

AELUROPUS PETERGANICUS (POACEAE), A NEW SPECIES FROM IRAN

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Received: 01.02. 2008. Accepted for publication: 15.06.2008.

Khodashenas M. 2008 06 30: *Aeluropus peterganicus* (Poaceae), a new species from Iran. –Iran. J. Bot. 14 (1): 13-15. Tehran.

Aeluropus peterganicus is described and illustrated as a new species from North East of Iran. This species is well characterized by the following characters: dense indumentum, compact inflorescence. Taxonomical characters and illustration of the new species are given. This species seems to be related to *Ae. macrostachys* which is compared with. In the new species leaves are shorter and densely hairy on the back side of lamina and sheath, inflorescence rather dense and compact, glumes, lemma, palea and anthers shorter. In *Ae. lagopoides* vegetative part is mainly glabrous, inflorescence loose and flower parts are smaller.

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Key words. *Aeluropus*, new species, Iran

معرفی گونه جدید *Aeluropus peterganicus* از شرق ایران

منصوره خداهشناس،

گونه جدید *Aeluropus peterganicus* بعنوان گونه جدید از خراسان معرفی می‌گردد. این گونه با پوشش کرکی متراکم در کل اندامهای رویشی و گل آذین سنبله منشعب و فشرده، برگهای سفت و خشن و کوتاه‌تر از گونه نزدیک خود *A. macrostachys* جدا می‌گردد.

Introduction

The genus *Aeluropus* (Poaceae) was revised for the project Flora of Iran Assadi (1987). Bor (1970) in Flora Iranica introduced 4 species, 3 occurring in Iran, namely *Ae. lagopoides* (L.) Trin. ex Thwaites, *Ae. littoralis* (Gouan) Perl. *Ae. macrostachys* Hack. The fourth species *Ae. pungens* (M. B.) C. Koch only recorded from Afghanistan. The species of the genus mainly grow on salty area. Depending on salt content of the soil rather much variation is observed within the species. Moreover, hybridization occurs among the species which is another source of variation in the members of the genus *Aeluropus*. Among the specimens collected in different parts of Iran, a specimen from Daghe (highly salty area) Petergan seemed to be interesting and different from the other species. Further studies showed that the same plant has been collected before and also in another locality. In this paper these collections known as a new species and accordingly described.

***Aeluropus peterganicus* Khodashenas, sp. nov.**

Planta perennis, rhizomatibus et stoloniferous. Culmi erecti, 5-10 cm alti. Folia vagina et lamina adaxiales

dense molliter pilosa; lamina rigida, plana vel ad basem concava, linearo-lanceolata, 0.8-2 cm longa, 1-2.5 mm lata, ad apicem pungentia; ligulae 0.5 mm longae, a pilis annularibus compositis. Inflorescentia spiciformia, ramosa; rachis hispidus, 1.5-2 cm longus; rami 5-8, spiculata; spiculae appressae, ovatae, 3.5-4 mm longae, 2-2.5 mm latae; flores 4-5. Glumae inequales, ad basem hispidae, secus nervum medianum scabrae, ad marginem membranaceae; gluma superiora 2.4-2.5 mm longa, 5-7 nervosa; gluma inferiora 2-2.2 mm longa, 3-4 nervosa, ovato-lanceolata, acuminata. Lemma 3.2.3.5 mm longa, 10-11 nervosa, ovata, cuspidata, ad marginem ciliata, interdum molliter retrose pilosa. Palea 2.5 mm longa, 0.8 mm lata, 2 carinata; carinae scabrae. Antherae 1.2-1.8 mm longae. Lodiculae 2, cuneatae, truncatae.

Typus. Iran, SE of Khorasan, Daghe Petergan, 550 m, Khodashenas & Hoseini 6293 (holotypus TARI; isotypus the herbarium of Research Organization of Agricultural and Natural Resources of Kerman. - *Paratypus*. Khorasan, 150 km E. of Ghayen on the road to Yazdan, Kavire Petergan, 600 m, Assadi & Amirabadi 66677 (TARI); South of Nehbandan, Godare Khunk, 1200 m Faghihnia 3393- FUMH.

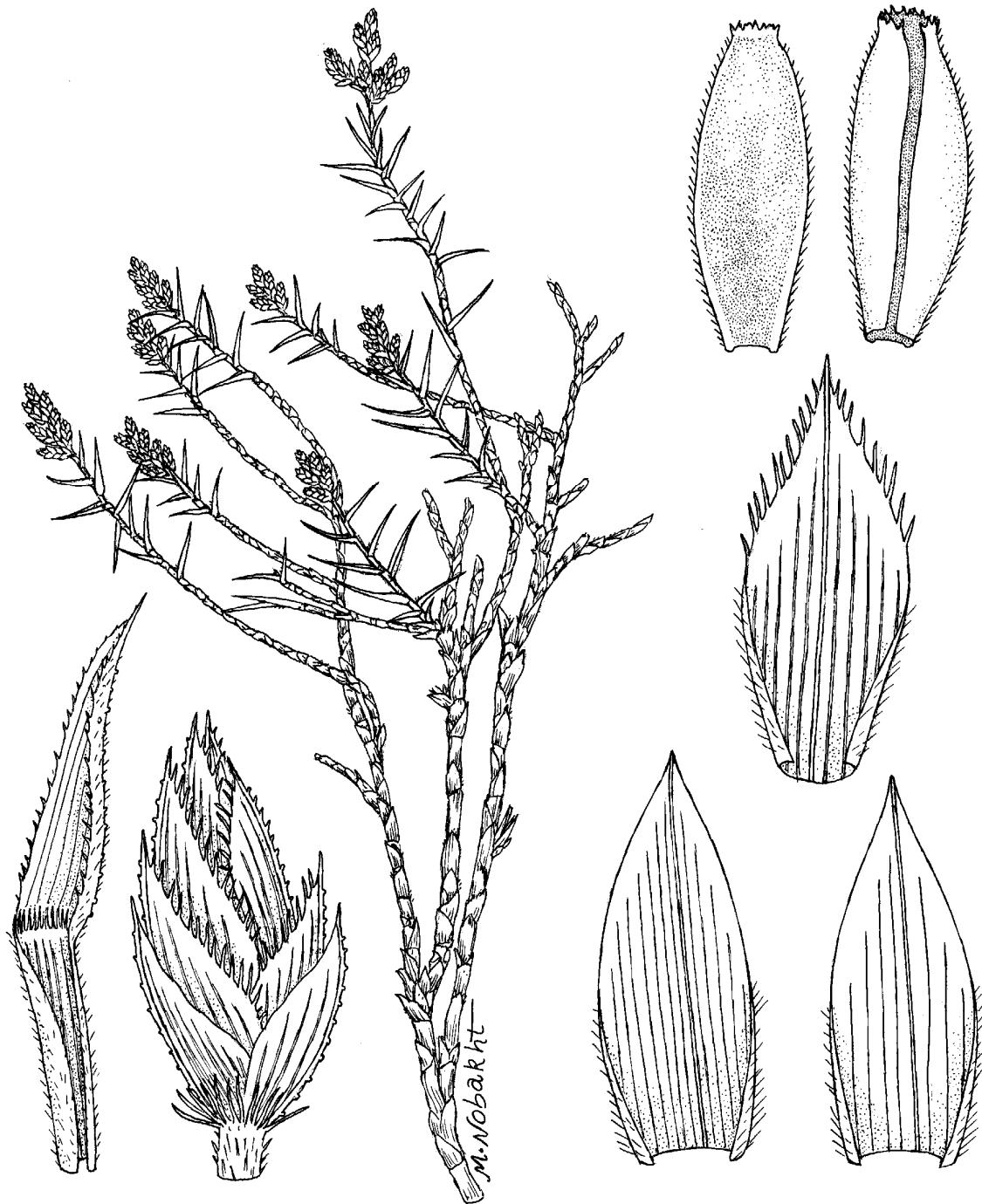


Fig. 1. *Aeluropus peterganicus* (x1). Leaf (x6); spikelet (x13.5); glumes (below right), lemma (middle right) and palea (above right) (x21).

Table1. Comparison of the new *Aeluropus* species with the other species of Iran.

Species	Leaf indumentum	Inflorescence shape	Inflorescence size (mm)	Inflorescence indumentum	Glumes	Lemma size (mm)	Lemma indumentum	Palea size (mm)	Palea Indumentum	Anther length (mm)
<i>A. littoralis</i>	glabrous or hairy (subsp. <i>intermedius</i>)	spike with interrupt spikelets	25-65	glabrous	glabrous	2-2.5	glabrous	-	glabrous	1-1.5
<i>A. pungens</i>	glabrous, scabrous at margin	spike with interrupt spikelets	20-50	glabrous	-	2-2.2	ciliate	1.5-2	glabrous	1-1.5
<i>A. lagopoides</i>	hairy	spike with hardly compact spikelets	10-15	hairy	hairy	2-2.5	hairy throughout	1.7-2.2	hairy	1-1.5
<i>A. macrostachys</i>	glabrous, scabrous at margin	long spike with distant branches	70-150	glabrous	glabrous	3-4.5	ciliate or hairy	3-4.2	scabrous	2-2.1
<i>A. petersanicus</i>	hairy	short and compact branches	15 - 20	hairy	hairy	3.2-3.5	ciliate or hairy	2.5	scabrous	1.2-1.8

Plant perennial with both rhizomes and stolons. Culms erect, 5-10 cm tall. Leaf sheaths and adaxial surface of blade leaves covered with dense and soft hairs; leaves distichous. Leaf blades stiff, flat or concave at the base, linear-lanceolate, 0.8- 2 cm long, 1-2.5 mm wide, pungent at the apex, at the adaxial surface densely hairy. Ligules 0.5 mm long, consist of ring of hairs. Inflorescence spike-like and branched; central axis hispid, 1.5-2 cm long; branches containing of 5-8 spikelets; spikelets appressed, ovate, 3.5-4 mm long and 2-2.5 mm wide; florets 4-5. Glumes unequal, hispid at base of adaxial surface, on the middle vein with strict and short hairs, membranous at the margins; upper glume 2.4-2.5 mm long, 5-7 veined, ovate lanceolate, acuminate at apex; lower glume 2-2.2 mm long, 3-4 veined, ovate lanceolate, acuminate at the apex. Lemma 3.2-3.5 mm long, 10-11 veined, ovate; cuspidate at the apex, ciliate at the margins, sometimes with soft and retrorse hairs throughout. Palea 2.5 mm

long, 0.8 mm wide, 2 keeled; keels scabrous. Anthers 1.2-1.8 mm long. Lodicules 2, cuneate, truncate.

The new species differs from *Aeluropus macrostachys* by following characters. Plant smaller with dense hairs on vegetative parts (not glabrous or rarely with sparse short hairs just on leaf sheaths). Inflorescence with short and compact branches (not with loose and distant branches). Glumes 2-2.5 mm long (not 2.5-3.2 mm). Lemma and palea shorter and narrower. Anthers 1.2-1.5 mm long (not 2 mm). The new species is compared with the other species of the genus *Aeluropus* in Iran in table 1.

References

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