
山小橘属 shan xiao ju shu

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Shrubs or trees, unarmed, with rust-colored villosulous indumentum (sometimes becoming bleached) on terminal and axillary buds and usually on young inflorescences. Leaves alternate [rarely opposite], odd-pinnate, 1-foliolate, or simple. Inflorescences terminal and/or axillary, paniculate, compoundly racemose, or reduced to 1 or a few flowers. Flowers bisexual, globose to ellipsoid in bud. Sepals 4 or 5, basally connate. Petals 4 or 5, imbricate in bud. Stamens 8 or 10, distinct, alternately ± unequal in length; filaments ± straight. Disk annular, pulvinate, columnar, conic, or bell-shaped. Gynoeceum 2–5-loculed, syncarpous; radial walls of locules straight; ovules 1(or 2) per locule; style to nearly as long as ovary, persistent in fruit. Fruit a berry, with mucilaginous pulp or dry, without pulp vesicles; endocarp membranous. Seeds with membranous seed coat; endosperm lacking; embryo straight; cotyledons elliptic, plano-convex, neither convolute nor folded; hypocotyl partly included between cotyledons.

About 50 species: E, S, and SE Asia, Australia; 11 species (two endemic) in China.

1a. Leaves, or most of them, simple or 1-foliolate.

2a. Leaves, or most of them, simple .............................................................. 1. G. cochinchinensis

2b. Leaves, or most of them, 1-foliolate.

3a. Leaflet blades lustrous when dry; petiole (0.6–)1.5–3 cm ........................................ 2. G. montana

3b. Leaflet blades not lustrous when dry; petiole 0.2–0.5(–1.6) cm.

4a. Inflorescences less than 1 cm; anther connective with an apical oil gland and 2 or 3 abaxial oil glands ................................................................. 3. G. pseudoracemosa

4b. Inflorescences 2–5 cm; anther connective with only an apical oil gland ........................................ 4. G. longifolia

1b. Leaves, or most of them, 2–7-foliolate.

5a. Margin of leaflet blades serrate or dentate; inflorescences often longer than 10 cm.

6a. Staminal filaments widest in ± their apical half; ovary glabrous ........................................... 5. G. pentaphylla

6b. Staminal filaments widest in ± their basal half; ovary rust-colored villosulous ................................ 6. G. esquirolii

5b. Margin of leaflet blades entire or repand; inflorescences rarely longer than 10 cm.

7a. Ovary terete; petals ca. 5 mm, not caducous .............................................................. 7. G. lucida

7b. Ovary globose or ovoid; petals less than 5 mm, caducous.

8a. Leaves (3–)5–7-foliolate .................................................................................................. 8. G. oligantha

8b. Leaves (1 or)2–5-foliolate.

9a. Leaflet blades concolorous; petals ca. 4 mm ...................................................................... 10. G. parviflora

9b. Leaflet blades discolorous; petals ca. 1.5 or ca. 3 mm.

10a. Petals ca. 1.5 mm; leaflet blades 5–9 cm wide .............................................................. 11. G. xizangensis

10b. Petals ca. 3 mm; leaflet blades 2–3 cm wide ................................................................. 9. G. craibii


海南山小橘 hai nan shan xiao ju

Glycosmis hainanensis C. C. Huang; G. tonkinensis Tanaka ex Guillaumin; Tetracronia cymosa Pierre.

Shrubs or trees, 1–3 m tall. Leaves, or most of them, simple; petiole 3–10 mm; leaf blade suborbicular, broadly elliptic, ovate, oblong, or lanceolate, 4–26 × 2–8 cm, papery to leathery, glabrous, base rounded, obtuse, cuneate, or attenuate, margin entire, apex rounded, obtuse, mucronate, or acuminate. Inflorescences axillary or terminal, with flowers conglomerate, rarely solitary, or in panicle ca. 5 cm. Sepals ovate, less than 1 mm. Petals white, ca. 3 mm. Stamens 10; filaments widest in ± their basal half. Disk obvious. Ovary globose; style short, narrow; stigma slightly expanded. Fruit reddish, 0.8–1.4 cm in diam. Fl. and fr. year-round.

Below 1000 m. Guangdong, S Guangxi, Hainan, S Yunnan [Cambodia, Laos, Myanmar, Thailand, Vietnam].


海南山小橘 hai nan shan xiao ju

Glycosmis hainanensis C. C. Huang; G. tonkinensis Tanaka ex Guillaumin; Tetracronia cymosa Pierre.

Shrubs or trees, 1–3 m tall. Leaves, or most of them, 1-foliolate; petiole (0.6–)1.5–3 cm; petiolule 2–10 mm; leaflet blades obovate-oblong to oblanceolate, 5–15 × 1.5–6.5 cm, papery to leathery, glabrous, base often obtuse, margin entire, apex abruptly acuminate to elongately caudate. Inflorescences paniculate, 1–3 cm. Flowers small, globose in bud. Sepals broadly ovate, less than 1 mm. Petals white, ca. 3 mm, caducous. Stamens 10; filaments widest in ± their basal half. Disk obviously uplifted. Ovary broadly ovoid to subglobose; style stout; stigma slightly expanded. Fruit pink, globose, ca. 8 mm in diam. Fl. Oct–Mar, fr. Jul–Sep.
Wood on hillsides, near rivers; 200–500 m. Guangdong, Hainan, SE Yunnan (Funing) [Vietnam].


华山小橘 *huà shān xiǎo jú*


Shrubs or trees, 1.5–3 m tall. Leaves, or most of them, 1-foliolate; petiole 2–5(–16) mm; petiolule 1–5 mm; leaflet blades oblong to lanceolate, 4–18 × 1.5–7 cm, papery, margin entire, apex acuminate. Inflorescences axillary or terminal, paniculate. Sepals broadly ovate, ca. 1 mm, margin ciliate. Petals 5, white, ca. 4 mm. Stamens 10; filaments widest in ± their basal half. Ovary ovoid, becoming clavate; style extremely short. Fruit orange, broadly ellipsoid to ovoid, 1–1.2 × 0.8–1 cm. Fl. nearly year-round, fr. May–Dec.

Hilly areas in woods and thickets; 400–1200 m. SW and W Guangxi, SE Yunnan (Malipo) [N Vietnam].


长叶山小橘 *zhǎng yè shān xiǎo jú*


Trees to 5 m tall. Leaves (3 or)5-foliolate; petiolules 2–10 mm; leaflet blades oblong, 10–25 × 3–7 cm, papery, base cuneate, margin serrate, apex mucronate. Inflorescences axillary or terminal, paniculate. Sepals broadly ovate, less than 1 mm. Petals white or pale yellow, 3–4 mm, caducous. Stamens 10. Ovary globose to broadly ovoid; style extremely short; stigma slightly expanded. Fruit reddish, subglobose, 8–10 mm in diam. Fl. Jul.–Oct, fr. Jan.–Mar. 2n = 36, 54.

Hillside and valley woods; 600–1200 m. S and SW Yunnan [Bhutan, Cambodia, NE India, Indonesia, Laos, Malaysia, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka, Thailand, NW Vietnam].


山小橘 *shān xiǎo jú*


Trees to 5 m tall. Leaves (3 or)5-foliolate; petiolules 2–10 mm; leaflet blades oblong, 10–25 × 3–7 cm, papery, base cuneate, margin serrate, apex mucronate. Inflorescences axillary or terminal, paniculate. Flowers globose in bud. Sepals broadly ovate, less than 1 mm. Petals white or pale yellow, 3–4 mm, caducous. Stamens 10. Ovary globose to broadly ovoid; style extremely short; stigma slightly expanded. Fruit reddish, subglobose, 8–10 mm in diam. Fl. Jul.–Oct, fr. Jan.–Mar. 2n = 36, 54.

Hillside and valley woods; 600–1200 m. S and SW Yunnan [Bhutan, Cambodia, NE India, Indonesia, Laos, Malaysia, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka, Thailand, NW Vietnam].


绣毛山小橘 *xiù máo shān xiǎo jú*


Trees 6–10 m tall. Leaves 4–7-foliolate; leaflet blades oblong to ovate, 10–16 × 4–7 cm, base cuneate, margin dentate, apex acuminate to obtuse. Inflorescences axillary or terminal, paniculate. Sepals broadly ovate, ca. 1 mm. Petals pale yellowish white, 3–4 mm. Stamens 10; filaments widest in ± their basal half; anthers elliptic, ca. 1 mm. Ovary subglobose, rust-colored villosulous; style extremely short. Fl. Oct.–Mar, fr. Apr.

Mountain woods and thickets; 400–1300 m. W Guangxi, S Guangzhou, S and SE Yunnan [Myanmar, Thailand].


亮叶山小橘 *liàng yè shān xiǎo jú*

*Glycosmis cyanocarpa* (Blume) Sprengel var. *cyanocarpa* Kurz; *G. cymosa* (Kurz) J. Narayanaswami ex Tanaka (1941), not Zippelius ex Spanoghe (1841).

Trees 3–5 m tall. Leaves (1 or)3- or 5(or 6)-foliolate; petiolules 2–8 mm; leaflet blades oblong to lanceolate, 7–18 × 3–6 cm, margin entire or repand, apex acuminate. Inflorescences axillary or terminal, paniculate, 1–4 cm, manyflowered. Sepals broadly ovate, ca. 1 mm, margin ciliate. Petals ca. 5 × 2–3 cm. Stamens 10; filaments linear. Ovary terete. Fruit orange, broadly ellipsoid to ovoid, 1–1.4 × 0.8–1.2 cm, 1-seeded. Fl. and fr. year-round but flowering peak Jan.–Mar.

Mountain woods; 900–1400 m. Yunnan [Bhutan, India, NE Myanmar].


少花山小橘 *shǎo huā shān xiǎo jú*

Shrubs or trees, to 3 m tall. Leaves (3 or)5- or 7-foliolate; petiolules 3–5 mm; leaflet blades narrowly lanceolate, 5–9 ×
1.5–2.5 cm, base attenuate, margin entire or repand, apex acuminate. Inflorescences axillary, 1–5-flowered. Sepals broadly ovate, ca. 1 mm wide. Petals ovate, ca. 3 mm, glabrous, apex obtuse. Stamens 10, longer ones ca. 2.5 mm, shorter ones ca. 1.5 mm. Ovary globose; style extremely short. Fruit not seen.

- Hillside woods; 200–500 m. SW Guangxi.


毛山小橘 毛山小橘 (原变种) 毛山小橘 (yuan bian zhong)

Glycosmis puberula Lindley var. craibii (Tanaka) B. C. Stone.

Trees to 5 m tall. Leaves (1–)3- or 5-foliolate; leaflet blades oblong, lanceolate, or ovate, 5–10 × 2–3 cm, papery or rigidly so, base attenuate to cuneate, margin entire, apex acuminate to mucronate. Inflorescences axillary or terminal, less than 3 cm or rarely ca. 4 cm. Sepals broadly ovate to ovate, less than 1 mm or ca. 1 mm. Petals ca. 3 mm. Filaments linear or widest in ± their basal half. Ovary terete in bud, becoming broadly conic, gourd-shaped, or ovoid at anthesis, slightly pubescent or glabrous. Fruit reddish to orange, subglobose, 0.8–1.4 cm in diam., 1- or 2-seeded. Fl. and fr. year-round.

- Hillside forests, woods, and thickets. Hainan, S Yunnan [N and NE Thailand, Vietnam].


1a. Filaments linear; ovary slightly pubescent

1b. Filaments widest in ± their basal half; ovary glabrous

9a. Glycosmis craibii var. craibii

毛山小橘 (原变种) 毛山小橘 (yuan bian zhong)

Trees to 3 m tall. Leaflet blades oblong to lanceolate, 7–9 × 2.5–3 cm, papery, base attenuate, apex acuminate. Inflorescences axillary, less than 3 cm, few flowered. Sepals broadly ovate, ca. 1 mm wide. Petals subepillic. Stamens slightly longer than petals; filaments linear. Ovary conic to gourd-shaped at anthesis, slightly pubescent. Fruit reddish to orange, 0.8–1 cm in diam., 1-seeded. Fl. Apr–May, fr. Aug–Oct.

- Hillside forests. S Yunnan [NE Thailand].


光叶山小橘 光叶山小橘

Glycosmis singuliflora Craib var. glabra Craib, Fl. Siam. 1: 226. 1926.

Trees to 5 m tall. Petiolules 2–6 mm; leaflet blades oblong, lanceolate, or ovate, 5–10 × 2–3 cm, rigidly papery, base attenuate to cuneate, apex acuminate to mucronate. Inflorescences axillary or terminal, rarely to 4 cm. Sepals ovate, less than 1 mm. Petals caducous. Stamens 10; filaments widest in ± their basal half. Ovary broadly ovoid at anthesis, glabrous. Fruit orange, 1–1.4 cm in diam., 1- or 2-seeded. Fl. and fr. year-round.

- Hillside woods and thickets; 300–500 m. Hainan [N Thailand, Vietnam].


小花山小橘 小花山小橘

Limonia parviflora Sims, Bot. Mag. 50: t. 2416. 1823; Citrus erythrocarpa Hayata; Glycosmis citrifolia Lindley; G. erythrocarpa (Hayata) Hayata; L. citrifolia Willdenow (1809), not Salisbury (1796).

Shrubs or trees, 1–3 m tall. Leaves (1 or)2–4(or 5)-foliolate; petiolules 1–5 mm; leaflet blades elliptic, oblong, or lanceolate, 5–19 × 2.5–8 cm, glabrous, base cuneate, margin entire, apex mucronate, acuminate, or obtuse. Inflorescences axillary or terminal,paniculate, 3–5 cm when axillary, to 14 cm when terminal. Sepals ovate, ca. 1 mm wide, apex obtuse. Petals white, ca. 4 mm, oblong. Stamens (8 or)10. Ovary broadly ovoid to globose; style extremely short; stigma slightly expanded. Fruit pale yellowish white but turning reddish to dark vermilion, globose to ellipsoid, 1–1.5 cm in diam., (1 or)2–3-seeded. Fl. Mar–May, fr. Jul–Sep. 2n = 54.

- Mountain woods; 200–1000 m. Fujian, Guangdong, Guangxi, Guizhou, Hainan, Taiwan, S and W Yunnan [Japan (including Ryukyu Islands), Myanmar, NE Vietnam].


西藏山小橘 西藏山小橘


Shrubs or trees, to 3 m tall. Leaves 3- or 4-foliolate; petiolules 4–10 mm; leaflet blades alternate to subopposite, broadly ovate to obovate-elliptic, 12–20 × 5–9 cm, subleathery, abaxially pale green, adaxially dark green, base cuneate, margin entire or repand, apex mucronate. Inflorescences axillary, 2.5–4 cm. Sepals broadly ovate, less than 2 mm, margin ciliate. Petals oblong, ca. 1.5 mm, glabrous, apex obtuse. Stamens 10; filaments flattened; anthers elliptic. Ovary subglobose; style terete. Fruit not seen.

- Mountain woods; 200–1000 m. Fujian, Guangdong, Guangxi, Guizhou, S Yunnan [NE Thailand, Myanmar].

● Hillside woods; ca. 800 m. SE Xizang (Mêdog).

The later names *Glycosmis medogensis* and *G. motuoensis* are based on the same type (*Qinghai-Xizang Exped. 74–4540*) as *Walsura xizangensis*. 