

152. PEROTIS Aiton, Hort. Kew. 1: 85. 1789.

茅根属 mao gen shu

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Diplachyrium Nees.

Annuals or sometimes perennials. Leaf blades short, broad, base slightly cordate, margins often pectinate-ciliate; ligule a membranous rim. Inflorescence a cylindrical raceme of long-awned, solitary spikelets borne directly on main axis; rachis clothed in short pegs after spikelets have fallen. Spikelets linear-elliptic, terete or slightly laterally compressed, with 1 floret, falling entire, subsessile or borne on a pedicel-like callus which falls with spikelet; glumes subequal, as long as spikelet and enclosing floret, papery, 1-veined, rounded, scabrous, apex with a long slender awn far exceeding glume body, lower glume tightly embraced by upper glume, its awn usually longer than upper glume awn; lemma lanceolate, shorter than glumes, hyaline, 1-veined, glabrous, acute; palea hyaline, slightly shorter than lemma, flattened. Caryopsis terete or flattened, apex acute.

Thirteen species: Old World tropics; three species in China.

This is an easily recognizable genus on account of the delicate, elongate, violet-tinged, “bottlebrush” inflorescence of small, long-awned spikelets, which fall entire from the central axis.

- 1a. Spikelets 3.5–4.5 mm; glume apex tapering into awn 1. *P. rara*
1b. Spikelets 1.5–2.5 mm; glume apex abruptly distinct from awn.
2a. Spikelet callus 0.2–0.5 mm; glumes scabrid on keel, evenly hirtellous on back; leaf blades 2–5 mm wide; inflorescence up to 12 cm 2. *P. indica*
2b. Spikelet callus 0.1–0.2 mm; glumes pectinate-ciliolate on keel, scaberulous-hirtellous in rows on lower back; leaf blades 4–7 mm wide; inflorescence up to 20 cm 3. *P. hordeiformis*

1. *Perotis rara* R. Brown, Prodr. 172. 1810.

大花茅根 da hua mao gen

Diplachyrium rarum (R. Brown) Nees; *Perotis longiflora* Nees; *P. macrantha* Honda; *P. patula* Nees; *Saccharum rarum* (R. Brown) Poiret.

Annual or short-lived perennial. Culms loosely tufted, decumbent at base, 15–40 cm tall. Leaf sheaths glabrous; leaf blades lanceolate to narrowly ovate, flat or margins involute, tough, 1.5–5 cm, 2–5 mm wide, glaucous, glabrous, margins spiny-scabrous, pectinate at base, apex acute. Inflorescence up to 20 cm; spikelets laxly arranged, horizontally spreading, lightly reflexed at maturity; rachis scaberulous-hirtellous. Spikelets 3.5–4.5 mm (excluding awns); basal callus 0.5–1.5 mm, narrowly obconical, flattened, sometimes laterally pubescent; glumes linear-lanceolate, back evenly scaberulous-hirtellous with short white hairs, midvein scabrous with longer prickles toward awn, apex gradually tapering into awn; awn 1–2.5 cm; lemma 1.2–1.5 mm. Anthers ca. 0.6 mm. Caryopsis terete, subulate, ca. 2.5 mm. Fl. and fr. Jun–Nov.

Sandy seashores. Fujian, Guangdong, Guangxi, Hainan, Taiwan [New Guinea, Philippines, Thailand, Vietnam; Australia].

This species is at the northern limit of its range in S China, and can be distinguished by its much more loosely arranged inflorescence of very narrow spikelets, with the tips drawn out into longer awns.

2. *Perotis indica* (Linnaeus) O. Kuntze, Revis. Gen. Pl. 2: 787. 1891.

茅根 mao gen

Anthoxanthum indicum Linnaeus, Sp. Pl. 1: 28. 1753; *Saccharum spicatum* Linnaeus.

Annual. Culms loosely tufted, erect or decumbent at base, 20–30 cm tall. Leaf sheaths usually glabrous; leaf blades lan-

ceolate to narrowly ovate, flat or margins involute, tough, 2–4 cm, 2–5 mm wide, glaucous, glabrous, margins spiny-scabrous especially near base, apex acute; ligule ca. 0.5 mm. Inflorescence up to 12 cm; spikelets usually densely arranged, ascending or horizontally spreading; rachis scabrous. Spikelets 1.5–2.5 mm (excluding awns); basal callus 0.2–0.5 mm, subacute; glumes narrowly lanceolate, back uniformly hirtellous with short white hairs, midvein scabrous, apex obtuse, clearly demarcated from awn; awn 1–1.5 cm; lemma 0.5–1 mm. Anthers ca. 0.3 mm. Caryopsis terete, narrowly ellipsoid, 1–1.8 mm.

Stream banks, roadsides, other weedy places, on sandy soil. Guangdong, Hainan, Shandong, Taiwan, Yunnan [Bhutan, Cambodia, India, Indonesia, Laos, Malaysia, Myanmar, Nepal, Philippines, Sri Lanka, Thailand, Vietnam; Africa (probably introduced), Australia (Queensland)].

3. *Perotis hordeiformis* Nees in Hooker & Arnott, Bot. Beechey Voy. 248. 1838.

麦穗茅根 mai sui mao gen

Perotis chinensis Gandoger.

Annual or short-lived perennial. Culms loosely tufted, erect or decumbent at base, 25–40 cm tall. Leaf sheaths glabrous; leaf blades lanceolate to narrowly ovate, 2–4 cm, 4–7

mm wide, glabrous, margins spiny-scabrous or loosely ciliate near base; ligule ca. 0.5 mm. Inflorescence up to 20 cm; spikelets usually densely arranged, ascending or horizontally spreading; rachis scabrous. Spikelets 1.5–2.5 mm (excluding awns); basal callus 0.1–0.2 mm, obtuse; glumes narrowly lanceolate, back scaberulous-hirtellous in rather indistinct close rows (most obvious toward lemma base), midvein pectinate-ciliolate, apex abruptly acute, clearly demarcated from awn; awn 0.5–1.5 cm. Anthers ca. 0.3 mm. Caryopsis terete, narrowly ellipsoid, ca. 1.5 mm. Fl. and fr. summer and autumn. $2n = 40$.

Sandy places, along seashores. Guangdong, Hebei, Jiangsu, Yunnan [India, Indonesia, Malaysia, Nepal, Myanmar, Pakistan, Sri Lanka, Thailand].

This species is very close to *Perotis indica* and is sometimes included within it. No single character by itself is reliable for separating the two, but the combination of characters given in the key will usually suffice.

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