

# A NEW SPECIES OF THE GENUS ASTRAGALUS L., SECT. HALICACABUS BUNGE (LEGUMINOSAE) FROM IRAN.

Sh. Zarre

Zarre M. Sh., 1992.12.1: A new species of the genus *Astragalus* L., sect. *Halicacabus* Bunge (Leguminosae) from Iran.- *Iran. Journ. Bot.* vol. 5(2): 95-99, Tehran.

*Astragalus brevipilus* from NW Iran is described as a new species. This species is the first record of a group from sect. *Halicacabus* which has short, setulous hairs. Differences of the new species with its closest relatives are described.

*Shahin Zarre Mobarakeh, Central Herbarium of Tehran University,  
Faculty of Sciences, Tehran University, Tehran, Iran.*

گونه جدیدی از بخش *Halicacabus* از جنس گون (*Astragalus* L.) در ایران.  
از: شاهین زارع

گونه جدید *Astragalus brevipilus* از شمال غربی ایران شرح داده می‌شود. گونه مذکور اولین گونه متعلق به گروه واجد کرکهای متفرق، خوابیده و کوتاه از بخش *Halicacabus* است که از ایران گزارش می‌گردد. اختلافات این گونه با نزدیکترین خویشاوندان آن توضیح داده می‌شود.

## INTRODUCITON

After the introduction of sect. *Halicacbus* by Bunge (1868)with *A. halicacabus* Lam. as lectotype, Boissier considered two natural groups in the section: one with canescent or tomentose hairs and the other with setulous hairs or glabrous (Boiss., 1872). *A. ebenoides* Boiss., *A. chardini* Boiss., *A. raddei* N. Basil. and *A. wagneri* Bartling ex Bunge from Iran were attributed to the first group. These species are closely related to the species of sect. *Megalocystis* Bunge and each of them (except *A. chardini*) has a familiar species in sect. *Megalocystis* (Zarre M., non published).

From the second group no species has been recorded from Iran. *A. brevipilus* from Zanjan province is the first record of this group.

vexillis alas aequantes (nec multo longiores), bracteis 2.5-4 mm longis (nec 5-8 mm longis).

Perennis, acaulis vel subacaulis, 30-60 cm altus. Pilis basifixis 0.1-0.7 (-1) mm longis; sparsis adpressissimis brevibus puberulusus. Caudice 1-4 cm longis, interfolia lanata, reliquiis stipulis obtectis. Stipulae chartaceae, 4-10(-12)mm longae, e basi lata, late triangulares, apice obtusae vel acutae, petiolo adnatae, glabrae vel ciliatae. Folia (3-) 4.5-23 cm longa, 10-17 juga; rachides dense adpresso strigosa, inferiore foliola remota; foliola 1.2-11 (-12) mm longa et 1 - 5.5 mm lata, oblongo - elliptica vel ovata, apice obtusa vel acuta, obsolete mucronulata, utrinque pilis brevissimis adpressis patule setulosa. Racemus longus, laxus, (10-) 15 - 30 florus; Pedunculi (13-)15-40 cm longi, foliis aequantes, pilis dense albo tomentosi. Bracteae minuteae, 2.5 - 5 mm longae, lanceolato - ovatae vel orbiculatae, acuminatae, pilis adpressis albis vel nigris obsitae. Bracteolis c.2 mm longis, subulatis. Calyces floriferi tubulosi, ca. 11 mm longi et 4 mm lati; fructiferi ovato- globosi, ca. 13 mm longi et 7-10 mm lati, rubroreticulato nervosi, brevissime adpresso nigro puberulosi intermixa longe adpresso albo sericei; dentibus ca. 2 mm

## ***Astragalus brevipilus* Zarre M., sp. nov.**

Differt ab *A. dictyophyllum* Reuter ex Bunge vexillum basi rotundatum (nec obtuse auriculata), foliolis 10-17 jugis (nec. 17-20 jugis) ab *A. halicacabus* Lam. vexillum ca. 16 mm longum (nec 22 mm longum),

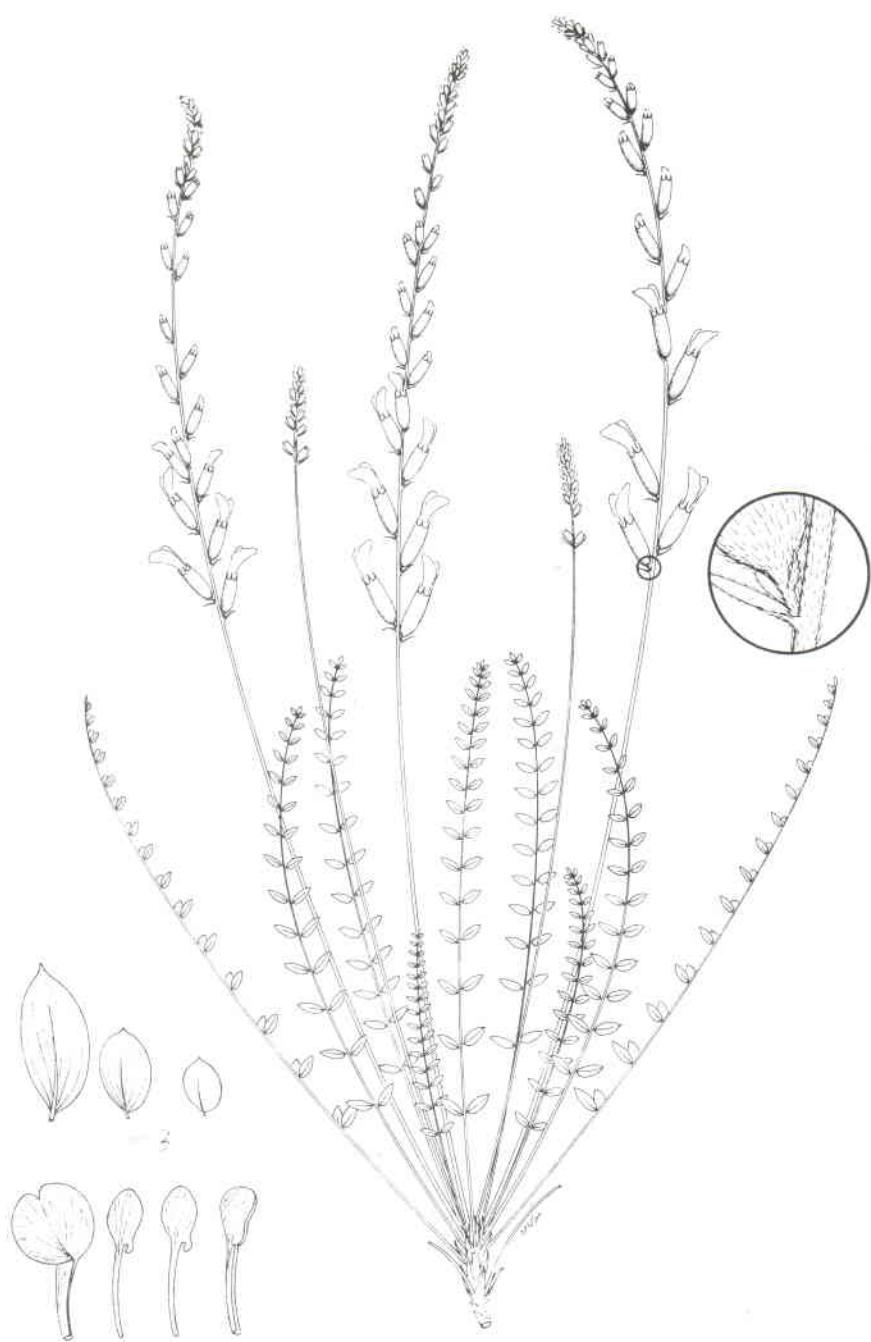


Fig. 1. *Astragalus brevipilus* (x 0.58; standard, wing and keel x 1.1; leaflets x 1.7)

longis, subulatis, e basi triangularibus. Petala lilacinea vel flavescentia. Vexilla 15-16.5 mm longa; lamina 7-8.5mm longa et lata, orbiculata, apice retusa, basi rotundata. Alae 15-16.5 mm longae, lamina 7 mm longa et 4 mm lata, obovata. Carina 16 mm longa; lamina 5-6 mm longa et 3 mm lata, obovato-triangulata. Legumina ca.5mm longa et 3.5 mm lata, monosperma, lateraliter compressa, quadrato-orbicularia, dense sericeo - tomentosa, mucronulata, brevissime stipitata.

*Typus:* Iran, Azarbayejan, Zanjan-Myaneh, Shooreh Zar-e Yaddiboulagh, 800-1000 m, 2.5.1973, Sabeti 1549 (holotypus: TARI).

Other specimens seen: Prov. Zanjan, Zanjan to Bijar, between Halab and Zarrin-Abad, 1700 m, 6.6.1974, Wendelbo, Assadi & Shirdelpur 12287; Kheirabad to Mahneshan, 1400 m, 13.6.1973, Sabeti 15518 (TARI); Zanjan to Bijar, 30.6.1971, Termeh s.n. (Evin).

Perennial, acaulescent or subacaulescent, 30-60 cm long, erect, laxly branched. Hairs basifix 0.1-0.7 mm long (on stem up to 1 mm long). Stem 1-4 (-6)cm long, covered by stipules and petiols. Stipules 4-10(-12)mm chartaceous, yellowish-white, 1-3 nerved, lanceolate at free portion, acute

or acuminate at tip, up to 1/3 of their length adnate to the petiole, glabrous or ciliate at margins. Leaves (3) 4.5-25 cm long, imparipinnate; rachises straight or somewhat convergent, thin, flexible, covered by dense appressed short hairs; petiole 1/3-1/5 as long as rachis; leaflets 12-17 pairs, 1.2-11 (12) mm long and (0.5)1-6 mm broad, elliptic or oblong elliptic, rarely ovate, acute or obtuse, sometimes slightly mucronulate, covered by sparse, short appressed hairs on both sides. Racemes lax, elongate, many flowered. Peduncle 15-40 cm long, equal to or longer than leaves, covered by dense appressed and subappressed hairs. Bracts thinly membranaceous, 2.5-4 mm long, ovate-lanceolate to rounded, acute or acuminate at tip, covered by dense appressed white and some black hairs. Bracteoles ca. 2 mm long, subulate, hairy the same as bracts. Pedicel short ca. 1.5 mm long, hairy. Calyx at flowering time tubular, up to 11 mm long and 3-4 mm broad, covered by dense short appressed hairs, fruiting calyx spherically inflated, 12-15 mm long and 7-10 mm wide, with 15 reticulate purple nerves, covered with appressed white and black hairs; the teeth ca. 2 mm long, subulate, 1/4-1/6 as long as tube. Petals yellow, sometimes pink at

limbs, glabrous, jointed to each other only at base. Standard 15-16.5 (-18) mm long; limb 7-8.5 mm long and broad, rounded, retuse at tip, rounded at base. Wing 15-16.5 mm long, equal to standard; limb 7 mm long and 3.5-4 mm broad, obovate, auricule 0.5-1 mm long; claw 8-10 mm long, 1-1.5 times longer than limb. Keel ca. 16 mm long, equal to wing; limb 5-6 mm long and ca. 3 mm broad slightly auriculate at base; calw 10-11 mm long. ovary very dense sericeous hairy. Pods ca. 5 mm long, 3.5 mm broad and 1.5 mm in diameter, monosperm, laterally compressed, ventral side straight or rarely recurved, dorsal side highly recurved, covered by dense short sub-appressed hairs; shortly stipitate; beak 0.2-0.8 mm long, straight to somewhat

convergent. Seeds 3.5-4 mm long and 2-3 mm broad, flattened, reniform, light or dark brown.

## REFERENCES

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