

Astragalus sichuanensis, a new species from Sichuan Province, China

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Astragalus sichuanensis, a new species from Maowen Xian, Sichuan province, is described and illustrated. The relationship between this species and *A. tongolensis* is discussed.

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Introduction

Two specimens collected from Maowen Xian of Sichuan province, China caught our attention while we were examining specimens of *Astragalus* in Herbarium of the Institute of Medicinal Plant Development, Chinese Academy of Medical Science. At first glance, these two specimens look like *A. tongolensis* Ulbr. (Ho & Fu 1993), but after carefully comparing them with the specimens of *A. tongolensis* Ulbr., we recognized that they morphologically are quite different from *A. tongolensis* Ulbr. and thus proposed as belonging to a new species, which is described below.

***Astragalus sichuanensis* L. Meng, X. Y. Zhu & Xiao, sp. nov.**

Type: China, Sichuan Province, Maowen Xian, on meadow in riversides, shady hillsides, or wet area

near wells, July 10, 1959, G. C. Xia 158 (Holotypus, IMD)

Paratype: China, Sichuan Province, Maowen Xian, on meadows in riversides, shady hillsides, or wet area near wells, July 10 1959, Investigation Team for *Astragalus* 5006 (IMD).

Hace species affinis *A. tongolensis*, sed bracteolis lanceolatis (nec linearibus), 1.1-1.4 cm longis (nec 4-6 mm longis), 2.3-4 mm latis; pedunculis foliis aequantibus vel paulo brevioribus (nec multo longioribus); calycibus campanulatis, 9-11 mm longis (nec 7 mm longis), intus glabris (nec nibro-pilosis), extus albo-pilosis (nec nibro-pilosis); dentibus brevibus (nec 1-2 mm longis); ovariis glabris (nec dense nibro-pilosis) differt. – Fig. 1.

Erect perennial herbs. Roots whitish. Stems green-bluish, sometimes more or less dark-reddish. Leaves imparipinnate, 10-13 cm long; petioles 1-4 cm long; leaflets 3-5 pairs, ovate or ovate-oblong, 2.6-4.2 cm

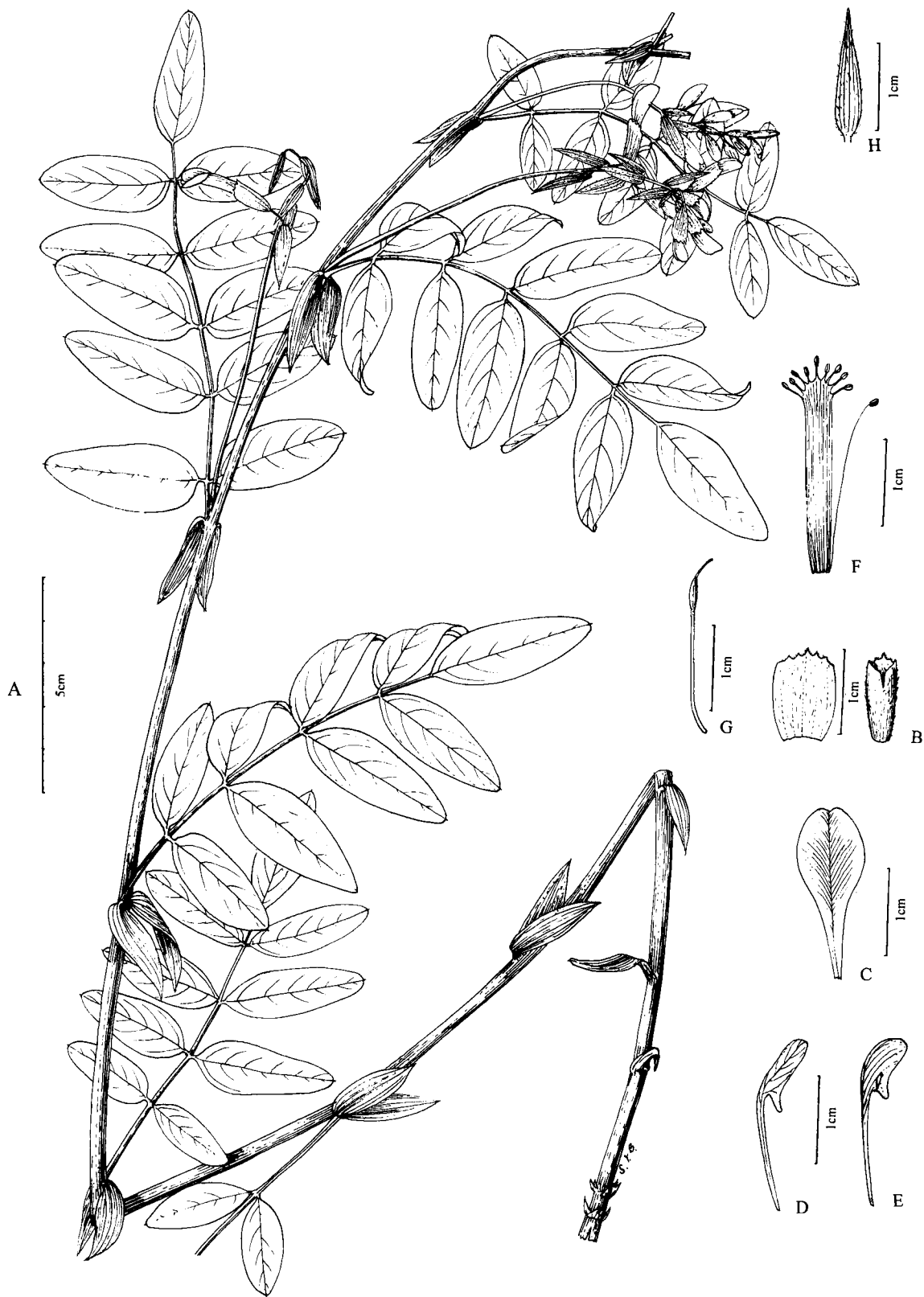
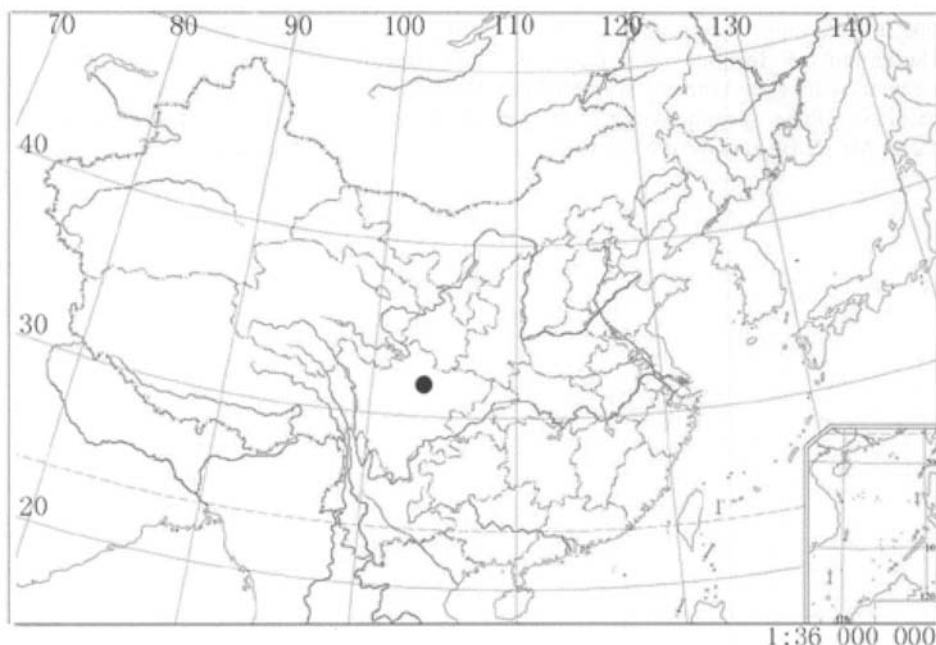


Fig. 2. Distribution map of *Astragalus sichuanensis*.



long, 1.0-1.7 cm wide, obtuse or mucronulate at apex, suborbicular or cuneate at base, greyish beneath with appressed white hairs; stipules free, ovate or ovate-lanceolate, glabrous, 2-2.6 cm long, 5-8 mm wide, veins usually conspicuous. Inflorescence with 5-10 flowers, axillary, as long as or slightly shorter than leaves, peduncle slender, 5-7 cm long; bracteoles lanceolate, 1.1-1.4 cm long, 2.5-4 mm wide, with densely appressed white hairs; pedicels 3-5 mm long, with white hairs. Flowers large, 1.5-2.2 cm long; calyx campanulate, 9-11 mm long, rimose on one side, inner side glabrous, outside with sparsely appressed white hairs which are also found along the margin of the teeth (which occasionally have a few black hairs), teeth broadly triangular, very short and nearly inconspicuous; corolla yellow; standard spatulate, 20-21 mm long, 7-8 mm wide, emarginate at apex, gradually tapering from middle to base; wings oblong, 20-21 mm long, claws 13-15 mm long, limbs 6-7 mm long, 2-3 mm wide, auricles ca.1.5 cm long, sub-orbicular at the apex; keel-petals 18.5-20 mm long, claws 12.5-14 mm, limbs 5.5-6 mm, with short auricles; ovary linear-elliptic, glabrous, with very long stipe. Pods unknown. – Fig. 1.

Distribution and habitat. *Astragalus sichuanensis*

is only known from its type locality, Maowen Xian, Sichuan province, China. This species grows on the meadow along the riversides, and on the meadow of shady hillsides or wet areas near wells (Fig. 2).

Taxonomic remarks. *Astragalus sichuanensis* is related to *A. tongolensis* growing in Sichuan province and morphological commonly in leaflets ovate or ovate-oblong, stipules free and ovate or ovate-lanceolate, corolla yellow, standard spatulate and the claws of wings and keel-petals much slender, nearly twice as long as its limbs. However it differs from *A. tongolensis* mainly in having bracteoles lanceolate, 1.1-1.4 cm long, 2.5-4 mm wide and densely covered with white hairs (non linear or linear-lanceolate, 4-6 mm long and covered with white and black hairs); the calyx 9-11 mm long, glabrous in its inside, and calyx tooth very short (not 7 mm long, with black hairs on the upper part of its inside, and calyx tooth 1-2 mm long); inflorescence as long as or slightly shorter than leaves (non much longer than leaves); ovary glabrous (not densely appressed with black hairs).

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Fig.1. *Astragalus sichuanensis*. – A. Habit; B. Calyx; C. Standard; D. Wing; E. keel-petal; F. Stamen; G. Ovary; H. Bracteole. – Scale bars: A = 5cm; B-H = 1cm. Drawn from holotype.

0072). We are most grateful to the curator of Herbarium of Institute of Medicinal Plant Development, Chinese Academy of Medical Science for the loan of the specimens we have studied. We also thank Mr Y. B. Sun for the drawings.

References

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