**ALANGIACEAE**

**八角枫科**  
ba jiao feng ke

Qin Haining (覃海宁)；Chamlong Phengklai

Trees or shrubs, deciduous, sometimes spiny. Leaves alternate, simple, estipulate, bases often oblique. Flowers bisexual, actinomorphic, often bracteate, in axillary cymes. Calyx lobes 4–10, toothlike or obsolete. Petals as many as calyx lobes, valvate, linear to oblanceolate, sometimes basally coherent. Stamens as many as petals or 2–4 × as many, distinct, arising from an enlarged disk; anthers 2-celled, dehiscing longitudinally. Ovary inferior, commonly 1- or rarely 2-loculed; ovule solitary, pendulous; style and stigma simple, or 2- or 3-lobed. Fruit a drupe, crowned with persistent calyx and disk. Seeds 1 or 2, with straight embryo and copious endosperm.

One genus and ca. 21 species: tropical and subtropical regions from Africa east to Australia and Fiji; 11 species (four endemic) in China.

Alangiaceae are treated here as separate from the Cornaceae, into which they have sometimes been placed. See the discussion under Cornaceae in Fl. China (14: 206. 2005).


### 1. ALANGIUM Lamarck, Encycl. 1: 174. 1783, nom. cons.

**八角枫属**  
ba jiao feng shu

Morphological characters and geographic distribution are the same as those of the family.

1a. Stamens not less than 10; leaf blade broadly ovate to cordate or orbicular, membranous to subleathery.
2a. Leaf blade broadly ovate to ovate, sometimes obovate

8. A. premnifolium

2b. Leaf blade oblong, cordate, or orbicular

3a. Leaf blade oblong

10. A. salviifolium

3b. Leaf blade cordate or orbicular

7. A. plataniifolium

1b. Stamens not more than 10; leaf blade ovate or orbicular, rarely linear-lanceolate, papery, rarely leathery.

4a. Flowers small, petals usually shorter than 1 cm.

5a. Leaf blade suborbicular; styles pubescent

11. A. yunnanense

5b. Leaf blade oblong or broadly elliptic; styles glabrous.

6a. Leaf blade oblong or lanceolate, pubescent when young, glabrescent; anthers basally pubescent

4. A. faberi

6b. Leaf blade broadly elliptic or ovate-oblong, both surfaces pubescent; anthers inside with soft hairs

2. A. barbatum

4b. Flowers large, petals ca. 1 cm or longer.

7a. Connectives of stamens glabrous.

8a. Inflorescences 7–30(–50)-flowered, petals lanceolate, 1–1.5 cm; leaf blade suborbicular, elliptic, or ovate, petiole 4–6 cm; drupe ovoid, 5–7 mm

3. A. chinense

8b. Inflorescences 1–5-flowered, petals linear, 1.8–2.3 cm; leaf blade ovate or suborbicular, petiole 1–4 cm; drupe ellipsoid, 1.3–2 cm

1. A. alpinum

7b. Connectives of stamens pubescent.

9a. Climbing shrub; petals 5; inflorescences 5–12-flowered; leaf blade oblanceolate

6. A. kwangsiense

9b. Erect small tree or shrub; petals 6–10; inflorescences 2–7-flowered; leaf blade ovate or suborbicular

10a. Leaf blade suborbicular or broadly ovate, 12–14 × 7–9 cm, petiole 2.5–4 cm; inflorescences

5–7-flowered, petals 6–8(–10), 2–2.5 cm

5. A. kurzii

10b. Leaf blade narrowly to broadly ovate, 4–7 × 2.7–4 cm, petiole 1–1.6 cm; inflorescences

2- or 3-flowered, petioles 7 cm, or 1 cm

9. A. qingchuanense

1. **Alangium alpinum** (C. B. Clarke) W. W. Smith & Cave,  

高山八角枫  
gaoshan ba jiao feng


Trees deciduous, to 12 m tall. Branchlets ascending; internodes obscurely angular. Petiole 3.5–5 cm; leaf blade subor-
biclar, ovate, or oblong-ovate, 6–16(–20) × 5–13 cm, papery, abaxially sparsely hairy, adaxially glabrous, base rounded, subtruncate, or cordate, margin wavy, apex acuminate. Inflorescences axillary, 3-flowered, 4–10 cm. Pedicels ca. 1 cm, to 3 cm in fruit. Calyx lobes 6–8. Petals 6–8, linear, 1.8–2.3 cm. Stamens 6–8; filaments 5–6 mm, glabrous. Drupe ellipsoid, ca. 20 × 8–9 mm. Seed 1. Fl. Jan–Aug, fr. Oct–Nov.

Forests; 1800–3000 m. S Xizang, W Yunnan [Bhutan, N India, N Myanmar, E Nepal].


2a. Branchlets, petioles, and inflorescences without long hairs

2b. Branchlets, petioles, and inflorescences with long hairs

3a. Leaf blade usually orbicular, base triangular or suborbicular, 3–5-lobed, lobes lanceolate or subovate

3b. Leaf blade usually orbicular, base triangular or suborbicular, 3–5-lobed, lobes lanceolate or subovate

3c. Leaf blade ovate, base rounded, margin entire

3d. Leaf blade often orbicular, base triangular or suborbicular, 3–5-lobed, lobes lanceolate or subovate

3e. Leaf blade ovate, base rounded, margin entire

3a. Alangium chinense subsp. chinense

八角枫 (原亚种) ba jiao feng (yuán yà zhòng)

Stylium chinense Loureiro, Fl. Cochinch. 1: 221. 1790; Alangium begoniiifolium (Roxburgh) Baillon; A. chinense var. tawianum (Masamune) Koidzumi; A. tawianum Masamune; Marlea begoniiifolia Roxburgh.


Forest margins, exposed places; below 1800 m. Anhui, Fujian, Gansu, Guangdong, Guangxi, Guizhou, Hainan, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Shanxi, Sichuan, Taiwan, S Xizang, Yunnan, Zhejiang [Bhutan, India, Nepal; E Africa, SE Asia].


伏毛八角枫 fu mao ba jiao feng


稀花八角枫 xi hua ba jiao feng

Alangium chinense var. pauciflorum W. P. Fang ex Y. C. Ho.

Inflorescences usually 3–6-flowered. Leaf blade ovate, base rounded, margin entire.


深裂八角枫 shen lie ba jiao feng


Inflorescences usually 3–6-flowered. Leaf blade usually orbicular, base triangular or suborbicular, 3–5-lobed, lobes lanceolate or subovate.

3e. Alangium faberi Oliver, Hooker’s Icon. Pl. 18: t. 1774. 1888.

小花八角枫 xiao hua ba jiao feng

Shrubs deciduous, 1–4 m high. Bark smooth; branchlets slender, with adnate large hairs when young, glabrescent. Winter buds ovoid, bracts ovate, outside with short soft hairs. Peti-
Leaf blade oblong, lanceolate, or elliptic-ovate, 12–15 × 6–8 cm.
- Forests; below 400 m. S Guangdong, S Guangxi.


异叶八角枫  yì yè bā jiāo fēng
Leaf blade linear-lanceolate, 10–20 × 1–2 cm. Stamen connectives pubescent.
- Forests. Guizhou, E Sichuan, Yunnan.


小叶八角枫  xiǎo yè bā jiāo fēng
Leaf blade linear-lanceolate, 4–7 cm × 5–8 mm. Stamen connectives glabrous.
- Forests. Guizhou, SE Yunnan.


毛八角枫  máo bā jiāo fēng
Trees or shrubs, erect, to 28 m tall, to 57 cm in diam. Twigs smooth, sparsely pubescent, glabrescent. Petiole 2.5–4 cm; leaf blade abaxially light green, adaxially dark green, suborbicular or broadly ovate, 12–14 × 7–9 cm, papery, abaxially pubescent, adaxially glabrous, base rounded or subrounded, margin entire, apex acuminate. Inflorescences 5–7-flowered; peduncle 3–5 mm. Pedicel 5–8 mm. Flowers strongly fragrant. Petals 6–8(–10), yellow, dark yellow, orange, or brick red, rarely white or cream-yellow, linear, 2–2.5 cm. Stamens 6–8(–10), yellow, pubescent. Ovary 2-loculed; style white; stigma subglobular, 4-lobed. Mature drupe dark violet to nearly black, elliptic, 1.2–1.5 cm. Fl. May–Jun, fr. Sep.

Forests, sparse forests, woodlands; 600–1600 m. Anhui, Fujian, Guangdong, Guangxi, Hainan, Henan, Hebei, Hunan, Jiangsu, Jiangxi, Shanxi, Yunnan, Zhejiang [Indonesia, Japan, Korea, Laos, Malaysia, Myanmar, Philippines, Thailand, Vietnam].

1a. Petals yellow to brick-red ....................... 5a. var. kurzii
1b. Petals white or cream-colored ............... 5b. var. handelii

5a. Alangium kurzii var. kurzii

毛八角枫 (原变种)  máo bā jiāo fēng (yuán biàn zhòng)


长果八角枫  cháng guǒ bā jiāo fēng
Leaf blade oblong-oblong-oblanceolate, 14–19.5 × 2.5–5.5 cm, base very oblique, lateral veins 8–10. Drupe 1.3–1.4 cm, 5–7 mm in diam.
- Among shrubs; ca. 1200 m. SE Xizang.


阔叶八角枫  kuò yè bā jiāo fēng

- Among shrubs; ca. 1200 m. SE Xizang.

4a. Alangium faberi var. faberi

小花八角枫 (原变种)  xiǎo huā bā jiāo fēng (yuán biàn zhòng)
Alangium barbatum Baillon subsp. faberi (Oliver) Bloembergen; A. tetrandrum R. H. Miao; Marlea bodinieri H. Léveillé.

Leaf blade linear-lanceolate, 10–20 × 10–20 mm; connectives pubescent ......................... 4d. var. heterophyllum

2b. Leaf blade 4–7 cm × 5–8 mm; connectives glabrous .......... 4c. var. perforatum

1b. Leaf blade oblong, lanceolate, elliptic-ovate, or oblong-oblong-lanceolate.

3a. Leaf blade 7–12 × 2.5–3.5 cm .............. 4a. var. faberi
3b. Leaf blade 12–20 × 2.5–8 cm.
4a. Leaf blade 14–19.5 × 2.5–5.5 cm .............. 4b. var. dolichocarpum
4b. Leaf blade 12–15 × 6–8 cm ............................ 4c. var. platyphyllum

4a. Alangium faberi var. faberi

毛八角枫  máo bā jiāo fēng
- Sparse forests; below 1600 m. Guangdong, Guangxi, Guizhou, Hubei, Hunan, Sichuan, SE Xizang, Yunnan.

1a. Leaf blade linear-lanceolate.
2a. Leaf blade 10–20 cm × 10–20 mm; connectives pubescent .............................. 4d. var. heterophyllum
2b. Leaf blade 4–7 cm × 5–8 mm; connectives glabrous ........................ 4c. var. perforatum

1b. Leaf blade oblong, lanceolate, elliptic-ovate, or oblong-oblong-lanceolate, 7–12(–19) × 2.5–3.5(–5.5) cm.
- Sparse forests; below 1600 m. Guangdong, Guangxi, Guizhou, Hubei, Hunan, Sichuan, SE Xizang.

4. ALANGIACEAE
Trees or shrubs, to 28 m high. Petals yellow, dark yellow, orange, or brick-red.

Sparse forests; 600–1600 m. Anhui, Fujian, Guangdong, Guizhou, Hainan, Henan, Hunan, Jiangsu, Jiangxi, Shanxi, Yunnan, Zhejiang [Indonesia, Laos, Malaysia, Myanmar, Philippines, Thailand, Vietnam].

“Alangium kurzii var. pachyphyllum” (W. P. Fang & H. Y. Su, J. Sichuan Univ., Nat. Sci. Ed. 1979(2); 96. 1979) belongs here but was not validly published under Art. 37.2 of the Vienna Code because two gatherings were indicated as types.


云山八角枫 yun shan ba jiao feng


广西八角枫 guang xi ba jiao feng

Shrubs or scandent shrubs, deciduous, 1–5 m high, pubescent. Bark dark purple, smooth; branchlets slender, pubescent. Petiole 1–1.5 cm; leaf blade oblong or narrowly elliptic, 8–17 × 4–8 cm, papery or membranous, midveins 3–5 and lateral veins 5–7 pairs, both surfaces pubescent, base unequal, apex acute or acuminate. Inflorescences axillary, 5–12-flowered, short, slender, pubescent; peduncle 1–1.5 cm. Pedicel 0.5–1.5 cm. Calyx cup-shaped, outside pubescent; lobes 5. Petals 5, reflexed at anthesis, linear, 1–1.5 cm, outside pubescent, inside glabrous, fused at base. Stamens 5, shorter than petals, pubescent; filaments adnate to petals at base, ca. 5 mm, pubescent. Disk subglobose, glabrous. Ovary 1-loculed. Drupe elliptic, 8–12 × ca. 5 mm. Fl. May, fr. Aug.

● Dense forests; below 700 m. Guangdong, Guizhou.


三裂瓜木 san lie gua mu


Shrubs. Branches gray-brown, usually shortly pilose when young. Petiole 3–10 cm, shortly pubescent; leaf blade abaxially pale, adaxially green, cordate-ovibarlic, 7–20 × 7–20 cm, thinly membranous, 4-angled, abaxially usually prominently shortly pubescent, adaxially usually slightly shortly pilose, base slightly cordate, shallowly 3–5–7 lobed; lobes deltoid, apex cuneate or truncate or slightly truncate or slightly oblong-caudate, in base obliquely broad-cuneate, apex obtusely apiculate, often clusters of 4–8 flowers, usually fewer, sometimes only a solitary flower, densely rusty tomentose. Petioles 2–8 mm. Flowers fragrant, cream-colored, 1.2–3 cm. Calyx tube ca. 2.5 mm; lobes 5–10, ca. 3 mm, toothed. Petals 4–6–10, basally swollen and apically obtuse, 1.2–3 cm, outside tomentose, inside less so. Stamens 10–30; filaments 4–12 mm, apically geniculate and bearded. Disk lobed.

Woodlands; below 1000 m. Anhui, Fujian, Guangdong, Guangxi, Zhejiang [Japan, Korea].


日本八角枫 ri ben ba jiao feng

Trees deciduous, to 15 m high. Branches glabrous or shortly appressed pubescent. Petiole 2–4 cm; leaf blade obliquely broadly ovate to ovate, sometimes obovate, 10–17 × 5–12 cm, abaxially with axillary tufts of hairs, base obliquely truncate or slightly cordate, margin entire, apex acuminate or abruptly obtuse. Inflorescences 2–5-flowered, short, 3–8 cm. Pedicels 1–1.5 cm. Calyx glabrous. Petals 7, linear, ca. 2 cm, inside pale yellow pubescent. Stamens 7, ca. 1.8 cm, connective densely appressed yellowish pubescent on inner side at base. Style ca. 2.5 cm, glabrous; stigma 2-fid. Drupe ellipsoid, 1–1.2 cm. Fl. May–Jun, fr. Sep.

● Forests; 500–1500 m. Anhui, Guangdong, Guangxi, Henan, Jiangsu, Zhejiang [India, Indonesia, Japan, Malaysia, Myanmar, Vietnam].


青川八角枫 qing chuan ba jiao feng

Trees deciduous, ca. 5 m high. Branches slender, glabrous or rarely pubescent. Petiole 1–1.6 cm; leaf blade abaxially light gray, adaxially light green, ovate, narrowly ovate, or broadly ovate, 4–7 × 2.7–4 cm, papery, abaxially with yellow axillary tufts of hairs, adaxially glabrous, base broadly attenuate or coriaceous, margin entire or inconspicuously 3–lobed, apex cuneate. Inflorescences axillary, 2- or 3-flowered; peduncle 1–1.3 cm. Pedicels ca. 1 cm. Calyx cup-shaped, inconspicuously lobed. Petals 7, white to yellowish white, linear, ca. 1 × 0.6 cm, adnate at base, both sides pubescent at base. Stamens 7, shorter than petals, pubescent. Ovary glabrous; style ca. 1 cm, glabrous; stigma capitate. Drupe not seen. Fl. Jun–Jul, fr. unknown.

● Forests; ca. 2300 m. N Sichuan.


土坛树 tu tan shu

Grewia salviifolia Linnaeus f., Suppl. Pl. 409. 1782; Alangium lamarkii Thwaites.

Shrubs or trees, deciduous, to 20 m high. Branchlets sometimes spinescent, tomentose to glabrescent. Petiole ca. 1 cm; leaf blade oblong to oblong-lanceolate, 8–18 × 2.3–7 cm, papery to subleathery, glabresecent, base cuneate, margin entire, apex obtuse. Inflorescence sessile, often clusters of 4–8 flowers, usually fewer, sometimes only a solitary flower, densely rusty tomentose. Pedicels 2–8 mm. Flowers fragrant, cream-colored, 1.2–3 cm. Calyx tube ca. 2.5 mm; lobes 5–10, ca. 3 mm, toothed. Petals 4–6–10, basally swollen and apically obtuse, 1.2–3 cm, outside tomentose, inside less so. Stamens 10–30; filaments 4–12 mm, apically geniculate and bearded. Disk lobed.
Ovary glabrous except near base of inner side, 1- or 2-loculed; ovule 1 per locule, pendulous; style glabrous, 8–24 mm; stigma capitate. Drupe red when ripe, subglobose, 9–24 × 6–16 mm. Fl. Feb, fr. Mar.

Forests; below 1200 m. Guangdong, S Guangxi, Hainan [Cambodia, India, Indonesia, Laos, Malaysia, Nepal, Philippines, Sri Lanka, Thailand, Vietnam; SE Africa].


云南八角枫 yun nan ba jiao feng

Shrubs or small trees, ca. 4 m high, pubescent. Branchlets light purple, slender. Petiole 2–3 cm; leaf blade suborbicular, 7–13 × 5–11 cm, papery, both surfaces pubescent, palmately 5-veined, lateral veins 4 or 5, more conspicuous abaxially, base subrounded, often 3-, rarely 5-lobed, apex acuminate. Inflorescences axillary, 7–15-flowered; peduncle 0.8–1.2 cm. Pedicel 1–3 mm. Calyx funnelform; lobes 9, dentiform. Petals 6–10, ca. 7 mm. Stamens 6–?10, slightly shorter than petals; filaments pubescent inside, slight adnate to petals at base. Disk slightly lobed. Style loosely pubescent; stigma capitate. Drupe ellipsoid, ca. 1 cm, pubescent; pedicel ca. 5 mm. Fl. Apr–May, fr. Aug–Sep.

● Forests; ca. 1400 m. C Yunnan.