



Caragana leduensis, a new species of Leguminosae from Qinghai, China

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YI-ZHIZHAO, YU-HU WU & LI-QING ZHAO

Caragana leduensis, a new species of *Leguminosae* from Qinghai, China

Abstract

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Caragana leduensis from Qinghai is described as a new species and illustrated. It is similar to *C. kozlovii* but differs by the corolla wing auricle being $\frac{3}{4}$ as long as the claw, the densely white-villous ovary and legumes, and the obovate-elliptic leaflets being blunt at the apex and glabrous except for the white-villous midvein and margins on the lower surface.

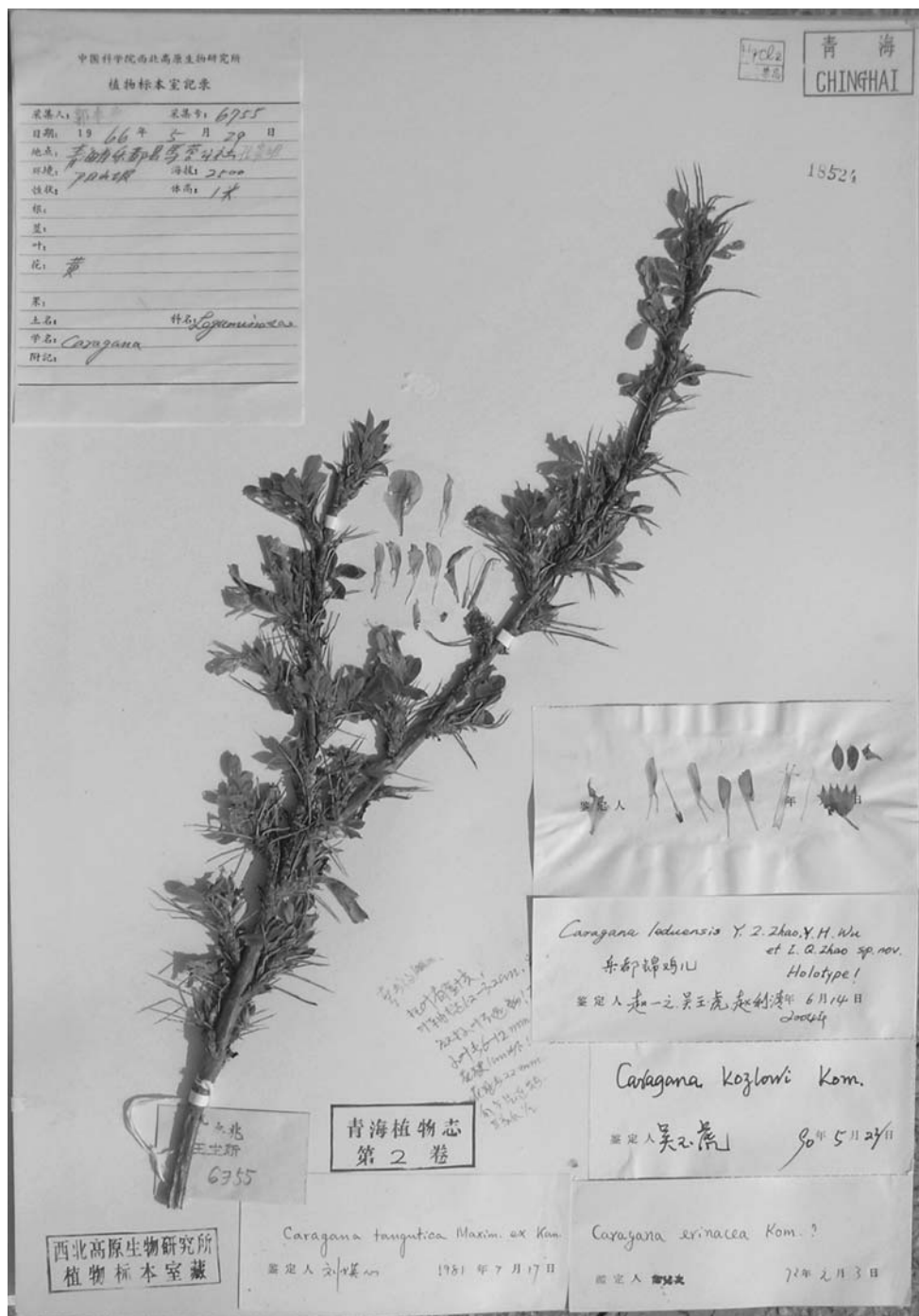
The genus *Caragana* Fabr. contains about 80 species, which are centred in their distribution to arid and semiarid Asia. About 60 species are found in China, preferable in the northern and western parts of the country (Liou 1993), of these about 20 species occur in Qinghai (WU 1999). Revising the herbarium specimens of *Caragana* collected in Qinghai, we discovered two older specimens that represent a still undescribed species, which is here described as new to science.

Caragana leduensis Y. Z. Zhao, Y. H. Wu & L. Q. Zhao, **sp. nov.**

Holotype: China, Qinghai, Ledu, mountain slope, c. 2500 m, 29.5.1966, B. Z. Guo 6755 (HNWP) – Fig. 1.

Species *Caragana kozlovii* Kom. affinis, sed auricula alae ungue $\frac{3}{4}$ longiore, ovario dense albo-villoso, foliola obovati-elliptica, apice obtusa, supra glabra, infra secus costam et marginem albo-villoso differt.

Shrub, c. 1 m tall. *Bark* cinereous-brunescens, lacerate. *Stipules* ovate, rufous, membranous, densely white-villous. *Leaves* paripinnate, *rachis* persistent and becoming a rigid thorn, 1.5-3 cm long; *leaflets* in 3-4 pairs, obovate-elliptic, 10-12 × 3-5 mm, blunt at the apex, glabrous on upper surface, white-villous at midvein and margins on the lower surface. *Flowers* solitary; *pedicel* c. 8 mm long, with a knee at the base, densely white-villous; *calyx* tubular, c. 10 mm long, c. 5 mm in diam., densely white-villous, lobes triangular, c. 2.5 mm long; *corolla* yellow; *vexillum* broadly obovate, c. 21 mm long; *wings* c. 20 mm long, claw c. 8 mm long, auricle linear, $\frac{3}{4}$ as long as the claw; *keel* c. 20 mm long, claw and blade equally long, auricle short and small, dentiform; *ovary* densely white-villous outside, glabrous inside. *Fruit* at maturity not seen.



中国科学院西北高原生物研究所

植物标本室记录

采集人: 王宗晋 采集号: 6755
 日期: 1966年5月29日
 地点: 青海省都兰县马家山
 环境: 7000m 海拔: 2500
 植株: 1株
 茎: _____
 叶: _____
 花: 黄
 果: _____
 土名: 44号 Leguminosae
 学名: *Caragana*
 附记: _____

青海
CHINGHAI

18524



Caragana leduensis Y. Z. Zhao, Y. H. Wu
 et L. Q. Zhao sp. nov.
 舟曲锦鸡儿
 Holotype!
 鉴定人 赵一之 吴玉虎 赵树清 6月14日
 2006.4

Caragana kozlowii Kom.
 鉴定人 吴玉虎 90年5月23日

青海植物志
第2卷

西北高原生物研究所
植物标本室藏

Caragana tangutica Maxim. ex Kun
 鉴定人 王宗晋 1981年7月17日

Caragana xerincea Kom.?
 鉴定人 王宗晋 72年元月3日

Fig. 1. *Caragana leduensis* – holotype specimen.

Additional specimen seen (paratype). – China, Qinghai, Zhiduo, c. 3950 m, 21.6.1966, L. H. Zhou 110 (LZU).

The new species is similar to *Caragana kozlovii* Kom. and *C. tangutica* Kom. (see Liou 1993, Wu 1999) but can be distinguished from these species as follows:

1. Leaflets oblong, 15-30 × 5-9 mm, with acute apex, often in 3 pairs, remotely spaced, the apical ones larger; pedicels with a knee at the middle of the lower half; ovary and pod densely white-villous *C. tangutica* Kom.
- Leaflets obovate-lanceolate or obovate-elliptic, 8-15 × 3-5 mm, in 3-4 pairs, closely spaced, ± of the same size; pedicels with a knee at the base; ovary and pod glabrous or densely white-villous 2
2. Corolla wings with auricle ½ as long as the claw; ovary and pod glabrous; leaflets obovate-lanceolate, with acute apex, glabrous on both surfaces *C. kozlovii* Kom.
- Corolla wings with auricle ¾ as long as the claw; ovary and pod densely white-villous; leaflets obovate-elliptic, with blunt apex, glabrous on upper surface, with white-villous midvein and margins on lower surface . . . *C. leduensis* Y. Z. Zhao, Y. H. Wu & L. Q. Zhao

References

- Liou, Y. H. 1993: *Caragana*. – Pp. 17-67 in: Fu, K. J. (ed.), *Flora Reipublicae Popularis Sinicae* **42(1)**, – Beijing.
- Wu, Y. H. 1999: *Caragana*. – Pp. 173-187 in: Liu, S. W. (ed.), *Flora of Qinghai* **2**. – Xining.

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