

1. CASUARINA Linnaeus, *Amoen. Acad.* 4: 123, 143. 1759.

木麻黄属 *mu ma huang shu*

Trees. Leaves (5 or)6–17 per whorl. Infructescence (“cone”) bracteoles never greatly thickened, without an abaxial protuberance. Samara body pale yellow-brown or grayish, dull, glabrous.

Seventeen species: nearly throughout range of family; three species (all introduced) in China.

The species hybridize freely when cultivated together; hybrids between *Casuarina equisetifolia* and *C. glauca*, and between *C. cunninghamiana* and *C. glauca* are known from Guangdong, Hainan, and Taiwan.

Casuarina junghuhniana Miquel (*C. montana* Junghuhn ex Miquel) has been reported as being occasionally cultivated but no specimens have been seen that confirm this.

1a. Toothlike leaves 12–17 per whorl, strongly recurved at apices of young branchlets; branchlets 0.9–1.4 mm in diam., with broad, slightly rounded, longitudinal ridges; bark pale yellow adaxially 3. *C. glauca*

1b. Toothlike leaves 6–10 per whorl, erect or slightly spreading, but not reflexed at apices of young branchlets; branchlets less than 1 mm in diam., with narrow, prominently angular, longitudinal ridges; bark red adaxially.

2a. Toothlike leaves usually (6 or)7(or 8) per whorl, not marcescent; cone 12–25 mm; bark dark red adaxially

..... 1. *C. equisetifolia*

2b. Toothlike leaves usually 8(–10) per whorl, marcescent; cone 7–12 mm; bark pale red adaxially 2. *C. cunninghamiana*

1. *Casuarina equisetifolia* Linnaeus, *Amoen. Acad.* 4: 143. 1759.

木麻黄 *mu ma huang*

Trees monoecious, to 35 m tall, not suckering from roots. Trunk straight, to 70 cm d.b.h.; crown conical; bark scaly, adaxially red-brown on old trees. Ultimate branchlets usually pendulous, grayish green, 10–27 cm × 0.8–0.9 mm; articles (2.5–)4–9 mm. Leaves erect and appressed to branchlets, (6 or)7(or 8) per whorl, lanceolate or triangular, 1–3 mm. Male inflorescences 1–4 cm. Cones ellipsoid, 1.2–2.5 cm, grayish green or yellowish brown tomentose when young, glabrous at maturity, base and apex truncate to obtuse; apex of bracteoles slightly obtuse or acute. Samaras 5–8 mm including wing. Fl. Apr–May, fr. Jul–Oct. $2n = 18, 20^*$. Cultivated in Fujian, Guangdong, Guangxi, Taiwan, Yunnan, Zhejiang [native to Indonesia, Malaysia, Myanmar, Papua New Guinea, Philippines, Thailand, Vietnam; Australia, Pacific Islands].

Only subsp. *equisetifolia* is cultivated in China. Used for timber and medicine, also for erosion control on coastal sands.

2. *Casuarina cunninghamiana* Miquel, *Rev. Crit. Casuar.* 56. 1848.

细枝木麻黄 *xi zhi mu ma huang*

Trees dioecious, to 25(–35) m tall, often with suckers from roots. Trunk straight, to ca. 40 cm d.b.h.; crown pyramidal; bark finely fissured and scaly, gray, adaxially pale red. Ultimate branchlets spreading to slightly pendulous, dark green, grayish green, or glaucous-green when dry, 15–38 cm × 0.5–0.7 mm; articles 4–5 mm. Leaves erect, 8(–10) per whorl, narrowly lanceolate. Male spikes 1.2–2(–4) cm. Cones ellipsoid or subglobose, 7–12 mm, truncate at both ends; apex of bracteoles acute. Samaras 3–5 mm including wing. Fl. Apr, fr. Jun–Sep. $2n = 18^*$.

Cultivated in Fujian, Guangdong, Guangxi, Hainan, Taiwan, Zhejiang [native to Australia].

Only subsp. *cunninghamiana* is cultivated in China. Used for timber.

3. *Casuarina glauca* Sieber ex Sprengel, *Syst. Veg.* 3: 803. 1826.

粗枝木麻黄 *cu zhi mu ma huang*

Trees dioecious, to 20 m tall. Trunk to 35 cm d.b.h.; bark grayish brown or grayish black, finely fissured and scaly, pale yellow adaxially. Ultimate branchlets ascending to pendulous, grayish green or glaucous green, rather long, to 1 m, 0.9–1.4 mm in diam.; articles 1–1.8 cm, slightly swollen at apex. Leaves erect but those of new shoots strongly recurved, 12–17 per whorl, narrowly lanceolate. Male inflorescences 1–3 cm. Cones broadly ellipsoid to subglobose, 1.2–2 cm, truncate at both ends; apex of bracteoles broadly acute to obtuse. Samaras 4–6 mm including wing. Fl. Mar–Apr, fr. Jun–Sep. $2n = 18^*$.

Cultivated in Fujian, Guangdong, Hainan, Taiwan, Zhejiang [native to Australia].

Used for timber.

