
Pseudopinanga Burret.

Stems clustered or less often solitary, ringed with prominent leaf scars, tall to short or subterranean. Leaves 5–11, pinnate or occasionally undivided; leaf sheaths closed, forming a prominent, yellowish to reddish green crownshaft (rarely open and not forming crownshefts), usually covered with variously colored scales; pinnae regularly arranged along rachis, spreading in same plane, linear to sigmoid, 1- to several veined, at leaf apex pinnae joined with only a short split at tip, giving pinnae a lobed appearance. Inflorescences branched to 1 order, with a few rachillae, sometimes spicate, borne below crownshaft, rarely among leaves, covered initially with prophyll; rachillae becoming pendulous, seldom remaining erect, usually smooth, sometimes hairy; flowers unisexual, borne throughout in triads of 1 female flower flanked by 2 male flowers, these arranged distichously along rachillae, or less often tristichously or spirally. Fruits red, orange, or black, small, ellipsoid to globose or spindle-shaped, commonly plane, linear to sigmoid, 1- to several veined, at leaf apex pinnae joined with only a short split at tip, giving pinnae a lobed appearance.

About 137 species: Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Laos, Malaysia, Myanmar, Nepal, Papua New Guinea, Thailand, Vietnam; five species (one endemic) in China.

The record in FRPS (13(1): 140. 1991) of Pinanga hexasticha (Kurz) Scheffer is probably based on a misidentification. Pinanga hexasticha is restricted to Myanmar.

1a. Inflorescences with 1 rachilla; flower triads and fruits spirally or tristichously arranged along rachilla.

2a. Rachilla triangular in cross section; flowers and fruits tristichously arranged along rachilla

1b. Inflorescences with more than 1 rachilla, rarely with 1 rachilla; flower triads and fruits distichously arranged along rachillae.

3a. Rachillae ca. 30

3b. Rachillae 1–8.

4a. Pinnae 10–28 per side of rachis; rachillae 3–8

4b. Pinnae 3–6 per side of rachis, or rarely leaf undivided; rachillae 1–4

1. Pinanga gracilis Blume, Rumphia 2: 77. 1839.

Areca gracilis Roxburgh, Fl. Ind., ed. 1832, 3: 619. 1832, not Buchanan-Hamilton (1826); Nenga gracilis (Blume) Bec-cari; Pinanga patula Blume var. gracilis (Blume) Scheff, Sea-forthia gracilis (Blume) Martius.

Stems clustered, to 4 m tall, ca. 1.5 cm in diam., reddish brown. Leaves pinnate, rarely undivided; sheaths closed and forming crownshefts, 21–34 cm, green with reddish brown scales; petioles 9–13 cm; rachis 40–60 cm; pinnae (1–)3–8 per side of rachis, green abaxially, sigmoid, regularly arranged, distantly spaced; middle pinnae to 55 × 3–10 cm. Inflorescences spicate, pendulous; peduncles 1.4–4 × 0.5–0.6 cm; rachis absent; rachilla 1, 12–17 cm, straight, triangular in cross section, glabrous; triads tristichously arranged, superficial on rachilla; male flowers to 8 mm, deciduous; sepals to 1 mm, connate at base into a 3-lobed cupule; petals to 8 mm, valvate; stamens ca. 35; female flowers to 2.5 mm; sepals to 2.5 mm, rounded at apex, ciliate; petals to 2.5 mm, ciliate. Fruits red, ellipsoid, to 1.8 × 1 cm.

Lowland to montane rain forests; below 1200 m. Xizang [Bangladesh, Bhutan, India, Myanmar, Nepal].


Pseudopinanga tashiroi (Hayata) Burret.

Stems clustered or solitary, to 5 m tall, 1.5–2 cm in diam., yellowish. Leaves pinnate; sheaths closed and forming crownshefts, to 25 cm, yellowish green with reddish brown scales; petioles to 30 cm; rachis 45–65 cm; pinnae 6–9 per side of rachis, green abaxially, sigmoid, multi-veined, regularly arranged, distantly spaced; middle pinnae 30–39 × 2.5–4 cm. Inflorescences spicate, pendulous or rarely erect; peduncles 1.5–2 × 0.4–0.5 cm; rachis absent; rachilla 1, 11–19 cm, straight, rounded in cross section, glabrous; triads spirally arranged, sunken in rachilla; male flowers to 6 mm, semipersistent; sepals to 1.5 mm, connate at base into a 3-lobed cupule; petals to 6 mm, triangular, valvate; stamens not seen; female flowers ca. 3 mm; sepals ca. 3 mm, acuminate, scarcely ciliate; petals ca. 3 mm, ciliate. Fruits red, ellipsoid, to 1.8 × 1 cm.

Lowland rain forests; below 1000 m. Yunnan [Myanmar].


Pseudopinanga tashiroi (Hayata) Burret.

Stems clustered or solitary, to 5 m tall, to 5 cm or more in diam., swollen at bases. Leaves pinnate; sheaths closed and forming crownshefts, to 1 m, green with reddish brown scales; petioles to 60 cm; rachis to 1.5 m; pinnae many per side of rachis, green abaxially, linear, multi-veined, regularly arranged; middle pinnae to 60 × 2–2.5 cm. Inflorescences branched, pendulous; peduncles not seen; rachis not seen; rachillae ca. 30, to

21 cm, glabrous; triads distichously arranged, superficial on rachillae; male flowers 10–11 mm, deciduous; sepal conuate into a 3-lobed calyx; petals to 10 mm; stamens 36–42; female flowers ca. 5 mm; sepals ca. 3 mm, rounded at apex, ciliate; petals ca. 3 mm, ciliate. Fruits red, ovoid to globose, to 1.8 × 1.2 cm.

- Lowland rain forests; below 500 m. Taiwan (Lan Yu).

The seeds are chewed as a substitute for betel nut.


华山竹 hu a n zhu

Areca sylvestris Loureiro, Fl. Cochinch. 2: 568. 1790; Pininia chinensis Beccari; P. macroclada Burret; Psychosperma sylvestre (Loureiro) Miquel; Seaforthia sylvestris (Loureiro) Blume ex Martius.

Stems clustered, to 6 m tall, 1.5–3.5 cm in diam., reddish brown. Leaves pinnate; sheaths closed and forming crownsheets, 17–45 cm, green or yellowish with reddish scales; petals 10–25 cm; rachis 1–3.5 cm; pinnae 10–28 per side of rachis, green abaxially, linear, distantly spaced, regularly arranged; middle pinnae 39–60 × 2–5 cm. Inflorescences branched, pendulous; peduncles 2.5–6 × ca. 0.7 cm; rachis 0.5–2.5 cm; rachillae 3–8, 9–26 cm, zigzag, triangular in cross section, glabrous; triads distichously arranged, superficial on rachillae; male flowers not seen; female flowers to 3 mm; sepals to 3 mm, rounded at apex, ciliate; petals to 3 mm, ciliate. Fruits red, ellipsoid, 1.4–1.8 × 0.5–0.7 cm.

Lowland and montane rain forests; 100–1700 m. Yunnan [Cambodia, Laos, Myanmar, Thailand].


变色山槟榔 bian se shan bin lang

Pinanga discolor Burret; P. sinii Burret; P. viridis Burret.

Stems clustered, to 5 m tall, 0.8–2.5 cm in diam., reddish brown. Leaves pinnate, rarely undivided; sheaths closed and forming crownsheets, 18–34 cm, green or yellowish green, with brown scales; petals 7–33 cm; rachis 32–100 cm; pinnae (1–)3–12 per side of rachis, gray-green abaxially, falcate, not contracted at bases, multi-veined, regularly arranged, closely spaced; middle pinnae 30–39 × 3–7 cm. Inflorescences branched, pendulous; peduncles 2–3 cm, ca. 0.4 cm wide; rachis 0–0.5 cm; rachillae (1–)2–5, 10–15 cm, zigzag, rectangular in cross section, glabrous; triads distichously arranged, superficial on rachillae; male flowers to 13 mm, deciduous; sepals to 3.5 mm, conuate into a 3-lobed, flat, membranous calyx; petals to 12 mm, unequal, triangular, fleshy, acute; stamens 20 or 21; female flowers to 3 mm; sepals to 3 mm, imbricate, rounded at apices or briefly acuminate, smooth or ciliate; petals to 3 mm, smooth or ciliate. Fruits red, ellipsoid, to 2.5 × 0.8–1 cm.

Lowland rain forests. Fujian, Guangdong, Guangxi, Hainan, Yunnan [Vietnam].

Cultivated taxa

Archontophoenix H. Wendland & Drude (假槟榔属 jia bin lang), native to Australia.

One species is cultivated in tropical and subtropical areas of Fujian, Guangdong, Guangxi, Hainan, Taiwan, and Yunnan: A. alexandrae (F. Mueller) H. Wendland & Drude (Linnaea 39: 212. 1875; Psychosperma alexandrae F. Mueller, Fragm. 5(33): 47. 1865; 假槟榔 jia bin lang jia bin lang shu).

Borassus Linnaeus (棕榈属 tang zong shu). One species is cultivated in S Yunnan (Xishuangbanna): B. flabellifer Linnaeus (Sp. Pl. 2: 1187. 1753; 假槟榔 jia bin lang), native to Australia.

Botania (Beccari) Beccari (布迪椰子属 bu di ye zi shu). One species is recorded as cultivated in China: R. vinifera P. Beauvois (Fl. Oware 1: 77. 1806; 椰子酒 ye zo ji), native to W Africa.

Butia (Beccari) Beccari (布迪椰子属 bu di ye zi shu). One species is cultivated as an ornamental: B. capitata (Martius) Beccari (Agric. Colon. 10: 507. 1916; 布迪椰子 bu di ye zi), native to Brazil and Uruguay.

Corypha Linnaeus (贝叶棕属 bei ye zong shu). One species is cultivated in S Yunnan (Xishuangbanna): C. umbraculifera Linnaeus (Sp. Pl. 2: 1187. 1753; 贝叶棕 bei ye zong), native to India and Sri Lanka.


Elaeis Jacquin (油棕属 you zong shu). One species is cultivated in Hainan, Taiwan, and Yunnan: E. guineensis Jacquin (Select. Stirp. Amer. Hist. 280. 1763; 油棕 you zong), native to W Africa but now very widely grown for its oil-rich fruits.


Raphia P. Beauvois (酒椰属 jiu ye shu). One species is recorded as cultivated in China: R. vinifera P. Beauvois (Fl. Oware 1: 77. 1806; 酒椰 jiu ye), native to W Africa.


Sabal Adanson (箬棕属 ruo zong shu). Two species are recorded as cultivated in China: S. minor (Jacquin) Persoon (Syn. Pl. 1: 399. 1805; Corypha minor Jacquin, Hort. Bot. Vindob. 3: 8. 1776; Chamae-rops acaulis Michaux; 小箬棕 xiao ruo zong) and S. palmetto (Walter) Loddiges ex Schultes & J. H. Schultes (Syst. Veg. 7: 1487. 1830; Corypha palmetto Walter, Fl. Carol. 119. 1788; 箬棕 ruo zong), both native to SE United States.

Syagrus Martius (金山蕉属 jin shan kui shu). One species is cultivated in S China: S. romanzoffiana (Chamisso) Glassman (Fieldiana, Bot. 31: 382. 1968; Cocos romanzoffiana Chamisso, Choris. Voy. Pittor. 5: 1822; 皇后蕉 huang hou kui), native to Brazil.

Washingtonia Rafinesque (华盛顿棕属 hua shen dun zong shu).
One species is cultivated in Fujian, Guangdong, Taiwan, and Yunnan: *W. filifera* (Linden ex André) H. Wendland (Bot. Zeitung (Berlin) 37: lxi, 68. 1880; *Pritchardia filifera* Linden ex André, Ill. Hort. 24: 32. 1877; 毛华盛顿棕 mao hua sheng dun zong), native to Mexico (Baja California) and the United States (Arizona, California); and one species is cultivated in S China: *W. robusta* H. Wendland (Gart.-Zeitung (Berlin) 2: 198. 1883; 华盛顿棕 hua sheng dun zong), native to Mexico (Baja California, Sonora).

There are many newly introduced palm species cultivated in China as ornamental and indoor plants.