89. POLYPOGON Desfontaines, Fl. Atlant. 1: 66. 1798.

棒头草属 bang tou cao shu
Lu Shenglian (卢生莲); Sylvia M. Phillips

Annual or perennial. Leaf blades linear, flat; ligule membranous. Panicle contracted to dense and spikelike, often bristly with numerous small deciduous spikelets. Spikelets with 1 floret, laterally compressed, without rachilla extension, falling entire, pedicel or upper part of it articulated and remaining attached to spikelet as a stipe; glumes equal, longer than floret, papery, scabrid, 1-veined, apex entire to 2-lobed, often with slender awn from apex; lemma about 1/2 as long as glumes, rounded, thin, smooth, shiny, obscurely 5-veined, veins usually shortly excurrent from truncate apex, awnless or with fine subapical awnlet or geniculate dorsal awn; palea 1/2 as long to equaling lemma. Stamens 1–3.

Twenty-five species: warm-temperate regions of the world and on tropical mountains, especially in damp places; six species (one endemic) in China.

Polypogon is closely related to Agrostis, with which it hybridizes. It is distinguished mainly by its deciduous spikelets falling with a slender, basal stipe attached.

1a. Glumes awnless.

2a. Spikelets 1.5–2.5 mm; palea almost as long as lemma; anthers 0.5–0.7 mm ............................................................. 1. P. viridis

2b. Spikelets 3–4 mm; palea 2/3 lemma length; anthers 1–1.5 mm ............................................................. 2. P. hissaricus

1b. Glumes awned.

3a. Awn of glumes shorter than or up to 1.5 times as long as glume body.

4a. Panicle very dense; spikelet stalks short, the longest articulated much above their base; palea almost as long as lemma ............................................................. 3. P. fugax

4b. Panicle lax; spikelet stalks long, all articulated only at their base; palea 2/3 lemma length ............................................. 4. P. ivanovae

3b. Awn of glumes 2.5–4 times as long as glume body.

5a. Glumes emarginate; lemma with 1.5–2 mm awn .................................................................................... 5. P. monspeliensis

5b. Glumes deeply 2-lobed; lemma awnless ........................................................................................................... 6. P. maritimus


苔绿棒头草 tai lü bang tou cao

Agrostis viridis Gouan, Hortus Regius Monspeliensis: 546. 1762; Agrostis semiverticillata (Forsskål) C. Christensen; Phalaris verticillata Forsskål; Polypogon semiverticillatus (Forsskål) Hylander.

Perennial, stoloniferous; stolons slender, spreading, rooting at nodes. Culms geniculate ascending, 20–100 cm tall. Leaf blades linear, flat, 3–12 cm, 2–8 mm wide, scaberulous on both surfaces, apex acute; ligule 2–5 mm. Panicle contracted, lanceolate to oblong, lobed and often interrupted, 5–15 cm; branches semiverticillate, ascending, bearing densely clustered spikelets. Spikelets narrowly oblong, 1.5–2.5 mm; glumes narrowly elliptic-oblong, scabrid, lightly keeled upward, apex obtuse, awnless; lemma broadly elliptic, ca. 1 mm, awnless, apex truncate, minutely denticulate; palea almost as long as lemma. Stamens 3, anthers 0.4–0.7 mm. Caryopsis oblong, ca. 1 mm.

Aquatic grass rooting in sand and mud of streams, marshy grasslands; ca. 2600 m. Yunnan [Kazakhstan, Kyrgyzstan, Pakistan, Tajikistan, Turkmenistan, Uzbekistan; N Africa, SW Asia, S Europe, NW India; introduced in S Africa, America, Australia].


糙毛棒头草 cao mao bang tou cao


Perennial. Culms erect or procumbent and rooting from lower nodes, 60–110 cm tall. Leaf blades linear, flat, 7–25 cm, 3–7.5 mm wide, scabrid on both surfaces, apex acute; ligule 3–6 mm. Panicle lanceolate to narrowly lanceolate, lobed, rather dense or sometimes loose, 10–20 cm; branches subverticillate, densely spinulose. Spikelets lanceolate, 3–4 mm; glumes oblong, scabrid or shortly bristly, apex acute, awnless; lemma 2–2.5 mm, apex obtuse or with deciduous awnlet up to 1.5 mm; palea 2/3 as long as lemma. Stamens 3, anthers 1–1.5 mm.

Wet meadows in river valleys; 2000–3000 m. Xinjiang [Afghanistan, SE Kazakhstan, Kyrgyzstan, Pakistan, Tajikistan, Uzbekistan; SW Asia (NE Iran)].


棒头草 bang tou cao

Noowдоворскя fugax (Nees ex Steudel) Nevski; Poly- pogon demissus Steudel; P. higegaweri Steudel; P. litoralis var. higegaweri (Steudel) J. D. Hooker.

Annual, tufted. Culms geniculate, sometimes trailing and rooting at lower nodes, 10–75 cm tall. Leaf blades linear or broadly linear, 2.5–15 cm, 3–10 mm wide, scabrid or adaxial surface smooth, apex acute; ligule 3–8 mm. Panicle densely

cylindrical, slightly lobed, or looser and narrowly ovate, 4–15 cm, pale green or flushed purple; branches narrowly ascending, up to 4 cm, bearing densely clustered spikelets. Spikelets narrowly oblong, 2–2.5 mm; glumes narrowly oblong, puberulous, vein scabrid-acuteate, margins shortly ciliate in lower half, apex emarginate, awned from sinus; awn shorter than or up to 1.5 times as long as glume body; lemma elliptic, 1–1.2 mm, apex slightly 4-toothed, midvein extended into a fine, straight, ca. 2 mm awn; palea as long as lemma. Stamens 3, anthers ca. 0.7 mm. Caryopsis elliptic, ca. 1 mm. Fl. and fr. Apr–Sep.

Moist places, near farmlands; 100–3600 m. Anhui, Fujian, Guangdong, Guizhou, Henan, Hubei, Jiangsu, Shaanxi, Shandong, Shanxi, Sichuan, Taiwan, Xinjiang, Xizang, Yunnan, Zhejiang [Bhutan, N India, Japan, Kazakhstan, Kyrgyzstan, Mongolia, Pakistan, Russia, Tajikistan, Turkmenistan, Uzbekistan; SW Asia; introduced elsewhere].

The names Polypogon littoralis Smith and P. lutosus (Poiret) Hitchcock have both been misapplied to this species. They are in fact synonyms of ×Agropogon lutosus.


伊凡棒头草  

Perennial, forming small loose tufts. Culms geniculately ascending, 8–20 cm, scaberulous below panicle. Leaf blades linear, flat or folded, 3–20 cm × 0.8–2.5 mm wide, scabrid on both surfaces; ligule 2–4.5 mm. Panicle narrow, fairly lax, 2.5–7 cm; tinged pinkish violet; branches short, scabrid. Spikelets 2.2–2.8 mm; glumes oblong, scabrid, apex obtuse, awned, awn straight, 0.5–2 mm; lemma ovate, 1.4–1.8 mm, apex aristulate-dentate, midvein extended into a straight or curved 2.3–3.5 mm awn; palea 2/3 lemma length. Stamens 3, anthers 0.5–0.8 mm. Fl. Jun.

Wet valley arable land, flooded meadows; 1300–1700 m. Xinjiang (Kunlun Shan).


长芒棒头草  


Annual, tufted. Culms erect or geniculate, up to 60 cm tall. Leaf blades narrowly to broadly linear, 2–13 cm, 2–9 mm wide, adaxial surface and margins scabrid, abaxial surface smooth, apex acute; ligule 2–8 mm. Panicle narrowly oblong in outline, dense, spike-like, sometimes slightly lobed, 1–10 cm, pale green, thickly clothed in yellow bristles. Spikelets narrowly oblong, 1.5–2.5 mm; glumes narrowly ovovate-oblong, puberulous, vein scabrid-aculeate, margins ciliate, apex emarginate, apex of lobes slightly acute, awned from sinus; awn 2.5–4 times as long as glume body; lemma ovovate, 1–1.2 mm, apex slightly 4-toothed, midvein extended into a fine, straight, readily deciduous, 1.5–2 mm awn; palea as long as lemma. Stamens 3, anthers ca. 0.8 mm. Caryopsis obovate-oblong, ca. 1 mm. Fl. and fr. May–Oct.

Moist places, streamsides; below 3000 m. Anhui, Fujian, Gansu, Guangdong, Hebei, Henan, Jiangsu, Nei Mongol, Ningxia, Qinghai, Shaanxi, Shandong, Shanxi, Sichuan, Taiwan, Xinjiang, Xizang, Yunnan, Zhejiang [India, Kazakhstan, Kyrgyzstan, Mongolia, Pakistan, Russia, Tajikistan, Turkmenistan, Uzbekistan; N and S Africa, SW Asia (Caucasus), Europe].

This is a widely introduced weed naturalized in most warm-temperate regions.

裂颖棒头草  lie ying bang tou cao

Annual, tufted. Culms erect or geniculate, up to 35 cm tall. Leaf sheaths scabrid, uppermost slightly inflated; ligule 1–6 mm, apex irregularly toothed; leaf blades linear, 5–10 cm, 1–5 mm wide, both surfaces scabrid, apex acuminate. Panicle dense, spikelike, sometimes lobed, 5–7 cm, often purple tinged. Spikelets 2–3 mm, yellowish green; glumes obovate-oblong, hispid, margins ciliate, apex deeply 2-lobed, lobes obtuse, aawned from sinus; awn 6–7 mm; lemma 1–1.2 mm, awnless; palea as long as lemma. Stamens 3, anthers 0.3–0.4 mm. Caryopsis obovate-oblong, 0.7–0.9 mm. Fl. and fr. Jun–Aug.

Moist grassland on mountain slopes, marshy meadows; 400–3300 m. Xinjiang [Kazakhstan, Kyrgyzstan, Mongolia, Russia, Turkmenistan, Uzbekistan; N Africa, SW Asia, Europe; introduced in North America].