

122. STIPAGROSTIS Nees, Linnaea 7: 290. 1832.

针禾属 zhen he shu

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Aristida sect. *Stipagrostis* (Nees) Bentham & J. D. Hooker.

Perennial, sometimes suffrutescent, or rarely annual. Culms tufted. Leaf blades mostly rolled, tough, sometimes deciduous from the sheaths. Inflorescence a narrow or open panicle. Spikelets with 1 floret; glumes scarious, unequal or subequal, 1–11-veined; floret callus laterally bearded, pungent; lemma narrowly cylindrical, indurated, glabrous or sparsely hairy; awn 3-branched, articulated at the lemma apex, a twisted column present or not, at least the central awn branch plumose, lateral branches shorter, often capillary. Stamens 3.

About 50 species: Africa to C Asia; two species in China.

This is a genus of grasses adapted to true desert conditions.

- 1a. Spikelets 1.3–1.7 cm; glumes subequal, lower slightly longer; lemma 5–7 mm, apex truncate, ciliolate 1. *S. pennata*
1b. Spikelets 2.5–3 cm; glumes unequal, lower clearly longer; lemma 8–9 mm, apex slightly 2-lobed, glabrous 2. *S. grandiglumis*

1. Stipagrostis pennata (Trinius) De Winter, Kirkia 3: 135.
1963.

羽毛针禾 yu mao zhen he

Aristida pennata Trinius, Mém. Acad. Imp. Sci. St. Pétersbourg Hist. Acad. 6: 488. 1815; *Aristida pungens* var. *pennata* (Trinius) Trautvetter; *Arthratherum pennatum* (Trinius) Tzvelev.

Perennial with slender rhizomes, roots tomentose. Culms tussocky, 20–60 cm tall, much branched at base. Leaf sheaths smooth or scabrid, longer than internodes; leaf blades involute, 10–30 cm, glaucous, abaxial surface scabrid, adaxial surface puberulent; ligule short, margin with 0.5–1 mm hairs. Panicle lax, open, base usually included in uppermost leaf sheath, 5–20 cm; branches paired, rarely solitary. Spikelets 1.3–1.7 cm, stramineous; glumes narrowly lanceolate, smooth or scabrid, pubescent within, subequal, lower slightly longer than upper, lower glume 3–5-veined, upper glume 3-veined, apex acuminate; callus ca. 1 mm; lemma 5–7 mm, smooth on back, apex truncate, ciliolate; awn with short 0.3–1 mm column, all 3 branches densely plumose throughout, hairs 2–4 mm, central branch 1–1.5 cm, lateral branches a little shorter. Fl. and fr. Jul–Sep.

Fixed dunes; 300–500 m. Xinjiang, Yunnan [Afghanistan, Kazakhstan, Kyrgyzstan, Russia, Turkmenistan, Uzbekistan; SW Asia (Caucasus, Iran)].

This species provides good fodder when young and is also good for binding sand.

2. Stipagrostis grandiglumis (Roshevitz) Tzvelev, Zlaki SSSR, 618. 1976.

大颖针禾 da ying zhen he

Aristida grandiglumis Roshevitz, Bot. Mater. Gerb. Bot. Inst. Komarova Akad. Nauk SSSR 11: 18. 1949.

Perennial, roots tomentose. Culms densely tufted, 30–65 cm tall, branched at base. Leaf sheaths smooth or scabrid, longer than internodes; leaf blades involute, 10–35 cm, abaxial surface smooth, adaxial surface pubescent; ligule short, ciliate. Panicle lax with few spikelets, 15–30 cm; branches capillary, solitary, 3–10 cm. Spikelets 2.5–3 cm, stramineous or yellowish white; glumes narrowly lanceolate, smooth or scabrid, densely pubescent within upward, unequal, lower glume 2.5–3 cm, 5–7-veined, marginal veins obscure, upper glume 2–2.3 cm, 3-veined, apex acuminate; callus 1–1.5 mm; lemma 8–9 mm, apex slightly 2-lobed, glabrous; awn with short ca. 1 mm column, all 3 branches densely plumose throughout, hairs 4–5 mm, central branch ca. 2.5 cm, lateral branches 2–2.2 cm. Fl. and fr. Jun–Sep.

Desert sands, banks of watercourses; 1100–1500 m. Gansu (Dunhuang), S Xinjiang [Mongolia].

