

A NEW SPECIES OF EPHEDRA L. AND REPORTS OF TWO NEW OR INTERESTING GRASSES FROM IRAN

M. Assadi

Assadi, M. 1996 12 25: A new species of *Ephedra* L. and reports of two new or interesting grasses from Iran. -*Iran. Journ. Bot.* 7 (1): 1-6. Tehran.

Ephedra laristanica is described as a new species. It is characterized by having upright habit, three anthers, two seeds and a short micropyle. *E. foliata* and *E. pachyclada* are compared with the new species as the closest affinities in the area.

Amblyopyrum muticum var. *loliaceum*, collected in NW. Iran is reported for the first time from Iran. *Melica altissima*, again from NW. Iran is an interesting record from Iran. Formerly it was recorded by the author of Flora Iranica, but apparently no specimen seen by him.

Mostafa Assadi, Central Herbarium of Iran, P. O. Box 13185-116, Tehran, Iran.

یک گونه جدید افدرا و گزارش دو گونه جدید یا جالب گراس از ایران

مصطفی اسدی

گونه جدید *Ephedra laristanica* از ایران نامگذاری و معرفی می‌گردد. این گونه با داشتن شکل رویشی افراشته، تعداد ۳ بساک در هر گل، ۲ دانه و لوله انتهایی بذر کوتاه، مشخص می‌گردد و با ۲ گونه نزدیک خود به نامهای *E. foliata* و *E. pachyclada* مقایسه می‌گردد. گونه *Amblyopyrum muticum* var. *loliaceum* که از شمال غرب ایران جمع‌آوری شده، برای اولین بار از ایران گزارش می‌گردد. گونه *Melica altissima* که نویسنده فلور ایرانیکا آنرا بدون دیدن نمونه و بر اساس یک نمونه قدیمی گزارش نموده، مجدداً از شمال غرب ایران جمع‌آوری شده است.

INTRODUCTION

In a revision of the genus *Ephedra* L. for the flora of Iran, some of the specimens seemed to be interesting, not fitting to the descriptions of all known Iranian species. Further studies revealed that they are a new for the science.

Revising the herbarium specimens of the genus *Elymus* L. in Iran, an *Elymus* looking like plant was identified as *Amblyopyrum muticum* (Boiss.) Eig, which is a new for the flora of Iran. Also, in a trip to NW. Iran a beautiful grass species, *Melica altissima* L. was collected. This species is recorded as a little known species from Iran.

NEW SPECIES

Ephedra laristanica Assadi, sp. nov.

Frutex, 80-100 cm altus, dioecious, erectus, glabrous; rami 1.5-2 mm crassi, viridi vel flavescentes, oppositi. Folia squamiformia, bina, parte maxima connata. Strobili masculi verticillati, sessiles, 4-5 mm longi; squamae 6-7 jugae, 2-3 mm longae, orbiculares, rotundatae, retusae; flores 10; perianthium ca. 2 mm longum; columna exserta; antherae 3, raro 4, sessiles. Strobili

femini verticillati, 8-9 mm longi, sessiles vel breviter pedunculati; pedunculi usque ad 4 mm longi; squamae 2-3 jugae, ciliatae, plus minusve orbiculares; inferiores ad 1/3 connatae. Semina 2, ca. 8 mm longa, lanceolata; micropylus 0.3 mm longus, rectus.

Typus. Fars: 19 km from Khonj to Lar, 700-1200 m, 15.4.1983, rocky slope, Assadi & Sardabi 41611 (holotypus TARI); 18 km from Lar to Bastak, 1000 m, 16.4.1983, Assadi & Sardabi 41781; Juyum to Jahrom, Gardaneh Bezan, ca. 1100 m, Mozaffarian 72610. -Hormozgan: 11 km from Bandarabbas to Sirjan, after the tunnel, 1000 m, 21.4.1983, Assadi & Sardabi 42095; the same locality, on rocky slopes, Assadi 73700.

Shrub 80-100 cm high, dioecious, erect, glabrous; bark of the old branches dark grey or blackish; young branches 1.5-2.5 mm in diameter, green or yellow green, opposite. Leaves scale-like, 2, connate for the most part. Male cones sessile, up to 10 in each node, verticillate, 4-5 mm long; scales 6-7 pairs, 2-3 mm long, orbicular, rounded or plus minus retuse at the apex, male flowers 10 in a cone, perianths ca. 2 mm long, orbicular-obovate, connate for



Fig. 1. *Ephedra laristanica* (x.67); male flower (x7); female cone (x3.5).

the most part; staminal column ca. 3 mm long, well exceeding from the scales; anthers 3, very rarely 4, sessile. Female cones verticillate, 8-9 mm long, up to 8 in each node, sessile or pedunculate; peduncles up to 4 mm long; scales 2-3 pairs, ciliate at the margin, plus minus orbicular, innermost connate up to 1/3 of the base. Seeds 2, ca. 8 mm long, lanceolate in the outline. Micropyle 0.3 mm long, straight.

Ephedra laristanica is in general habit similar to *E. pachyclada* Boiss., but distinguished in following characters: branches glabrous, yellow green, anthers 3, seeds 2, micropyle minute, ca. 0.3 mm long. In *E. pachyclada* branches hairy, grey, anthers ca. 8 in number, seeds 1, micropyle ca. 1.5 mm long.

The new species differs from *E. foliata* Boiss. by having erect habit (not ascending), scale-like leaves (not foliaceous), sessile male and female cones (not pedunculate); uppermost scales of the fruits connate up to 1/3 and cover half of the seeds (not connate up to the apex and not covering the whole seeds).

NEW RECORDS

Amblyopyrum muticum (Boiss.) Eig
var. **loliaceum** (Jaub. & Spach) Eig

Azərbaycan: 60 km on the road from Khoyn to Makou, 1000 m, Akbarzadeh & Salari 41090.

An annual member of the tribe *Triticeae* distributed from Caucasus to Anatolia. The closest locality to the Iranian gathering is in Turkey, rather close to the Iranian frontier (Davis 1985). *Amblyopyrum muticum* comprises two varieties, namely var. *loliaceum* with glabrous spikelets and var. *muticum* with hairy spikelets (Davis l. c.). The single specimen collected from Iran bears glabrous spikelets and therefore assignable to var. *loliaceum*.

Melica altissima L.

Azərbaycan: 15 km from main road of Makou-Bazargan toward Kelisa-Kandi, 1800 m, 16.8.1991, Assadi 70827.

Melica altissima was recorded in Flora Iranica (cf. Bor 1970) from Azərbaycan, Alibolagh, but apparently the specimen has not been seen by the author. In Iran it is a rare species found in crevices of rocks in a gorge.

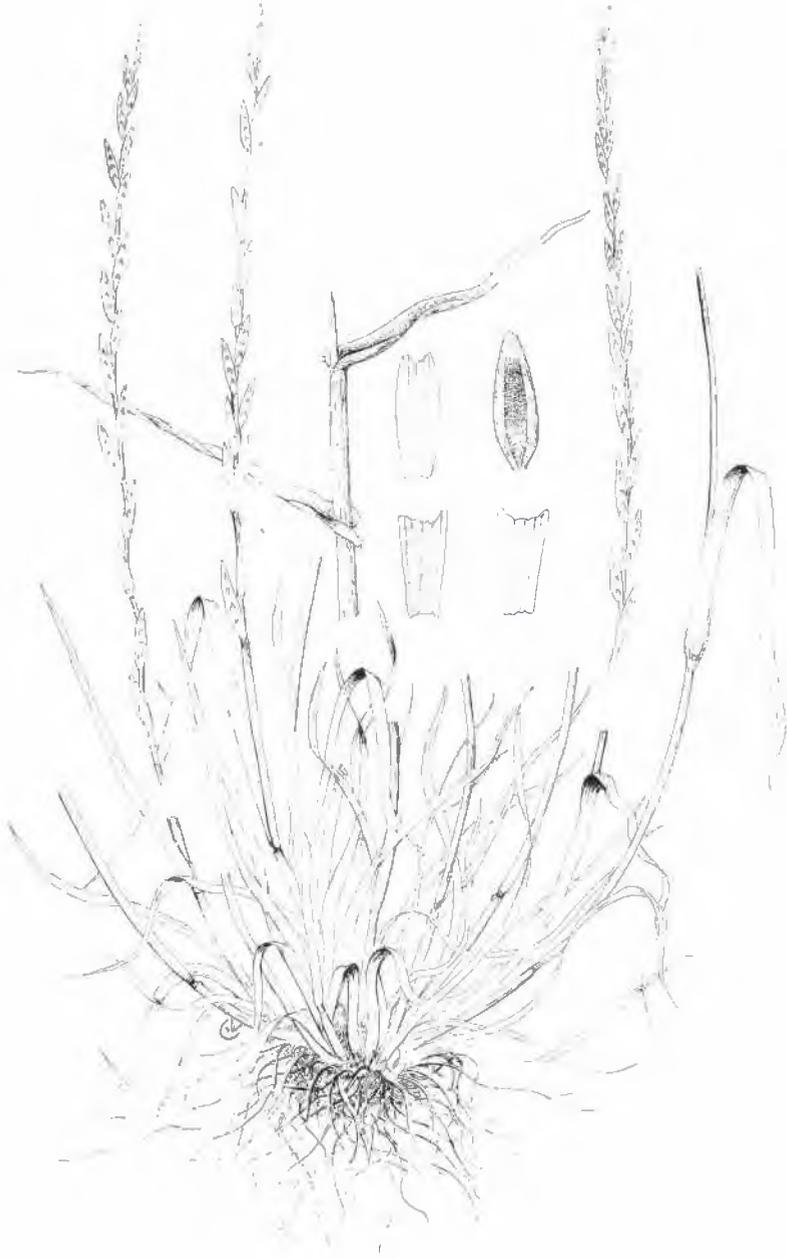


Fig 2. *Amblyopyrum muticum* var. *loliaceum* (0.5); glumes, lemma and palea (x3).