

Gagea chinensis (Liliaceae), a new species from Inner Mongolia, China

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Gagea chinensis Y.Z. Zhao & L.Q. Zhao *sp. nova* (Liliaceae) is described from Inner Mongolia, China. It appears most closely related to *G. pauciflora* and *G. provisa*. The distinguishing characters are given in a key to the three species.

Key words: *Gagea*, Liliaceae, taxonomy

There are about 70 species of *Gagea* (Liliaceae) in the world. They are chiefly distributed over Europe, the Mediterranean region and the temperate region of Asia; there are about 20 species in China. In May 2002 the second author collected specimens of *Gagea*, which after careful study turned out to represent a hitherto undescribed species. It belongs in sect. *Plecostigma*.

Gagea chinensis Y.Z. Zhao & L.Q. Zhao, *sp. nova* (Fig. 1)

G. pauciflorae affinis, sed differt folio basali, quo semitubulare, ventraliter subsulcatus, dorsaliter 4-angular est, tunica non prolongata supra bulbum et superne non vaginata, bulbo e basi emittenti stipites tenues stoloniformes ad extremum bulbiliferos.

TYPE: China. Inner Mongolia, Hohhot, Helinggeer, Houshuiquan, on mountain slopes, 4.V.2002 Li-Qing Zhao 001 (holotype HIMC).

Perennial herb. Bulb ovoid, fulvous, 3–5 mm in diameter, emitting from base several slender

stoloniform yellowish-white stalks with bulbil at end. Stem 10–30 cm tall, densely pubescent in lower part. Basal leaf 1, filiform, semitubular, shallowly sulcate adaxially, 4-angular abaxially, densely pubescent below, 9–20 cm long, ca. 1 mm wide; cauline leaves 2–4, linear or narrowly lanceolate, 1–6 cm long, 1–3 mm wide. Flowers solitary or 2–4 in a racemose inflorescence; pedicel 2–10 cm long, becoming slightly elongate in fruit; tepals 6, oblong-lanceolate, membranous at margins, outer three 15–17 mm long, inner three 13–15 mm long; stamens 6, 6–8 mm long; anther oblong, ca. 2 mm long; stigma 3-partite with lobes ca. 3 mm long, ovary oblong, ca. 5 mm long. Capsule obovoid, ca. 1 cm long; bearing at base persistent tepals 18–20 mm long; seeds irregularly triangular, flattened, rufous, with yellowish edge, ca. 2 mm long. Flowering and fruiting from May to June.

ADDITIONAL SPECIMENS EXAMINED (paratypes). — **China.** Same locality as holotype, 15.V.2002 Li-Qing Zhao 002, 003 (HIMC).

Gagea chinensis is at present known only from the three specimens cited in this paper. It

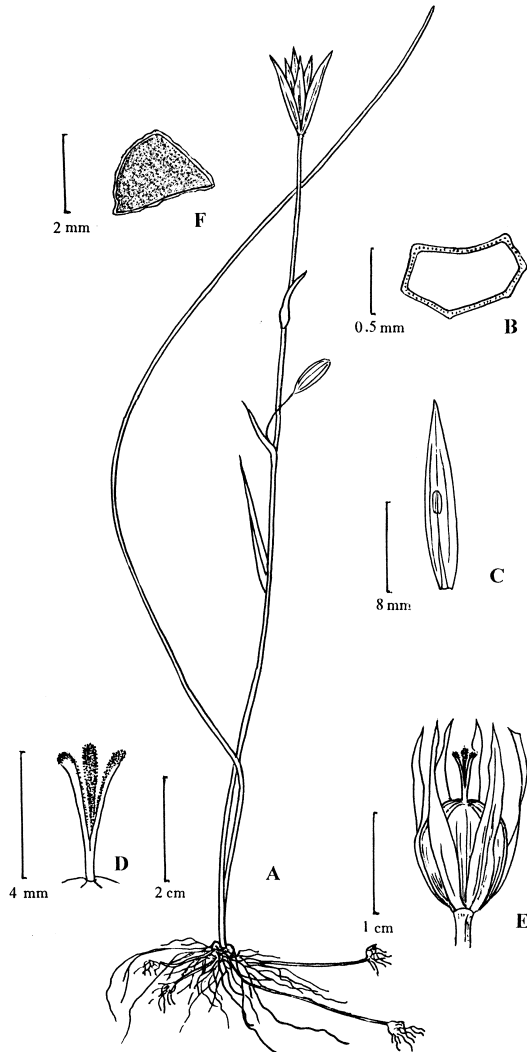


Fig. 1. *Gagea chinensis* (from holotype, drawn by Bao Hong-Ying). — **A:** Plant. — **B:** Cross-section of basal leaf. — **C:** Tepal and stamen. — **D:** Style and stigma. — **E:** Capsule and persistent tepals. — **F:** Seed.

resembles *G. pauciflora* and *G. provisa*, but can be distinguished as in the following key.

Key to *Gagea chinensis* and two related species

1. Stigma 3-lobed with lobes as long as 1/3 of style
..... *G. provisa*
1. Stigma 3-partite with lobes as long as 1/2 to 3/4 of the style 2
2. Basal leaf solid; tunic extending above bulb, sheathing stem and lacerate in upper part; bulb lacking stoloniform stalks *G. pauciflora*
2. Basal leaf semitubular, shallowly sulcate adaxially, 4-angular abaxially; tunic not extending above bulb; bulb emitting from base several slender stoloniform stalks with a terminal bulbil *G. chinensis*