176. PSEUDORAPHIS Griffith ex Pilger, Notizbl. Bot. Gart. Berlin-Dahlem 10: 210. 1928.

伪针茅属 wei zhen mao shu

Chen Shouliang (陈守良); Sylvia M. Phillips

Aquatic or semi-aquatic perennials. Culms decumbent to stoloniferous, many-noded, rooting at lower nodes or floating. Leaf sheaths compressed; leaf blades linear to lanceolate; ligule membranous or ciliate. Inflorescence open or contracted, composed of racemes on all sides of a common axis; racemes solitary or grouped, rachis slender, bearing 1 to several alternate shortly pedicelled spikelets, terminating in a bristle. Spikelets lanceolate, terete or slightly dorsally compressed, florets 2; lower glume very small, veinless; upper glume equaling the spikelet, firmly herbaceous, scabrous to setose, long-acuminate or briefly awned; lower lemma resembling upper glume but usually slightly shorter, enclosing a shorter hyaline palea; upper floret 1/2 as long, shortly stipitate, membranous, smooth, shiny. Caryopsis eventually much larger than upper floret and filling spikelet when mature. x = 7, 9.

Six species: India to Japan and throughout SE Asia to Australia; three species in China.

- 1a. Inflorescence open, lanceolate to ovate; racemes spreading, 2–3-spiculate 1. P. brunoniana 1. P. brunoniana
- 1b. Inflorescence contracted, linear to oblong; racemes erect, usually 1-spiculate.

1. Pseudoraphis brunoniana (Wallich & Griffith) Pilger, Notizbl. Bot. Gart. Berlin-Dahlem 10: 210. 1928.

伪针茅 wei zhen mao

Panicum brunonianum Wallich & Griffith, J. Asiat. Soc. Bengal 5: 574. 1836; Chamaeraphis brunoniana (Wallich & Griffith) A. Camus; C. spinescens (R. Brown) Poiret var. brunoniana (Wallich & Griffith) J. D. Hooker.

Culms soft, compressed, usually floating, emergent flowering shoots 20–40 cm, nodes pubescent. Leaf sheaths usually longer than internodes, mouth with lanceolate auricles adnate to the ligule; leaf blades linear-lanceolate, $3-9\times0.3$ –0.6 cm, base contracted, apex acute; ligule membranous, lacerate, ciliolate. Inflorescence open, lanceolate to ovate in outline, 5–10 cm; racemes stiff, ascending to patent, bearing (1-)2-3 distant spikelets on a slender scabrous rachis, terminal bristle (7-)15-30 mm. Spikelets 5.5-8(-10) mm; lower glume 0.5-1 mm, broadly rounded or truncate; upper glume lanceolate, as long as spikelet, 7-1 1-veined, sparsely spinulose on veins and margins, apex slenderly acuminate; lower lemma slightly shorter than upper glume, 7-9-veined; anthers 3, 1.3-2 mm; upper lemma ca. 2 mm. Fl. and fr. Jul–Aug.

Rooting in shallow water, floating in deep water. Anhui, Guangdong, Taiwan [Bangladesh, NE India, Myanmar, Philippines, Thailand, Vietnam].

This species is closely related to *Pseudoraphis spinescens* (R. Brown) Vickery, with which it has often been confused. *Pseudoraphis spinescens* has a widespread distribution from India and Sri Lanka through Malaysia and Indonesia to Australia. It differs in its densely hairy nodes with shiny, white, appressed, silky hairs; longer racemes bearing 5–10 approximate spikelets, usually with a shorter terminal bristle; and by its caudate upper glume much exceeding the lower lemma

2. Pseudoraphis sordida (Thwaites) S. M. Phillips & S. L. Chen, Novon 13: 469. 2003.

瘦脊伪针茅 shou ji wei zhen mao

Panicum sordidum Thwaites, Enum. Pl. Zeyl. 443. 1864; Chamaeraphis spinescens (R. Brown) Poiret var. depauperata Nees ex J. D. Hooker; Pseudoraphis depauperata (Nees ex J. D. Hooker) Keng; P. spinescens (R. Brown) Vickery var. depauperata (Nees ex J. D. Hooker) Bor; P. ukishiba Ohwi.

Culms tufted, slender, 20–50 cm, internodes often purplish, nodes pubescent to subglabrous. Leaf sheaths loose, auricles variable, often inconspicuous; leaf blades linear, $2-6\times0.2-0.4$ cm, base contracted, apex acute; ligule a ciliate membrane. Inflorescence contracted, almost spikelike, oblong, 2-8 cm, enclosed at the base by the uppermost leaf sheath or only slightly exserted; racemes erect, bearing a single spikelet (rarely 2), terminal bristle 8-12 mm. Spikelets 4-6 mm; lower glume 0.6-0.8 mm; upper glume as long as the spikelet, 7 main veins with thinner intermediaries, sparsely strigose on lower back and near margins, sharply acuminate; lower lemma subequal to upper glume, 7-veined; anthers 2, 0.6-1.1 mm; upper lemma 1.3-1.4 mm. Fl. and fr. autumn.

Shallow lakes, streams; 100–500 m. Fujian, Hubei, Hunan, Jiangsu, Shandong, Yunnan, Zhejiang [India, Japan, Korea, Sri Lanka].

The name "Chamaeraphis depauperata Nees ex Steudel" (Syn. Pl. Glumac. 1: 49. 1853) was not validly published because it was merely cited as a synonym of *Panicum asperum* Wight ex Steudel (1853), not Lamarck (1779).

3. Pseudoraphis balansae Henrard, Blumea, Suppl. 1: 230. 1937

长稃伪针茅 chang fu wei zhen mao

Pseudoraphis longipaleacea L. C. Chia.

Perennial, with rhizomes. Culms slender, floating, 20–70 cm long when flowering, smooth, nodes glabrous. Leaf sheaths loose, keeled, glabrous, mouth with lanceolate auricles adnate to the ligule; leaf blades linear, soft, $3-5\times0.2-0.4$ cm, abaxial surface smooth, adaxial surface scabrous, base rounded, apex subacute; ligule membranous, white, glabrous, subtruncate. Inflorescence linear, 4-5 cm, composed of few spikelets; racemes erect, alternate, bearing a single spikelet (rarely 2), terminal bristle 8-24 mm. Spikelets 4.5-6.5 mm, acute; lower glume 0.5-0.7 mm, obtuse or subtruncate; upper glume as long as or slightly shorter than lower lemma, glabrous, 7-9-veined, acute; lower lemma equal to spikelet, 13-veined; anthers 3, ca. 3 mm; upper lemma ca. 2.5 mm. Fl. and fr. Sep-Oct.

Ponds, lakes. Hainan [Thailand, Vietnam].

Pseudoraphis balansae is distinctive in the genus because its spikelets are merely acute, lacking the drawn-out, narrow tip on the upper glume found in most species. The short, subacute leaves, white, truncate ligule, and few-spiculate inflorescence are also characteristic.

Flora of China 22: 547-548. 2006.