
荠麦属 qiao mai shu

Li Anjen (李安仁 Li An-ren); Suk-pyo Hong

Herbs annual or perennial, rarely subshrubs, monoecious. Stems erect, glabrous or pubescent. Leaves simple, alternate, petiolate; leaf blade triangular, cordate, broadly ovate, sagittate, or linear; ocrea membranous, oblique, margin entire, apex acute or truncate. Inflorescence racemose or corymbose. Flowers bisexual. Perianth persistent, 5-parted; tepals 5, not accrescent. Stamens 8. Styles 3, elongate; stigmas capitate. Achenes trigonous, not winged or horned at base.

About 15 species: Asia, Europe; ten species (six endemic) in China.

1a. Subshrub or perennial herb.

2a. Subshrub; leaves sagittate or ovate-triangular, apex long acuminate or caudate .............................................. 1. F. urophyllum

2b. Perennial herb; leaves broadly ovate or triangular, apex acuminate or acute.

3a. Stems and branches leafless above; leaves broadly ovate or triangular, 2–3 cm, ocrea apically acute; pedicel articulate at apex; achenes ovoid, 2–2.5 mm ................................................................. 2. F. statice

3b. Stems and branches leafy above; leaves triangular, 4–12 cm; ocrea apically truncate; pedicel articulate at middle; achenes broadly ovoid, 6–8 mm ................................................................. 3. F. dibotrys

1b. Annual herb.

4a. Achenes grooved; angles rounded below middle, sharply acute above; pedicel articulate at middle .............. 4. F. tataricum

4b. Achenes not grooved; angles sharply acute; pedicel apically articulate or not articulate.

5a. Leaves cordate; inflorescence capitate ................................................................. 5. F. gilesii

5b. Leaves not cordate; inflorescence racemose, corymbose, or filiform, terminal spikelike panicle.

6a. Stems, branches leafless above ................................................................. 6. F. leptopodum

6b. Stems, branches leafy above.

7a. Leaves triangular or ovate triangular, 1.5–5 cm wide; inflorescence racemose or corymbose.

8a. Inflorescence lax, interrupted; pedicel articulate at apex; achenes ca. 3 mm; plants wild ...... 7. F. gracilipes

8b. Inflorescence dense, not interrupted; pedicel not articulate; achenes 5–6 mm; plants cultivated ................................................................. 8. F. esculentum

7b. Leaves linear, triangular-sagittate, or narrowly sagittate, 0.2–1 cm wide; inflorescence a dense

or lax filiform terminal spikelike panicle.

9a. Leaves linear .................................................................................................. 9. F. lineare

9b. Leaves triangular-sagittate or narrowly sagittate .................................................. 10. F. caudatum


Herbs perennial. Rhizomes black, ligneous. Stems 40–50(–65) cm tall, branched at base, glabrous, slenderly striate, leafless above. Petiole 2–4 cm; leaf blade broadly ovate or triangular, 2–3 × 1.5–2.5 cm, both surfaces glabrous, veins rather prominent abaxially, base broadly cordate or nearly truncate, apex acute; ocrea membranous, oblique, margin not ciliate, apex acute. Inflorescence of several spikes aggregated and panicle-like, lax; bracts funnel-shaped, each 2- or 3-flowered. Pedicels longer than bracts, 2–2.5 mm, slender, apex articulate. Tepals elliptic, 1–1.5 mm. Stamens equaling perianth. Styles free; stigmas capitulate. Achenes shiny, ovoid, 2–2.5 mm. Fl. Jul.–Oct, fr. Aug.–Nov.

Grassy slopes; 1300–2200 m. Guizhou, Yunnan.


长柄野荞 chang bing ye qiao


Herbs perennial. Rhizomes black, ligneous. Stems 40–50(–65) cm tall, branched at base, glabrous, slenderly striate, leafless above. Petiole 2–4 cm; leaf blade broadly ovate or triangular, 2–3 × 1.5–2.5 cm, both surfaces glabrous, veins rather prominent abaxially, base broadly cordate or nearly truncate, apex acute; ocrea membranous, oblique, margin not ciliate, apex acute. Inflorescence of several spikes aggregated and panicle-like, lax; bracts funnel-shaped, each 2- or 3-flowered. Pedicels longer than bracts, 2–2.5 mm, slender, apex articulate. Tepals elliptic, 1–1.5 mm. Stamens equaling perianth. Styles free; stigmas capitulate. Achenes shiny, ovoid, 2–2.5 mm. Fl. Jul.–Oct, fr. Aug.–Nov.

Grassy slopes; 1300–2200 m. Guizhou, Yunnan.

**Polygonum dibotrys** D. Don, Prodr. Fl. Nepal. 73. 1825; *Fagopyrum acutatum* (Lehm.) Mansfeld ex K. Hammer; *Fagopyrum cymosum* (Trevisan) Meissner; *F. megaspermatium* Q. F. Chen; *F. pilus* Q. F. Chen; *P. acutatum* Lehmann; *P. cymosum* Trevisan; *P. labordei* H. Léveillé & Vaniot; *P. tristachyum* H. Léveillé; *P. violabile* Turczaninow.

Herbs perennial. Rhizomes black-brown, stout, ligneous. Stems erect, green or brownish, 40–100 cm tall, much branched, striate, glabrous. Petiole 2–10 cm; leaf blade triangular, 4–12 × 3–11 cm, both surfaces papillate, base nearly hastate, margin entire, apex acuminate; ocrea brown, 5–10 mm, membranous, oblique, apex truncate, not ciliate. Inflorescence terminal or axillary, corymbose; bracts ovate-lanceolate, ca. 3 mm, margin membranous, apex acute, each 4-flowered, rarely 6-flowered. Pedicels equaling bracts, articulate at middle. Perianth white; tepals narrowly elliptic, ca. 2.5 mm. Stamens included. Styles free; stigmas much exceeding persistent perianth, capitate, dense. Achene blackish brown, dull, broadly ovoid, 6–8 mm, trigonous, sometimes narrowly winged, angles smooth to repandous, apex acute. Fl. Apr–Oct, fr. May–Nov. 2n = 24, 32*


This species is used medicinally.


**Polygonum tataricum** Linnaeus, Sp. Pl. 1: 364. 1753.

Herbs annual. Stems erect, green, 30–70(–100) cm tall, branched, striate, papillate. Petioles ca. as long as blade; leaf blade broadly triangular, 2–7 × 2–8 cm, both surfaces papillate along veins, base cordate or truncate, margin entire, apex acute; ocrea brown, ca. 5 mm, membranous, oblique. Inflorescence terminal or axillary, racemose, several racemes together paniculate, lax; bracts ovate, 2–3 mm, apex acute, each 2–4-flowered. Pedicel 3–4 mm, articulate at middle. Perianth white or pinkish; tepals elliptic, 2–2.5 mm. Stamens included. Stigmas capitate. Achenes exceeding persistent perianth, brown, slightly shiny, narrowly ovoid, trigonous, 3–4 mm. Fl. Jul–Aug, fr. Aug–Sep.

Grassy slopes, valleys; 2200–4000 m. Sichuan, Yunnan [Pakistan].


**Polygonum gilesii** Hemsley, Hooker’s Icon. Pl. 18: t. 1756. 1887.

Herbs annual. Stems erect, 10–30(–50) cm tall, branched at base, glabrous, striate. Petiole 1.5–3 cm; leaf blade greenish abaxially, green adaxially, cordate, 1–3 × 0.8–2.5 cm, abaxially small papillate along veins, adaxially glabrous; ocrea 3–5 mm, membranous, glabrous, apex acute, oblique. Inflorescence geminate, capitate, dense; peduncle dichotomous; bracts funnel-shaped, 2.5–3 mm, apex acute, glabrous, each 2- or 3-flowered. Pedicel 3–4 mm, slender, apex articulate. Perianth pinkish; tepals elliptic, 2–2.5 mm. Stamens included. Stigmas capitate. Achenes exceeding persistent perianth, brown, slightly shiny, narrowly ovoid, trigonous, 3–4 mm. Fl. Jul–Aug, fr. Aug–Sep.

Mountain slopes, valleys; 1000–3000 m. Sichuan, Yunnan.

1a. Raceme dense ........................................ 6a. var. leptopodum
1b. Raceme very lax ....................................... 6b. var. grossii

6a. *Fagopyrum leptopodum* var. leptopodum


Mountain slopes, valleys; 1000–3000 m. Sichuan, Yunnan.


细柄野荞  xi bing ye qiao


Herbs annual. Stems erect, 20–70(–80) cm tall, branched at base, striate, sparsely shortly strigose. Petiole 1–3 cm, shortly strigose; leaf blade ovate-triangular, 2–4 × 1.5–3 cm, both surfaces sparsely shortly strigose, base cordate or hastate, apex acuminate; ocrea 4–5 mm, membranous, shortly strigose, oblique, apex acute. Inflorescence axillary or terminal, racemose, interrupted, pendulous, very lax, 2–4 cm, slender; bracts green, funnel-shaped, margin membranous, each 2- or 3-flowered. Pedicels longer than bracts, slender, apex articulate. Perianth pinkish; tepals elliptic, unequal, 2–2.5 mm, with conspicuous green veins. Stamens included. Stigmas capitate. Achenes exceeding persistent perianth, shiny, broadly ovoid, ca. 3 mm, sharply trigonous, sometimes narrowly winged along angles. Fl. Jun–Oct, fr. Jul–Nov.

Grassy slopes, wet valleys, field margins; 300–3400 m. S Gansu, Guizhou, Henan, Hubei, Shaanxi, ?Shanxi, Sichuan, Yunnan.

8. Fagopyrum esculentum Moench, Methodus, 290. 1794.

荠麦  qiao mai

Fagopyrum emarginatum (Roth) Meisner; ?F. emarginatum var. kunawarensese Meisner; F. zuogongense Q. F. Chen; Polygonum emarginatum Roth; P. fagopyrum Linnaeus.

Herbs annual. Stems green or red when mature, erect, 30–90 cm tall, branched above, glabrous or papillate on one side. Petiole 1.5–5 cm; leaf blade triangular, 2.5–7 × 2–5 cm, both surfaces papillate along veins, base cordate or nearly truncate, apex acuminate; ocrea caducous, ca. 5 mm, membranous, oblique, not ciliate. Inflorescence axillary or terminal, racemose or corymbose; peduncles 2–4 cm, papillate along one side; bracts green, ovate, 2.5–3 mm, margin membranous, each 3- or 5-flowered. Pedicels longer than bracts, not articulate. Perianth pink or white; tepals elliptic, 3–4 mm. Anthers pinkish. Styles heterostylous. Achenes exceeding persistent perianth, shiny, broadly ovoid, 5–6 mm, surfaces flat. Fl. May–Sep, fr. Jun–Oct. 2n = 16*, 32*.

Probably native to China, but commonly cultivated and easily escaping [cultivated in Bhutan, Korea, Mongolia, Myanmar, Nepal, Russia, and Sikkim; also Australia, Europe, and North America].


线叶野荞  xian ye ye qiao

Polygonum lineare Samuelsson in Handel-Mazzetti, Symb. Sin. 7: 188. 1929.
nent abaxially, lateral veins inconspicuous, base hastate, margin entire, revolute, apex acute; ocrea 2–3 mm, membranous, oblique, apex acute. Inflorescence racemose, dense, several racemes aggregated and panicle-like; bracts purplish, oblique, ca. 1.5 mm, each 2- or 3-flowered. Pedicels longer than bracts, slender, apex articulate. Perianth white or pinkish; tepals elliptic, ca. 1.5 mm. Stamens included. Stigmas capitate. Achenes exceeding persistent perianth, brown, shiny, broadly ellipsoid, trigonous. Fl. Aug–Oct, fr. Sep–Nov.

- Forest margins, moist valleys; 1700–2200 m. Yunnan.


疏穗野荞  shu sui ye qiao


Herbs annual. Stems 30–50 cm tall, branched at base; branches decumbent or ascending, slender, striate, internodes 1.5–3 cm, upper internodes ca. 8 cm. Petiole 0.8–1.2 cm; leaf blade triangular-sagittate or narrowly sagittate, 1–3 cm × 4–10 mm, both surfaces glabrous, midvein slightly prominent abaxially, basal lobes lanceolate, apex acute; ocrea yellow-brown, 4–5 mm, membranous, oblique, apex acute. Inflorescence terminal or axillary, racemose, very lax, interrupted, 3–6 cm, several racemes aggregated and panicle-like; bracts yellow-brown, 2–2.5 mm, membranous, oblique, apex acuminate, each 2- or 3-flowered. Pedicel 3–4 mm, slender, apex articulate. Perianth white or pinkish; tepals elliptic, ca. 1.5 mm, apex rounded, accrescent. Anthers elliptic. Stigmas capitate. Achenes exceeding persistent perianth, slightly shiny, broadly ovoid, trigonous, 3–4 mm. Fl. Jun–Oct, fr. Jul–Nov.

- Valleys, mountain slopes; 1000–2200 m. S Gansu, Sichuan, Yunnan.