

21. BLYSMUS Panzer ex Schultes, Mant. 2: 41. 1824, nom. cons.

扁穗草属 bian sui cao shu

Liang Songyun (梁松筠 Liang Song-jun); Gordon C. Tucker

Blysmopsis Oteng-Yeboah; *Nomochloa* P. Beauvois ex T. Lestiboudois.

Herbs, perennial. Rhizomes creeping. Culms nodose or not, 3-angled or terete, smooth or scabrous. Leaves basal or cauline, ligulate. Basalmost involucre bract leaflike, suberect; bractlets glumelike. Inflorescences spicate with few to many pseudodistichous spikelets, rarely with a lateral branch. Spikelets dark brown, with few bisexual flowers. Glumes imbricate, subdistichous. Perianth bristles 3–6, rarely absent, usually retrorsely scabrous. Stamens 3; connective apex evident beyond anthers. Style deciduous, base not thickened; stigmas 2. Nutlet stipitate, oblong, plano-convex, smooth, apex beaked.

About four species: temperate regions in N Africa, Asia, Europe, and North America; three species in China.

- 1a. Culms subterete; nutlet 3.5–4 mm; perianth bristles shorter than nutlet or usually absent 1. *B. rufus*
- 1b. Culms 3-angled; nutlet ca. 2 mm; perianth bristles 1–3 × as long as nutlet.
 - 2a. Perianth bristles erect or slightly flexuose, ± as long as nutlet; anthers ca. 2 mm 2. *B. compressus*
 - 2b. Perianth bristles contorted, slender, 2–3 × as long as nutlet; anthers 2–2.5 mm 3. *B. sinocompressus*

1. *Blysmus rufus* (Hudson) Link, Hort. Berol. 1: 278. 1827.

内蒙古扁穗草 nei meng gu bian sui cao

Schoenus rufus Hudson, Fl. Angl., ed. 2, 1: 15. 1778; *Blysmopsis rufa* (Hudson) Oteng-Yeboah; *Blymus exilis* (Printz) Ivan; *B. rufus* subsp. *exilis* Printz; *Scirpus rufus* (Hudson) Schrader.

Rhizomes slender. Culms 3–20 cm tall, subterete, clothed at base with brown bladeless leaf sheaths. Cauline leaves as long as or shorter than culm; leaf blade brown, narrowly linear, thickly crescentic in cross section, apex ± obtuse. Involucral bract dark reddish brown, leaflike or glumelike, many veined, apex acute. Inflorescences consisting of 4–7 spikelets arranged in a distichous spike, 0.7–1.7 cm. Spikelets oblong-ovoid, 5–6 mm, 2- or 3-flowered, apex ± obtuse. Glumes elliptic-ovate, ca. 5 mm, 2- or 3-veined, apex obtuse. Perianth bristles usually absent. Stamens 3; anthers 3–4 mm; connective apex ca. 2 mm. Stigmas 2. Nutlet yellowish, shortly stipitate, oblong-ovoid, ca. 3.5 × 1.5 mm, plano-convex, base subrounded. Fl. and fr. Jun–Sep. $2n = 40$.

Wet saline meadows, wet sandy places; 500–5200 m. Heilongjiang, Jilin, Liaoning, Nei Mongol, Ningxia, Qinghai, Xinjiang [Kashmir, Kazakhstan, Kyrgyzstan, Mongolia, Pakistan, Russia, Tajikistan, Uzbekistan; Europe, North America].

2. *Blysmus compressus* (Linnaeus) Panzer ex Link, Hort. Berol. 1: 278. 1827.

扁穗草 bian sui cao

Schoenus compressus Linnaeus, Sp. Pl. 1: 43. 1753; *Blysmopsis compressus* (Linnaeus) Oteng-Yeboah; *Nomochloa compressa* (Linnaeus) Beetle; *Scirpus compressus* (Linnaeus) Persoon.

Rhizomes 1–1.5 cm × 1.5–2 mm. Culms 9–30 cm tall, 3-angled, clothed at base with black bladeless leaf sheaths. Cauline leaves usually shorter than culm; sheath brown to rust-colored, mouth obliquely truncate, apex acuminate; ligule very

short; leaf blade linear, flat, 1–3.5 mm wide, membranous. Involucral bract leaflike, slightly shorter or longer than inflorescence. Inflorescences consisting of 3–12 spikelets arranged in a simple distichous spike, oblong to obovoid, 1–2.2 × 0.4–0.9 cm. Spikelets ovoid to narrowly ovoid, 5–7 mm, 5–8-flowered. Glumes subdistichous, oblong-ovate, ca. 5 mm, membranous, 7-veined, apex obtuse. Perianth bristles 6, as long as nutlet, slightly flexuose at base, retrorsely scabrous. Stamens 3; anthers oblong, ca. 2 mm. Stigmas 2, as long as nutlet. Nutlet brown, obovoid, ca. 2 mm, plano-convex. Fl. and fr. Jul–Sep. $2n = 44, 79$.

Swampy meadows, valleys, wet places; 500–5000 m. Qinghai, Shanxi (Lüliang Shan), Xinjiang, Xizang [Afghanistan, Bhutan, N India, Kashmir, Kazakhstan, Kyrgyzstan, Nepal, Pakistan, Russia, Tajikistan, Turkmenistan, Uzbekistan; N Africa, SW Asia, Europe].

3. *Blysmus sinocompressus* Tang & F. T. Wang, Fl. Reipubl. Popularis Sin. 11: 224. 1961.

华扁穗草 hua bian sui cao

Rhizomes yellow, 2–7 cm × 2.5–3.5 mm, shiny, with black scales. Culms scattered, 5–60 cm tall, 0.7–4 mm thick, compressed 3-angled, clothed at base with brown to purplish brown leaf sheaths. Cauline leaves shorter than culm; ligule pale, very short; leaf blade flat, 0.5–4 mm wide, membranous, involute, margin scabrous, apex acuminate. Involucral bract leaflike, usually surpassing inflorescence; bractlets glumelike, membranous. Inflorescences consisting of 3–10 or more spikelets, densely arranged in a distichous or subdistichous spike; basal 1 or several spikelets usually remote, 1.5–3 × 0.6–1.1 cm. Spikelets narrowly ovoid, ovoid, or long ellipsoid, 5–7 mm, 2–9-flowered. Glumes rust-colored brown, subdistichous, long ovate, 3.5–4.5 mm, 3–5-veined, keel green, apex acute. Perianth bristles 3–6, flexuose or contorted, 2–3 × as long as nutlet, retrorsely scabrous. Stamens 3; anthers narrowly oblong, 2–2.5 mm; connective apex ca. 0.3 mm. Stigmas 2, ± as long as style. Nutlet dark brown, broadly obovoid, ca. 2 mm, plano-convex. Fl. and fr. Jun–Sep.

Wet places, stream and river margins, riverbeds, grasslands, valleys, swampy meadows, slopes; 500–4800 m. Gansu, Hebei, Liaoning, Nei Mongol, Ningxia, Qinghai, Shaanxi, Shanxi, Sichuan, Xinjiang, Xizang, NW Yunnan [Mongolia].

- 1a. Culms 0.7–1 mm thick; leaf blade
0.5–0.8 mm wide 3c. var. *tenuifolius*
1b. Culms 1–4 mm thick; leaf blade
1.5–4 mm wide.
2a. Culms 5–20 cm tall, 1–1.2 mm
thick; leaf blade 1.5–2.5 mm
wide 3a. var. *sinocompressus*
2b. Culms 26–60 cm tall, 3–4 mm
thick; leaf blade 3–4 mm wide 3b. var. *nodosus*

3a. *Blysmus sinocompressus* var. *sinocompressus*

华扁穗草(原变种) *hua bian sui cao* (*yuan bian zhong*)

Culms 5–20 cm tall, 1–1.2 mm thick. Leaf blade 1.5–2.5 mm wide. Fl. and fr. Jun–Sep.

Stream margins, riverbeds, grasslands; 500–4800 m. Gansu, Hebei, Liaoning, Nei Mongol, Ningxia, Qinghai, Shaanxi, Sichuan, Xinjiang, Xizang, NW Yunnan [Mongolia].

3b. *Blysmus sinocompressus* var. *nodosus* Tang & F. T. Wang, Fl. Reipubl. Popularis Sin. 11: 224. 1961.

节秆扁穗草 *jie gan bian sui cao*

Culms 26–60 cm tall, 3–4 mm thick. Leaf blade 3–4 mm wide. Fl. and fr. Jul–Sep.

• Wet places, stream margins, river margins, swampy meadows; ca. 2700 m. Hebei, Nei Mongol, Shaanxi, Shanxi.

3c. *Blysmus sinocompressus* var. *tenuifolius* Tang & F. T. Wang, Fl. Reipubl. Popularis Sin. 11: 224. 1961.

细叶扁穗草 *xi ye bian sui cao*

Culms slender, 0.7–1 mm thick. Leaf blade finely linear, 0.5–0.8 mm wide. Fl. and fr. Aug.

• Slopes; ca. 2200 m. S Gansu (Minxian), Shanxi, W Sichuan.

