

Astragalus baharensis (Fabaceae), a new species from NE Iran

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Astragalus baharensis is described from Iran as a new species in *Astragalus* sect. *Ammodendron* (Fabaceae), and illustrated in line drawings. It is related to and compared with *A. macrobotrys*.

Key words: *Ammodendron*, *Astragalus*, Fabaceae, new species, taxonomy

Iran is one of the biggest centers of diversity for *Astragalus*, with approximately 700 species. In this paper I describe a new Iranian species in *Astragalus* sect. *Ammodendron*.

Astragalus sect. *Ammodendron* has its center of diversity in the Turkestanian floristic province (Takhtajan 1986) of the Irano-Turanian region, with vast distribution in the Armeno-Iranian province of the region. The Iranian species are concentrated mainly in the central, southern, and eastern parts of Iran, where they grow at altitudes between 20 and 3500 m.

Astragalus baharensis F. Ghahremani.,
sp. nova (Fig. 1)

Differt ab A. macrobotrys racemis 15–37 (nec 7–15) cm longis, pedunculis 5.5–12 (nec 5.5) cm longis, foliis 1.5–3.5 (nec 1.5–7) cm longis, calyx bibracteolatus (nec ebracteolatus).

TYPE: Iran. Khorassan Province: N Bojnord, between Geoz and Kariz villages, Bahar-Cheshmeh area,

38°10'50"N, 56°51'17"E, 1096 m, 17.VI.2003 Ghahremaninejad & Joharchi 377 (holotype FAR; isotypes FAR, FUMH, UPS).

Perennial woody plant, to 80 cm tall, vested with white bifurcate hairs; stems to 46 cm long, densely covered with appressed hairs. Stipules 1–5 mm long, adnate to petiole, almost fully connate or with two free triangular portions, membranous, hairy. Leaves imparipinnate, 1.5–3 (3.5) cm long, petiole and rachis densely canescent; petiole 1–7 mm long; rachis 1–14 mm long; leaflets in 1–2 pairs, obovate to oblong, obtuse, 10–20 mm long, 3–7 mm wide, densely covered beneath and sparsely above (with longer hairs) with appressed hairs. Peduncle 5.5–12 cm long, several times longer than leaves, densely covered with appressed hairs. Inflorescence 15–37 cm long, loosely 20–51-flowered. Bracts lanceolate to triangular, 1–2 mm long, sparsely covered with hairs, or only ciliate. Bracteoles wanting or two, hairy, ca. 0.5 mm long. Pedicel 1.5–2 mm long, densely covered with hairs. Calyx campanulate, 6–6.5 mm long, not inflated

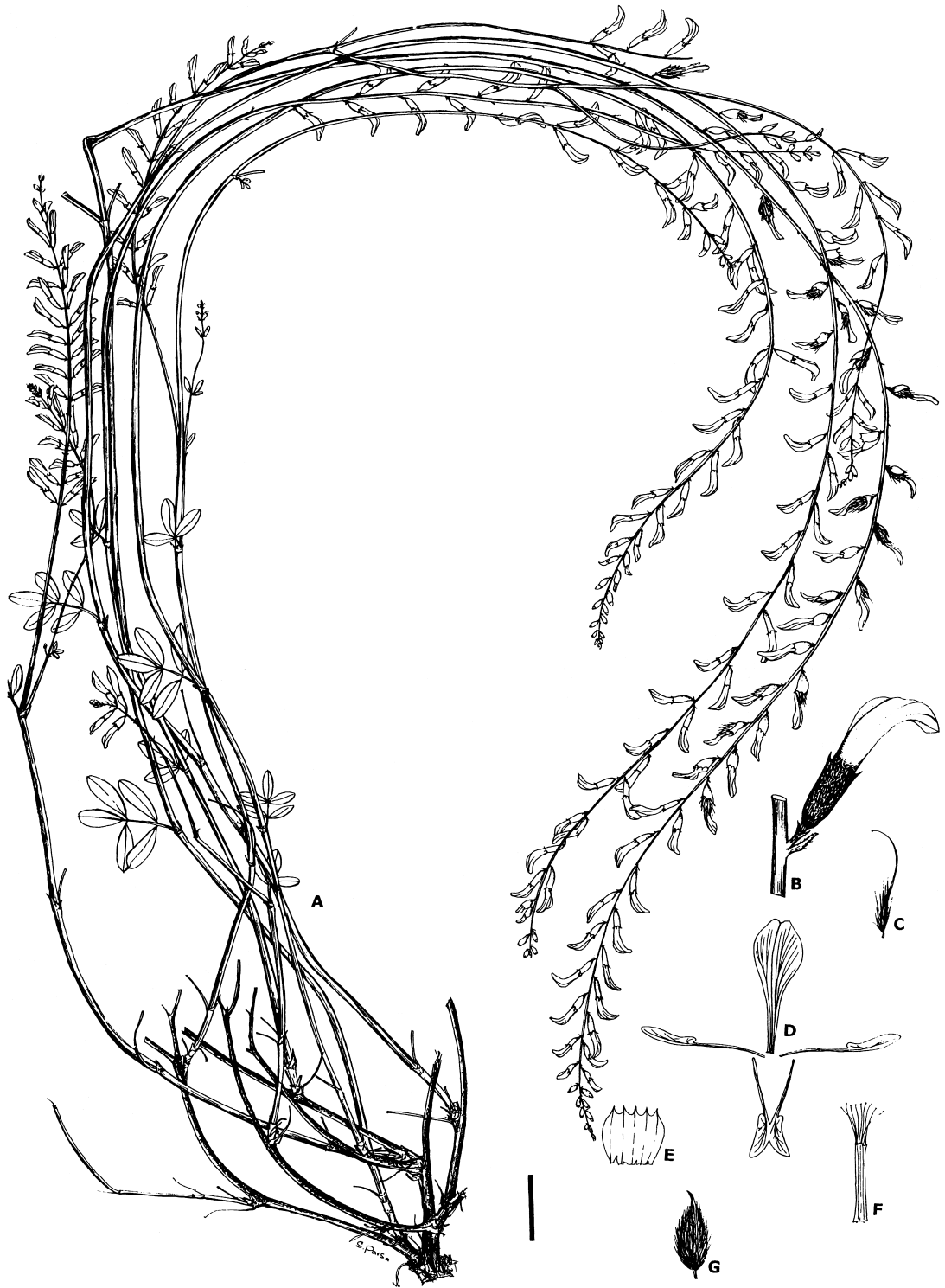


Fig. 1. *Astragalus baharensis* (from holotype). — **A:** Habit. — **B:** Bracteolate flower. — **C:** Pistil. — **D:** Petals. — **E:** Calyx. — **F:** Stamens. — **G:** Fruit. Scale: **A** = 2 cm, **B** = 0.5 cm, **C–G** = 0.66 cm.

in fruit, finally ruptured by fruit, covered with appressed hairs; calyx teeth linear-subulate, ca. 1 mm long, 1/5 as long as the tube. Corolla drying pale brown to violet, fresh violet, glabrous; standard 14–14.5 mm long, limb retuse, 4.5–5.5 mm wide, non-ligulate; wing 12.8–13 mm long, limb oblong to oblong-elliptic, 5.5–6 mm long, 1.4–1.5 mm wide, ligule 0.9 mm long; keel 10.7–11 mm long, limb 4.5 mm long, 2 mm wide. Ovary 4–5 mm long, densely hairy, on stipe ca. 0.5 mm long; style 7.5–8 mm long, glabrous. Stamens 11.5–12 mm long, free portion 3–4 mm long. Pod on stipe 0.6–1 mm long, elliptical-oblong, acute, 8.5–9.5 mm long, 3 mm broad in middle part, terminating in a curved beak (1.5 mm long), densely hairy (hairs 2.5–3.5 mm long), bilocular. Flowering and fruiting June–July.

This endemic species is known only from the type locality. I collected the specimens recently in Khorassan province near the Turkmenistan border (Fig. 2).

Astragalus baharensis is well distinguished from all species of the section by the combination of a bracteolated flower and a multi-flowered inflorescence (with up to 50 flowers). Morphologically the closest relative of this species is *A. macrobotrys* (type LE!; cf. Bunge 1868), which is distributed in Iran and Turkmenistan. *Astragalus baharensis* differs from *A. macrobotrys* in having a longer inflorescence (15–37 cm vs. 7–15 cm), longer peduncle (5.5–12 cm vs. < 5.5 cm), and shorter leaves (1.5–3.5 cm vs. 1.5–7 cm). In *A. macrobotrys* the peduncle is equal to



Fig. 2. Distribution map of *Astragalus baharensis*.

the leaves or slightly exceeding them, but in *A. baharensis* the peduncle is many times longer than the leaves.

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