

# A NEW SPECIES OF ASTRAGALUS L. SECT. ORNITHOPODIUM (FABACEAE) FROM NORTHEAST OF IRAN

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During the study and identification of the collected plants from North Khorassan province a new species was found. The new species was described as *Astragalus razensis* from the studied area. This species belongs to the sect. *Ornithopodium* and is compared with its closest relative, *Astragalus ornithopodioides*.

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**Key words.** *Astragalus*, Sect. *Ornithopodium*, new species, Iran.

در طی جمع‌آوری و شناسایی گیاهان استان خراسان شمالی در میان گیاهان جمع‌آوری شده، نمونه‌ای از جنس گون مشاهده شده که به عنوان گونه‌ای جدید معرفی و شرح داده می‌شود. این آرایه به نام *Astragalus razensis* متعلق به بخش *Ornithopodium* می‌باشد. شرح گونه به همراه تصویر و پراکنش جغرافیایی آن ارائه می‌شود. همچنین با نزدیکترین خویشاوند خود یعنی *A. ornithopodioides* مقایسه شده‌است. نمونه تیپ این گونه در هرباریوم پژوهشکده علوم گیاهی دانشگاه فردوسی مشهد (FUMH) و ایزوتیپ آن در هرباریوم مؤسسه تحقیقات جنگلها و مراتع کشور (TARI) نگهداری می‌شود.

## Introduction

In the genus *Astragalus* the sect. *Ornithopodium* Bunge belongs to the subgenus *Cercidothrix* with bifurcate hairs. The species of this section based on Flora of the USSR (Gontcharov 1946) occur in Central Asia, Iran and rarely in Asia Minor and Arabia (Ghahremaninejad 2004, Chamberlain & Matthews 1982 & Maassoumi 2005). Seven species namely *A. brachydontus* Boiss., *A. glochideus* Boriss., *A. jodostachys* Boiss. & Buhse, *A. lunatus* Pal., *A. ornithopodioides* Lam., *A. shelkovnikovii* Grossh. and *A. stevenianus* DC. have been described from different parts of Iran, especially from northwest and west. The species of this section have been covered with symmetrical to asymmetrical medifixed to basifixed hairs.

***Astragalus razensis* Nasseh & Joharchi, sp. nov.** (Sect. *Ornithopodium* Bunge) Fig. 1.

Differt ab *Astragalus ornithopodioides* folioliis superficialibus dense pilosis (nec laxe pilosis), pedunculo 4-6 cm longo (nec ca. 12 cm), racemo 3-6

cm longo (nec ca. 8 cm), calyce 4 mm longo (nec 5-7 mm), legumine 15 × 1.5 mm (nec 40 × 2-3 mm) albo piloso pilis nigris sparse immixtis (nec albo pilso).

Plant perennial, herbaceous, 25- 45 cm tall, erect to ascending, branched from the base. Branches slender, covered with appressed white hairs, on nodes mixed with sparse black hairs. Stipules 2-4 mm long, membranous to herbaceous, milky to pale green, adnate at the base to petiole for ca. 1 mm, free apex shortly triangular, covered with appressed white hairs. Leaves 3.5- 5 cm long; petiole absent in upper leaves and up to 1.5 cm in lower leaves; leaflets in 10-14 pairs, 5-10 mm long and 1.5-3 mm wide, elliptic to oblong or obovate, obtuse, on upper side sparsely covered with appressed white hairs at the margin, glabrous at middle part; on the under side covered with appressed white hairs. Peduncles 4-6 cm long, as long as or shortly longer than the leaves, densely covered with appressed white hairs, in upper parts and near to the raceme mixed with sparse black hairs. Inflorescences more or less oblong,



Fig. 1. *Astragalus razensis* (Memariani & Zangoeei 40308).

3-6 cm long and up to 1.5 cm in diameter, 12-20 flowered or up to 25, dense, somewhat elongated in fruit. Bracts up to 2 mm long, narrowly triangular to lanceolate, with black hairs at the margin. Pedicel ca. 1 mm long, shorter than the bract, covered with white and black hairs. Calyx ca. 4 mm long, campanulate-tubular, rather densely covered with medifixed, appressed, white and black hairs; teeth 1.5-2 mm long, subulate, hairy. Corolla milky in dry. Standard 13-13.5 mm long, oblong to elliptic. Style ca. 5 mm long, glabrous. Legumes up to 1.5 cm long and 1.5 mm wide, linear, incurved into a nearly semi-circle, densely covered with appressed white hairs mixed with sparse black hairs, shortly constricted between the seeds.

*Holotypus*. Northern Khorassan province: NW Bojnourd, SW Raz, 10 km on the road toward Pirboz, 1500 m, 21.5.2008, , 37° 53' 16.3" N, 57° 11' 1.7" E, Memariani & Zangooei 40308 (FUMH; isotypus TARI).

*Etymology*. The specific epithet refers to type locality Raz.

*Astragalus razensis* is introduced as a new species from this section. It has been covered with symmetrical to shortly asymmetrical bifurcate hairs and has been collected from Northern Khorasan province.

This species differs from *Astragalus ornithopodioides* in covering upper side of leaflet

densely with medifixed appressed hairs (not sparsely medifixed appressed hairs); The length of peduncle 4-6 cm (not up to 8 cm); the length of calyx 4 mm (not 7 mm); the length and width of legumes up to 1.5 cm × 1.5 mm respectively (not up to 4 cm × 2-3 mm), the hairs of legume white mixed sparse black (not white).

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