

AELUROPUS LACINIATUS (POACEAE), A NEW SPECIES FROM IRAN

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Aeluropus lacinatus is described and illustrated as a new species from North East of Iran (Khorassan province). It is very similar to *A. littoralis* and *A. pungens* but, well characterized by the following characters: inflorescence is more compact, glumes are longer and with white rigid hairs at base, palea with obviously lacinate hairs at margins.

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Key words. *Aeluropus*, new species, Iran

Aeluropus laciniatus گونه ای جدید از شمال شرق ایران (استان خراسان)

منصوره خداشناس، مربی پژوهش مرکز تحقیقات کشاورزی و منابع طبیعی استان کرمان.

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Aeluropus lacinatus برای اولین بار از شمال شرق ایران (استان خراسان) گزارش می‌گردد. بنابراین با توجه به تغییراتی که در این جنس داده شده اکنون تعداد گونه‌های جنس *Aeluropus* در ایران به ۶ گونه می‌رسد. گونه جدید توسط صفات زیر از دو گونه نزدیک خود یعنی *Aeluropus littoralis* و *Aeluropus pungens* جدا می‌گردد. در این گونه گل‌آذین سنبله فشرده و گلپوش (بویژه تحتانی) در قاعده با موهای سفت و سفید و رگ پستی برجسته‌تر، پوشینک در حاشیه دارای زوائد ریشک مانندی است که به سمت نوک کوتاه‌تر می‌شوند.

Introduction

Aeluropus is a genus of Poaceae: Aeluropodeae that occurs in Europe, Africa, Temperate Asia and Tropical Asia. This is a genus of grasses adapted to saline soils in desert regions. It is widely distributed by rhizomes and stolons. Based on Flora Iranica, it is containing of 4 species in Flora Iranica region and 3 species in Iran (Bor 1970). Terme (2001) added *A. pungens* as a new record to Iran. The genus *Aeluropus* was revised for the project Flora of Iran by the first author. *A. peterganicus* collected from South of Khorassan province was described as a new species (Khodashenas 2008). During the study of herbarium material in Ferdowsi University Mashhad Herbarium (FUMH), 2 specimens were identified and recognized as a new species to the science.

Materials and Methods

The study was mainly based on herbarium specimens of TARI and partly FUMH. The specimens were studied using Flora Iranica (Bor 1970), Flora of Iraq (Bor 1968), Flora of Pakistan (1982) and Grasses of the

Soviet Union (Tzvelev 1976). The type specimens are deposited in FUMH and TARI.

Results and discussion

Aeluropus laciniatus is described as a new species for the first time from Iran. It is similar to *A. littoralis* and *A. pungens* but they are easily distinguished by the glumes and especially palea characters. The new species is described and compared with 3 closest species in table 1.

Aeluropus laciniatus Khodashenas, sp. nov.

Fig. 1.

Planta perennis, rhizomatibus et stoloniferis. Culmi erecti, 5-30 cm alti. Foliorum vaginae pilosae vel ±glabrae; laminae planae, linearo-lanceolatae, margines scabidae, supra glabrae, subtus dense scabridae, 0.1-4.5 cm longae, ad apicem filiformes; ligulae 0.5 mm longae, a pilis ciliolatis compositae. Inflorescentia spiciformia, 1.5- 2.5 cm longa, 5-7 mm lata; spiculae appressae, ellipticae, 3-4 mm longae, 2-2.5 mm latae; flores 4-6. Glumae subequales, ad basem breviter

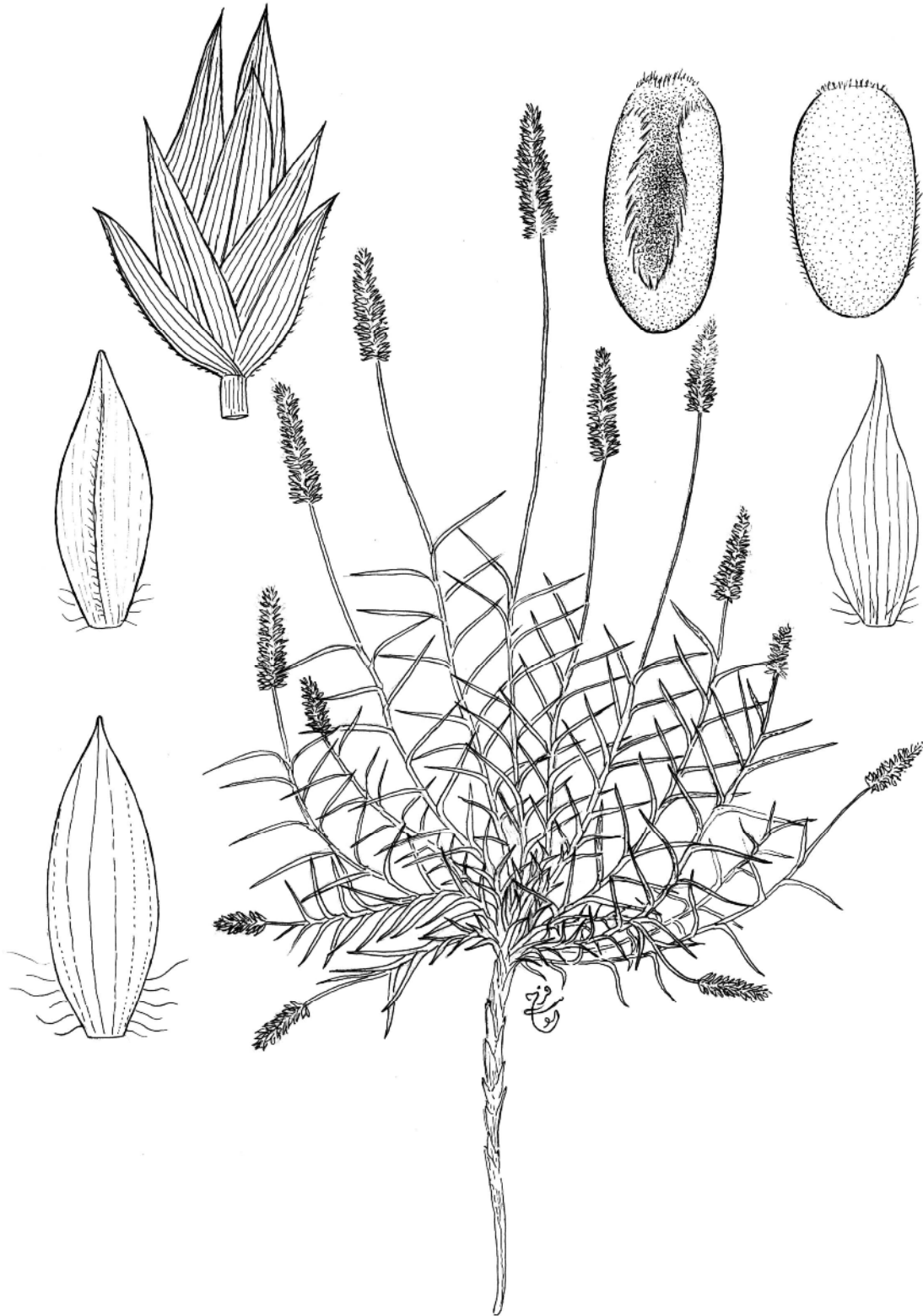


Fig. 1. *Aeluropus laciniatus* ($\times 0.83$); spikelet ($\times 14.5$); lower glume (lower left and upper glume (upper left) ($\times 24$); lemma (lower right) and palea (upper right) ($\times 18$).

Table 1. Comparison of the new *Aeluropus* species with other species in Iran.

Species	Inflorescence size(mm)	Inflorescence shape	Spikelet size (mm)	Glumes indumentum	Upper glume size (mm)	Lower glume size (mm)	Lemma size (mm)	Lemma indumentum	Palea size(mm)	Palea indumentum
<i>A. littoralis</i>	50-100	spike-like with interrupt spikelets	2-4 × 1/5-2	glabrous	1/7-2/2	1/2-1/7	1/5-2/7	glabrous	1/5-2/2	glabrous
<i>A. pungens</i>	20-65	spike-like with interrupt spikelets	2/5-3/5 × 1-1/6(2)	glabrous rarely hairy at base	1/2-1/5	1/2-1/5	2-2/5	ciliate at margins	1/5-2	glabrous
<i>A. laciniatus</i>	15-25	spike-like with interrupt but compact spikelets	3-4	hairy at base, scabrous at margins	2/2-2/5	2-2/2	2/2-2/5	glabrous	1/8-2	lacinate at margins
<i>A. lagopoides</i>	13-20	spike-like with hardly compact spikelets	4/5-6	hairy	1/7-2/2	1/5-2	2-2/7(3)	hairy throughout	2/2-2/7	hairy

hispidae, secus nervum medianum scabrae, ad margines membranaceae; gluma superiora 2.2-2.5 mm longa, 3-5 nervosa; gluma inferiora 2-2.2 mm longa, 2-3 nervosa, ovato-lanceolata, acuminata, pilis brevibus ciliatis praedita. Lemma 2.2-2.5 mm longa, 10-11 nervosa, ovata, cuspidata, ad marginem glabrata. Palea 1.8- 2 mm longa, 0.8- 1 mm lata, 2 carinata; carinae valde scabrae, margines manifeste lacinatae. Antherae 1.2-1.5 mm longae. Lodiculae 2, cuneatae, truncatae.

Typus. Iran, N of Khorasan, Kashmar, Kuh Sorkh, Road of Rivash to Ataieh, 1550 m, Ayatollahi & Zangui 14623 FUMH (holotypus FUMH; isotypus TARI). -*Paratypus.* Khorasan, Chenaran, Abghad to Frizzy, 1438 m, Memariani & Zangui 36879 FUMH.

Perennial plant rhizomatous and stoloniferous. Culms erect, 5-30 cm tall, hairy. Leaf sheath hairy or ±glabrous, ciliate at the margin; leaf blades flat, linear-lanceolate, 0.1- 4.5 cm long, curved inward at the apex, more or less glabrous above, densely scabrous below and at the margins; ligules 0.5 mm long, consist of ciliate hairs. Inflorescence spike-like, 1.5-2.5 cm long, 5-7 mm broad; spikelets appressed, elliptic, 3-4 mm long and 2-2.5 mm wide; florets 4-6. Glumes subequal, shortly hispid at base of adaxial surface, on the middle veins scabrous or shortly ciliate, membranous at the margins; upper glume 2.2-2.5 mm long, ovate, 3-5 veined, mucronate at apex; lower glume 2-2.2 mm

long, 2-3 veined, ovate-lanceolate, mucronate at the apex. Lemma 2.2-2.5 mm long, 10-11 veined, ovate; glabrous, shortly ciliate at the margin and with few white hairs at base of adaxial surface especially in upper florets, cuspidate at the apex. Palea 1.8-2 mm long, 2 keeled; keels strongly scabrous, obviously lacinate at the margins. Anthers 1.2-1.5 mm long. Lodicules 2, cuneate, truncate.

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