

10. STELLARIA Linnaeus, Sp. Pl. 1: 421. 1753.

繁缕属 fan lu shu

Chen Shilong (陈世龙); Richard K. Rabeler

Fimbripetalum (Turczaninow) Ikonnikov; *Mesostemma* Vvedensky.

Herbs annual, biennial, or perennial. Roots or rhizomes filiform and slender, roots sometimes robust, fleshy. Stems erect, ascending, or prostrate. Leaves compressed, variously shaped, rarely needlelike; stipules absent. Flowers terminal, seldom only axillary, in cymes or solitary, small; bracts immediately subtending calyx absent. Sepals (4 or)5. Petals (4 or)5, white, rarely green, usually 2-cleft nearly to base, rarely retuse or multilobed, sometimes absent. Stamens 2–5 or (6–)10. Ovary 1-loculed, rarely 3-loculed when young; ovules numerous, rarely several and only 1 or 2 mature; styles (2 or)3(or 4). Capsule orbicular or ovoid, opening by valves (1 or)2 × number of styles. Seeds (1 to) numerous, reniform, slightly compressed, tuberculate or smooth; embryo curved.

About 190 species: mainly in temperate and cold regions; 64 species (28 endemic) in China.

- 1a. Petals 5–7-cleft, longer than sepals 58. *S. radians*
1b. Petals 2-cleft either apically or often to base, longer or shorter than sepals, seldom absent.
2a. Styles 2(or 3) or 4; capsules 4(or 6)-valved.
3a. Styles 4.
4a. Sepals rounded apically 64. *S. stronglylosepala*
4b. Sepals long acuminate apically 45. *S. oxycoccoides*
3b. Styles 2(or 3).
5a. Petals and sepals 4; stamens 8; petals ca. 1.5 × as long as sepals; styles 2 59. *S. martjanovii*
5b. Petals and sepals 5; stamens 10; petals shorter than the sepals; styles 2(or 3).
6a. Stems 0.1–0.3 m, tufted; leaves oblong-lanceolate, 0.1–0.2 cm 63. *S. bistyla*
6b. Stems 1–2 m, diffuse; leaves ovate-lanceolate, (2–)3–10 cm 61. *S. ovatifolia*
2b. Styles usually 3; capsules usually 6-valved.
7a. Seeds 1–3(–8), ovules few or many; capsules shorter than sepals, often globose; stamens (5–)8–10.
8a. Stems 15–20 cm tall, not tufted; inflorescence bracts absent; petals ca. 2 × as long as sepals 25. *S. ebracteata*
8b. Stems 2–200 cm, tufted if less than 30 cm; inflorescence bracts present; petals shorter than sepals or absent.
9a. Stems 50–200 cm, diffuse; leaves lanceolate to oblong- or ovate-lanceolate, (2–)3–11(–23) cm; young ovary 3-loculed, with 3 or 4 ovules.
10a. Stamens 5; capsule with 2 or 3 mature seeds; petals subequaling sepals 62. *S. delavayi*
10b. Stamens 5 or 10; capsule with 1 mature seed; petals shorter than sepals.
11a. Plants glandular hairy; leaves lanceolate to oblong-lanceolate, base rounded, semiclasping; petals ca. 2/3 as long as sepals 60. *S. monosperma*
11b. Plants pubescent with curved hairs; leaves ovate-lanceolate, base narrowed into petiole; petals minute, ca. 1/3 as long as sepals 61. *S. ovatifolia*
9b. Stems 2–30(–60) cm, tufted, plants often cushionlike; leaves linear or ovate, 0.3–3.5 cm; ovary 1-loculed, ovules many.
12a. Petals 2-cleft to middle; plants glandular hairy; stamens 10.
13a. Sepals lanceolate, apex acuminate, margin narrowly membranous; stems terete 22. *S. dichotoma*
13b. Sepals oblong, apex obtuse, margin broadly membranous; stems quadrangular .. 23. *S. amblyosepala*
12b. Petals 2-cleft nearly to base or absent; plants densely cushionlike, glabrous or pubescent or woolly; stamens 5 or (8–)10.
14a. Petals subequaling sepals; stamens 5 12. *S. petiolaris*
14b. Petals shorter than sepals or absent; stamens (8–)10.
15a. Leaves ovate to ovate-lanceolate, 3–6 mm.
16a. Plants 5–7 cm tall; stems glabrous basally, pubescent apically 53. *S. arenarioides*
16b. Plants 10–20 cm tall; stems densely white pubescent, rarely glabrous 56. *S. decumbens*
15b. Leaves linear to linear-lanceolate, 4–20(–25) mm.
17a. Stems glabrous 55. *S. petraea*
17b. Stems pubescent, either with curved hairs or white pilose apically.
18a. Stems pubescent with curved hairs; flowers few in loose cymes 54. *S. cherleriae*
18b. Stem white lanate apically; flowers many in dense cymes 57. *S. congestiflora*

- 7b. Seeds and ovules many (rarely few); capsules usually subequaling or longer than sepals, often ovoid; stamens (2–)10, hypogynous or perigynous.
- 19a. Sepals distinct; stamens hypogynous or perigynous.
- 20a. Leaves linear-lanceolate; petals ca. 1.5 × as long as sepals 24. *S. henryi*
- 20b. Leaves broader, usually ovate or ovate-lanceolate; petals of varying lengths.
- 21a. Leaves sessile or subsessile, base sometimes slightly clasping.
- 22a. Plants glabrous 17. *S. gyirongensis*
- 22b. Plants hairy.
- 23a. Plants stellate hairy 16. *S. infracta*
- 23b. Plants pubescent, hairs not stellate.
- 24a. Plants pubescent, hairs short, not dense; abaxial leaf midvein prominent.
- 25a. Leaves with inconspicuous reticulate abaxial veins, only basal margin ciliate; sepals 2–2.5 mm 14. *S. omeiensis*
- 25b. Leaves with conspicuous reticulate abaxial veins, margin ciliate; sepals ca. 2.5 mm 15. *S. reticulivena*
- 24b. Plants glandular hairy, woolly, or hairs long filiform; abaxial leaf midvein prominent or not.
- 26a. Plants densely glandular hairy.
- 27a. Leaves ovate, 5–15 mm, margin ciliate; petals 2-cleft to base; seeds rugulose 18. *S. zangnanensis*
- 27b. Leaves oblong, 12–18 mm, margin not ciliate; petals 2-cleft to middle; seeds tuberculate 19. *S. tibetica*
- 26b. Plants woolly or with long hairs.
- 28a. Plants densely white woolly; petals shorter than sepals; stamens 8; capsules ca. 2 × as long as persistent sepals 20. *S. lanata*
- 28b. Plants long filiform hairy; petals nearly as long as sepals; stamens 10; capsules shorter than persistent sepals 21. *S. patens*
- 21b. All leaves or only leaves of lower stems petiolate.
- 29a. Cymes with few flowers or flower solitary and axillary; petals slightly longer than sepals, 2-cleft to base or 2-lobed.
- 30a. Stems glabrous; petals apically 2-cleft only to 1/3; flowers of 2 types: lower axillary flowers lacking stamens (and petals) 5. *S. wushanensis*
- 30b. Stems hairy; petals 2-lobed or 2-cleft to base; flowers uniform.
- 31a. Stems glandular hairy; leaves ovate or ovate-oblong, 2–8 cm.
- 32a. Capsule slightly longer than sepals; stem with 1 line of multicellular glandular hairs; sepals ovate-oblong to ovate-lanceolate, apex obtuse 1. *S. bungeana*
- 32b. Capsule 1.5–2 × as long as sepals; stem sparsely glandular hairy; sepals lanceolate, apex acute 2. *S. nemorum*
- 31b. Stem hairs not glandular; leaves ovate to rhombic, 0.5–1.5 cm.
- 33a. Stems with appressed hairs; leaves ovate, apex obtuse, base rounded, shortly petiolate or sessile; petals 2-cleft nearly to base 3. *S. nepalensis*
- 33b. Stems sparsely stiffly hairy; leaves rhombic or triangular-ovate, apex acuminate, base rounded or nearly cordate; petals 2-lobed 4. *S. arisanensis*
- 29b. Cymes usually with numerous flowers; petals shorter than or subequaling sepals, sometimes very small or absent.
- 34a. Plants with 1 (or 2) lines of hairs on stems or basal margin of leaves and nodes, not pilose or stellate hairy.
- 35a. Petals absent or very small; stamens 3–5; seeds 0.7–0.8 mm in diam., with tiny protuberances 8. *S. pallida*
- 35b. Petals present, shorter than or subequaling sepals; stamens 3–10; seeds ca. 1 mm or more in diam., with conic or semiglobose protuberances.
- 36a. Stems somewhat stout, 30–80 cm tall; petals subequaling sepals; stamens (6–)8–10; seeds ca. 1.5 mm in diam., with conic protuberances 6. *S. neglecta*

- 36b. Stems slender, 10–30 cm tall; petals shorter than or subequaling sepals; stamens 3–5; seeds
1–1.2 mm in diam., with semiglobose protuberances 7. *S. media*
- 34b. Plants stellate hairy or pilose, rarely glabrous.
- 37a. Plants stellate hairy 9. *S. vestita*
- 37b. Plants pilose or only petioles pilose, rarely glabrous.
- 38a. Leaves ovate to ovate-lanceolate, glabrous on both surfaces, sometimes reddish green 10. *S. chinensis*
- 38b. Leaves narrowly ovate to oblong-lanceolate, white hairy on both surfaces, rarely glabrous.
- 39a. Petals absent; leaves lanceolate to linear-lanceolate 13. *S. lanipes*
- 39b. Petals present; leaves oblong-lanceolate to narrowly ovate.
- 40a. Leaves oblong-lanceolate, 2.5–4 cm; petals slightly shorter than sepals; stamens 10 11. *S. pilosoides*
- 40b. Leaves narrowly ovate, 1.5–2.5 cm; petals subequaling sepals; stamens 5 ... 12. *S. petiolaris*
- 19b. Sepals connate at base into obconic calyx; stamens perigynous.
- 41a. Flowers solitary, axillary or terminal; bracts herbaceous, without membranous margin; pedicels filiform, curved after anthesis; stems glabrous.
- 42a. Plants usually less than 5 cm tall; stamens subequaling petals 26. *S. winkleri*
- 42b. Plants 5–14 cm; stamens shorter than petals 27. *S. crassifolia*
- 41b. Flowers in cymes or umbels, rarely solitary; bracts all herbaceous or with membranous margin; pedicels not filiform; stems glabrous or not.
- 43a. Flowers in cymose umbels; petals absent or small.
- 44a. Petals small; inflorescence compact; stems less than 5 cm tall 49. *S. irrigua*
- 44b. Petals absent; inflorescence loose; stems 5–20 cm tall.
- 45a. Stems pilose; leaves ovate-lanceolate to ovate 50. *S. parvumbellata*
- 45b. Stems glabrous; leaves elliptic or linear to linear-lanceolate.
- 46a. Stems tufted; leaves linear to linear-lanceolate; stamens 5 52. *S. subumbellata*
- 46b. Stems solitary; leaves elliptic; stamens 10 51. *S. umbellata*
- 43b. Flowers in dichotomous cymes, rarely solitary; petals present (rarely absent), usually conspicuous.
- 47a. Leaves lanceolate to narrowly ovate, base semiclapping.
- 48a. Plants glabrous; leaves lanceolate.
- 49a. Leaf margin herbaceous; stamens 10 28. *S. discolor*
- 49b. Leaf margin cartilaginous, crisp; stamens 5(–10).
- 50a. Leaves (2–)5–20 mm; stamens 5(–10) 33. *S. alsine*
- 50b. Leaves 30–60 mm; stamens 10 38. *S. salicifolia*
- 48b. Plants pubescent; leaves lanceolate to ovate-lanceolate.
- 51a. Leaves lanceolate or narrowly ovate, 4–12 mm, base narrowed; inflorescences with 1–3 flowers 30. *S. pusilla*
- 51b. Leaves ovate-lanceolate, 3–10 mm; inflorescences with numerous flowers.
- 52a. Leaf apex acute; stems with retrorse hairs; petals slightly longer than sepals; pedicel 5–30 mm, longer than sepals 31. *S. mainlingensis*
- 52b. Leaf apex obtuse; stems minutely pubescent; petals shorter than sepals (rarely absent); pedicel 3–4 mm, subequaling sepals 32. *S. depressa*
- 47b. Leaves narrower, linear to linear-lanceolate; base semiclapping or not.
- 53a. Flower solitary; mature capsule black 48. *S. soongorica*
- 53b. Inflorescences with numerous flowers; mature capsule yellow.
- 54a. Stems pubescent.
- 55a. Stems pubescent, hairs retrorse 44. *S. alaschanica*
- 55b. Stem pubescence not retrorse.
- 56a. Stems not tufted.
- 57a. Stems minutely pubescent; leaves linear, sickle-shaped 29. *S. gyangtseensis*
- 57b. Stems with 2 lines of hairs; leaves linear to linear-lanceolate, not sickle-shaped 34. *S. graminea*
- 56b. Stems tufted.
- 58a. Stems densely tufted, 5–15 cm tall, with one line of recurved hairs; petals ca. 2/3 as long as sepals 46. *S. uda*
- 58b. Stems sparsely tufted, 20–30 cm tall, sparsely hairy; petals slightly shorter than or subequaling sepals 47. *S. souliei*

- 54b. Stems glabrous or nearly so.
 59a. Petals 1/2–2/3 as long as the sepals; leaves lanceolate, 1–2 cm 35. *S. brachypetala*
 59b. Petals slightly shorter than to 2 × as long as sepals; leaves linear to lanceolate.
 60a. Abaxial midvein of leaf blade inconspicuous, not raised.
 61a. Leaves oblong-lanceolate, ca. 1 cm, apex obtuse, margin glabrous; flowers 1 or 2;
 petals slightly longer than sepals 41. *S. imbricata*
 61b. Leaves linear to lanceolate, 0.5–7 cm, apex acute, margin usually ciliate; flowers
 numerous; petals slightly shorter to longer than sepals.
 62a. Leaves 0.5–4 cm, margin ciliate at base; seeds black-brown, granulose 34. *S. graminea*
 62b. Leaves 3–5(–7) cm, margin ciliate; seeds brown, sparsely tuberculate . 36. *S. yunnanensis*
 60b. Abaxial midvein of leaf blade conspicuously raised.
 63a. Stems rough; leaf margin finely papillate roughened, rarely sparsely ciliate.
 64a. Sepals ca. 3 mm or less at anthesis, apex obtuse, veins inconspicuous; mature
 capsule
 black-brown; seeds smooth 40. *S. longifolia*
 64b. Sepals (4–)5 mm or more at anthesis, apex acuminate, veins conspicuous; mature
 capsule yellowish; seeds rugulose 37. *S. palustris*
 63b. Stems smooth; leaf margin often ciliate, especially near base of blade.
 65a. Pedicels ca. 15 mm or less; sepals 6–7 mm; petals shorter than sepals .. 39. *S. dianthifolia*
 65b. Pedicels ca. 14 mm or longer; sepals 4–5.5 mm; petals subequaling to 2 × as
 long
 as sepals.
 66a. Seeds orbicular-reniform, tuberculate; petals 1.5–2 × as long as sepals . 42. *S. nipponica*
 66b. Seeds ellipsoid, rugulose; petals subequaling to 1.5 × as long as sepals .. 43. *S. filicaulis*

1. *Stellaria bungeana* Fenzl var. ***stubendorffii*** (Regel) Y. C. Chu, Fl. Pl. Herb. Chin. Bor.-Orient. 3: 29. 1975.

林繁缕 lin fan lu

Stellaria nemorum Linnaeus var. *stubendorffii* Regel, Bull. Soc. Imp. Naturalistes Moscou 35(1): 270. 1862. Herbs perennial. Stems ascending or erect, 50–80 cm tall, simple or branched, with 1 line of multicellular hairs. Leaves ovate, ovate-oblong, or ovate-lanceolate, 4–8 × 2–3(–4) cm, both surfaces nearly glabrous, base nearly cordate, rounded, or cuneiform, margin with multicellular hairs, apex acuminate; proximal cauline leaves petiolate, distal leaves sessile. Flowers in terminal cymes; bracts ovate, herbaceous, ciliate. Pedicel 1–3 cm, densely glandular hairy. Sepals 5, narrowly ovate-oblong to ovate-lanceolate, 4–5 mm, with soft hairs, midvein inconspicuous, apex slightly obtuse-acute. Petals 5, slightly longer than sepals, 2-cleft nearly to base. Stamens 10, nearly as long as sepals. Styles 3. Capsule ovoid, slightly longer than persistent sepals, 6-valved. Seeds blackish brown, compressed reniform, ca. 1.2 mm in diam., densely tuberculate. Fl. Apr–Jun, fr. Jul–Aug.

Mixed woods, grassland slopes; ca. 1500 m. Jilin [Japan, Korea, Russia; Europe].

The typical variety differs from var. *stubendorffii* in its pubescent stems and flowers, ovate sepals, petals 1.5–2 × as long as sepals, and tuberculate seeds.

2. *Stellaria nemorum* Linnaeus, Sp. Pl. 1: 421. 1753.

腺毛繁缕 xian mao fan lu

Stellaria nemorum var. *bracteata* Fenzl; *S. diversiflora* Maximowicz var. *gymnandra* Franchet; *S. nemorum* var. *subbracteata* Fenzl.

Herbs annual, sparsely glandular pubescent. Stems 45–50 cm tall, diffuse and decumbent, quadrangular, sparsely branched at base. Basal leaves petiolate, ovate, small; middle cauline leaves with petiole 2–4 cm; leaf blade oblong-ovate, 2–4 × 2–3(–4) cm, both surfaces sparsely pubescent, base cordate, apex acuminate; distal leaves shortly petiolate, small, sessile to semiclasping. Flowers in terminal, sparse cymes; bracts ovate, herbaceous. Pedicel 2–3 cm, slender, with white soft hairs. Sepals 5, lanceolate, 5–8 mm, outside sparsely pubescent, apex acute. Petals slightly longer than sepals, 2-cleft nearly to base. Stamens 10, slightly shorter than sepals. Styles 3, linear. Capsules ovoid, 1.5–2 × as long as persistent sepals. Seeds numerous, brown, suborbicular, ca. 1 mm in diam., tuberculate. Fl. May–Jun, fr. Jun–Jul. $2n = 26$.

Grassland slopes; 2100–2700 m. Gansu, Shanxi [Japan, Mongolia, Russia; Europe].

3. *Stellaria nepalensis* Majumdar & Vartak, J. Indian Bot. Soc. 50: 215. 1971.

尼泊尔繁缕 ni po er fan lu

Stellaria neotomentosa Mizushima ex H. Ohba.

Herbs perennial. Stems prostrate, tufted, 10–30 cm; branchlets nearly claviform or triangular, sparsely white appressed hairy (hairs 0.4–0.7 mm). Leaves shortly petiolate or sessile; leaf blade broadly ovate or ovate, 0.5–1.5 × 0.4–1.3 cm, abaxially sparsely appressed hairy, midvein conspicuous, adaxially glabrous, base

cordate, margin ciliate, apex acute. Flowers 1–3 in axillary cymes; bracts lanceolate or ovate-lanceolate, 3–4 × 0.5–1 mm, herbaceous. Pedicel 1.5–5 cm, pubescent, subglabrous in fruit. Sepals 5, lanceolate, 5–7 × 1–1.5 mm, veins 1–3, outside glabrous, base rounded, margin membranous, apex acute. Petals 5, slightly longer than sepals, 2-cleft nearly to base; lobes lanceolate. Stamens 10; filaments subulate; anthers purplish; disc lobed, ringlike, with glands. Styles 3, ca. 3 mm, filiform, glabrous. Capsules ovoid, 7–8 mm, 6-valved. Seeds numerous, brown, compressed, ca. 1.2 mm wide, conspicuously tuberculate. Fl. Jun–Jul, fr. Jul–Aug.

Picea forests, mixed coniferous and broadleaf forests; 2500–3100 m. Xizang [Bhutan, India, Nepal].

4. *Stellaria arisanensis* (Hayata) Hayata, Icon. Pl. Formosan. 3: 40. 1913.

阿里山繁缕 a li shan fan lu

Cerastium arisanense Hayata, J. Coll. Sci. Imp. Univ. Tokyo 30(1): 35. 1911; *Stellaria arisanensis* var. *leptophylla* Hayata; *S. diversiflora* Maximowicz var. *leptophylla* (Hayata) Mizushima.

Herbs perennial, sparsely hirsute. Stems diffuse, 20–60 cm tall, slender. Leaves with petiole compressed, 4–6 mm; leaf blade broadly rhombic to triangular-ovate, 5–7 × 5–8 mm, abaxially glabrous, adaxially pubescent, midvein hirsute, base broadly cuneiform or nearly rounded, margin ciliate, apex acuminate. Flower solitary, axillary. Pedicel 6–8 mm, hirsute. Sepals 5, lanceolate, 6–8 × 2–3 mm, with scales, outside sparsely hirsute. Petals 5, obovate-spatulate, 1.2–1.4 cm × 4–6 mm, apex 2-lobed. Stamens 10. Ovary ovoid, 2–3 mm, apex truncate; styles 3. Capsule globose. Seeds oblong. $2n = 20^*$.

• 1800–2400 m. Taiwan.

5. *Stellaria wushanensis* F. N. Williams, J. Linn. Soc., Bot. 34: 434. 1899.

巫山繁缕 wu shan fan lu

Stellaria wushanensis var. *trientaloides* Handel-Mazzetti.

Herbs annual. Stems sparsely tufted, slightly diffuse at base, erect above, 10–20 cm tall, multibranching, glabrous. Leaves with petiole 1–2 cm; leaf blade ovate-cordate to ovate, 2–3.5 × 1.5–2 cm, abaxially greenish, both surfaces glabrous or adaxially sparsely hirsute, midvein protuberant, base cordate or narrowed into long petiole, asymmetric, margin glabrous or ciliate, apex acute. Flowers several, usually 1–3 in terminal or axillary cymes; bracts herbaceous. Pedicel 2–6 cm, 4–10 × as long as sepals, glabrous or sparsely pubescent. Sepals 5, lanceolate, 5.5–6 mm, 1-veined, margin membranous, apex acute. Petals 5, obcordate, ca. 8 mm, apex 2-cleft to 1/3 of sepals. Stamens (7–) 10, shorter than petals. Styles (2 or) 3 (or) 4. Axillary flower at middle or proximal parts of inflorescences female;

stamens absent or sometimes both petals and stamens absent; styles 2. Capsule ovoid, subequaling persistent sepals. Seeds 3–5, brown, orbicular-reniform, tuberculate. Fl. Apr–Jun, fr. Jun–Jul.

• Mountains, hills; 1000–2000(–2500) m. Guangdong, Guangxi, Guizhou, Hubei, Hunan, Jiangxi, Shaanxi, Sichuan, Yunnan, Zhejiang.

6. *Stellaria neglecta* Weihe in Bluff & Fingerhuth, Comp. Fl. German. 1: 560. 1825.

鸡肠繁缕 ji chang fan lu

?*Stellaria diversiflora* Maximowicz var. *gymnandra* Franchet; *S. media* (Linnaeus) Villars var. *decandra* Fenzl; *S. media* Villars var. *procera* Klatt & Richter; *S. octandra* Pobedimova.

Herbs annual or biennial, pale green. Stems tufted, 30–80 cm tall, with 1 line of hairs. Leaves shortly petiolate or sessile, ovate or narrowly ovate, (1.5–)2–3 × 0.5–1.3 cm, base cuneate, somewhat clasping, apex acute, basal leaf margin and stems between 2 basal leaves long hairy. Flowers terminal in dichotomous cymes; bracts lanceolate, herbaceous, glandular pubescent. Pedicel 1–1.5 cm, slender, with a line of dense soft hairs, nodding after anthesis. Sepals 5, ovate-elliptic to lanceolate, 3–4(–5) mm, outside densely pubescent with multicellular glandular hairs, margin membranous, apex acute, inflexed. Petals 5, nearly as long as or slightly longer than sepals, 2-cleft nearly to base. Stamens (6–)8–10, slightly longer than petals. Styles 3. Capsule ovoid, longer than persistent sepals, 6-valved; valves revolute. Seeds numerous, brown, nearly compressed orbicular, ca. 1.5 mm in diam., with sparse conical papillae. Fl. Apr–Jun, fr. Jun–Aug. $2n = 22$.

Mixed forests; 900–1200 m. Guizhou, Heilongjiang, Jiangsu, Nei Mongol, Qinghai, Shaanxi, Sichuan, Taiwan, Xinjiang, Xizang, Yunnan, Zhejiang [Afghanistan, Japan, Kazakhstan, Nepal, Russia; N Africa, SW Asia, S Europe].

7. *Stellaria media* (Linnaeus) Villars, Hist. Pl. Dauphiné 3: 615. 1789.

繁缕 fan lu

Herbs annual, biennial, or perennial. Stems decumbent or ascending, pale purplish, 10–30 cm tall, sparsely branched at base, with 1 (or) 2 lines of hairs. Basal leaves long petiolate, distal leaves sessile or shortly petiolate; leaf blade broadly ovate to ovate-orbicular, 0.8–2.5 × (0.5–)1–1.5 cm, base narrowed or cordate, apex acuminate or acute. Flowers in sparse terminal or axillary cymes. Pedicel 0.7–1.4 cm, elongate and nodding after anthesis, slender, with 1 line of hairs. Sepals 5, ovate-lanceolate or ovate-oblong, ca. 2–2.5 or 4 mm, outside glandular pubescent, margin broadly membranous, apex slightly obtuse or nearly rounded. Petals oblong, shorter than or subequaling sepals, 2-cleft nearly to base; lobes nearly linear. Stamens 3–5, shorter than petals. Styles 3, linear. Capsule ovoid, slightly longer than persistent sepals, 6-valved. Seeds numerous, red-brown, ovoid to compressed globose, 1–1.2 mm in diam., semiglobose-tuberculate or curved reticulate. Fl. Jun–Jul, fr. Jul–Aug. $2n = 40, 42, 44$.

Fields. Anhui, Fujian, Gansu, Guangdong, Guangxi, Guizhou, Hebei, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Jilin, Liaoning, Nei Mongol, Ningxia, Qinghai, Shaanxi, Shandong, Shanxi, Sichuan, Taiwan, Xizang, Yunnan, Zhejiang [Afghanistan, Bhutan, India, Japan, Korea, Pakistan, Russia, Sikkim; Europe].

- 1a. Herbs annual or biennial; leaves 1.5–2.5 cm; sepals ca. 4 mm; petals shorter than sepals 7a. var. *media*
1b. Herbs perennial; leaves 0.8–1 cm; sepals 2–2.5 mm; petals subequaling sepals 7b. var. *micrantha*

7a. *Stellaria media* var. *media*

繁缕(原变种) fan lu (yuan bian zhong)

Alsine media Linnaeus, Sp. Pl. 1: 272. 1753; *Stellaria monogyna* D. Don.

Herbs annual or biennial. Stems 10–30 cm tall. Basal leaves long petiolate, distal leaves sessile or shortly petiolate; leaf blade ovate, 1.5–2.5 × 1–1.5 cm, apex acuminate. Stamens 3–5, shorter than petals. Styles 3, linear. Capsule ovoid, slightly longer than persistent sepals, 6-valved. Seeds numerous, red-brown, ovoid to suborbicular, slightly compressed, 1–1.2 mm in diam., semiglobose-tuberculate. Fl. Jun–Jul, fr. Jul–Aug. $2n = 40, 42, 44$.

Fields. Anhui, Fujian, Gansu, Guangdong, Guangxi, Guizhou, Hebei, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Jilin, Liaoning, Nei Mongol, Ningxia, Qinghai, Shaanxi, Shandong, Shanxi, Sichuan, Xizang, Yunnan, Zhejiang [Afghanistan, Bhutan, India, Japan, Korea, Pakistan, Russia, Sikkim; Europe].

7b. *Stellaria media* var. *micrantha* (Hayata) T. S. Liu & S. S. Ying, Fl. Taiwan 2: 350. 1976.

小花繁缕 xiao hua fan lu

Stellaria micrantha Hayata, J. Coll. Sci. Imp. Univ. Tokyo 30: 36. 1911.

Herbs perennial. Stems decumbent, ascending above, 10–25 cm tall. Leaves sessile, broadly ovate-orbicular, 0.8–1 cm × 5–7 mm, base narrowed, somewhat clasping, apex acute, aristate. Flowers terminal or in axillary cymes. Pedicel usually opposite; bracts ovate-orbicular, very small, 1–1.5 mm. Sepals 5, ovate-oblong, 2–2.5 mm, apex acute. Petals 5, subequaling sepals, 2-cleft nearly to base. Stamens 5. Styles 3, short. Capsule ovoid, 6-valved. Seeds compressed globose, curved reticulate, apex with short rostellum, reflexed.

• Taiwan.

8. *Stellaria pallida* (Dumortier) Crépin, Man. Fl. Belgique, ed. 2, 19. 1866.

无瓣繁缕 wu ban fan lu

Alsine pallida Dumortier, Fl. Belg. 109. 1827.

Herbs annual or biennial. Stems usually decumbent, sometimes ascending, basal branches with 1 line of villous nonglandular hairs. Middle and distal leaves

sessile, proximal leaves long petiolate; leaf blade suborbicular, small, 5–8(–15) mm, both surfaces glabrous, base cuneate, apex acute. Flowers in terminal dichotomous cymes. Pedicel slender. Sepals lanceolate, rarely ovate-lanceolate, 3–4 mm, ± densely pubescent, rarely glabrous, apex acute. Petals absent or minute. Stamens 3–5, rarely absent. Styles very short. Seeds pale red-brown, minute, 0.7–0.8 mm in diam., minutely tuberculate, margin shallowly serrate or smooth. $2n = 22$.

Fields. Jiangsu, Xinjiang [Asia, Europe].

Chinese records of *Stellaria apetala* Ucria (e.g., in FRPS) are almost certainly referable to *S. pallida*.

9. *Stellaria vestita* Kurz, J. Bot. 11: 194. 1873.

箐姑草 qing gu cao

Herbs perennial, stellate hairy. Stems sparsely tufted, diffuse or decumbent, 30–60(–90) cm tall, basally branched, apically densely stellate hairy. Leaves ovate or elliptic to oblong-lanceolate, 1–10 × 0.8–3 cm, both surfaces stellate hairy, midvein conspicuous abaxially, base rounded or clasping, rarely narrowed into short petiole, apex acute or acuminate. Flowers in sparse cymes; peduncles long, densely stellate pubescent; bracts ovate-lanceolate, herbaceous, margin membranous. Pedicel unequal, 1–3 cm, slender, densely stellate hairy. Sepals 5, gray-green, lanceolate, 4–6 mm, outside stellate pubescent, 3-veined, margin membranous, apex acute. Petals 5, shorter than or subequaling sepals, 2-cleft nearly to base; lobes linear. Stamens 10, shorter than or nearly as long as petals. Styles 3(or 4). Capsules ovoid, 4–5 mm, 6-valved. Seeds numerous, reniform, compressed, ca. 1.5 mm, ridges tuberculate. Fl. Apr–Jun, fr. Jun–Aug. $2n = 24, 26, 28$.

Stony places, grassland slopes, forests; 600–3600 m. Fujian, Gansu, Guangxi, Guizhou, Hebei, Henan, Hubei, Hunan, Jiangxi, Shaanxi, Shandong, Sichuan, Taiwan, Xizang, Yunnan, Zhejiang [Bhutan, India, Indonesia, Myanmar, Nepal, New Guinea, Philippines, Sikkim, Vietnam].

- 1a. Plants 30–60(–90) cm tall; leaves ovate or elliptic 9a. var. *vestita*
1b. Plants ca. 100 cm tall; leaves oblong-lanceolate or ovate-lanceolate 9b. var. *amplexicaulis*

9a. *Stellaria vestita* var. *vestita*

箐姑草(原变种) qing gu cao (yuan bian zhong)
Stellaria hamiltoniana Majumdar; *S. laxa* Merrill; *S. pseudosaxatilis* Handel-Mazzetti; *S. saxatilis* Buchanan-Hamilton ex D. Don (1825), not Scopoli (1772); *S. saxatilis* f. *petiolata* Mizushima; *S. stellatopilosa* Hayata.

Stems 30–60(–90) cm tall. Leaves ovate or elliptic, 1–3.5 × 0.8–2 cm, both surfaces stellate hairy, midvein

conspicuous abaxially, base rounded, rarely narrowed into a short petiole, apex acute, rarely acuminate.

Stony places, grassland slopes, forests; 600–3600 m. Fujian, Gansu, Guangxi, Guizhou, Hebei, Henan, Hubei, Hunan, Jiangxi, Shaanxi, Shandong, Sichuan, Taiwan, Xizang, Yunnan, Zhejiang [Bhutan, India, Indonesia, Myanmar, Nepal, New Guinea, Philippines, Sikkim, Vietnam].

9b. *Stellaria vestita* var. *amplexicaulis* (Handel-Mazzetti) C. Y. Wu, Index Fl. Yunnan. 1: 263. 1984.

抱茎箐姑草 *bao jing qing gu cao*

Stellaria saxatilis Buchanan-Hamilton ex D. Don var. *amplexicaulis* Handel-Mazzetti, Symb. Sin. 7: 190. 1929.

Stems ca. 100 cm tall. Leaves oblong-lanceolate or ovate-lanceolate, 5–10 × 1–3 cm, base clasping, apex acuminate.

• Slopes; 1900–3200 m. Sichuan, Yunnan.

10. *Stellaria chinensis* Regel, Bull. Soc. Imp. Naturalistes Moscou 35: 283. 1862.

中国繁缕 *zhong guo fan lu*

Stellaria hassiana Loesener.

Herbs perennial. Stems diffuse or decumbent, quadrangular, 30–100 cm tall, slender, glabrous. Leaves shortly petiolate or sessile; petiole villous; leaf blade ovate to ovate-lanceolate, 3–4 × 1–1.6 cm, both surfaces glabrous, midvein conspicuous abaxially, base broadly cuneate or nearly rounded, apex acuminate. Flowers in sparse cymes; peduncles slender; bracts membranous. Pedicel ca. 1 cm or longer, slender. Sepals 5, lanceolate, 3–4 mm, margin membranous, apex acuminate. Petals 5, nearly as long as sepals, 2-cleft nearly to base. Stamens 10, slightly shorter than petals. Styles 3. Capsule ovoid, slightly longer than or subequaling persistent sepals, 6-valved. Seeds brown, ovoid, slightly compressed, papillate. Fl. May–Jun, fr. Jul–Aug.

• Scrub, *Abies* forests, wetlands; (160–)500–1300(–2500) m. Anhui, Fujian, Gansu, Guangxi, Hebei, Henan, Hubei, Hunan, Jiangxi, Shaanxi, Shandong, Sichuan, Zhejiang.

11. *Stellaria pilosoides* Shi L. Chen et al., Novon 11: 302. 2001.

长毛箐姑草 *chang mao qing gu cao*

Stellaria pilosa Franchet, Pl. Delavay. 99. 1889, not Dulac (1867).

Herbs annual, grayish white villous. Stems sparsely tufted, diffuse, decumbent or ascending, 20–30 cm tall, apically branched, villous. Basal leaves smaller, middle and distal ones larger. Leaves oblong-lanceolate, 2.5–4 cm × 3–10 mm, both surfaces villous, rarely glabrous, base narrowed into short petiole or sessile, apex acute or acuminate. Flowers numerous in sparse cymes; bracts lanceolate, 2–3 mm, densely villous. Pedicel 1–4 cm, slender, densely villous. Sepals 5, lanceolate, 5–6 × ca. 1 mm, margin narrowly membranous, apex long acuminate. Petals 5, slightly shorter than sepals, 2-cleft

nearly to base. Stamens 10, nearly as long as petals; filaments linear; anthers yellow-brown, ellipsoid. Styles 3, linear. Capsule oblong-ovoid, nearly as long as persistent sepals, 6-valved. Seeds brown, compressed orbicular, tuberculate. Fl. Jun–Jul, fr. Aug–Sep.

• Forest margins, grasslands; 2200–2800(–3700) m. Sichuan, Yunnan.

12. *Stellaria petiolaris* Handel-Mazzetti, Oesterr. Bot. Z. 89: 57. 1940.

细柄繁缕 *xi bing fan lu*

Stellaria capillipes (Franchet) C. Y. Wu; *S. pilosa* Franchet var. *capillipes* (Franchet) Handel-Mazzetti; *S. saxatilis* Buchanan-Hamilton ex D. Don var. *capillipes* Franchet.

Herbs perennial. Stems numerous, tufted, decumbent or ascending, ca. 20 cm; branches quadrangular, slender, white villous. Distal several leaves slightly denser than middle ones. Leaves narrowly ovate, 1.5–2.5 cm × 5–13 mm, abaxially paler than adaxially, veins prominent, base slightly rounded and narrowed, apex acuminate. Flowers numerous (to 13) in sparsely dichotomous cymes; peduncles long; proximal bracts herbaceous, other bracts membranous. Pedicel long, 1.5–2.5 cm, slender, declinate. Sepals 5, lanceolate, ca. 5 mm, glabrous or long hairy at anthesis, veins 3, margin narrowly membranous, apex acute. Petals 5, subequaling sepals, 2-cleft nearly to base; lobes narrowly linear. Stamens 5, nearly as long as petals; filaments filiform. Styles 3, subequaling filaments. Capsule ca. 1/2 as long as persistent sepals, 3-valved. Seeds rarely formed, tuberculate.

• *Picea* and *Quercus* forests, scrublands; 1800–2700(–3700) m. Sichuan, Xizang, Yunnan.

13. *Stellaria lanipes* C. Y. Wu & H. Chuang in C. Y. Wu et al., Fl. Yunnan. 6: 836. 1995.

绵柄繁缕 *mian bing fan lu*

Herbs diffuse. Stems 15–25 cm tall, slender, branched, shiny, glabrous; nodes densely white lanate. Leaves sessile or proximal leaves very shortly petiolate, narrowly lanceolate or linear-lanceolate, rarely lanceolate, 0.6–2 cm × 2–5 mm, dark, abaxially white lanate at midvein, adaxially glabrous, both surfaces with prominent midvein, base narrowed or rounded, apex acuminate or acute. Flowers in terminal cymes; bracts linear-lanceolate, smaller than leaves, herbaceous. Pedicel 0.7–1(–2.5) cm, slender, white lanate, hairs dense distally. Sepals 5, lanceolate, 2.5–3 mm, glabrous, veins very slender and inconspicuous, margin membranous, apex acute. Petals absent. Stamens 10, slightly shorter than petals; anthers suborbicular, small; filaments subulate. Ovary ovoid, ca. 1 mm; styles 3, subequaling ovary. Capsule narrowly ovoid, 3–4 mm. Seeds red-brown, globose, compressed, ca. 0.5 mm in diam., nearly smooth. Fl. Jun, fr. Jun.

- Wet valleys; ca. 3500 m. Yunnan.

14. *Stellaria omeiensis* C. Y. Wu & Y. W. Tsui ex P. Ke, *Acta Bot. Yunnan.* 7: 72. 1985.

峨眉繁缕 e mei fan lu

Herbs annual. Stem solitary, quadrangular, 20–30 cm tall, apically branched, pilose. Leaves ovate, orbicular-ovate, or ovate-lanceolate, 1.5–2.5(–4.5) × 0.8–1.2(–1.5) cm, abaxially sparsely hairy, adaxially glabrous, midvein conspicuously protuberant, densely hairy, base rounded, sessile, margin ciliate, apex acuminate. Flowers numerous, in terminal, sparse cymes; bracts ovate, membranous. Pedicel 1–2 cm, subglabrous. Sepals 5, lanceolate, 2–2.5 mm, midvein conspicuous, margin membranous, apex acuminate. Petals 5, shorter than sepals, 2-cleft nearly to base. Stamens 10, shorter than petals. Styles 3. Capsule oblong-ovoid, ca. 1.5 × as long as persistent sepals, 6-valved. Seeds brown-purplish, compressed globose, inconspicuously tuberculate. Fl. Apr–Jul, fr. Jun–Aug.

- Forests, grasslands; (1200–)1500–2900 m. Guizhou, Hubei, Sichuan, Yunnan.

15. *Stellaria reticulivena* Hayata, *Icon. Pl. Formosan.* 7: 1. 1918.

网脉繁缕 wang mai fan lu

Herbs annual. Stems decumbent or ascending, quadrangular, 20–30 cm tall, pilose, nodes densely pilose. Leaves sessile, orbicular-ovate, 1.5–2.5 × 0.8–1.2 cm, base rounded, apex long acuminate. Basal leaves petiolate, withered at anthesis, abaxially midvein prominent, hairy, reticulate veins conspicuous, adaxially midvein impressed, margin shortly ciliate. Flowers in terminal cymes; peduncles 4–6 cm, glabrous; bracts ovate, 1–1.5 mm, membranous. Pedicel 1–2 cm, slender. Sepals 5, ovate-lanceolate, ca. 2.5 × 1 mm, glabrous, midvein conspicuous, margin membranous, apex acuminate. Petals 5, ca. 2 × 0.3 mm, 2-cleft nearly to base; lobes narrowly linear, narrowed at base, apex obtuse. Stamens 10; filaments linear, ca. 2 mm; anthers subglobose. Ovary ovoid-orbicular; styles 3, ca. 0.5 mm. Capsule ovoid, ca. 3 mm, 6-valved to middle. Seeds brown, oblong, ca. 0.6 mm, inconspicuously muriculate. Fl. May–Jul, fr. Jul–Aug.

1800–2800 m. Taiwan, Zhejiang [Bhutan, Sikkim].

16. *Stellaria infracta* Maximowicz, *Trudy Imp. S.-Peterburgsk. Bot. Sada* 11: 72. 1889.

内弯繁缕 nei wan fan lu

Arenaria velutina Pax & K. Hoffmann; *Stellaria dichasioides* F. N. Williams; *S. infracta* Maximowicz var. *ovatolanceolata* Mattfeld; *S. nutans* F. N. Williams. Herbs perennial, densely grayish white stellate hairy. Stems diffuse, decumbent or ascending, rooting at nodes basally, 15–35(–50) cm, branched, stellate hairy. Leaves lanceolate or linear-lanceolate, rarely narrowly ovate, 1.5–3(–5) cm × 3–5(–9) mm, gray-green, both

surfaces stellate hairy, midvein raised abaxially, base clasping, apex acute. Flowers numerous, in terminal dichotomous cymes, stellate hairy; bracts herbaceous, stellate hairy. Pedicel 0.3–1.5 cm, slender. Sepals 5, gray-green, linear-lanceolate, 3–4 × ca. 1.5 mm, stellate hairy, margin membranous, apex acute. Petals 5, slightly shorter than sepals, 2-cleft nearly to base; lobes narrowly linear. Stamens 10, slightly shorter than petals. Styles 3. Capsules ovoid, ca. 4 mm, slightly longer than persistent sepals, 6-valved. Seeds brown, reniform, ca. 0.8 mm, with protuberances. Fl. Jun–Jul, fr. Aug–Sep.

- Grasslands; 800–2500(–3200) m. Gansu, Hebei, Henan, Nei Mongol, Shaanxi, Shanxi, Sichuan.

17. *Stellaria gyirongensis* L. H. Zhou in C. Y. Wu, *Fl. Xizang.* 1: 700. 1983.

吉隆繁缕 ji long fan lu

Stems 15–30 cm tall, slender, shiny, glabrous. Leaves sessile or shortly petiolate, pale green, ovate, 1–2.5 × 0.5–1.5 cm, midvein raised, base rounded, apex acute. Flowers numerous, terminal; bracts lanceolate, 5–10 mm, membranous. Pedicel green, 1–3.5 cm, slender, shiny. Sepals 5, lanceolate, 3–5 mm, membranous, 1-veined, base broad, apex long acuminate. Petals 5, subequaling sepals, 2-cleft nearly to base. Stamens shorter than petals; anthers yellow. Ovary ovoid; styles 3, narrowly linear.

- Mixed forests; ca. 2500 m. Xizang.

18. *Stellaria zangnanensis* L. H. Zhou, *Bull. Bot. Lab. N. E. Forest. Inst., Harbin* 9: 56. 1980.

藏南繁缕 zang nan fan lu

Stems yellow, 10–30 cm tall, glandular hairy. Leaves sessile, ovate, 0.5–1.5 cm × 3–7 mm, both surfaces glandular pubescent, base rounded, margin ciliate, apex acute. Flowers numerous, in terminal cymes; bracts ovate-lanceolate, 5–10 × 2–3 mm, both surfaces glandular pubescent, base rounded, apex acuminate. Pedicel 0.5–1.5 cm, densely glandular pubescent. Sepals 5, lanceolate, 3–4 × ca. 1 mm, outside glandular pubescent, base broad, margin membranous, apex acuminate. Petals 5, 2–3 mm, 2-cleft nearly to base; lobes linear. Stamens 8, subequaling petals. Styles 3, linear. Capsules narrowly ovoid, 3–4 × ca. 1 mm, subequaling or slightly longer than persistent sepals. Seeds brown, orbicular-reniform, rugulose. Fl. May–Jul, fr. Jul–Aug.

- Grassy valleys; (1900–)2300–2700 m. Xizang, Yunnan.

19. *Stellaria tibetica* Kurz, *Flora* 55: 285. 1872.

西藏繁缕 xi zang fan lu

Herbs annual, densely glandular pubescent. Stems ascending, 7–13 cm tall, somewhat stout, base glabrous. Leaves sessile, oblong-ovate, 1.2–1.8 cm, veins inconspicuous, apex obtuse or acute. Flowers few, axillary or in terminal cymes, ca. 8 mm in diam.; bracts herbaceous. Pedicel shorter to longer than flowers. Sepals 5, elliptic, margin membranous, apex acute. Pet-

als 5, longer or shorter than sepals, 2-cleft to middle. Styles 3, slender. Capsule broadly ovoid, slightly shorter than persistent sepals, 6-valved. Seeds brown, tuberculate.

• Rocky crevices; 3600–5500 m. Xizang.

20. *Stellaria lanata* J. D. Hooker, Fl. Brit. India 1: 232. 1874.

绵毛繁缕 mian mao fan lu

Herbs perennial, densely white woolly. Stems sparsely tufted, ascending, 25–30 cm tall, slender, branched, woolly. Leaves sessile, narrowly lanceolate to linear, 1–3 cm × 2–5 mm, midvein conspicuous, abaxially white woolly, adaxially gray green, sparsely hairy or glabrous, base rounded or cuneate, apex acute. Flowers few, in terminal cymes. Pedicel erect in fruit, longer than leaves, white woolly. Sepals 5, ovate-lanceolate, 5–7 mm, outside lanate, margin membranous, apex acute. Petals 5, shorter than sepals, 2-cleft nearly to base; lobes linear. Stamens 8, shorter than petals. Styles 3. Capsule narrowly ovoid, ca. 2 × as long as persistent sepals, 6-valved. Seeds brown, reniform, granulose. Fl. Jun–Jul, fr. Aug–Sep.

Forests, grasslands, stony banks; 2700–3800(–4100) m. Xizang [Bhutan, India, Nepal, Sikkim].

21. *Stellaria patens* D. Don, Prodr. Fl. Nepal. 215. 1825.

白毛繁缕 bai mao fan lu

Stellaria fenzliana Klotzsch; *S. longissima* Wallich ex Edgeworth & J. D. Hooker; *S. mollis* Klotzsch.

Herbs diffuse, with long, white filiform hairs. Stems yellow, 10–40 cm, slender, shiny, with long filiform hairs, basally glabrous. Leaves sessile, linear or linear-lanceolate, 1–2.5 cm × 2–5 mm, midvein conspicuously raised, both surfaces with long filiform hairs, base broadly cuneate, apex acute or acuminate. Flowers few to numerous, in dichotomous cymes; bracts ovate-lanceolate, 4–5 mm, with long filiform hairs, margin broadly membranous, apex acute. Pedicel 5–10 mm, with dense long filiform hairs. Sepals 5, ovate-lanceolate or lanceolate, 5–7 × 1–1.5 mm, outside with white filiform hairs, 3-veined, margin narrowly membranous, apex acute. Petals 5, shorter than or subequaling sepals, 2-cleft to base; lobes narrowly ovate. Stamens 10, subequaling petals. Ovary ovoid-orbicular; styles 3, linear, ca. 2 mm. Capsules yellow, narrowly ovoid, shorter than persistent sepals, 6-valved. Seeds brown, reniform to suborbicular, granulose. $2n = 26$.

Forests, forest margins; 2200–2800(–3600) m. Xizang [Bhutan, India, Kashmir, Nepal, Sikkim].

22. *Stellaria dichotoma* Linnaeus, Sp. Pl. 1: 421. 1753.

叉歧繁缕 cha qi fan lu

Herbs perennial, compressed globose, glandular hairy. Stems tufted, terete, 15–30(–60) cm tall, with numerous

dichotomous branches, glandular hairy or pubescent, sometimes with 1 line of hairs. Leaves ovate or ovate-lanceolate, 0.5–2.5 cm × 1–10 mm, both surfaces glandular hairy or pubescent, base rounded or subcordate, somewhat clasping, apex acute or acuminate, rarely glabrous. Flowers numerous, in terminal cymes. Pedicel 1–2 cm, slender, pubescent. Sepals 5, lanceolate, 4–5 mm, midvein conspicuous, glandular hairy or pubescent, rarely glabrous outside, margin membranous, apex acuminate. Petals 5, oblanceolate, ca. 4 mm, subequaling sepals, 2-cleft nearly to 1/3 or 1/2; lobes sublinear. Stamens 10, 1/3–1/2 as long as petals. Ovary ovoid or broadly elliptic-oblanceolate; styles 3, linear. Capsule broadly ovoid, ca. 3 mm, shorter than persistent sepals, 6-valved. Seeds 1–5, brown-black, ovoid-orbicular, slightly compressed, tuberculate. Fl. May–Jul, fr. Jul–Aug. $2n = 28$.

Slopes, stony and sandy hills and steppes; 200–3100 m. Gansu, Hebei, Heilongjiang, Liaoning, Nei Mongol, Ningxia, Qinghai, Shaanxi, Xinjiang [Mongolia, Russia].

1a. Leaves linear, 0.5–2 cm × 1–2 mm 22c. var. *linearis*

1b. Leaves ovate or lanceolate, 0.5–2.5 cm × 1.5–10 mm.

2a. Leaves ovate or ovate-lanceolate, 0.5–2 cm × 3–10 mm 22a. var. *dichotoma*

2b. Leaves linear-lanceolate or oblong-lanceolate, 0.5–2.5 cm × 1.5–5 mm 22b. var. *lanceolata*

22a. *Stellaria dichotoma* var. *dichotoma*

叉歧繁缕(原变种) cha qi fan lu (yuan bian zhong)

Stellaria dichotoma var. *cordifolia* Bunge.

Herbs perennial, compressed globose, glandular hairy. Stems 15–30(–60) cm tall. Leaves ovate or ovate-lanceolate, 0.5–2 cm × 3–10 mm. Capsule broadly ovoid, ca. 3 mm, shorter than persistent sepals, 6-valved. Seeds 1–5, brown-black, ovoid-orbicular, slightly compressed, tuberculate. Fl. May–Jun, fr. Jul–Aug.

Slopes, stony and sandy hills; 200–800 m. Gansu, Hebei, Heilongjiang, Liaoning, Nei Mongol, Qinghai, Xinjiang [Mongolia, Russia (Siberia)].

22b. *Stellaria dichotoma* var. *lanceolata* Bunge, Verz. Altai Pfl. 34. 1836.

银柴胡 yin chai hu

Stellaria dichotoma var. *heterophylla* Fenzl; *S.*

dichotoma var. *stephaniana* (Willdenow ex

Schlechtendal) Regel; *S. gypsophiloides* Fenzl; *S.*

gypsophiloides var. *lanceolata* (Bunge) Kozhevnikov; *S. stephaniana* Willdenow ex Schlechtendal.

Leaves linear-lanceolate, lanceolate, or oblong-lanceolate, 0.5–2.5 cm × 1.5–5 mm, apex acuminate.

Seed 1. Fl. Jun–Jul, fr. Jul–Aug. $2n = 28$.

Stony slopes, stony steppes; 1300–3100 m. Gansu, Liaoning, Nei Mongol, Ningxia, Shaanxi [Mongolia, Russia].

22c. *Stellaria dichotoma* var. *linearis* Fenzl in Ledebour, Fl. Ross. 1: 38. 1842.

线叶繁缕 xian ye fan lu

Stems and pedicels with 1 line of short hairs. Leaves linear, 0.5–2 cm × 1–2 mm, glabrous. Sepals oblong, ca. 3 mm, outside glabrous.

• Sandy steppes, slopes; 500–1700 m. Nei Mongol, Shaanxi.

23. *Stellaria amblyosepala* Schrenk, Enum. Pl. Nov. 2: 54. 1842.

钝萼繁缕 *dun e fan lu*

Stellaria dichotoma Linnaeus var. *rigida* Bunge; *S. potaninii* Krylov.

Herbs perennial, glandular pubescent. Stems tufted, diffuse, quadrangular, 15–30 cm. Leaves sessile, linear to linear-lanceolate, 1–3.5 cm × 1.5–5 mm, both surfaces subglabrous, base narrowed, apex acute. Flowers terminal in few branched dichotomous cymes. Pedicel 1.5–2.5 cm, slender, glandular pubescent. Sepals 5, oblong, 3.5–4 × 1.5–2 mm, outside sparsely glandular pubescent, midvein conspicuous, margin broadly membranous, apex rounded-obtuse. Petals 5, slightly shorter than or subequaling sepals, 2-lobed; lobes oblong-ovate, apex obtuse. Stamens 10, subequaling petals. Styles 3, linear. Capsule ovoid, shorter than persistent sepals, 6-valved. Seeds black-brown, orbicular-ovoid, somewhat compressed, ca. 1.5 mm in diam., tuberculate. Fl. May–Jul.

Stony slopes, stony areas, forests; 500–1800 m. Gansu, Nei Mongol, Xinjiang [Kazakhstan, Mongolia, Russia].

24. *Stellaria henryi* F. N. Williams, J. Linn. Soc., Bot. 34: 434. 1899.

湖北繁缕 *hu bei fan lu*

Herbs annual. Stem solitary, nearly erect, 15–30 cm tall, slender, apically branched, glabrous or sparsely pubescent. Leaves with petiole short, ca. 2 mm; leaf blade linear-lanceolate, 1–2 cm × 3–5 mm, both surfaces glabrous, 1-veined, base broadly cuneate, margin sometimes slightly undulate, apex acuminate. Flowers axillary, solitary or in cymes. Pedicel 1–2.5 cm. Sepals 5, lanceolate, sometimes with sparse, purplish stiff hairs. Petals 5, ca. 1.5 × as long as sepals, 2-cleft nearly to base. Stamens 5; filaments slender. Ovary ellipsoid; styles 3, shortly linear, slightly shorter than ovary. Capsule globose, 6-valved. Fl. Apr–May, fr. Jun–Sep.

• Slopes. Hubei, Sichuan.

25. *Stellaria ebracteata* Komarov, Trudy Imp. S.-Peterburgsk. Bot. Sada 18: 441. 1901.

无苞繁缕 *wu bao fan lu*

Herbs perennial. Stems solitary, ascending or erect, 15–20 cm tall, simple, narrowly striate, pubescent. Leaves sessile or shortly petiolate, ovate-lanceolate or lanceolate, 2–3 cm × 4–10 mm, abaxially and marginally glabrous or sparsely hairy, apex acute. Flowers solitary, rarely 2, terminal, ca. 8 mm in diam.; bracts absent. Pedicel 2–3 cm, pubescent. Sepals ovate-

lanceolate, margin membranous, ciliate, apex acuminate. Petals oblong-cuneate, ca. 2 × as long as sepals, apex retuse. Filaments glabrous; anthers black. Capsule shorter than persistent sepals. Seeds usually 3, small, tuberculate.

Wet valleys. Heilongjiang [Korea, Russia].

26. *Stellaria winkleri* (Briquet) Schischkin in Komarov, Fl. URSS 6: 403. 1936.

帕米尔繁缕 *pa mi er fan lu*

Cerastium winkleri Briquet, Annuaire Conserv. Jard. Bot. Genève 13: 382. 1911, based on *C. schizopetalum* H. Winkler, Vidensk. Meddel. Dansk Naturhist. Foren. Kjobenhavn 51. 1902, not Maximowicz (1888).

Stems 3–5(–8) cm tall, slender, glabrous. Leaves sessile, ovate-lanceolate, 5–10 × 2(–3) mm, midvein conspicuous, base cuneate, apex acuminate. Flower solitary, axillary. Pedicel 1–1.2 cm. Sepals ovate-lanceolate, 3–4 mm, margin white, membranous. Petals 2–2.5 mm, subequaling or slightly longer than sepals, 2-cleft nearly to base. Stamens subequaling petals; anthers yellow-brown. Ovary globose, ca. 1 mm; styles 3, linear, ca. 1.5 mm. Capsule ovoid. Fl. Jul–Aug.

Stony slopes; (2500–)3800–4100 m. Xinjiang [Kyrgyzstan, Tajikistan].

27. *Stellaria crassifolia* Ehrhart, Hannover. Mag. 8: 116. 1784.

叶苞繁缕 *ye bao fan lu*

Herbs perennial, glabrous. Stems ascending, quadrangular, 5–14 cm tall, slender, branched. Leaves sessile, ovate-lanceolate or lanceolate, 0.5–1.6(–2) cm × 1–4 mm, midvein conspicuously raised abaxially, base nearly rounded or cuneate, apex acuminate. Flower solitary, axillary or terminal; bracts leaflike, herbaceous, without membranous margin. Pedicel 1–2 cm, to 3.5 cm in fruit, slender. Sepals 5, ovate-lanceolate, 3.5–4 × ca. 2 mm, 3-veined, margin broadly membranous, apex acuminate. Petals 5, subequaling sepals, 2-cleft nearly to base; lobes linear. Stamens 10, shorter than petals. Ovary suborbicular; styles 3. Capsule ellipsoid, 1.5–2 × as long as persistent sepals, 6-valved. Seeds brown, compressed globose, ca. 1 mm in diam., tuberculate. Fl. May–Jul, fr. Jun–Aug. $2n = 26$.

River banks, meadows, fields. Nei Mongol, Xinjiang [Japan, Kazakhstan, Mongolia, Russia; Europe, North America].

- 1a. Leaves ovate-lanceolate or lanceolate, 5–15(–20) × 2–4 mm 27a. var. *crassifolia*
- 1b. Leaves linear-lanceolate or linear, 7–16(–20) × 1–3 mm 27b. var. *linearis*

27a. *Stellaria crassifolia* var. *crassifolia*

叶苞繁缕(原变种) *ye bao fan lu (yuan bian zhong)*

Leaves sessile, ovate-lanceolate or lanceolate, 5–15(–20) × 2–4 mm, midvein conspicuously raised abaxially, base nearly rounded or cuneate, apex acuminate. Capsule ellipsoid, 2.5–3 × as long as persistent sepals, 6-valved. Seeds brown, compressed globose, ca. 1 mm in diam., tuberculate. Fl. May–Jun, fr. Jun–Aug. $2n = 26$.

River banks, meadows, fields. Nei Mongol [Japan, Kazakhstan, Mongolia, Russia; Europe, North America].

27b. *Stellaria crassifolia* var. *linearis* Fenzl in Ledebour, Fl. Ross. 1: 383. 1842.

线形叶苞繁缕 xian xing ye bao fan lu

Leaves linear-lanceolate or linear, 7–16(–20) × 1–3 mm. Petals shorter to slightly longer than sepals. Fl. Jun–Jul, fr. Jul–Aug.

Nei Mongol, Xinjiang [Japan, Russia; Europe].

28. *Stellaria discolor* Turczaninow, Bull. Soc. Imp. Naturalistes Moscou 15: 601. 1842.

翻白繁缕 fan bai fan lu

Herbs perennial, glabrous. Stems ascending, quadrangular, 10–40 cm tall, branched, glabrous; sterile axillary branches present. Leaves sessile, lanceolate, 3–4(–5) cm × 3–6(–8) mm, abaxially green, both surfaces glabrous, midvein raised abaxially, base rounded or cuneate, apex acuminate. Flowers in terminal cymes, axillary on rachillae; peduncles long; bracts white, ovate-lanceolate, 2–3(–6) mm, membranous, apex long acuminate. Pedicel 1–1.5 cm. Sepals 5, lanceolate, ca. 5 mm, 3-veined, margin membranous, apex long acuminate. Petals 5, shorter to slightly longer than sepals, 2-cleft nearly to base. Stamens 10, shorter than petals; anthers purplish or yellow-brown. Ovary ovoid-globose; styles 3, linear. Capsule slightly shorter than to as long as persistent sepals, 6-valved. Seeds brown, ovoid, slightly compressed, tuberculate. Fl. Apr–Jul, fr. Jun–Aug.

Montane grasslands, forest margins, wet places in forests; ca. 3000 m. Hebei, Heilongjiang, Jilin, Liaoning, Nei Mongol, Shaanxi [Japan, Mongolia, Russia].

Kozhevnikov described *Stellaria merzbacheri* (Novosti. Sist. Vyssh. Rast. 20: 105. 1983) based on a specimen from the Tian Shan region of Xinjiang. It would key out closest to *S. discolor* based on its glabrous stems and narrowly ovoid leaves (ca. 1.4 cm × 5–6 mm). Other features of this taxon include sepals 2.5–3.5 mm, slightly shorter than the petals, with a broadly membranous margin and indistinct veins. The present authors have seen no material of this taxon.

29. *Stellaria gyangtseensis* F. N. Williams, J. Linn. Soc., Bot. 38: 396. 1909.

江孜繁缕 jiang zi fan lu

Herbs green, branched, glabrous. Stems 5–15(–30) cm tall, slender, angular, branched; branchlets with numerous leaves, terete, apically slightly pubescent. Leaves sessile, blackish when dried, narrowly linear, usually sickle-shaped, declinate, 0.5–1.1(–2.5) cm × 1–2.5 mm, apex acuminate; nodes puberulent. Flowers in dichotomous cymes; bracts usually purplish, lanceolate, dry membranous. Pedicel 0.5–1.5 cm. Sepals purplish, lanceolate, 5–6 × 1–1.5 mm, 1(–3)-veined, base broad, margin narrowly dry-membranous, apex acuminate or acute. Petals subequaling or slightly longer than sepals, 2-cleft. Stamens conspicuously perigynous, shorter than petals. Ovary obovoid-globose; styles 3, linear, ca. 3 mm. Seeds brown, orbicular-reniform, papillose.

Grassland slopes, stony ground; 3900–4600 m. Xizang [Sikkim].

30. *Stellaria pusilla* Em. Schmid, Repert. Spec. Nov. Regni Veg. 31: 41. 1932.

小繁缕 xiao fan lu

Herbs perennial. Stems diffuse, tufted, shiny, glabrous, apically sparsely pubescent. Leaves sessile or proximal leaves petiolate, lanceolate or narrowly ovate, 4–12 mm, glabrous, base ciliate, margin cartilaginous, apex acuminate. Flowers 1–3 in cymes; bracts white, ovate-lanceolate, margin broad, apex acute. Pedicel 5–6 mm or longer. Sepals 5, lanceolate, 5–6 mm, margin white, green, or purplish, membranous, apex acuminate. Petals subequaling sepals, 2-cleft. Stamens 10, slightly shorter than petals. Styles 3. Capsule ovoid.

• 4100–5500 m. Xinjiang, Xizang.

31. *Stellaria mainlingensis* L. H. Zhou in C. Y. Wu, Fl. Xizang. 1: 693. 1983.

米林繁缕 mi lin fan lu

Stems pale brown, tufted, 10–20 cm tall, slender, pubescent with retrorse hairs. Leaves sessile, brown, ovate-lanceolate, 5–10 × 1.5–3 mm, midvein raised and cartilaginous, glabrous, base rounded, apex acute. Flowers numerous, in dichotomous cymes; bracts small, herbaceous. Pedicel 0.5–3 cm, slender, pubescent with retrorse hairs. Sepals 5, lanceolate, ca. 4 mm, glabrous, inconspicuously 3-veined, margin membranous, apex acute. Petals 5, slightly longer than sepals, 2-cleft to base. Stamens 10; filaments ca. 3 mm; anthers gray-green. Ovary obovoid, ca. 1.5 mm; styles 3, ca. 3 mm.

• Gully slopes, river banks; 2500–3600 m. Xizang.

32. *Stellaria depressa* Em. Schmid, Repert. Spec. Nov. Regni Veg. 31: 41. 1932.

凹陷繁缕 ao xian fan lu

Herbs perennial. Stems diffuse, tufted, ca. 12 cm, shiny, glabrous, apically slightly pubescent. Leaves ovate-lanceolate, 3–7 mm, glabrous, 1-veined, margin cartilaginous, apex subobtusate. Flowers 2–7, in cymes;

bracts ovate-lanceolate, membranous, apex acuminate. Pedicel 3–4 mm. Sepals 5, ovate-lanceolate, 3–4 mm, glabrous, margin white, green, or purplish, broad, apex subobtusate. Petals slightly shorter than sepals, 2-cleft (rarely absent). Stamens 10, 2.5–3 mm. Styles 3. Capsule ovoid-orbicular.

• 5000–5500 m. ?Xinjiang, Xizang.

Kozhevnikov described *Stellaria depressa* var. *arenicola* (Novosti. Sist. Vyssh. Rast. 20: 105. 1983) based on a specimen from Kaschgaria (Xinjiang). It was described as having smaller, often apetalous flowers (2–2.5 vs. 4–5 mm) and indistinct sepal veins. The present authors have seen no material of this taxon and do not know if it warrants recognition.

33. *Stellaria alsine* Grimm, Nov. Actorum Acad. Caes. Leop.-Carol. Nat. Cur. 3. App. 313. 1767.

雀舌草 *que she cao*

Herbs annual, glabrous. Stems tufted, slightly diffuse, ascending, 15–25(–35) cm tall, much branched. Leaves sessile, lanceolate to oblong-lanceolate, (0.2–)0.5–2 cm × (1–)2–4 mm, basally sparsely ciliate, both surfaces slightly pinkish green, base cuneate, semiclasping, margin cartilaginous, slightly undulate, apex acuminate. Flowers 3–5 in cymes or solitary, terminal or axillary. Pedicel 0.5–2 cm, slender, glabrous, slightly declinate in fruit. Sepals 5, lanceolate, 2–4 × ca. 1 mm, glabrous, midvein raised, margin membranous, apex acuminate. Petals 5, shorter than or subequaling sepals, 2-cleft nearly to base; lobes linear, apex obtuse. Stamens 5(–10), slightly shorter than petals. Ovary ovoid; styles 3, sometimes 2, linear, short. Capsule ovoid-orbicular, subequaling or slightly longer than persistent sepals, 6-valved. Seeds numerous, brown, reniform, slightly compressed, rugulose. Fl. May–Jun, fr. Jul–Aug. $2n = 24, 26, 46$.

Fields, streamsides, wetlands; 500–4000 m. Anhui, Fujian, Gansu, Guangdong, Guangxi, Guizhou, Henan, Hunan, Jiangsu, Jiangxi, Nei Mongol, Sichuan, Taiwan, Xizang, Yunnan, Zhejiang [Bhutan, India, Japan, Kashmir, Korea, Nepal, Pakistan, Vietnam; Europe].

1a. Flowers 3–5, in cymes; leaves 5–20 × 2–4

mm 33a. var. *alsine*

1b. Flower solitary; leaves ca. 2 × 1 mm 33b. var. *alpina*

33a. *Stellaria alsine* var. *alsine*

雀舌草(原变种) *que she cao* (yuan bian zhong)

Stellaria alsine var. *phaenopetala* Handel-Mazzetti; *S. alsine* var. *undulata* (Thunberg) Ohwi; *S. uliginosa* Murray; *S. uliginosa* var. *undulata* (Thunberg) Fenzl; *S. undulata* Thunberg.

Flowers 3–5, in terminal or axillary cymes. Leaves lanceolate to oblong-lanceolate, 5–20 × 2–4 mm. Pedicel slightly declinate in fruit, 0.5–2 cm, slender, glabrous. Capsule ovoid-orbicular, subequaling or slightly longer than persistent sepals, 6-valved. Seeds numerous, brown, reniform, slightly compressed, rugulose.

Fields, streamsides, wetlands; 500–4000 m. Anhui, Fujian, Gansu, Guangdong, Guangxi, Guizhou, Henan, Hunan, Jiangsu, Jiangxi, Nei Mongol, Sichuan, Taiwan, Xizang, Yunnan, Zhejiang [Bhutan, India, Japan, Kashmir, Korea, Nepal, Pakistan, Vietnam; Europe].

33b. *Stellaria alsine* var. *alpina* (Schur) Handel-Mazzetti, Symb. Sin. 7: 191. 1929.

高山雀舌草 *gao shan que she cao*

Labraea uliginosa Murray var. *alpina* Schur, Enum. Pl. Transsilv. 115. 1866; *Stellaria uliginosa* Murray var. *alpina* (Schur) Gürke.

Stem slender. Leaves ca. 2 × 1 mm, sometimes lanceolate. Flower solitary, terminal or axillary.

Capsule longer than persistent sepals.

3000–4000 m. Sichuan, Yunnan [Europe].

34. *Stellaria graminea* Linnaeus, Sp. Pl. 1: 422. 1753.

禾叶繁缕 *he ye fan lu*

Herbs perennial, often glabrous. Stems densely tufted, slightly erect, quadrangular, 10–30 cm tall, slender, glabrous or with 2 lines of hairs; sterile branches axillary from proximal leaves present. Leaves sessile, pinkish green, linear to lanceolate, 0.5–4(–5) cm × 1.5–3(–4) mm, basal margin sparsely ciliate, midvein inconspicuous, base slightly narrowed, apex acute. Flowers many or sometimes few, in terminal or axillary cymes, 7–11 mm in diam.; bracts lanceolate, 2(–5) mm, midvein conspicuous, margin membranous. Pedicel 0.5–2.5 cm, to 3.8 cm in fruit, slender. Sepals 5, green, lanceolate or narrowly lanceolate, 4–4.5 mm or longer, shiny, 3-veined, margin membranous, apex acuminate. Petals 5, slightly shorter or longer than sepals, 2-cleft nearly to base. Stamens 10; filaments filiform, glabrous, 4–4.5 mm; anthers brown, broadly ellipsoid, ca. 0.3 mm. Ovary ovoid-oblong; styles 3(or 4), ca. 2 mm. Capsule ovoid-cylindric, much longer than persistent sepals. Seeds black-brown, nearly compressed orbicular, granulose. Fl. May–Jul, fr. Aug–Sep. $2n = 26, 39, 52$.

Forests, forest margins, grasslands, grassy slopes, rock crevices; 1400–4000(–4200) m. Gansu, Hubei, Qinghai, Shandong, Shaanxi, Shanxi, Sichuan, Xinjiang, Xizang [Afghanistan, India, Kashmir, Nepal, Pakistan, Russia, ?Sikkim; Europe].

1a. Petals slightly shorter than sepals; stems glabrous.

2a. Flowers ca. 11 mm in diam. 34b. var. *chinensis*

2b. Flowers 7–8 mm in diam. . 34a. var. *graminea*

1b. Petals longer than sepals; stems pubescent or glabrous.

3a. Stems with 2 lines of hairs .. 34c. var. *pilosula*

3b. Stems glabrous 34d. var. *viridescens*

34a. *Stellaria graminea* var. *graminea*

禾叶繁缕(原变种) *he ye fan lu* (yuan bian zhong)

?*Stellaria patentifolia* Kitagawa.

Stems densely tufted, slightly erect, quadrangular, 10–30 cm tall, slender. Leaves sessile, linear, 0.5–4(–5) cm

× 1.5–3 (–4) mm. Flowers 7–8 mm in diam. Petals slightly shorter than sepals. Styles 3(or 4), ca. 2 mm. Capsule ovoid-cylindric, much longer than persistent sepals. $2n = 26, 39, 52$.

Forests, grassy slopes, rock crevices; 1400–3700(–4200) m. Gansu, Hubei, Qinghai, Shandong, Shaanxi, Shanxi, Sichuan, Xinjiang, Xizang [Afghanistan, India, Kashmir, Nepal, Pakistan, Russia, ?Sikkim; Europe].

34b. *Stellaria graminea* var. *chinensis* Maximowicz, Fl. Tangut. 90. 1889.

中华禾叶繁缕 *zhong hua he ye fan lu*

Leaves larger than in var. *graminea*. Flowers ca. 11 mm in diam. Styles slightly shorter than ovary.

• Qinghai, Sichuan, Xizang.

34c. *Stellaria graminea* var. *pilosula* Maximowicz, Fl. Tangut. 91. 1889.

毛禾叶繁缕 *mao he ye fan lu*

Stem pilose, with 2 lines of hairs. Leaves linear-lanceolate, ca. 2.2 cm × 3 mm. Flowers ca. 7 mm in diam. Fruiting pedicel ca. 3.8 cm. Petals longer than sepals.

• Qinghai.

34d. *Stellaria graminea* var. *viridescens* Maximowicz, Fl. Tangut. 90. 1889.

常绿禾叶繁缕 *chang lu he ye fan lu*

Stellaria viridescens (Maximowicz) Kozhevnikov. Stems taller than in var. *graminea*, glabrous. Flowers numerous. Petals longer than sepals. Styles shorter than ovary.

• Forest margins, grasslands; 2000–4000 m. Gansu, Qinghai, Shaanxi, Sichuan, Xizang.

35. *Stellaria brachypetala* Bunge in Ledebour, Fl. Altaic. 2: 161. 1830.

短瓣繁缕 *duan ban fan lu*

Stellaria graminea Linnaeus var. *brachypetala* (Bunge) Regel.

Herbs perennial. Stems erect, sometimes diffuse, 10–30 cm tall, basally branched. Leaves sessile, ovate-lanceolate to lanceolate, 1–2 cm × 1.5–4 mm, both surfaces glabrous, base cuneate, apex acuminate, axillary sterile branches from proximal leaves sometimes present. Flowers 1–3, sometimes 6–10, in cymes; bracts herbaceous, margin membranous. Pedicel ca. 1 cm. Sepals 5, ovate-lanceolate, 5–8 × 1–2 mm, margin membranous, apex acuminate. Petals 5, 1/2–2/3 as long as sepals, 2-cleft nearly to base; lobes linear. Stamens 10; filaments short. Ovary ovoid; styles 3. Capsule ovoid-orbicular, 5–7 mm. Seeds orbicular-ovoid, rugulose. Fl. Jun–Aug, fr. Aug–Sep.

Mountains; 1700–2900(–4300) m. Gansu, Nei Mongol, Qinghai, Xinjiang [Kazakhstan, Mongolia, Russia].

Kozhevnikov described *Stellaria brachypetala* var. *magna* (Novosti. Sist. Vyssh. Rast. 20: 106. 1983) based on a specimen from the Tian Shan region of Xinjiang. It was described as being more robust (stems to 25 cm), with the pedicels spreading in fruit. The present authors

have seen no material of this taxon and do not know if it warrants recognition.

36. *Stellaria yunnanensis* Franchet, Bull. Soc. Bot. France 33: 433. 1886.

千针万线草 *qian zhen wan xian cao*

Herbs perennial. Stems erect, terete, 10–30 cm tall, simple or branched. Leaves sessile, lanceolate or linear-lanceolate, 3–5(–7) × 0.5–1(–1.5) cm, abaxially pinkish green, margin sparsely ciliate, base rounded or slightly narrowed, apex acuminate. Flowers in dichotomous cymes, glabrous; bracts lanceolate, margin membranous, apex acuminate. Pedicel 1–2 cm, longer in fruit, slender. Sepals 5, lanceolate, 4–5 mm, 3-veined, margin membranous, apex acuminate. Petals 5, slightly shorter than sepals, 2-cleft nearly to base; lobes linear. Stamens 10. Ovary ovoid; styles 3, linear. Capsule ovoid-orbicular, slightly shorter than persistent sepals, 6-valved. Seeds 2–6, brown, reniform, slightly compressed, sparsely tuberculate. Fl. Jul–Aug, fr. Sep–Oct.

• Forests, forest margins; 1800–3300 m. Sichuan, Yunnan.

37. *Stellaria palustris* Retzius, Fl. Scand. Prodr., ed. 2, 106. 1795.

沼生繁缕 *zhao sheng fan lu*

Stellaria dilleniana Moench (1777), not Leers (1775); *S. glauca* Withering; ?*S. hsinganensis* Kitagawa.

Herbs perennial, gray-green, glabrous. Stems tufted, erect, quadrangular, (10–)20–35 cm tall, slender, basally branched, papillose. Leaves sessile, pinkish green, linear to linear-lanceolate, 2–4.5 cm × 2–4 mm, both surfaces glabrous, midvein conspicuous and abaxially papillose, base slightly narrowed, margin papillose, apex acute. Flowers in dichotomous cymes; peduncles 7–10 cm; bracts white, lanceolate to ovate-lanceolate, (3–)5–6(–7) mm, margin membranous. Sepals 5, ovate-lanceolate, (4–)5–7 mm, abaxially with 3 conspicuous veins, margin membranous, apex acuminate. Petals 5, 4–7 mm, subequaling or slightly longer than sepals, 2-cleft nearly to base; lobes nearly linear, apex obtuse. Stamens 10, slightly shorter than sepals. Ovary ovoid; styles 3, filiform, ca. 3 mm. Capsule ovoid-cylindric, subequaling or slightly longer than persistent sepals. Seeds numerous, black-brown, suborbicular, conspicuously rugulose. $2n =$ ca. 100, ca. 130, 174–188.

Grassland slopes, sparse valley forests; 1000–3600 m. Gansu, Hebei, Heilongjiang, Henan, Liaoning, Nei Mongol, Shandong, Shaanxi, Shanxi, Sichuan, Yunnan [Afghanistan, Japan, Kazakhstan, Mongolia, Russia; SW Asia, Europe].

38. *Stellaria salicifolia* Y. W. Tsui & P. Ke, Acta Bot. Yunnan. 7: 77. 1985.

柳叶繁缕 *liu ye fan lu*

Herbs perennial. Stems erect or ascending, quadrangular, 20–30 cm tall, usually simple, glabrous. Leaves lanceolate, 3–6 cm × 4–12 mm, abaxially gray-

green, hairy at base, base cuneate, slightly clasping, margin cartilaginous, usually undulate, apex acuminate. Flowers in sparse terminal cymes; peduncles ca. 5 cm; bracts lanceolate, 1–2 mm, membranous. Pedicel 1–2.5 cm, slender, glabrous. Sepals 5, lanceolate, 4–5 mm, conspicuously 3-veined, base slightly rounded, margin membranous, apex long acuminate. Petals 5, slightly shorter than sepals, 2-cleft nearly to base; lobes narrowly linear. Stamens 10, slightly shorter than petals; anthers brown, cylindric. Ovary ovoid-orbicular; styles 3, linear. Capsules ovoid-orbicular, slightly shorter than or subequalling persistent sepals, 6-valved. Seeds narrowly ovoid-orbicular, ca. 1 mm, rugulose. Fl. May–Jun, fr. Jul–Aug.

• Slopes, wet places in sparse forests; 1200–3000 m. Gansu, Hubei, Hunan, Ningxia, Shaanxi, Sichuan, Zhejiang.

39. *Stellaria dianthifolia* F. N. Williams, J. Linn. Soc., Bot. 38: 396. 1908.

石竹叶繁缕 *shi zhu ye fan lu*

Stellaria yunnanensis Franchet f. *villosa* C. Y. Wu ex P. Ke.

Herbs perennial, pinkish green, glabrous or sparsely pubescent. Stems diffuse or ascending, (5–)10–40 cm tall, slender, simple or apically branched. Leaves linear, (1–)1.6–4.5 cm × 2–4 mm, midvein conspicuous, abaxially densely pubescent, basal ones with margin ciliate, apex acuminate. Flowers 6–9, in terminal and sparse dichotomous cymes; bracts linear, margin membranous, apex acute. Pedicel 1.2–1.4 cm. Sepals 5, lanceolate-linear, 6–7 mm, 3-veined, margin narrowly membranous, apex acuminate. Petals 5, 2-cleft nearly to base; lobes narrow. Capsule ovoid-orbicular. Seeds brown, minute, compressed, auriculate, rugulose, with granular protuberances. Fl. Jun–Jul, fr. Aug–Sep.

• Forests; (3200–)3400–3800(–4400) m. Gansu, Qinghai, Sichuan, Xizang.

40. *Stellaria longifolia* Muhlenberg ex Willdenow, Enum. Pl. 479. 1809.

长叶繁缕 *chang ye fan lu*

Stellaria diffusa Willdenow ex Schlechter; *S. diffusa* f. *ciliolata* Kitagawa; *S. diffusa* var. *ciliolata* (Kitagawa) Kitagawa; *S. friesiana* Seringe; *S. longifolia* f. *ciliolata* (Kitagawa) Y. C. Chu; *S. longifolia* var. *legitima* Regel. Herbs perennial, glabrous. Stems densely tufted, ascending, quadrangular, 15–25 cm tall, branched, diffuse; axillary sterile branches present. Leaves linear or broadly linear, 1.5–3.5 cm × 0.5–2 mm, sometimes sparsely shortly ciliate, midvein conspicuous, slightly narrowed at base, apex acuminate. Flowers in terminal or mostly axillary cymes; peduncles 3–6 cm, glabrous; bracts white, ovate-lanceolate, 1–2 mm, ciliate, sometimes margin membranous, apex long acuminate. Pedicel 1–1.5 cm, to 2.5 cm after anthesis, slender. Sepals 5, ovate-lanceolate, 2.5–3 mm, 3–4 mm in fruit, inconspicuously 3-veined, margin membranous, apex obtuse or slightly acute. Petals 5, subequalling or

slightly longer than sepals, 2-cleft nearly to base; lobes sublinear, base narrowed, apex obtuse. Stamens 10; filaments linear; anthers yellow. Ovary ovoid-cylindric; styles 3. Capsule brown-black, ovoid-orbicular, 1.5–2 × as long as persistent sepals, 6-valved. Seeds numerous, brown, ovoid-orbicular or ellipsoid, 0.8–1 mm, nearly smooth. Fl. Jun–Jul, fr. Jun–Aug. $2n = 26$.

Wet meadows, forest margins, forests; ca. 1900 m. Hebei, Heilongjiang, Jilin, Liaoning, Nei Mongol, Ningxia, Shaanxi [Japan, Korea, Mongolia, Russia; Europe, North America].

41. *Stellaria imbricata* Bunge in Ledebour, Fl. Altaic. 2: 159. 1830.

覆瓦繁缕 *fu wa fan lu*

Stellaria palustris Ehrhart var. *imbricata* (Bunge) Krylov.

Herbs perennial. Stems ascending or semidiffuse, quadrangular, ca. 10 cm tall, slender. Leaves imbricate, oblong-lanceolate, 1–1.1 cm, glabrous, smooth, apex slightly obtuse. Flowers solitary, rarely 2, terminal; bracts ovate, membranous. Pedicel short. Sepals 5, ovate, ca. 5 mm, margin broadly membranous. Petals 5, slightly longer than sepals, 2-cleft; lobes ovate-oblong. Capsule cylindric, ca. 1.5 × as long as persistent sepals, tuberculate at maturity, apex acuminate. Seeds orbicular-reniform, ca. 1.2 mm, slightly rugulose. Fl. Jun–Jul.

Montane river banks, slopes. Xinjiang [Russia].

42. *Stellaria nipponica* Ohwi, Acta Phytotax. Geobot. 3: 83. 1934.

多花繁缕 *duo hua fan lu*

Stellaria florida Fischer ex de Candolle var. *angustifolia* Maximowicz.

Herbs perennial. Stems nearly tufted, erect, quadrangular, (5–)10–20 cm tall, slender, internodes shorter than leaves, glabrous except sparsely shortly ciliate basally. Leaves linear, 2–3(–4.5) cm × 1–2 mm, both surfaces glabrous, midvein conspicuous, abaxially raised, adaxially retuse, base slightly narrowed, apex acute. Flowers 1–8, in sparse terminal cymes; bracts lanceolate, ca. 5 mm, margin membranous. Pedicel erect, 1.5–4(–6) cm. Sepals 5, lanceolate to oblong-lanceolate, 4–5.5 mm, 3-veined, apex acute. Petals 5, 1.5–2 × as long as sepals, 2-cleft nearly to base. Stamens 10; filaments slender. Styles 3, 2–3 mm. Capsule yellow, ellipsoid to ovoid-orbicular, slightly shorter than or subequalling persistent sepals. Seeds brown, compressed, orbicular-reniform, ca. 1 mm, tuberculate. Fl. May–Jun, fr. Jun–Aug. $2n = 26$.

Montane rocks; ca. 1800 m. Hubei [Japan].

Stellaria montioides (Edgeworth & J. D. Hooker) Ghazanfar (Fl.

Pakistan 175: 25. 1986, based on *S. graminea* Linnaeus var.

montioides Edgeworth & J. D. Hooker in J. D. Hooker, Fl. Brit. India 1: 233. 1874) may also key out near *S. filicaulis* and *S. nipponica*. It is an alpine plant with glabrous stems, linear leaves with a raised abaxial midvein, and solitary flowers with petals about as long as the sepals. Although Ghazanfar (loc. cit.) gave the taxon as occurring in

W Xizang (probably referring to territory now in Pakistan), the present authors have no further information on the occurrence of this species in China.

43. *Stellaria filicaulis* Makino, Bot. Mag. (Tokyo) 15: 113. 1901.

细叶繁缕 xi ye fan lu

Stellaria filicaulis f. *jaluana* (Nakai) Kitagawa; *S. jaluana* Nakai; ?*S. neopalustris* Kitagawa.

Herbs perennial, glabrous. Stems tufted, erect or ascending, quadrangular, 30–50 cm tall, slender, apically branched. Leaves linear, 2–3 cm × 1–2(–3) mm, marginally sparsely ciliate, midvein abaxially raised, adaxially retuse, base cuneate, slightly clasping, apex acuminate. Flowers solitary or in axillary cymes; bracts lanceolate, 1–2 mm, margin membranous, sometimes herbaceous below, apex acuminate. Pedicel filiform, 2–5 cm. Sepals 5, lanceolate to narrowly lanceolate, 4–5 mm, midvein conspicuous, margin membranous. Petals 5, linear-lanceolate, ca. 1.5 × as long as sepals, 2-cleft nearly to base; lobes linear. Stamens 10, shorter than sepals. Styles 3. Capsule yellow, cylindrical-ovoid, as long as to 1.5 × as long as persistent sepals, 6-valved. Seeds numerous, brown, ellipsoid, 0.7–1 mm, regularly rugulose. Fl. May–Jul, fr. Jun–Aug.

Wet grasslands, river banks; 500–700 m. Hebei, Heilongjiang, Jilin, Liaoning, Nei Mongol, Shanxi [Japan, Korea].

44. *Stellaria alaschanica* Y. Z. Zhao, Acta Sci. Nat. Univ. Intramongol. 13(3): 283. 1982.

贺兰山繁缕 he lan shan fan lu

Stellaria uda F. N. Williams var. *pubescens* Y. W. Cui & L. H. Zhou.

Herbs perennial. Stems densely tufted, quadrangular, 5–15 cm tall, slender, branched, pubescent with retrorse hairs; sterile axillary branches present. Leaves linear or lanceolate-linear, 0.5–2 cm × 1–2.5 mm, midvein abaxially raised, base narrowed, margin ciliate, apex acuminate. Flowers 1–3, in terminal cymes; bracts ovate-lanceolate, 1.5–3 mm, margin broadly membranous. Pedicel 0.7–1.5 cm, slender, glabrous. Sepals 5, ovate-lanceolate, ca. 3 × 1.2 mm, glabrous, midvein conspicuous, margin membranous, apex acuminate. Petals 5, ca. 2 mm, ca. 2/3 as long as sepals, 2-cleft nearly to base; lobes oblong-linear, base narrowed, apex obtuse. Stamens 10, slightly longer than petals. Styles 3, ca. 1 mm. Capsule cylindrical-ovoid, ca. 4 mm, ca. 1.25 × as long as persistent sepals. Seeds numerous, broadly ovoid or suborbicular, slightly compressed, 0.5–0.8 mm, nearly smooth. Fl. Jul, fr. Aug.

• Slopes, *Picea* forests; 2100–2800(–3200) m. Gansu, Ningxia, Qinghai.

45. *Stellaria oxycoccoides* Komarov, Repert. Spec. Nov. Regni Veg. 13: 234. 1914.

莓苔状繁缕 mei tai zhuang fan lu

Stem pale brownish red, diffuse, slender, branched only at base, pubescent with retrorse hairs. Leaves sessile, green, linear-lanceolate, minute, glabrous, apex acute. Flowers in terminal racemes; bracts white, dry, membranous. Sepals purplish or green, long acuminate, margin white, cartilaginous. Petals slightly shorter than sepals, 2-cleft to base. Styles 4.

• Sandy places on river banks. Sichuan.

46. *Stellaria uda* F. N. Williams, J. Linn. Soc., Bot. 34: 435. 1899.

湿地繁缕 shi di fan lu

Herbs perennial. Stems tufted, base diffuse, nearly erect above, 5–15 cm tall, slender, with 1 line of hairs. Leaves dense and small proximally, distal leaves sessile, linear-lanceolate, 5–10 × ca. 1 mm, both surfaces glabrous or sparsely pubescent, midvein raised abaxially, base cuneate, semiclasping, apex acuminate. Flowers in terminal cymes; bracts herbaceous. Sepals 5, lanceolate, ca. 3 mm, midvein conspicuous, 3-veined, margin membranous, apex acuminate. Petals 5, ca. 2/3 as long as sepals, 2-cleft nearly to base. Stamens 10. Ovary ovoid; ovules ca. 10; styles 3, linear. Capsule cylindrical, slightly longer than persistent sepals. Seeds brown, reniform. Fl. May–Jun, fr. Jul–Aug.

• Gullies, slopes, plateaus; 1200–4800 m. Qinghai, Sichuan, Xinjiang, Xizang, Yunnan.

47. *Stellaria souliei* F. N. Williams, J. Linn. Soc., Bot. 34: 434. 1899.

康定繁缕 kang ding fan lu

Herbs perennial. Stems tufted, 20–30 cm tall, sparsely pubescent. Leaves sessile, linear-lanceolate, 0.3–3.5 cm × 1.5–2.5 mm, margin sparsely long ciliate, apex long acuminate. Flowers in terminal cymes; peduncles slender; bracts ovate, ca. 2 mm, membranous. Pedicel 0.5–1(–4.5) cm. Sepals 5, lanceolate, 3–4 mm, midvein conspicuous, 3-veined, margin membranous, apex acute. Petals 5, slightly shorter than or subequaling sepals, 2-cleft nearly to base. Stamens 10. Ovary ovoid-orbicular; ovules 7 or 8; styles 3, linear. Capsule shortly obovoid. Fl. Jul, fr. Sep.

• Grassland slopes. Sichuan.

48. *Stellaria soongorica* Roshevitz in Komarov, Fl. URSS 6: 881. 1936.

准噶尔繁缕 zhun ga er fan lu

Herbs perennial, glabrous. Stems solitary or tufted, slightly quadrangular, 15–25 cm tall, slender, simple or branched, usually glabrous. Leaves sessile, linear-lanceolate or linear, 2.5–6 cm × 2.5–4 mm, both surfaces glabrous, pubescent at base, midvein raised, base slightly semiclasping, apex long acuminate. Flower solitary, terminal; bracts lanceolate, margin membranous, apex acuminate. Pedicel 1.5–5.5(–8) cm, slender. Sepals 5, ovate-lanceolate, ca. 5 × 2.5 mm,

glabrous, midvein conspicuous, margin white, membranous, apex acuminate. Petals 5, ca. 1.2 × as long as sepals, 2-cleft nearly to base; lobes oblong-ob-lanceolate, apex obtuse. Stamens 10, 1–1.2 mm; anthers yellow. Ovary ovoid; styles 3. Capsule brown or nearly black, cylindrical-ovoid, longer than persistent sepals, 6-valved. Seeds brown, reniform-orbicular or ovoid, slightly compressed, minute, tuberculate. Fl. Jun–Jul, fr. Aug–Sep.

Picea forest margins, scrublands, grassland slopes; 1600–3500 m. Xinjiang [Kazakhstan, Russia].

49. *Stellaria irrigua* Bunge, Verz. Altai Pfl. 35. 1836.
冻原繁缕 *dong yuan fan lu*

Herbs perennial. Stems 2–3 cm tall, simple, glabrous. Leaves ovate-oblong, narrowed at base, apex obtuse. Flowers 3–7, in terminal cymes; bracts membranous. Pedicel filiform, elongated after anthesis. Sepals ovate, apex acute. Petals minute, ca. 0.5 mm, 2-cleft nearly to base; lobes linear. Stamens 10, subequaling sepals. Fl. Jul.

Montane wet places, mossy frozen areas. Xinjiang [Russia].

50. *Stellaria parvumbellata* Y. Z. Zhao, Acta Sci. Nat. Univ. Intramongol. 20(2): 226. 1989.

小伞花繁缕 *xiao san hua fan lu*

Herbs perennial. Stems 5–8 cm tall, pilose. Leaves sessile, ovate-lanceolate or ovate-orbicular, 5–11 × 2–4 mm, both surfaces glabrous, ciliate at proximal margin, midvein raised abaxially, base connate, clasping, apex acuminate. Flowers in terminal cymose umbel; bracts 2, opposite, ovate-orbicular, margin white, membranous. Pedicel 3–25 mm, slender, glabrous. Sepals 5, ovate-lanceolate, 2.5–3 mm, 3-veined, margin membranous, apex acuminate. Petals absent. Stamens 10, shorter than sepals. Ovary ovoid-globose; styles 3. Capsule cylindrical-ovoid, ca. 3.5 mm, slightly longer than persistent sepals. Seeds black, ellipsoid, compressed, ca. 0.7 × 0.3 mm, with protuberances. Fl. and fr. Jun–Jul.

• Valleys; ca. 2900 m. Gansu, Ningxia, Qinghai, Shaanxi, Xinjiang.

51. *Stellaria umbellata* Turczaninow ex Karelin & Kirilov, Bull. Soc. Imp. Naturalistes Moscou 15: 173. 1842.

伞花繁缕 *san hua fan lu*

Stellaria wutaica Handel-Mazzetti.

Herbs perennial, glabrous. Stem solitary, 5–15 cm tall, branched. Leaves elliptic, 1.5–2 cm × 4–5 mm, both surfaces glabrous, base cuneate, slightly clasping, apex obtuse or acute. Flowers 3–10, in cymose umbel; bracts 3–5, ovate, nearly membranous. Pedicel filiform, 0.5–2 cm, slightly longer in fruit. Sepals 5, green, lanceolate, 2–3 mm, margin membranous, apex acuminate. Petals absent. Stamens 10, shorter than sepals. Ovary cylindrical-ovoid; styles 3, linear, short. Capsule subequaling persistent sepals, 6-valved. Seeds reniform, slightly compressed, rugulose, without protuberances. Fl. Jun–Jul, fr. Jul–Aug. $2n = 26$.

Montane grasslands, forests, steppes; 1600–3800(–5000) m. Gansu, Hebei, Qinghai, Shaanxi, Shanxi, Sichuan, Xinjiang, Xizang [Kazakhstan, Russia; North America].

52. *Stellaria subumbellata* Edgeworth in J. D. Hooker, Fl. Brit. India 1: 233. 1874.

亚伞花繁缕 *ya san hua fan lu*

Herbs annual, glabrous. Stems tufted, ascending, 12(–20) cm tall, slender. Leaves sessile, linear to linear-lanceolate, 5–15 × (0.8–)1.5–2(–4) mm, both surfaces glabrous, midvein conspicuous, base rounded, apex obtuse. Flowers 2–4, in cymose umbel; bracts ovate, ca. 2 mm, membranous. Pedicel 1.2–2.4 cm, slender. Sepals 5, green, ovate-lanceolate, ca. 2 mm, 3-veined, margin broadly membranous, apex acute. Petals absent. Stamens 5; filaments slender. Styles 3, short. Capsule ovoid, ca. 4 mm, ca. 2 × as long as persistent sepals, 6-valved. Seeds pale brown or dark brown, compressed orbicular, with granular protuberances. Fl. Jun–Jul, fr. Jul–Aug.

Montane meadows, rocky crevices, cushionlike scrub; 3500–5000 m. Sichuan, Xizang, Yunnan [India, Kashmir, Nepal, Sikkim].

Species nos. 53–57 are members of *Stellaria* sect. *Adenonema* (Bunge) Turczaninow. This group is in need of thorough revision. There are now several different ideas on which of these taxa should be recognized. It is also possible that additional taxa may (or may not) belong to this section.

In addition, Kozhevnikov described *Stellaria divnogorskajae* (Novosti. Sist. Vyssh. Rast. 20: 103. 1983) based on a specimen from Kaschgaria (Xinjiang). It is similar in size to *S. arenarioides* (stems 5–7 cm), with oblong-elliptic leaves, 4- or 5-merous flowers, 2 styles, and a 4-valved capsule. He also described *S. divnogorskajae* var. *pilosa* (Novosti Sist. Vyssh. Rast. 20: 104. 1983) based on a specimen from Tagdumbasch-Pamir (Xinjiang), noting that the plant is pilose throughout. The present authors have seen no material of either taxon.

53. *Stellaria arenarioides* Shi L. Chen et al., Novon 11: 302. 2001.

沙生繁缕 *sha sheng fan lu*

Stellaria arenaria Maximowicz, Fl. Tangut. 91. 1889, not Linnaeus (1753).

Herbs perennial. Stems tufted, prostrate, diffuse, yellow basally, green apically, 5–7 cm tall, basally shiny, glabrous, apically pubescent. Leaves sessile, ovate or ovate-lanceolate, 4–6 × 2–3 mm, midvein raised abaxially, base nearly rounded, margin pubescent, apex acute. Flowers 1–5, in terminal cymes; bracts ovate, ca. 3 × 1.5 mm, membranous. Sepals 5, ovate-lanceolate, 3–4 × 1–1.5 mm, midvein conspicuous. Petals 5, 1–1.5 mm, shorter than sepals, 2-cleft nearly to base; lobes linear. Stamens 10, conspicuously shorter than petals. Disc orbicular, with 5 glands. Styles 3, enlarged at apex. Seeds 1 or 2. Fl. Jun–Jul, fr. Aug–Sep.

• Grassland slopes, mountains, river banks; 2500–5200(–5500) m. Gansu, Qinghai, Xinjiang, Xizang.

54. *Stellaria cherleriae* (Fischer ex Seringe) F. N. Williams, Bull. Herb. Boissier, sér. 2, 7: 830. 1907.

兴安繁缕 xing an fan lu

Arenaria cherleriae Fischer ex Seringe in de Candolle, Prodr. 1: 409. 1824; *Stellaria petraea* Bunge var. *fasciculata* Bunge ex Turczaninow; *S. petraea* var. *vegeta* Fenzl; *S. viridiflora* Pax & K. Hoffmann. Herbs perennial, pubescent with curved hairs. Stems tufted, erect or ascending, 5–12(–18) cm tall, base usually woody, basally branched; short axillary sterile branches present. Leaves subsessile, linear or linear-oblongate, (0.7–)1–2(–2.5) cm × 1–2.5 mm, both surfaces glabrous, lower margin pubescent, base narrowed, apex acute. Flowers few, in terminal cymes; bracts lanceolate, ca. 4 × 1.2 mm, herbaceous, glabrous, margin membranous, apex acute. Pedicel slightly longer than sepals, ca. 1 cm, distally sparsely pubescent. Sepals 5, oblong-lanceolate, ca. 5 × 1–1.5 mm, midvein raised, base sparsely pubescent, margin membranous, apex acute. Petals 5, 1/3–1/2 as long as sepals, 2-cleft nearly to base; lobes linear. Stamens 10, ca. 1/2 as long as petals; anthers yellow, compressed globose. Capsule obovoid, ca. 1/2 as long as persistent sepals. Seeds 2, nearly black, ellipsoid-obovoid, 1–1.5 mm in diam., tuberculate. Fl. Jun–Jul, fr. Jul–Aug.

• Stony slopes, steppes, forests; 2800–3400 m. Hebei, Nei Mongol, Shaanxi, Shanxi.

55. *Stellaria petraea* Bunge in Ledebour, Fl. Altaic. 2: 160. 1830.

岩生繁缕 yan sheng fan lu

Adenonema petraeum (Bunge) Bunge var. *alpinum* Bunge; *Stellaria cherleriae* (Fischer ex Seringe) F. N. Williams var. *alpina* (Bunge) Schischkin; *S. petraea* var. *alpina* (Bunge) Turczaninow; *S. petraea* var. *imbricata* Fenzl.

Herbs perennial, cushionlike. Stems densely tufted, ascending or erect, 2–7 cm tall, glabrous or nearly so. Leaves lanceolate-linear, 4–10 × ca. 1.5 mm, margin nearly imbricate, thick, apex acute, hard, sometimes sickle-shaped; axillary leaves clustered. Flowers 1–3(–12), in terminal cymose umbel, rarely solitary. Sepals lanceolate, 4–5 × 1–1.3 mm, glabrous, apex acuminate. Petals 1/3–2/3 as long as sepals, 2-cleft nearly to base; lobes linear. Capsule subglobose, shorter than persistent petals, base narrowed. Seeds 1 or 2. Fl. Jul–Aug.

Steppe hills to montane stony slopes. Nei Mongol, Xinjiang [Kazakhstan, Mongolia, Russia].

56. *Stellaria decumbens* Edgeworth, Trans. Linn. Soc. London 20: 35. 1846.

偃卧繁缕 yan wo fan lu

Herbs perennial, cushionlike. Stems 10–20 cm tall, stout or slender, densely white pubescent, glandular, or glabrous. Leaves sessile, ovate-lanceolate to linear-lanceolate, 3–4 × 1–1.5 mm, margin glabrous or ciliate, hard, midvein conspicuously raised, base nearly rounded, apex acuminate. Flowers solitary or few in

(sometimes dense) cymes. Pedicel ca. 4 mm or less. Sepals (4 or)5, ovate-lanceolate or oblong-lanceolate, ca. 4 × 1.5 mm, herbaceous, 3-veined, base truncate, apex acuminate. Petals 5, ca. 1/2 as long as sepals, 2-cleft nearly to base; lobes linear or absent. Stamens (5–)8–10. Styles 3. Capsule shorter than persistent sepals, 6-valved. Seeds 2–8, suborbicular, smooth. Fl. Jun–Aug, fr. Jul–Oct. $2n = 18$.

Scrub, montane meadows, stony areas, slopes, mossy areas, roadsides; 3000–5600 m. Qinghai, Sichuan, Xizang, Yunnan [Bhutan, India, Kashmir, Nepal, Pakistan, Sikkim].

1a. Stems glabrous 56b. var. *pulvinata*

1b. Stems pubescent.

2a. Stems with glandular hairs 56c. var. *arenarioides*

2b. Stems with nonglandular hairs.

3a. Leaves ovate-lanceolate; flower solitary or few in cymes 56a. var. *decumbens*

3b. Leaves subulate-lanceolate or subulate-ovate; flowers in dense headlike cymes 56d. var. *polyantha*

56a. *Stellaria decumbens* var. *decumbens*

偃卧繁缕(原变种) yan wo fan lu (yuan bian zhong)

Stellaria cherleriae (Fischer ex Seringe) F. N. Williams var. *minor* (Edgeworth & J. D. Hooker) Majumdar; *S. decumbens* var. *edgeworthii* Edgeworth & J. D. Hooker; *S. decumbens* var. *minor* Edgeworth & J. D. Hooker. Stems stout or slender, densely white pubescent. Leaves ovate-lanceolate, 3–4 × 1–1.5 mm. Flower solitary or few in cymes. Stamens 8–10. Capsule shorter than persistent sepals, 6-valved. Seeds 2–8, suborbicular, smooth. Fl. Jul–Aug, fr. Sep–Oct.

Slopes, roadsides; 3000–5600 m. Qinghai, Sichuan, Xizang, Yunnan [Bhutan, India, Kashmir, Nepal, Pakistan, Sikkim].

56b. *Stellaria decumbens* var. *pulvinata* Edgeworth & J. D. Hooker in J. D. Hooker, Fl. Brit. India 1: 235. 1875.

垫状偃卧繁缕 dian zhuang yan wo fan lu

Stellaria maximowiczii Kozhevnikov.

Plant densely cushionlike. Stems glabrous. Leaves ovate-lanceolate, margin ciliate. Flower solitary. $2n = 18$.

Montane meadows, stony areas, scrub; (4600–)4900–5600 m. Qinghai, Sichuan, Xizang, Yunnan [Bhutan, India, Nepal, Sikkim]. In his original description of *Stellaria maximowiczii*, Kozhevnikov (Novosti Sist. Vyssh. Rast. 20: 104. 1983) stated that the plant has 4-merous flowers, with only two styles. The present authors have been unable to verify his statements.

56c. *Stellaria decumbens* var. *arenarioides* L. H. Zhou in C. Y. Wu, Fl. Xizang. 1: 703. 1983.

错那繁缕 cuo na fan lu

Stellaria cuonaensis L. H. Zhou.

Stems slender, glandular pubescent. Leaves linear-subulate, margin ciliate. Petals absent. Stamens 5. Fl. Jun–Jul, fr. Jul–Aug.

• Scrub, mossy areas; 3800–4100 m. Sichuan, Xizang, Yunnan.

56d. *Stellaria decumbens* var. *polyantha* Edgeworth & J. D. Hooker in J. D. Hooker, Fl. Brit. India 1: 235. 1874.

多花偃卧繁缕 duo hua yan wo fan lu

Stellaria cherleriae (Fischer ex Seringe) F. N. Williams var. *polyantha* (Edgeworth & J. D. Hooker) R. R. Stewart.

Leaves subulate-lanceolate or subulate-ovate, margin ciliate or glabrous. Flowers in dense headlike cymes. Stony areas; 4600–5000 m. Xizang [India, Kashmir, Nepal, Sikkim].

57. *Stellaria congestiflora* H. Hara, J. Jap. Bot. 52: 195. 1977. 密花繁缕 mi hua fan lu

Stellaria semivestita Edgeworth var. *brevipetala* L. H. Zhou.

Herbs perennial. Stems densely tufted, 3–20 cm tall, apically white pilose. Leaves nearly sessile, pale green, linear-lanceolate, 0.7–1.3 cm × 1–3.5 mm, both surfaces glabrous, sometimes distal leaves pubescent, margin glabrous or sometimes ciliate, apex acuminate. Flowers numerous, in dense terminal cymes. Pedicel short, rarely 6 mm, white pilose; bracts herbaceous. Sepals 5, green, lanceolate, (4–)5–6 mm, glabrous or densely white pilose, 3-veined, margin white, apex acuminate. Petals 5, 1.5–3 mm, shorter than sepals, 2-cleft nearly to base; lobes linear. Stamens 10, 1.5–3.5 mm; filaments broadened and glandular at base; anthers purplish, ovoid, ca. 0.3 mm. Ovary ovoid, 0.5–1 mm; carpels 6; styles 3, ca. 2 mm.

Scrub; 3800–4100 m. Xizang [Bhutan, Nepal, Sikkim].

58. *Stellaria radians* Linnaeus, Sp. Pl. 1: 422. 1753.

沸瓣繁缕 sui ban fan lu

Cerastium fimbriatum Ledebour (1815), not E. Pritzel (1900); *Fimbripetalum radians* (Linnaeus) Ikonnikov; *Stellaria radians* f. *fimbriata* (Ledebour) Kitagawa; *S. radians* var. *ovato-oblonga* Koidzumi.

Herbs perennial, woolly, densely so above. Stems erect or ascending, quadrangular, 40–60 cm tall, basally branched, densely woolly. Leaves oblong-lanceolate to ovate-lanceolate, 3–12 × 1.5–2.5 cm, both surfaces lanate, midvein raised abaxially, base narrowed into short petiole, apex acuminate. Flowers in large terminal, dichotomous cymes; bracts lanceolate, herbaceous, densely lanate. Pedicel 1–3 cm, densely woolly, pendulous after anthesis. Sepals oblong-ovate or narrowly ovate, 6–8 × 2–2.5 mm, outside densely lanate. Petals 5, broadly obovate-cuneate, 8–10 mm, 5–7-cleft to middle or below; lobes nearly linear. Stamens 10, shorter than petals. Ovary broadly ellipsoid-ovoid; styles 3, linear. Capsule ovoid, slightly longer than persistent sepals, 6-valved. Seeds 2–5, black-brown, reniform, slightly compressed, scrobiculate. Fl. Jun–Aug, fr. Jul–Sep.

Hill scrublands, forest margins; 300–500 m. Hebei, Heilongjiang, Jilin, Liaoning, Nei Mongol [Japan, Korea, Mongolia, Russia].

59. *Stellaria martjanovii* Krylov, Trudy Imp. S.-Peterburgsk. Bot. Sada 21: 3. 1902.

长裂繁缕 chang lie fan lu

Mesostemma martjanovii (Krylov) Ikonnikov.

Herbs perennial, glandular hairy. Stems 3–6 cm tall, simple or sparsely branched. Leaves congested, sessile,

oblong-ovate, 5–7 × ca. 3 mm, midvein conspicuous, apex acuminate. Flowers axillary or terminal. Pedicel 5–7 mm or longer, pendulous at anthesis. Sepals 4, ovate-lanceolate, ca. 4 × 2 mm, margin narrowly membranous, apex acute. Petals 4, ca. 1.5 × as long as sepals, ca. 6 × 4 mm, 2-cleft to 2/3 length; lobes oblong-obovate. Stamens 8. Capsule ovoid, 4-valved to base, slightly longer than persistent sepals. Fl. Apr–Jul. Stony slopes; Xinjiang (Altai Mts.) [Russia].

Stellaria alexeenkoana Schischkin (in Komorov, Fl. URSS 6: 882. 1936; *Mesostemma alexeenkoana* (Schischkin) Ikonnikov) was described based on a specimen from Tagdumbasch Pamir (Xinjiang). It is similar to *S. martjanovii*, but has linear-oblong leaves, pubescent sepals, and petals shorter than the sepals. The present authors have seen no material of this taxon.

60. *Stellaria monosperma* Buchanan-Hamilton ex D. Don, Prodr. Fl. Nepal. 215. 1825.

独子繁缕 du zi fan lu

Herbs perennial. Stems yellow, quadrangular, 50–80 (–120) cm tall, stout, shiny, pubescent with 1 or 2 rows of glandular hairs above. Leaves short or long petiolate, lanceolate or oblong-lanceolate to elliptic, 4–11 (–23) × 1.2–2.5 (–6) cm, broadest from middle to base, base nearly rounded, semiclapping, adaxially pubescent or glabrous, midvein raised, pale yellow, margin crisp, apex long acuminate. Flowers numerous, in paniculate cymes, bisexual or unisexual; bisexual flowers large, female flowers small; bracts lanceolate. Pedicel 2–9 mm, slender, densely glandular pubescent. Sepals 5, gray-green, ovate-lanceolate to linear-lanceolate, (3–)5–6 (–8) × 1–2 mm, sparsely glandular pubescent, margin narrowed, dry, membranous, apex acuminate or rarely obtuse. Petals 5, 1/2–1 × as long as sepals, 2-cleft to middle; lobes sometimes sickle-shaped, apex acute. Stamens 5 or 10; filaments 5–6 mm; anthers yellow, ca. 0.3 mm in diam. Ovary ca. 2 mm, 1-loculed; ovules 3; styles 3, linear, ca. 4 mm. Seed 1 maturing per carpel, brown, globose, ca. 3 mm, somewhat rugulose or granular. Fl. Aug–Sep, fr. Sep–Oct. $2n = 36, 44, 52$.

Forests, mixed forests, montane forests, grassland slopes; 1200–2900 (–3300) m. Fujian, Guangdong, Guizhou, Hubei, Taiwan, Xizang, Yunnan, Zhejiang [Afghanistan, Bhutan, India, Japan, Kashmir, Myanmar, Nepal, Pakistan, Sikkim, Thailand, Vietnam].

1a. Stamens 10 60a. var. *monosperma*

1b. Stamens 5.

2a. Sepals lanceolate 60b. var. *paniculata*

2b. Sepals ovate-lanceolate 60c. var. *japonica*

60a. *Stellaria monosperma* var. *monosperma*

独子繁缕(原变种) du zi fan lu (yuan bian zhong)

Stellaria crispata Wallich ex D. Don; *S. glandulifera* Klotzsch; *S. nyalamensis* L. H. Zhou.

Stems yellow, quadrangular, 50–80 (–120) cm tall, stout, shiny, glandular pubescent, with 1 or 2 rows of hairs above. Seed 1 maturing per carpel, brown, globose, ca. 3 mm, somewhat rugulose or granular. Fl. Aug–Sep, fr. Sep–Oct. $2n = 36, 52$.

Forests; 2700–2800 m. Xizang [Afghanistan, Bhutan, India, Kashmir, Nepal, Pakistan, Sikkim].

60b. *Stellaria monosperma* var. *paniculata* (Edgeworth) Majumdar, J. Indian Bot. Soc. 44(1): 141. 1965.

锥花繁缕 *zhui hua fan lu*

Stellaria paniculata Edgeworth, Trans. Linn. Soc. London 20: 35. 1846.

Leaves variously shaped, oblong-lanceolate to elliptic, adaxially rough, margin usually glabrous, base narrowed into short or long petiole, apex long acuminate. Female flowers small. Sepals lanceolate, ca. 4 mm. Petals 1/2–1 × as long as sepals. Stamens 5. Mixed forests, grassland slopes; 1500–2900(–3300) m. Xizang, Yunnan [Afghanistan, Bhutan, India, Kashmir, Myanmar, Nepal, Sikim, Thailand, Vietnam].

60c. *Stellaria monosperma* var. *japonica* Maximowicz, Bull. Acad. Imp. Sci. Saint-Pétersbourg 18(4): 384. 1873.

皱叶繁缕 *zhou ye fan lu*

Stellaria paniculigera Makino.

Stems with 1 line of hairs. Leaves oblong-lanceolate, broadly lanceolate, or oblanceolate, subglabrous or adaxially pubescent, midvein abaxially pubescent, base cuneate, narrowed into a short petiole, apex acuminate. Sepals ovate-lanceolate, soft, apex acuminate. Petals shorter than sepals, narrow, 2-cleft to base; lobes nearly sickle-shaped, apex acute. Stamens 5. $2n = 44$.

Montane forests; 1200–1500 m. Fujian, Guangdong, Guizhou, Hubei, Taiwan, Zhejiang [Japan].

61. *Stellaria ovatifolia* (Mizushima) Mizushima, J. Jap. Bot. 41: 259. 1966.

卵叶繁缕 *luan ye fan lu*

Brachystemma ovatifolium Mizushima, Acta Phytotax. Geobot. 16: 42. 1955.

Herbs perennial. Stems diffuse, basally purplish, apically yellow-green, 1–2 m, slightly shiny, branched, pubescent with 2 lines of recurved hairs, somewhat densely pubescent above. Proximal and middle leaves usually broadly ovate or elliptic; distal leaves ovate-lanceolate to lanceolate, (2–)3–10 × (1–)1.5–2.5 cm, both surfaces glabrous, margin ciliate, midvein conspicuous, base nearly rounded, apex acute or acuminate. Flowers numerous in dichotomous, nearly subglobose cymes; distal bracts narrow, membranous, others herbaceous, usually shorter than pedicel, densely ciliate, subglabrous on both surfaces. Pedicel 3–5 mm after anthesis, densely pubescent. Sepals yellow-green, oblong to long ovate, 3–4(–6) × 1–1.5 mm, basal margin pubescent, pubescent outside, subglabrous inside, 3-veined, lateral veins conjoined at apex, base nearly rounded, margin dry, membranous, apex obtuse. Petals minute, ca. 1 mm, ca. 1/3 as long as sepals, 2-cleft nearly to base; lobes nearly linear, forked, base entire or undulate-crenate. Stamens 10; filaments ca. 2 mm, base broad, ca. 1/2 as long as sepals, glabrous; anthers pale yellow. Ovary globose or compressed globose, 1-loculed, ca. 1 mm, base narrowed, apex umbonate; ovules 3 or 4; styles 2 or 3, longer than ovary, apex curved. Capsule globose, shorter than persistent sepals, ca. 2.5 mm in diam., 4- or 6-valved.

Seed 1, reniform-globose, densely papillate, papillate cells much branched, rotate. Fl. Jul, fr. Nov.

Forest margins, river banks; 2600–2800 m. Xizang [Nepal].

62. *Stellaria delavayi* Franchet, Pl. Delavay. 97. 1889.

大叶繁缕 *da ye fan lu*

Herbs perennial. Stems ca. 1 m tall, basally branched, sparsely pubescent, apically densely pubescent. Leaves sessile or shortly petiolate; leaf blade oblong-lanceolate or lanceolate, 3–10 × 2–4 cm, marginal veins conspicuous, ciliate, abaxially densely pubescent, adaxially sparsely pubescent, base rounded, apex long acuminate. Flowers in broad cymes, densely glandular pubescent; bracts narrowly lanceolate, densely pubescent and ciliate, apex acute. Pedicel 0.5–1.2 cm, slender, densely glandular pubescent. Sepals 5, lanceolate, ca. 5 mm, outside glandular pubescent, midvein conspicuous, margin membranous, apex acute. Petals 5, slightly shorter than or subequaling sepals, 2-cleft. Stamens 5, alternating with petals, subequaling petals. Styles 3. Capsule 6-valved. Seeds 2 or 3. Fl. Aug–Sep, fr. Sep–Oct.

• Forest margins, grassland slopes; 1800–2900(–3400) m. Sichuan, Yunnan.

63. *Stellaria bistyla* Y. Z. Zhao, Bull. Bot. Res., Harbin 5(4): 142. 1985.

二柱繁缕 *er zhu fan lu*

Stellaria bistylata W. Z. Di & Y. Ren.

Herbs perennial. Stems densely tufted, diffuse, purplish, subterete, 10–30 cm tall, dichotomously branched, densely glandular hairy. Leaves oblong-lanceolate, 1–2 cm × 2–10 mm, margin hairy or glabrous, midvein conspicuous, raised abaxially, impressed adaxially, base narrowed, apex acute. Flowers in terminal dichotomous cymes; bracts lanceolate, 1.5–3 mm, both surfaces glandular hairy. Pedicel 0.3–2 cm. Sepals 5, oblong-lanceolate, 4–5 × ca. 1 mm, outside shortly hairy or glabrous, margin broadly membranous, apex acute. Petals 5, obovate, ca. 3 × 2 mm, shorter than sepals, apex 2-cleft to 1/4–1/3 length, base cuneate. Stamens 10, ca. 3 mm. Ovary globose, 1-loculed; ovules 4 or 5; styles 2(or 3), 2–3 mm. Capsule obovoid, ca. 2.5 mm, shorter than persistent sepals, 4(or 6)-valved. Seeds 1(or 2), black-brown, ovoid to obovoid, 1.5–1.8 mm, tuberculate. Fl. Jul, fr. Aug.

• Dry gullies; 2000–2600 m. Nei Mongol, Ningxia.

64. *Stellaria strongylosepala* Handel-Mazzetti, Oesterr. Bot. Z. 88: 301. 1939.

圆萼繁缕 *yuan e fan lu*

Herbs perennial. Stems tufted, nearly erect, quadrangular, ca. 20 cm tall, ca. 2 mm in diam., dry after anthesis, basally branched, with short branchlets and axillary leaf clusters; proximal leaves and inflorescences white papillate with stiff hairs. Leaves crowded below, distant above; leaf blade green, lanceolate-linear, ca. 1.5 cm × 1.2 mm, somewhat thick, margin erose, midvein slightly raised abaxially, impressed adaxially, apex acute. Flowers 5–16 in

dichotomous cymes; branches nearly forked, sparse; bracts herbaceous, distal ones ca. 2 mm. Pedicel 0.5–1.5 cm, slender. Sepals 5, white, oblong, ca. 1.5 mm wide, glabrous or papillate-pubescent, veins 3 and dichotomously branched, margin broadly membranous, apex rounded, green; calyx ca. 9 mm in diam. Petals ca. $\frac{2}{3}$ as long as sepals, 2-cleft to middle; lobes oblong. Stamens 10, slightly shorter than petals, inserted on carnose, semiorbicular, separated disc lobes; anthers pale yellow, nearly rectangular. Ovules few; styles 4. Capsule 4-valved. Seeds 2 or 3. Fl. Aug–Sep, fr. Sep–Oct.

- Nei Mongol.

