

17. AMPELOCALAMUS S. L. Chen, T. H. Wen & G. Y. Sheng, Acta Phytotax.
Sin. 19: 332. 1981.

悬竹属 xuan zhu shu

Li Dezhu (李德铎); Chris Stapleton

Patellocalamus W. T. Lin.

Shrubby bamboos. Rhizomes short necked, pachymorph. Culms unicaespitose, pendulous or scrambling; internodes terete, finely ridged; nodal sheath scars usually prominent, often with corky collar. Mid-culm bud broadly ovoid, bud scale thick, initially closed at front, branch sheathing reduced, several branch initials becoming visible. Branches many, geniculate, central often dominant. Culm sheaths deciduous, papery, shorter than internodes; ligule conspicuous; auricles usually developed, often with conspicuous oral setae; blade often foliar, reflexed, lanceolate or narrowly lanceolate. Leaves small to large; ligule conspicuous; auricles usually conspicuous; blade with inconspicuous transverse veins. Inflorescence ebracteate or with few reduced sheaths, semelauctant, interrupted clustered pendulous panicles on leafy or leafless flowering branches. Spikelets pendulous on long, wiry inflorescence branches and curved pedicels, 2–7 flowered, followed by a sterile floret; rachilla internodes disarticulating, ca. 1/2 as long as florets. Glumes 2, thin; lemma papery; palea equal to or longer than lemma, 2-keeled, obtuse; lodicules 3, transparent. Stamens 3; filaments free, long exserted; anthers yellow. Ovary appendage absent; style 1; stigmas 2, plumose. Caryopsis ovoid to oblong, glabrous. New shoots late summer.

About 13 species: from C Himalayas to S China; 13 species (12 endemic) in China.

In addition to the species treated below, *Ampelocalamus anhispidis* T. H. Wen (J. Bamboo Res. 4(2): 11. 1985) was described from Hunan. From the original description, its placement in *Ampelocalamus* would appear somewhat speculative. More gatherings are required.

- 1a. Mid- and upper culm sheath margins long fimbriate.
 - 2a. Central branch dominant; culm sheaths persistent, densely white powdery, purple-brown setose, irregularly spotted; culm to 1.5 cm in diam. 1. *A. mianningensis*
 - 2b. Branches subequal; culm sheath deciduous, sparsely brown setose; culm 2.5–4(–6) cm in diam. 2. *A. patellaris*
- 1b. Mid- and upper culm sheath margins not long fimbriate.
 - 3a. Culm taller than 10 m.
 - 4a. Mid-culm internodes to 30 cm; leaf blade 13–20 cm 3. *A. scandens*
 - 4b. Mid-culm internodes 8–20 cm; leaf blade usually 5–12 cm 4. *A. luodianensis*
 - 3b. Culm 2–6(–10) m, or shorter.
 - 5a. Leaf sheath auricles and oral setae absent.
 - 6a. Leaf blade 9–17 × 1–2.5 cm, abaxially white pubescent 5. *A. yongshanensis*
 - 6b. Leaf blade 3–9 × 0.4–0.8 cm, glabrous 6. *A. microphyllus*
 - 5b. Leaf sheath auricles small or conspicuous, with oral setae.
 - 7a. Culm internode initially hispidulous below node, with persistent remnants visible later.
 - 8a. Culms 2–3 m, branches climbing to 6(–15) m; leaf blade papery, tomentose 7. *A. actinotrichus*
 - 8b. Culms to 1.5 m; leaf blade leathery, glabrous 8. *A. calcareus*
 - 7b. Culm internodes glabrous, smooth.
 - 9a. Mid-culm internodes 22–53 cm; leaf blade 1–2.2 cm wide.
 - 10a. Leaf sheaths with prominent oral setae, ligule 2–5 mm 9. *A. saxatilis*
 - 10b. Leaf sheaths without prominent oral setae, ligule ca. 1 mm 10. *A. melicoideus*
 - 9b. Mid-culm internodes 12–28 cm; leaf blade 0.5–1.2 cm wide.
 - 11a. Culm sheath auricles minute 11. *A. naibunensis*
 - 11b. Culm sheath auricles absent.
 - 12a. Culm sheath margins brown ciliate; leaf blade (4.5–)11–17 cm 12. *A. hirsutissimus*
 - 12b. Culm sheath margins glabrous; leaf blade (4–)6–10.5 cm 13. *A. breviligulatus*

1. *Ampelocalamus mianningensis* (Q. Li & X. Jiang) D. Z. Li & Stapleton, Kew Bull. 51: 811. 1996.

shanensis T. P. Yi; *P. mianningensis* (Q. Li & X. Jiang) T. P. Yi.

冕宁悬竹 mian ning xuan zhu

Dendrocalamus mianningensis Q. Li & X. Jiang, J. Yunnan Forest. Coll. 1984(1): 134. 1984; *Drepanostachyum mianningense* (Q. Li & X. Jiang) T. P. Yi; *Patellocalamus gong-*

Culms 4–8 m, to 1.5 cm in diam., internodes 22.5–27 cm; wall 3–6 mm thick. Branches several, dominant branch obvious. Culm sheaths persistent, irregularly brown spotted, triangular, leathery, white powdery, densely brown hairy, margins long ciliate; auricles absent; ligule ca. 1 cm, fimbriate; blade

erect or reflexed. Leaf sheaths 7–8 cm, glabrous; ligule 1–2 mm, apex ciliate; blade 15–21 × 3–3.5 cm. Inflorescence unknown.

- Riverside slopes; 1000–1700 m. W Sichuan, W Yunnan.

2. *Ampelocalamus patellaris* (Gamble) Stapleton, Edinburgh J. Bot. 51: 321. 1994.

碟环竹 die huan zhu

Dendrocalamus patellaris Gamble, Ann. Roy. Bot. Gard. Calcutta 7: 86. 1896; *Chimonobambusa jainiana* C. R. Das & D. C. Pal; *Drepanostachyum jainianum* (C. R. Das & D. C. Pal) R. B. Majumdar; *Patellocalamus patellaris* (Gamble) W. T. Lin.

Culms 6–10 m, 25–40(–60) mm in diam.; internodes 30–45 cm; wall thin. Branches several. Culm sheaths deciduous, leathery, abaxially striate, appressed brown setose; auricles absent; ligule fimbriate or ciliate; blade reflexed, lanceolate. Leaf sheath abaxially striate; ligule long, ciliate; blade variable in size, 19–24(–40) × 2.5–3.5(–10) cm. Inflorescence semelaucant, paniculate. Spikelets 2–3 cm; florets 4–7, apical one sterile with a reduced rachilla extension. Glumes 2, rounded, short, many veined; lemma broadly rounded, slightly scabrous, 9–11-veined, margins long pubescent, apex mucronate; palea keels scabrous, 2-veined between keels. Anthers yellow, apiculate. Ovary ovoid; style 1, oblong; stigmas 2, plumose. Caryopsis 1–1.2 cm.

Broad-leaved forests; 1000–1800 m. Yunnan [India, Laos, Myanmar, Nepal].

This species was initially described in *Dendrocalamus* after flowers of *D. hamiltonii* were mistakenly included in a gathering from NE India. In China, a new section of *Dendrocalamus* was established to accommodate this species along with several unrelated species of *Dendrocalamus*. The correct flowers were eventually found in Nepal, and also in NE India, where they were described as a new species of *Chimonobambusa*.

3. *Ampelocalamus scandens* Hsueh & W. D. Li, J. Bamboo Res. 4(2): 5. 1985.

爬竹 pa zhu

Drepanostachyum scandens (Hsueh & W. D. Li) P. C. Keng ex T. P. Yi.

Culms subscandent, to 10 m or more, ca. 8 mm in diam., internodes to 30 cm; nodes with persistent, raised sheath base; wall ca. 2.5 mm. Branches many, central branch obviously dominant, often similar to main culm, secondary branches slender. Culm sheaths tardily deciduous or persistent, narrowly triangular, thinly leathery, white setose, margins apically long ciliate; auricles minute; ligule truncate, ca. 5 mm, serrate, fimbriate; blade reflexed, lanceolate, readily deciduous. Leaves 3–5 per ultimate branch; sheath ca. 4.5 cm, margins ciliate; auricles projecting, hispidulous; oral setae pronounced, initially purple, curving, to 1.5 cm; ligule developed; blade lanceolate, 13–20 × 0.7–2.2 cm, transverse veins not distinct. Inflorescence unknown. New shoots Aug.

- Steep slopes; 200–300 m. Guizhou (Chishui).

4. *Ampelocalamus luodianensis* T. P. Yi & R. S. Wang, J.

Bamboo Res. 4(2): 3. 1985.

小蓬竹 xiao peng zhu

Drepanostachyum luodianense (T. P. Yi & R. S. Wang) P. C. Keng ex T. P. Yi.

Culms basally erect, apically drooping, ca. 10 m, 4–10 mm in diam., nearly solid, internodes terete, 8–20 cm, initially white powdery, becoming glabrous. Branches several, central dominant, to 5 m. Culm sheaths tardily deciduous, yellow-green, with purple spots, narrowly triangular, abaxially striate, appressed setose; auricles absent; ligule truncate, ciliate; blade erect or reflexed, lanceolate. Leaves 4–11 per ultimate branch. Leaf sheaths ca. 5 cm, ciliate; auricles developed; blade lanceolate, usually 5–12 × 0.7–1.7 cm, white powdery. Spikelet 1.2–1.7 cm; florets 3–5, apical one sterile. Glumes 2, membranous, 3–5-veined; lemma rigid, 8–9 mm, 7-veined; palea slightly longer than lemma, glabrous; lodicules 3, ovate, ca. 1 mm, margins ciliate. Anthers 8–9 mm. Ovary ovoid, glabrous; style 1; stigmas 2, plumose. Caryopsis unknown.

- Steep slopes; 600–1000 m. Guizhou (Chishui).

5. *Ampelocalamus yongshanensis* Hsueh & D. Z. Li, J. Bamboo Res. 6(2): 10. 1987.

永善悬竹 yong shan xuan zhu

Drepanostachyum yongshanense (Hsueh & W. D. Li) P. C. Keng ex T. P. Yi.

Culms erect, apically drooping, to 3 m, 5–10 mm in diam.; internodes terete, 15–19 cm, initially white powdery; node slightly projected, sheath ring obvious with woody rudiment. Branches 5–15, secondary branches slender. Culm sheaths deciduous, narrowly triangular, 9–14 cm, thinly leathery, sparsely brown ciliate; auricles absent; ligule ca. 1 mm, ciliate; blade reflexed, 0.5–3 cm, adaxially pubescent. Leaves 3–5 per ultimate branch; leaf sheath auricles absent; ligule truncate, ca. 1 mm; blade 9–17 × 1–2.5 cm, abaxially white silky. Inflorescence unknown. New shoots Aug–Sep.

- Slopes on hills; 600–700 m. SW Sichuan, Yunnan (Yongshan).

6. *Ampelocalamus microphyllus* (Hsueh & T. P. Yi) Hsueh & T. P. Yi, J. Bamboo Res. 4(2): 7. 1985.

坝竹 ba zhu

Sinocalamus microphyllus Hsueh & T. P. Yi, J. Yunnan Forest. Coll. 1982(1): 71. 1982 [“*microphylla*”]; *Drepanostachyum microphyllum* (Hsueh & T. P. Yi) Hsueh & T. P. Yi; *Neosinocalamus microphyllus* (Hsueh & T. P. Yi) P. C. Keng & T. P. Yi.

Culms 2–6 m, 5–15 mm in diam., internodes terete, 15–35 cm, initially white powdery, becoming glabrous; sheath ring elevated, woody; wall 1.5–2 mm thick; culm sheaths triangular, thickly papery, sparsely gray ciliate; auricles absent; ligule truncate or slightly concave, ca. 1 mm; blade reflexed, subulate or narrowly lanceolate, abaxially glabrous. Leaves 4–10 per ultimate branch; leaf sheath auricles absent; ligule truncate, ca.

1 mm, serrate; blade 3–9 × 0.4–0.8(–1.1) cm, glabrous, transverse veins not distinct. Inflorescence unknown. New shoots Aug.

- Steep slopes; 300–500 m. E and N Sichuan.

7. *Ampelocalamus actinotrichus* (Merrill & Chun) S. L. Chen, T. H. Wen & G. Y. Sheng, *Acta Phytotax. Sin.* 19: 332. 1981.

射毛悬竹 she mao xuan zhu

Arundinaria actinotricha Merrill & Chun, *Sunyatsenia* 2: 206. 1935; *Indocalamus actinotrichus* (Merrill & Chun) McClure; *Pleioblastus actinotrichus* (Merrill & Chun) P. C. Keng.

Culms apically drooping, 2–3 m; branches climbing to 6(–15) m, 1–1.5 cm in diam.; internodes initially light purple, becoming gray-green and scarred, to 30 cm, hispidulous. Branches 2 to several. Culm sheaths tardily deciduous, initially green, thickly papery or leathery, margins with red-brown bristles to 2(–3.7) cm; auricles readily deciduous, prominent, ovate; ligule short, fimbriate; blade reflexed, green, lanceolate. Leaf sheaths glabrous; auricles obvious; ligule truncate, rigid, fimbriate; blade elliptic-lanceolate, usually 6–30 × 1–4 cm. Spikelets 1.8–3.5 cm; florets 2–7, apical one sterile; internode of rachilla 6–7 mm. Glumes 2, narrowly lanceolate; 1–5-veined; lemma lanceolate, 7–9-veined, apex mucronate; palea about as long as or longer than lemma, keels ciliate; lodicules 3. Anthers slender. Ovary ovoid; styles 2, basally joined; stigmas plumose. Caryopsis oblong-ovoid. New shoots May, fl. Feb–Jul.

- Slopes of hills; 500–1200 m. Hainan.

8. *Ampelocalamus calcareus* C. D. Chu & C. S. Chao, *Acta Phytotax. Sin.* 21: 204. 1983.

贵州悬竹 gui zhou xuan zhu

Culms apically drooping, to 1.5 m, 4–5 mm in diam., internodes terete, 8–18 cm, distally pubescent, later subglabrous; supra-nodal ridges prominently raised. Branches often 5–7, subequal, 0.5–1 m, 1–2 mm in diam. Culm sheaths persistent, irregularly spotted, shorter than internode, densely white pubescent, glabrescent, margins densely white ciliate; auricles subcircular, amplexicaul; oral setae many, radiating, ca. 1 cm; ligule short, apex densely white fimbriate; blade reflexed, green, ovate-lanceolate. Leaves 2 or 3 per ultimate branch; sheaths glabrous, glossy, margin ciliate; auricles present; oral setae deciduous, radiating, 5–7 mm; ligule short, apex long, white ciliate; blade 7–20 × 1.2–3 cm, thinly leathery, abaxially slightly glaucous, glabrous, secondary veins indistinct, 4–7 pairs. Inflorescence unknown. New shoots Apr.

- Broad-leaved forests; ca. 500 m. Guizhou.

9. *Ampelocalamus saxatilis* (Hsueh & T. P. Yi) Hsueh & T. P. Yi, *J. Bamboo Res.* 4(2): 7. 1985.

羊竹子 yang zhu zi

Sinocalamus saxatilis Hsueh & T. P. Yi, *Yunnan Linxue-*

yuan Xuebao [J. Yunnan. Forest. Coll.] 1982(1): 69. 1982; *Drepanostachyum saxatile* (Hsueh & T. P. Yi) P. C. Keng ex T. P. Yi; *Neosinocalamus saxatilis* (Hsueh & T. P. Yi) P. C. Keng & T. P. Yi.

Culms basally oblique, initially apically drooping, 3–6 m, 5–15 mm in diam.; internodes 5–12 cm at culm base, 22–53 cm at mid-culm, rough, densely striate, hollow; wall 1.5–2 mm thick; supra-nodal ridge level; sheath base persistent, elevated, thickened. Branches (6–)10–15 from 6th to 12th node up, central dominant. Culm sheaths gradually deciduous, oblong-triangular, thickly papery, apex truncate; auricles and oral setae absent; ligule truncate or slightly sunken, ca. 1 mm; blade readily deciduous, reflexed, linear or linear-lanceolate. Leaves 4–10 per ultimate branch; sheaths smooth, margins ciliate; auricles obvious; oral setae present; ligule 2–5 mm, apex serrate; blade 8–18 × 1–2.2 cm, glabrous, secondary veins 4–6 pairs, transverse veins indistinct. Inflorescence unknown. New shoots Aug–Sep.

- Forests; 600–1500 m. S Sichuan, NE Yunnan.

10. *Ampelocalamus melicoideus* (P. C. Keng) D. Z. Li & Stapleton, *Novon* 15: 599. 2005 [“*melicoides*”].

南川竹 nan chuan zhu

Drepanostachyum melicoideum P. C. Keng, *J. Bamboo Res.* 5(2): 35. 1986.

Culms initially apically drooping, 2–3 m, 7–10 mm in diam., internodes (8–)28–35 cm, glabrous; nodes without supra-nodal ridge; sheath ring elevated with persistent sheath base, hollow; wall 1.2–4 mm thick. Branches more than 10, central dominant. Culm sheaths unknown. Leaf sheaths 3.5–5 cm, basally glabrous, distally ciliate, auricles minute, densely ciliate; ligule truncate, ca. 1 mm, abaxially densely ciliate; blade lanceolate, 5.5–15 × 1–2 cm, abaxially sparsely tomentose, adaxially glabrous, secondary veins 2–4-paired, transverse veins not distinct. Spikelets 1.2–1.5 cm; florets 3–5. Glumes 2; lemma lanceolate, 9–11 mm, 7–9-veined, glabrous; palea 1–1.2 cm, apex truncate; lodicules 3. Ovary ovoid, glabrous; stigmas 2, plumose. Caryopsis unknown.

- Chongqing (Nanchuan).

11. *Ampelocalamus naibunensis* (Hayata) T. H. Wen, *J. Bamboo Res.* 6(3): 34. 1987.

内门竹 nei men zhu

Arundinaria naibunensis Hayata, *J. Coll. Sci. Imp. Univ. Tokyo* 30: 408. 1911; *Bambusa naibunensis* (Hayata) Nakai; *Chimonobambusa naibunensis* (Hayata) McClure & W. C. Lin; *Drepanostachyum naibunense* (Hayata) P. C. Keng; *Leleba naibunensis* (Hayata) Nakai; *Pleioblastus naibunensis* (Hayata) Kanehira & Sasaki; *Pseudosasa naibunensis* (Hayata) Makino & Nemoto.

Culms apically drooping, 3–6 m, 5–10 mm in diam.; internodes 12–28 cm, glabrous, hollow; nodes raised; wall 2–3 mm thick. Branches several per node. Culm sheaths thinly papery, sparsely setose; auricles minute, brown setose; blade readily

deciduous, linear-subulate. Leaf sheaths 3–6 cm; glabrous; auricles minute; ligule arched, long, ciliate; blade lanceolate, (3–)4–14 × 0.5–1.2 cm, transverse veins not distinct. Spikelets 2–4 cm; florets 3–6. Glumes 2, narrowly rounded; lemma ovate, narrowly rounded, 10–12 × 3–4 mm, 7–11-veined; palea 7–11 × 2–3 mm; lodicules 3, ciliate. Anthers ca. 4 mm. Ovary obovoid; styles 2; stigmas 2, plumose. Caryopsis unknown. Fl. Feb.

- About 1000 m. S Taiwan (Pingdong).

12. *Ampelocalamus hirsutissimus* (W. D. Li & Y. C. Zhong) Stapleton & D. Z. Li, *Novon* 15: 599. 2005.

多毛悬竹 duo mao xuan zhu

Drepanostachyum hirsutissimum W. D. Li & Y. C. Zhong, *J. Bamboo Res.* 16(1): 52. 1997.

Culms caespitose, basally erect, apically drooping, to 3–5 m, 5–10(–15) mm in diam.; internodes 12–18(–23) cm, glabrous, hollow; wall 3–5(–7) mm thick; nodes with 3 bud groups, 2 lateral developing into sub-branches and center 1 developing into main branch. Culm sheaths needle-like, narrowly triangular, asymmetrical, ca. 22 cm, thinly leathery, base ca. 3.5 cm wide, apex ca. 1 mm wide, apex truncate; auricles absent; ligule ca. 1 mm, ciliate; blade readily deciduous, erect, linear, 1.5–2 cm. Leaves 5–11 per ultimate branch; sheaths smooth, margins ciliate; auricles falcate or subcircular; oral setae projecting, purple ciliate; ligule round-arched, margins purple ciliate; blades narrowly lanceolate, (4.5–)11–17 × 0.7–1.5 (–3.1) cm, abaxially tomentose. Inflorescence unknown. New shoots Sep–Oct.

- Guizhou (Guiyang).

13. *Ampelocalamus breviligulatus* (T. P. Yi) Stapleton & D. Z. Li, *Novon* 15: 599. 2005.

钓竹 diao zhu

Drepanostachyum breviligulatum T. P. Yi, *J. Bamboo Res.* 12(4): 42. 1993.

Culms scrambling, apically drooping, 3–6 m, 5–15(–20) mm in diam.; internodes green, terete, 18–20 cm, glabrous, hollow; wall 1.5–2 mm thick. Branches many per node, main branches climbing, to 5 m, 3–5.5 mm in diam. Culm sheaths gradually deciduous, narrowly triangular, (5.5–)12–27 cm, base 2.4–4.8 cm wide, apex 2.5–4 mm wide, leathery, apex acuminate, acumen 2.5–4 mm; auricles and oral setae absent; ligule purple, truncate, 1–2 mm, initially shortly ciliate; blades reflexed, purple-green, triangular, linear, or linear-lanceolate, (0.4–)0.8–9 × (0.1–)0.25–0.7 cm, glabrous, margins serrate. Leaves (2–)4–6(–9) per ultimate branch; sheaths initially gray ciliate; auricles purple, minute; oral setae projecting, purple-brown; ligules purple, rounded, ca. 1 mm, margins initially ciliate; blade abaxially light green, narrowly lanceolate, (4–)6–10.5 × 0.6–1 cm, papery, white-gray pubescent. Inflorescence unknown. New shoots Aug.

- Steep rocks, stony slopes; 400–900 m. Gansu, Guizhou, Sichuan.

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