

27. MACHAERINA Vahl, Enum. Pl. 2: 238. 1805.

剑叶莎属 *jian ye suo shu*

Liang Songyun (梁松筠 Liang Song-jun); Jeremy J. Bruhl, Karen L. Wilson

Baumea Gaudichaud.

Herbs, perennial, often with long scaly rhizomes. Culms tufted, erect, flattened, angular, or terete, usually smooth, rarely rough. Leaves distichous; basal sheaths brown to purplish; ligule absent; leaf blade unifacial, compressed or terete, sometimes reduced to a sheath. Involucral bracts sheathing and with a short blade. Inflorescences paniculate, consisting of few to several partial panicles, main axis often sinuous. Spikelets often clustered, rarely solitary, ovoid to narrowly ovoid, compressed. Glumes distichous, basal 1 or 2 flowers bisexual, apical flower(s) male. Perianth bristles absent. Stamens 3. Style base distinctly thickened, conic or pyramidal, persistent; stigmas 3. Nutlet stipitate or sessile, ovoid, oblong, or oblong-ellipsoid, ± terete or 3-sided, smooth or rugulose, apex beaked.

About 50 species: mostly tropical and temperate regions, especially Australia; three species (two endemic) in China.

- 1a. Culms terete 3. *M. rubiginosa*
- 1b. Culms flattened.
 - 2a. Leaf blade ca. 1.5 m, margin smooth; spikelets ca. 5 mm 1. *M. myriantha*
 - 2b. Leaf blade ca. 0.5 m, margin scabrous; spikelets 10–12 mm 2. *M. ensigera*

1. Machaerina myriantha (Chun & F. C. How) Y. C. Tang, Fl. Hainan. 4: 537. 1977.

多花剑叶莎 *duo hua jian ye suo*

Cladium myrianthum Chun & F. C. How, Acta Phytotax. Sin. 7: 83. 1958.

Rhizomes short, stout. Culms to 2 m tall, 6–8 mm thick, flattened, several nodose. Leaves basal; leaf blade ensiform, ca. 1.5 m × 1.8–2.2 cm, smooth, margin entire, apically gradually narrowed. Inflorescences paniculate, consisting of a terminal and several lateral branches, 20–60 cm. Spikelets 2–4 clustered, oblong-ovoid, 4–5 mm, 2–4-flowered; basal 1 or 2 spikelets bearing nutlet. Glumes 5 or 6, brown, ovate to oblong, basal-most ca. 4 mm, pubescent, margins hyaline and ciliate, apex obtuse. Perianth bristles 4–6, brown, shorter than style. Stamens 3; anthers oblong, 3.5–4 mm; connective apex apiculate. Style ca. 4 mm, persistent, with white hairs, base thickened; stigmas 3. Nutlet brown, obovoid, ca. 1 mm, acutely 3-sided, glabrous, apex beaked. Fl. and fr. Aug–Sep.

• Riversides, forests, ditch sides; 900–2800 m. Hainan.

2. Machaerina ensigera (Hance) T. Koyama, Bot. Mag. (Tokyo) 69: 63. 1956.

剑叶莎 *jian ye suo*

Cladium ensigerum Hance, J. Bot. 23: 80. 1885.

Rhizomes horizontal, 4.5–6.8 mm thick. Culms flattened. Leaves basal; leaf blade ensiform, 3.8–50 × 0.7–2.5 cm, rigid, many veined, margin purple, finely scabrous, and denticulate. Inflorescences paniculate, narrow, usually 3-branched. Spikelets purple, ca. 11.3 × 3.5 mm, 2- or 3-flowered. Glumes ovate-lanceolate, apex acuminate. Nutlet subdrupaceous, ellipsoid, 3-furrowed; persistent style base thickened. Fl. and fr. Apr–Aug.

• Swamps, lake margins. Hong Kong.

No specimen has been seen by the present authors.

3. Machaerina rubiginosa (Solander ex G. Forster) T. Koyama, Bot. Mag. (Tokyo) 69: 65. 1956.

圆叶剑叶莎 *yuan ye jian ye suo*

Schoenus rubiginosus Solander ex G. Forster, Fl. Ins. Austr. 89. 1786; *Fuirena rubiginosa* (Solander ex G. Forster) Sprengel.

Rhizomes long, horizontal, scaly. Culms tufted, (0.3–)1–1.8 m tall, 2–6 mm thick, compressed biconvex to subterete, smooth. Basal leaves shorter than to equaling culm; leaf blade erect, (2–)4–7 mm wide, biconvex with obtuse edges to subterete, smooth; pith spongy. Cauline leaves long sheathing with short blades. Inflorescences paniculate, erect, narrow, dense or interrupted, (10–)20–50 cm, 3–7-noded. Spikelets in oblong to globose clusters, 4–7 × 2–2.5 mm, narrowly ovoid maturing to ovoid, 2- or 3-flowered, bearing 1 or 2 nutlets. Glumes 5, ovate to lanceolate, 4.5–6.5 mm, margins long ciliate, apex acuminate. Perianth bristles absent. Stamens 3; anthers 1.5–2 mm; connective apex prominently apiculate. Nutlet orange to reddish brown, sessile, ellipsoid to oblong-ellipsoid, 3–5 × 1.5–2 mm, 3-sided, smooth, shiny; persistent style base depressed to shortly pyramidal, densely hairy. Fl. and fr. Apr–Aug.

Swamps, lake margins, *Sphagnum* bogs; below 1800 m. Hong Kong, Yunnan (Tengchong) [Bangladesh, India, Indonesia, Japan (Ryukyu Islands), Malaysia, Papua New Guinea, Philippines, Sri Lanka, Vietnam; Australia, Pacific islands (New Zealand)].

