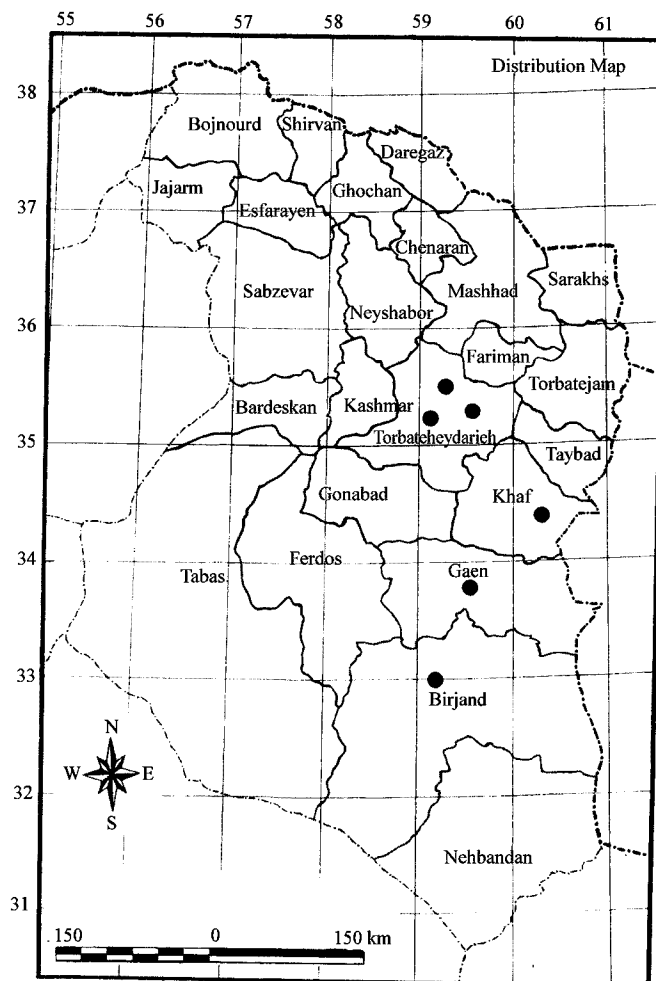


Fig. 2: Distribution map of *Bromus danthoniae* subsp. *uniaristata*. In Khorassan Province (North East of Iran)

2-4 mm width; 3-veined. Upper glume apex acute. Fertile lemma elliptic; 7-9 mm long and 1-3 mm width; 5-nerved, chartaceous; much thinner on margins. Lemma surface pubescent, pilose or villous. Lemma apex 2-fid; awned; awns origin is subapical, upper lemma 3-awned, other 1-awned. Principal lemma awn dorsal; curved; spreading; up to 15 mm long. Lateral lemma awns arising dorsally; shorter than principal. Palea shorter than lemma, 4-6 mm long and 1-2 mm width, margins with short hairs; denticled; 2-awned. Lodicules 2; membranous. Anthers 3; up to 2 mm long. Ovary with a fleshy appendage above style insertion; pubescent on apex. Caryopsis with adherent pericarp; hairy at apex; apex fleshy. Hilum linear.

Habitat: Rocky slopes and open lands.

General distribution: Asia-temperate: Soviet Middle Asia, Caucasus, western Asia, Iraq and Arabia. Asia-Tropical: India.

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