

### 13. SKIMMIA Thunberg, Nov. Gen. Pl. 3: 57. 1783, nom. cons.

茵芋属 yin yu shu

Zhang Dianxiang (张奠湘); Thomas G. Hartley

Shrubs or trees, evergreen, usually dioecious or monoclinal, unarmed. Leaves alternate, simple. Inflorescences terminal, thyriform. Sepals (3 or)4 or 5(–7), distinct or basally connate. Petals (3 or)4 or 5(–7), imbricate in bud. Stamens (3 or)4 or 5(–7), distinct, rudimentary in female flowers. Disk annular or pulvinate. Gynoecium 2–5-loculed, syncarpous, rudimentary in male flowers; ovules 1(or ?2) per locule; style short or ± as long as ovary. Fruit a fleshy drupaceous berry, with 1–5 1-seeded leathery pyrenes. Seeds ovoid to ellipsoid; seed coat membranous; endosperm copious; embryo straight; cotyledons oblong to suborbicular, flattened; hypocotyl superior.

Five to six species: E, S, and SE Asia; five species (one endemic) in China.

- 1a. Leaf blade midvein puberulent.  
2a. Fruit red ..... 1. *S. reevesiana*  
2b. Fruit bluish black ..... 2. *S. melanocarpa*  
1b. Leaf blade midvein glabrous.  
3a. Leaf blade secondary veins 12–20 on each side of midvein; rudimentary gynoecium in male flowers entire or nearly so; petals reflexed ..... 5. *S. multinervia*  
3b. Leaf blade secondary veins fewer than 10 on each side of midvein; rudimentary gynoecium in male flowers 3- or 4-lobed; petals erect to spreading.  
4a. Shrubs to 2 m tall; fruit red ..... 3. *S. laureola*  
4b. Trees to 12 m tall; fruit bluish black ..... 4. *S. arborescens*

**1. *Skimmia reevesiana*** (Fortune) Fortune, J. Tea Countr. China 329. 1852.

茵芋 yin yu

*Ilex reevesiana* Fortune, Gard. Chron. 1851: 5. 1851; *Skimmia arisanensis* Hayata; *S. distinctevenulosa* Hayata; *S. fortunei* Masters; *S. hainanensis* C. C. Huang; *S. japonica* Thunberg var. *distinctevenulosa* (Hayata) C. E. Chang; *S. japonica* subsp. *reevesiana* (Fortune) N. P. Taylor & Airy Shaw; *S. japonica* var. *reevesiana* (Fortune) N. P. Taylor; *S. orthoclada* Hayata.

Shrubs 1–2 m tall. Branches with hollow pith; bark pale grayish green, smooth, cracked when dry. Leaves clustered at branch apex, with a citrus-leaf odor; petiole 5–10 mm; leaf blade elliptic, lanceolate, ovate, or oblanceolate, 5–12 × 1.5–4 cm, leathery, midvein adaxially puberulent, base cuneate, apex mucronate to obtuse or acuminate. Inflorescences puberulent, with condensed flowers. Flowers male, female, or bisexual, (3 or)4- or 5-merous, fragrant. Sepals rounded, 1–1.5 mm, margin ciliate. Petals yellowish white, 3–5 mm. Stamens (3 or)4 or 5. Male flowers: rudimentary ovary compressed globose, entire or shallowly 2–4-lobed, apex mucronate. Female flowers: ovary subglobose; style elongated; stigma capitate. Fruit red, globose to ellipsoid-obovoid, 0.8–1.5 cm, 2–4-seeded. Seeds compressed ovoid, 5–9 × 4–6 mm. Fl. Mar–May, fr. Sep–Nov.  $2n = 60^*$ .

Montane moss forests; 1200–2600 m. S Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hainan, Henan, Hubei, Hunan, Jiangxi, Sichuan, Taiwan, E Yunnan, Zhejiang [Myanmar, Philippines, S Vietnam].

Taylor (Kew Mag. 4: 182, 183. 1987) treated *Skimmia reevesiana* as *S. japonica* subsp. *reevesiana* and placed *S. arisanensis*, *S. distinctevenulosa*, *S. hainanensis*, and *S. orthoclada* in synonymy of *S. japonica*.

var. *reevesiana*.

**2. *Skimmia melanocarpa*** Rehder & E. H. Wilson in Sargent, Pl. Wilson. 2: 138. 1914.

黑果茵芋 hei guo yin yu

Shrubs 1–2 m tall, monoecious, dioecious, or monoclinal. Branches with hollow pith; bark pale grayish green, smooth, cracked when dry. Petiole 5–10 mm; leaf blade elliptic to elliptic-lanceolate, 3–7 × 1.5–2.5 cm, midvein adaxially pubescent, apex acuminate to acute. Inflorescences to 4 cm, with condensed flowers; rachis puberulent; bracts ca. 1 mm. Flowers subsessile. Sepals broadly ovate, 1–1.5 mm, margin ciliate. Petals 5, yellowish white, oblanceolate to oblong, 3–4 mm, subequal, reflexed in male flowers. Male flowers: stamens as long as or slightly longer than petals. Female and bisexual flowers: stamens shorter than petals; ovary subglobose; style cylindrical. Fruit bluish black, subglobose, ca. 8 mm in diam., (4 or)5-loculed, apex with (4 or)5 stylar scars. Fl. Mar–May, fr. Sep–Nov.

• Dense or open forests; 2000–3000 m. S Gansu, W Hubei, S Shaanxi, Sichuan, SE Xizang, Yunnan.

Taylor (Kew Mag. 4: 189. 1987) placed *Skimmia melanocarpa* in synonymy of *S. laureola* subsp. *laureola*.

**3. *Skimmia laureola*** (Candolle) Siebold & Zuccarini ex Walpers, Repert. Bot. Syst. 5: 405. 1845–1846.

月桂茵芋 yue gui yin yu

*Limonia laureola* Candolle, Prodr. 1: 536. 1824.

Shrubs to 1.3 m tall. Branches grayish green, dichotomous or nearly whorled. Leaves nearly opposite or whorled, clustered near apex of branches, spreading, with a citrus-leaf odor; leaf blade oblong-lanceolate, (4–)7–10(–12) × 2–3 cm, adaxially

dark green, shiny, and with translucent oil glands, midvein slender, secondary veins hardly distinguishable, base attenuate, margin entire, apex mucronate. Inflorescences 5–8 cm; rachis stout, angulate. Pedicel puberulent; bracteoles opposite near middle of pedicel, caducous. Sepals ovate, base pubescent, margin ciliate. Petals 5, yellowish, oblong, ca. 3 × as long as sepals, apex obtuse. Stamens 5, erect. Ovary ovoid, 2- or 3-loculed, glabrous, with oil glands; ovules 1 (or ?2) per locule; style short; stigma small. Fruit ovoid, 8–10 mm in diam. Fl. Apr, fr. autumn.  $2n = 30^*$ , 60.

Evergreen forests; below 2800 m. S Xizang (Yadong) [Bhutan, NE India, Myanmar, Nepal].

**4. *Skimmia arborescens*** T. Anderson ex Gamble, J. Linn. Soc., Bot. 43: 491. 1916.

乔木茵芋 qiao mu yin yu

*Skimmia euphlebia* Merrill; *S. japonica* Thunberg var. *euphlebia* (Merrill) N. P. Taylor; *S. japonica* var. *kwangsiensis* (C. C. Huang) N. P. Taylor; *S. kwangsiensis* C. C. Huang.

Trees to 8 m tall, d.b.h. to 20 cm. Branches with small but prominent pith. Petiole 1–2 cm; leaf blade elliptic, oblong, or obovate-elliptic, 5–18 × 2–6 cm, papery, glabrous, midvein adaxially prominent, secondary veins 7–10 on each side of midvein. Inflorescences 2–5 cm; rachis puberulent or glabrous; bracts broadly ovate, 1–1.5 mm. Sepals ovate, margin ciliate. Petals 5, yellowish, obovate to ovate-oblong, 4–5 mm. Male flowers: stamens longer than petals; filaments filiform; rudimentary gynoecium barlike, 3–4 mm, apex 3- or 4-lobed. Female flowers: rudimentary stamens shorter than petals; ovary globose; style ca. 1 mm; stigma capitate. Fruit bluish black, globose, 6–8 mm in diam., 1–3-seeded. Fl. Apr–Jun, fr. Jul–Sep.

Shady moist montane areas; 1000–2800 m. Guangdong, Guangxi, Guizhou, Sichuan, E Xizang, Yunnan [Bhutan, NE India, Laos, Myanmar, Nepal, N Thailand, N Vietnam].

Taylor (Kew Mag. 4: 183–185. 1987) treated *Skimmia arborescens* as *S. arborescens* subsp. *arborescens*, *S. euphlebia* as *S. japonica* var. *euphlebia*, and *S. kwangsiensis* as *S. japonica* var. *kwangsiensis*.

**5. *Skimmia multinervia*** C. C. Huang, Acta Phytotax. Sin. 7: 348. 1958.

多脉茵芋 duo mai yin yu

*Skimmia laureola* (Candolle) Siebold & Zuccarini ex Walpers subsp. *multinervia* (C. C. Huang) N. P. Taylor & Airy Shaw.

Trees to 13 m tall. Branches dark grayish, with scattered lenticels. Petiole 1–2 cm, stout; leaf blade oblanceolate to rarely narrowly oblong, 10–18 × 3–5 cm, leathery, midvein adaxially slightly prominent, secondary veins 12–20 on each side of mid-

vein, margin slightly revolute. Inflorescences 2–6 cm; rachis stout when young, puberulent, elongated in fruit; bracts ovate, 1–2 mm, margin ciliate. Pedicel stout. Sepals ovate, ca. 2 mm, margin ciliate. Petals 5, yellowish white, obovate-oblong to oblong, 4–5 mm, reflexed at anthesis. Stamens 5. Male flowers: stamens longer than petals; rudimentary gynoecium barlike, ca. 1.5 mm, apex entire or shallowly lobed. Female and bisexual flowers: rudimentary stamens as long as petals; ovary globose, 5-loculed; style ca. 1.5 mm; stigma capitate. Fruit bluish black, subglobose to slightly compressed, 6–8 mm in diam., 4- or 5-seeded. Fl. Apr–Jun, fr. Jul–Sep.

Montane forests; ca. 2000 m or above. SW Sichuan, NW Yunnan [Bhutan, NE India, Myanmar, Nepal, N Vietnam].

Taylor (Kew Mag. 4: 189. 1987) treated *Skimmia multinervia* as *S. laureola* subsp. *multinervia*.

Fl. China 11: 77–79. 2008.