

MYRICACEAE

杨梅科 yang mei ke

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Trees or shrubs, evergreen or deciduous, monoecious or dioecious, aromatic, often with resinous, peltate glands. Leaves alternate, simple, pinnately veined, entire to irregularly serrate or lobed, rarely pinnatifid; stipules absent or rarely present. Flowers in spikes, usually unisexual, anemophilous, without perianth. Male flowers solitary in axil of each bract, with 2–4 bracteoles or not. Stamens 2–20, often 4–8 on receptacle at base of bract; filaments short, free or slightly united at base; anthers erect, dithecal, extrorse, dehiscing longitudinally. Female flowers solitary or 2–4 in axil of bract, usually with 2–4 bracteoles. Gynoecium of 2 carpels united into a compound and 1-loculed ovary; styles distinct or united only at base; ovule solitary, basal, erect, orthotropous. Fruit drupaceous, or nearly a nutlet, often with headlike, wax-covered papillae; endocarp hard. Seeds nearly without endosperm; embryo straight; cotyledons fleshy, plano-convex.

Three genera and ca. 50 species: widespread in both hemispheres, mostly in temperate or subtropical regions; one genus and four species (two endemic) in China.

Kuang Ko-zen & Lu An-ming. 1979. Myricaceae. In: Kuang Ko-zen & Li Pei-chun, eds., Fl. Reipubl. Popularis Sin. 21: 1–6.

1. MYRICA Linnaeus, Sp. Pl. 2: 1024. 1753.

杨梅属 yang mei shu

Morella Loureiro.

Trees or shrubs evergreen or deciduous, dioecious or monoecious, with resinous, peltate glands in young parts. Leaves simple, often aggregated at apex of shoot, margin entire or serrate; stipules absent. Flowering precocious or coetaneous. Inflorescences spicate, simple or paniculate. Male flowers with 2–8(–20) stamens; filaments free or united at base, with bracteoles or not. Female flowers with 2–4 bracteoles adnate to ovary and enlarged, or free and not enlarged; ovary with resinous glands; style short, with 2 relatively long stigmatic branches. Fruit a drupe, often with headlike, wax-covered papillae; endocarp hard. Seeds erect, with membranous testa.

About 50 species: nearly worldwide except for some warm temperate parts of Old World and Australia; four species (two endemic) in China.

1a. Branchlets and petioles tomentose; drupes ellipsoid; fl. Aug–Feb, fr. Feb–May.

2a. Trees (2–)4–10 m tall; male inflorescences branched, 4–9 cm; fruit many per infructescence; leaves 4–18 cm 1. *M. esculenta*

2b. Shrubs 1–3 m tall; male spikes nearly simple, 1–2 cm; fruit 1 per infructescence; leaves 1.5–7 cm 2. *M. adenophora*

1b. Branchlets and petioles glabrous or sparsely pubescent; drupes globose; fl. Feb–Apr, fr. Apr–Jul.

3a. Trees 4–15 m tall; leaves 5–14 cm; male flowers with 2–4 bracteoles; female flowers with 4 bracteoles 3. *M. rubra*

3b. Shrubs 0.5–3 m tall; leaves 2.5–8 cm; male flowers with 0–2 bracteoles; female flowers with 2 bracteoles 4. *M. nana*

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1. *Myrica esculenta* Buchanan-Hamilton in D. Don, Prodr. Fl. Nepal. 56. 1825.

毛杨梅 mao yang mei

Myrica sapida Wallich.

Trees evergreen, dioecious, usually (2–)4–10 m tall; trunk to 40 cm d.b.h.; bark gray. Branchlets and buds tomentose. Petiole 0.3–2 cm, pubescent to tomentose; leaf blade narrowly elliptic-obovate or lanceolate-obovate to cuneate-obovate, 4–18 × 1.5–4.5 cm, leathery, abaxially pale green, dark punctate, occasionally sparsely golden glandular, adaxially dark green, rarely glandular, pubescent along midvein, base cuneate, margin entire or sometimes serrate in apical 1/2, apex obtuse to acute. Male inflorescences much branched, erect or pendulous at apex, 4–9 cm; individual spikelets to ca. 1 cm; peduncle densely pubescent; bracts overlapping, ciliate and usually golden glandular. Male flowers without bracteoles. Stamens 3–7; anthers red, ellipsoid. Female inflorescences erect, 1–3.5 cm, many flowered; flowers in short, axillary fascicles well spaced at maturity; rachis densely pubescent and golden glandular; bracts ciliate, golden glandular. Female flowers with 2 bracteoles, ciliate and golden glandular. Ovary velutinous; stigmas 2, bright red. Drupes many per infructescence, red at maturity, usually ellipsoid, papilliferous. Fl. Aug–Feb, fr. Nov–May.

Open, mixed forests on mountain slopes; 300–2500 m. NW Guangdong, Guangxi, S and W Guizhou, W Sichuan, Yunnan [Bhutan, India, Myanmar, Thailand, Vietnam].

2. *Myrica adenophora* Hance, J. Bot. 21: 357. 1883.

青杨梅 qing yang mei

Myrica adenophora var. *kusanoi* Hayata.

Shrubs or trees evergreen, monoecious, 1–3 m tall; trunk to 3 cm d.b.h.; bark grayish. Branchlets and buds densely tomentose or pubescent. Petiole 0–1 cm, pubescent to tomentose; leaf blade elliptic-obovate to cuneate-obovate, 1.5–7 × 0.5–3 cm, subleathery, abaxially densely golden glandular, adaxially golden glandular when young, midvein pubescent, base cuneate, margin usually serrate or serrate-crenate in apical 2/3, apex acute or obtuse. Male spikes nearly simple, ascending, 1–2 cm; peduncle and rachis pubescent; bracts overlapping, ciliate, densely golden glandular. Male flowers without bracteoles. Stamens 2–6; anthers red(?), ellipsoid. Female spikes solitary in leaf axils or inconspicuously branched at base, to 1.5 cm, 1–3-flowered; rachis pubescent; bracts ciliate and densely golden glandular. Female flowers often with 2 bracteoles. Ovary velutinous in young fruit; stigmas 2, bright red. Drupe usually 1 per infructescence, red or white, usually ellipsoid, papilliferous, 0.7–1 cm in diam. Fl. Oct–Nov, fr. Feb–May of following year.

• Forests, valleys. Guangdong, Guangxi, Taiwan (Hengchun).

3. *Myrica rubra* Siebold & Zuccarini, Abh. Math.-Phys. Cl. Königl. Bayer. Akad. Wiss. 4: 230. 1846.

杨梅 yang mei

Morella rubra Loureiro; *Myrica rubra* var. *acuminata* Nakai.

Trees evergreen, dioecious, to 15 m tall; trunk to 60 cm d.b.h.; bark gray. Branchlets and buds glabrous. Petiole 2–10 mm, glabrous to puberulent adaxially; leaf blade cuneate-obovate or narrowly elliptic-obovate, 5–14 × 1–4 cm, leathery, glabrous, abaxially pale green and sparsely to moderately golden glandular, adaxially dark green, base cuneate, margin entire or serrate in apical 1/2, apex obtuse to acute. Male spikes simple or inconspicuously branched, solitary or sometimes few together in leaf axils, 1–3 cm; peduncle glabrous; bracts suborbicular, ca. 1 mm, glabrous but abaxially golden glandular. Male flowers with 2–4 ovate bracteoles, sparsely ciliate. Stamens 4–6; anthers dark red, ellipsoid. Female spikes solitary in leaf axils, 0.5–1.5 cm, many flowered; rachis pubescent and glandular; bracts overlapping, glabrous and inconspicuously glandular. Female flowers with 4 bracteoles. Ovary velutinous; stigmas 2, bright red, slender. Drupe dark red or purple-red at maturity, globose, 1–1.5 cm in diam., to 3 cm when cultivated, papilliferous; papillae to 3.5 mm. Fl. Mar–Apr, fr. May–Jul.

Forests in mountain slopes, valleys; 100–1500 m. Fujian, Guangdong, Guangxi, Guizhou, Hainan, Hunan, Jiangsu, Jiangxi, Sichuan, Taiwan, Yunnan, Zhejiang [Japan, Korea, Philippines].

Commonly cultivated for its edible fruit, this taxon is usually cited as *Myrica rubra* (Loureiro) Siebold & Zuccarini. However, in their publication of 1846, Siebold & Zuccarini provided a description only, with no reference, direct or indirect, to *Morella rubra* Loureiro (1790). Therefore, the name *Myrica rubra* Siebold & Zuccarini must be treated as new, preventing the combination in *Myrica* of Loureiro's earlier name.

4. *Myrica nana* A. Chevalier, Mém. Soc. Sci. Nat. Cherbourg 32: 202. 1901.

云南杨梅 yun nan yang mei

Myrica nana var. *luxurians* A. Chevalier.

Shrubs evergreen, dioecious, to 3 m tall; trunk to 3(?) cm d.b.h.; bark dark gray. Branchlets and buds glabrous to puberulent, occasionally hirtellous, golden glandular. Petiole 1–5 mm, glabrous to puberulent; leaf blade narrowly elliptic-obovate to cuneate-obovate, 2.5–8 × 1–3.5 cm, leathery or subleathery, glabrous or sometimes puberulent along midvein adaxially, abaxially sparsely to moderately golden glandular, base cuneate, margin serrate, especially above middle, or often entire on smaller leaves, apex acute or rounded. Male spikes simple, solitary in leaf axils, 1–1.5 cm; peduncle and rachis glabrous; bracts suborbicular-deltoid, to 1.5 mm, ciliolate and golden glandular. Male flowers with 1 or 2 bracteoles, or bracteoles absent. Stamens 1–6(–8); anthers red, ellipsoid. Female spikes simple or inconspicuously branched, 0.5–1.5 cm; rachis glabrous to puberulent; bracts ciliate and densely golden glandular, each with 2 flowers. Female flowers

with 2 bracteoles. Ovary glabrous, becoming velutinous in fruit; stigmas 2, red. Drupe red, globose to ellipsoid, 1–1.5 cm in diam., papilliferous; papillae with apical, golden glands. Fl. Feb–Apr, fr. May–Jul.

- Shrub forests or forests on mountain slopes; 1900–3000 m. W Guizhou, C and N Yunnan.

