

31. SEMIARUNDINARIA Nakai, J. Arnold Arbor. 6: 150. 1925.

业平竹属 ye ping zhu shu

Li Dezhu (李德铎); Chris Stapleton

Brachystachyum Keng.

Shrubby bamboo, sometimes subarborescent. Rhizomes leptomorph, with running underground stems. Culms densely pluricaespitose, erect; internodes flattened or grooved above branches, glabrous (pubescent in *S. densiflora*); nodes prominent. Branches (3–)5–9(–13), subequal, buds initially open at front. Culm sheaths deciduous, leathery or thickly papery; ligule conspicuous; blade recurved or reflexed. Leaves 3–7(–10) per ultimate branch; blade with distinct transverse veins. Inflorescence lateral, racemose to panicle, fully bracteate, partially iterant, prophyllate; pseudospikelets subtended by a spatheform prophyll and 2 or 3 gradually enlarged bracts. Spikelets sessile, 2–7-flowered. Rachilla articulate, internodes extended (short in *S. densiflora*). Glumes absent to 3; lemma papery, acuminate; palea about as long as or longer than lemma, 2-keeled abaxially, apex rounded, ciliate; lodicules 3(or 4). Stamens 3; filaments free; anthers exerted. Ovary ellipsoid, ovoid, or globose; style 1; stigmas 3, plumose. Fruit a caryopsis.

Ten species: E China, Japan; three species (two endemic, one introduced) in China.

In addition to the species treated below, *Semiarundinaria shapoensis* McClure (Lingnan Univ. Sci. Bull. 9: 54. 1940) is an imperfectly known species based on sterile material from Hainan.

- 1a. Culm sheaths partially deciduous, auricles minute 2. *S. fastuosa*
- 1b. Culm sheaths completely deciduous; auricles well developed.
 - 2a. Culms to 2.6 m, to ca. 1 cm in diam.; internodes 7–15 cm; culm sheath blade horizontal or recurved 1. *S. densiflora*
 - 2b. Culms 3–5 m, 1–1.5 cm in diam.; internodes 15–27 cm; culm sheath blade erect 3. *S. sinica*

1. *Semiarundinaria densiflora* (Rendle) T. H. Wen, J. Bamboo Res. 8(1): 24. 1989.

短穗竹 duan sui zhu

Arundinaria densiflora Rendle, J. Linn. Soc., Bot. 36: 434. 1904; *Brachystachyum densiflorum* (Rendle) Keng; *Fargesia densiflora* (Rendle) Nakai.

Culms to 2.6 m, to ca. 1 cm in diam.; internodes green, 7–15 cm, initially sparsely hairy, becoming glabrous, glaucous below nodes; pith chambered. Culm sheaths deciduous, initially green, becoming yellow and striate, papery, sparsely hispid, ciliate; ligule arched, ciliate; auricles well developed, elliptical or falcate, variable in shape and size; oral setae 3–5 mm, undulate; blade horizontal or recurved, lanceolate to narrowly lanceolate, base ca. 1/2 as wide as sheath apex. Leaves 2–5 per ultimate branch; sheath margins ciliate; auricles small; oral setae ca. 3 mm, rough; ligule truncate, 1–1.5 mm; blade lanceolate or oblong-lanceolate, 5–18 × 1–2 cm. Pseudospikelets 2–8 on flowering branches, fascicled, 1.5–3.5 cm; florets 5–7. Glumes 1–3; rachilla internodes 1–3 mm; lemma ovate-lanceolate, 8–10 mm; palea 8–10 mm; lodicules 3.5–4.5 mm. Anthers ca. 7 mm. Style 5–6 mm; stigmas 3, 5.5–7 mm. New shoots May–Jun, fl. Mar–May.

• Sunny slopes and plateaus. Anhui, Guangdong, Hubei, Jiangsu, Jiangxi, Zhejiang.

The culms are split for weaving.

2. *Semiarundinaria fastuosa* (Mitford) Makino, J. Jap. Bot. 2(2): 8. 1918.

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Bambusa fastuosa Mitford, Garden (London) 46: 547. 1894; *Arundinaria fastuosa* (Mitford) J. Houzeau; *A. narihira*

Makino; *Phyllostachys fastuosa* (Mitford) Pfitzer.

Culms 3–9 m, 1–4 cm in diam.; internodes initially green, later brownish, terete, 10–30 cm, glabrous, hollow. Branches 3 per node. Culm sheaths essentially glabrous but proximally hairy; auricles minute; oral setae few; ligule 1–1.5 mm, apex truncate, ciliate; blade narrowly lanceolate, apex acuminate. Leaves 3–7(–10) per ultimate twig; sheath ca. 4 cm, sparsely pubescent; auricles obscure; ligule truncate, 1–1.5 mm; blades narrowly lanceolate, 8–20 × 1.5–2.5 cm, papery, glabrous or abaxially proximally pubescent, secondary veins 6–8-paired, transverse veins present, base rounded or broadly cuneate, contracted into a short pseudopetiole, margin serrulate, apex acuminate. Inflorescence panicle-like, subtended by ovate or lanceolate, leathery, glabrous, sheathlike spathes 3.5–4 cm. Pseudospikelets 1 or 2 subtended by a spathe; spikelet narrowly terete, 5–10 cm; florets 3–6; rachilla ca. 1 cm. Glumes always absent; lemmas ovate or broadly lanceolate, 1.5–3 cm, leathery, ciliate, ca. 20-veined; palea broadly lanceolate, 1.8–2 cm, 3-veined, apex bifid; lodicules ca. 5 mm. Filaments ca. 2 cm; anthers yellow, ca. 1.1 cm. Ovary terete, ca. 4 mm, glabrous; styles ca. 4 mm; stigmas 3, plumose. Caryopsis unknown.

Cultivated in many cities of Taiwan and mainland China [native to Japan (SW Honshu)].

3. *Semiarundinaria sinica* T. H. Wen, J. Bamboo Res. 8(1): 13. 1989.

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Culms 3–5 m, 1–1.5 cm in diam.; internodes initially green, flattened above branches, 15–27 cm, glabrous; nodes with prominent supra-nodal ridge; sheath scar prominent; internode 2–3 mm. Branches 3, subequal. Culm sheaths deciduous,

initially green, becoming yellowish brown, hispid, margin and base glabrous; auricles brown, falcate; oral setae ca. 4 mm; ligule arched or truncate, glabrous; blade erect, dark green, narrowly lanceolate, margin recurved. Leaves 3–5 per ultimate

branch; sheaths green, striate, 3.5–4.5 cm, glabrous, margins ciliate; auricles ovate to ellipsoid, oral setae gray, 3–4 mm; ligule ca. 2 mm; blade lanceolate, 9–16 × 1.4–2.2 cm, glabrous, base obtuse, contracted into pseudopetiole 9–12 mm, lateral veins 4 or 5 pairs, transverse veins distinct, margins serrate, apex acuminate. Inflorescence panicle-like, with 6–11 spikelets, spathes ca. 25 × 8 mm; spikelets 55–60 mm; florets 5 or 6. Glumes 1 or 2; lemmas ca. 17 × 6 mm, glabrous, with 9 longitudinal veins, apex mucronate; palea ca. 1.4 cm, 2-keeled, with transverse veins prominent, margins and keel ciliate, apex acuminate, bifid; lodicules 3, narrowly rhomboid, membranous, apex white ciliate. Ovary oblong, glabrous; styles to 8–12 mm; stigmas bifid, plumose. New shoots May.

- Jiangsu, Zhejiang.

This species differs from *Semiarundinaria fastuosa* by its hispid culm sheath. It is known only in cultivation and is likely a cultivar of that species.

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