

6. **BONIA** Balansa, J. Bot. (Morot) 4: 29. 1890.

单枝竹属 dan zhi zhu shu

Xia Nianhe (夏念和); Chris Stapleton

*Monocladus* L. C. Chia et al.

Clump-forming scrambling bamboos, small to medium sized. Rhizomes short necked, pachymorph. Culms solid or nearly so; nodes slightly prominent. Branches solitary, nearly as thick as culms. Culm sheaths persistent, leathery; auricles subfalcate to broadly falcate, large; ligule short; blade erect. Leaf blade lanceolate to linear-lanceolate, usually large, base truncate; venation not tessellate. Inflorescence iterant, fully bracteate, arising from axil of persistent spathiform bracts; prophylls 2-keeled, gemmiferous, inserted at point of branching, closely followed by 2 or 3 closely spaced, gemmiferous bracts. Pseudospikelets 3–9-flowered, uppermost floret imperfect; first fertile lemma separated from gemmiferous bracts by rachilla segment to 1 cm. Rachilla disarticulating between florets, internodes to 1 cm. Lemma subleathery; palea of lowest floret slightly longer than lemma, subleathery; palea of other florets much shorter than lemma, membranous; lodicules 3, glabrous. Stamens 6; filaments free. Ovary glabrous; style very short; stigmas 3, plumose. Caryopsis terete, glabrous.

Five species: S China, Vietnam; four species (all endemic) in China.

- 1a. Culm sheath auricles inconspicuous ..... 4. *B. parvifloscula*  
 1b. Culm sheath auricles well developed.  
     2a. Ligules of culm sheath and leaf sheath long ciliate ..... 1. *B. saxatilis*  
     2b. Ligules of culm sheath and leaf sheath entire.  
         3a. Culm sheath blade obliquely cordate, amplexicaul; leaf blade abaxially glaucous, pubescent; culm internodes white powdery, sparsely brown strigose ..... 3. *B. amplexicaulis*  
         3b. Culm sheath blade nearly rounded, not amplexicaul; leaf blade abaxially pale green, glabrous; culm not white powdery, glabrous ..... 2. *B. levigata*

**1. *Bonia saxatilis*** (L. C. Chia et al.) N. H. Xia, Kew Bull. 51: 567. 1996.

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Culms 1–4 m, 4–8 mm in diam.; internodes 25–40 cm, glabrous, initially white powdery. Branches 0.5–1.5 m. Culm sheaths shortly tomentose and stiffly dull brown hairy, or glabrous; auricles subfalcate, amplexicaul; oral setae ca. 1 cm; ligule margin with 5–10 mm cilia; blade reflexed, lanceolate, base cordate. Leaf sheaths distally white powdery and shortly tomentose, sometimes stiffly dull brown hairy; auricles subfalcate; oral setae ca. 1 cm; ligule margin with cilia 5–10 mm; blade usually 20–35 × 3.5–6 cm, abaxially glaucous, subglabrous. Pseudospikelets 2–3 cm; prophylls 2-keeled, ca. 8 mm, keels ciliate; gemmiferous bracts ovate-elliptic, ca. 9-veined, abaxially slightly hairy. Spikelets with 5–9 florets, first floret longest; first internode of rachilla longest, 7–10 mm, terete, angular, apex slightly hairy, other internodes progressively shorter and flattened on one side. Glumes lanceolate, ca. 11-veined, apex mucronate, lower glume ca. 1 cm, upper ca. 1.2 cm; lemma ovate-lanceolate, ca. 1.3 cm, 9–11-veined, apex acute or mucronate. Palea narrowly lanceolate, 2-keeled, brown hairy, 4-veined between keels, 2-veined on each side of keels, apex obtuse. Lodicules 3, heteromorphic, ca. 1 mm. Anthers 2–3 mm; filaments very short. Ovary ellipsoid, ca. 0.7 mm; stigmas 3, 1.5–1.8 mm. Fruit unknown.

• Limestone hills and mountains. Guangdong, Guangxi.

- 1a. Culm sheaths shortly tomentose with stiff, dull brown hairs ..... 1a. var. *saxatilis*  
 1b. Culm sheaths abaxially glabrous ..... 1b. var. *solida*

**1a. *Bonia saxatilis* var. *saxatilis***

单枝竹(原变种) dan zhi zhu (yuan bian zhong)

*Monocladus saxatilis* L. C. Chia et al., Acta Phytotax. Sin. 26: 213. 1988.

Culm sheaths shortly tomentose, also with longer, stiff, dull brown hairs.

• Limestone mountains. Guangdong, Guangxi.

The culms are used for papermaking.

**1b. *Bonia saxatilis* var. *solida*** (C. D. Chu & C. S. Chao) D. Z. Li, Acta Bot. Yunnan. 22: 44. 2000.

箭秆竹 jian gan zhu

*Indocalamus solidus* C. D. Chu & C. S. Chao, Acta Phytotax. Sin. 18: 26. 1980; *Bonia solida* (C. D. Chu & C. S. Chao) N. H. Xia; *Monocladus saxatilis* var. *solidus* (C. D. Chu & C. S. Chao) L. C. Chia.

Culm sheaths abaxially glabrous.

• Limestone hills. Guangxi.

**2. *Bonia levigata*** (L. C. Chia et al.) N. H. Xia, Kew Bull. 51: 568. 1996.

响子竹 xiang zi zhu

*Monocladus levigatus* L. C. Chia et al., Acta Phytotax. Sin. 26: 216. 1988.

Culms 1–5 m, 0.6–1 cm in diam.; internodes 25–35 cm, glabrous, without white powder. Branches 1–3 m. Culm sheaths shortly tomentose, stiffly dull brown hairy; auricles broadly falcate; oral setae ca. 2 mm bristles; ligule entire; blade ovate-lanceolate, base subcordate. Leaf sheaths white powdery, with stiff, dull brown hairs; auricles oblong or reniform; oral setae 5–7 mm; ligule entire; blade usually 20–35 × 4–6 cm, abaxially pale green. Inflorescence unknown.

- Forests; 200–700 m. Hainan.

**3. *Bonia amplexicaulis*** (L. C. Chia et al.) N. H. Xia, Kew Bull. 51: 568. 1996.

芸香竹 yun xiang zhu

*Monocladus amplexicaulis* L. C. Chia et al., Acta Phytotax. Sin. 26: 215. 1988.

Culms 2–5 m, 0.5–1.5 cm in diam.; internodes 30–50 cm, initially white powdery, with stiff, brown or pale hairs. Branches 0.5–3 m. Culm sheaths shortly tomentose, mixed with longer, stiff, dull brown hairs; auricles broadly falcate, one usually covered by base of blade; ligule entire; oral setae 1.5–2 mm; blade oblique, cordate to narrowly oblique-cordate, amplexicaul. Leaf sheaths slightly hairy and stiffly dull brown hairy; auricles ascending, broadly ovate, usually swollen on one side; oral setae ca. 6 mm; ligule entire; blade usually 25–40 × 4.5–8 cm, glaucous, abaxially pubescent. Inflorescence unknown.

- Limestone hills; 300–500 m. Guangxi.

The culms are used for papermaking.

**4. *Bonia parvifloscula*** (W. T. Lin) N. H. Xia, Novon 15: 601. 2005.

小花单枝竹 xiao hua dan zhi zhu

*Monocladus parviflosculus* W. T. Lin, J. Bamboo Res. 12(3): 3. 1993.

Culms 1–1.2 m, 4–6 mm in diam., solid or subsolid; internodes 16–39 cm, initially hispidulous, becoming glabrous; nodes flat. Culm sheaths tardily deciduous, abaxially sparsely hispid; auricles inconspicuous or small; oral setae absent; ligule ca. 0.8 mm, denticulate; blade suberect or deflexed, linear-lanceolate, base narrowed. Ultimate branchlets with 5–7 leaves. Leaf blade 11–22 × 1.5–3.2 cm, abaxially glaucous and pubescent. Pseudospikelets 1.7–2 cm; bracts 2 or 3; florets 4–6. Glumes absent; lemma 6–8 mm, abaxially sparsely hispidulous. Palea shorter than lemma, keels ciliolate, 1- or 2-veined between and 2-veined on either side of keels. Rachilla segments 3–5 mm. Lodicules unequal, 1.5–2.5 mm, glabrous, apex emarginate. Ovary ellipsoid, ca. 1 mm; style ca. 0.5 mm; stigmas 3. Fruit unknown.

- Limestone hills. Guangdong (Zhaoqing).

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