

5. **STAUNTONIA** de Candolle, Syst. Nat. 1: 511, 513. 1817.

野木瓜属 *ye mu gua shu*

Parvattia Decaisne.

Woody climbers, evergreen. Monoecious or dioecious. Winter bud scales many, in several whorls; outer scales imbricate, usually short and broad; inner scales longer than outer ones, ligulate to straplike. Leaves alternate, long petiolate; leaf blade palmately 3–9-foliolate or pinnately 3-foliolate; petiolules unequal; leaflet margins entire. Inflorescences axillary, several to more than 10-flowered; bracts subtending inflorescences, scaly. Sepals 6, outer 3 valvate. Petals absent or 6 and inconspicuous. Male flowers: stamens 6; filaments connate into a tube, basally, or only at base; connective apical appendage often hornlike or apiculate. Pistillodes 3, concealed within filaments tube. Female flowers: sepals usually slightly larger than those of male flowers. Stamminodes minute, squamose, sessile, inserted at base of carpels opposite petals. Carpels 3, straight, sessile; ovules in several rows. Stigma terminal. Fruit single or in pairs, rarely 3-fascicled, sometimes dehiscent along abaxial suture. Seeds numerous, embedded in pulp. About 25 species: China, N India, Japan, Myanmar, Vietnam; 20 species (16 endemic) in China.

1a. Petals 6.

2a. Leaves palmately 5–7-foliolate, sometimes 3- or 4-foliolate apically on branches.

3a. Leaflets adaxially dull; petals 2–3 mm; fruit 4–6 × ca. 2.5 cm 4. *S. maculata*

3b. Leaflets adaxially shiny; petals ca. 1.5 mm; fruit 7–10 × 3–5 cm 5. *S. chinensis*

2b. Leaves pinnately 3-foliolate.

4a. Branches, petiole, and petiolules narrowly winged; leaflets abaxially pulverulently or papillately puberulous; inflorescence 1- or 2-flowered; male flower outer 3 sepals 2.2–2.5 cm 1. *S. decora*

4b. Branches, petiole, and petiolules not winged; leaflets glabrous; inflorescence many flowered; male flower outer 3 sepals 0.5–0.8 cm.

5a. Leaflets subleathery; secondary veins and tertiary veinlets conspicuously prominent on both surfaces;

stamen connective apical appendage longer than anther 2. *S. brunoniana*

5b. Leaflets papery; secondary veins and tertiary veinlets abaxially prominent, adaxially inconspicuous;

stamen connective apical appendage as long as anther 3. *S. elliptica*

1b. Petals absent.

6a. Stamen connective unappendaged 20. *S. leucantha*

6b. Stamen connective appendaged.

7a. Connective apical appendage 3–5 mm (sometimes ca. 2 mm in *S. purpurea*).

8a. Leaflets abaxially pale green 10. *S. libera*

8b. Leaflets abaxially grayish green or glaucous.

9a. Leaflet base cuneate to broadly cuneate 9. *S. duclouxii*

9b. Leaflet bases obtusely rounded, rounded, or slightly cordate.

10a. Leaflets abaxially whitish; pedicel ca. 1 cm; connective apical appendage ca. 4 mm 8. *S. trinervia*

10b. Leaflets abaxially grayish green; pedicel 2–5 cm; connective apical appendage 2–3 mm.

11a. Leaflets 6–9.5 cm wide, abaxially not maculate, margin revolute when dry; sepals of male flowers

ca. 1.8 cm 6. *S. glauca*

11b. Leaflets 2.5–5 cm wide, abaxially densely whitish brown maculate, margin crisp when dry; sepals

of male flowers 1–1.5 cm 7. *S. purpurea*

7b. Connective apical appendage to 2.5 mm.

12a. Connective apical appendage 2–2.5 mm.

13a. Leaflets 12–17 cm, subleathery, apex with a ca. 3.5 cm cauda; outer 3 sepals of male flowers 2–2.5

cm 13. *S. yaoshanensis*

13b. Leaflets less than 7 cm, leathery, apex not caudate; outer 3 sepals of male flowers 0.8–1.4 cm.

14a. Leaflet apex mucronate and apiculate; outer 3 sepals of male flowers ca. 8 cm 11. *S. oligophylla*

14b. Leaflet apex emarginate to obcordate, not mucronate and apiculate; outer 3 sepals of male flowers ca. 1.4 cm 12. *S. obcordatilimba*

- 12b. Connective apical appendage minute to 1 mm.
 15a. Connective apical appendage ca. 1 mm.
 16a. Leaflets 3(–5), abaxially whitish green, margin conspicuously revolute 14. *S. conspicua*
 16b. Leaflets 5–9, abaxially pale green or glaucous, margin not revolute.
 17a. Leaflets obovate, obovate-oblong, or spatulate, abaxially not maculate 16. *S. obovatifoliola*
 17b. Leaflets oblanceolate, oblong-lanceolate, or oblong abaxially densely maculate 15. *S. pseudomaculata*
 15b. Connective apical appendage scarcely visible to 0.6 mm.
 18a. Leaflets lanceolate-linear to lanceolate, abaxially densely maculate; connective apical appendage ca. 0.6 mm; plants dioecious 17. *S. cavalerieana*
 18b. Leaflets obovate, oblong, broadly elliptic, oblanceolate, or spatulate, abaxially not maculate; connective apical appendage scarcely visible; plants monoecious.
 19a. Leaflets 3–5, obovate, oblong, broadly elliptic, or oblanceolate, apex rounded or sometimes acute to acuminate; sepals thin, not fleshy 18. *S. obovata*
 19b. Leaflets 5–9, spatulate, apex long caudate and with a filiform easily broken tip; sepals thick, subfleshy 19. *S. brachyanthera*

1. *Stauntonia decora* (Dunn) C. Y. Wu ex S. H. Huang, Fl. Yunnan. 2: 8. 1979.

翅野木瓜 *chi ye mu gua*

Parvatia decora Dunn, Hooker's Icon. Pl. 28: t. 2712. 1901; *Stauntonia alata* Merrill.

Monoecious. Stems and branches striate, winged; wings 3 or 4, 1–2 mm wide. Winter bud scales inconspicuous. Leaves fascicled. Petiole 3–8 cm, winged; leaf blade pinnately 3-foliolate; petiolules narrowly winged, lateral ones 5–10 mm, terminal one 2.5–4 cm; leaflets elliptic, sometimes ovate to oblong, 5–12 × 3–7 cm, leathery, abaxially farinaceous green, pulverulently or papillately puberulous, adaxially olive-green and shiny, base rounded, slightly cordate, broadly cuneate, or sometimes subtruncate, margin revolute, apex acute, obtuse, short acuminate, or sometimes subrounded and mucronate; secondary veins 5 or 6 pairs, basal pair divergently ascending, others horizontally spreading. Racemes several to many, 1(or 2)-flowered; bracts persistent, inconspicuous; peduncle slender, 4–10 mm. Pedicel slender, 2–3 cm; bracteoles lanceolate, less than 1 mm. Outer 3 sepals lanceolate, 2.2–2.5 × ca. 0.6 cm, apex acuminate; inner 3 sepals narrower, ca. 2.1 cm. Petals lanceolate, ca. 2 mm. Male flowers: filaments connate into a tube; anthers free; connective apical appendage hornlike, equaling or longer than anther. Pistillodes subulate, concealed within filament tube. Female flowers: staminodes subulate, ca. 1 mm. Carpels clavate, 6–7 mm. Stigma lanceolate, reflexed. Fruit not seen. Fl. Nov–Dec.

• Forest margins, mountain slopes, by streams along valleys; 700–1300 m. Guangdong, Guangxi, Yunnan.

2. *Stauntonia brunoniana* Wallich ex Hemsley, Hooker's Icon. Pl. 29: t. 2843. 1907.

三叶野木瓜 *san ye ye mu gua*

Parvatia brunoniana (Wallich ex Hemsley) Decaisne; *Stauntonia trifoliata* Griffith.

Plants large. Dioecious. Stems surface slightly rough; branchlets smooth. Leaves fascicled. Petiole slender, 5–8 cm; leaf blade pinnately 3-foliolate; petiolules 1–4(–6)

cm; leaflets oblong, elliptic, or oblong-lanceolate, 7–15 × 3–7 cm, subleathery, abaxially slightly glaucous, adaxially shiny, base rounded to cuneate and sometimes asymmetric on lateral leaflets, apex acuminate to short mucronate; secondary veins 4–6 pairs; tertiary veinlets and secondary veins conspicuously prominent on both surfaces. Racemes 2–5, many flowered; bracts persistent, broadly ovate, less than 1 mm; peduncle short. Flowers white and slightly pale green; bracteoles broadly ovate, less than 1 mm; petals ovate to lanceolate, ca. 1.5 mm. Male flowers: pedicel ca. 9 mm. Sepals 5.5–6.5 mm, outer 3 ovate, inner 3 lanceolate. Filaments basally connate into a short tube, apically slightly free; connective apical appendage subulate, hornlike, longer than anther. Pistillodes 3, filiform, slightly longer than filament tube. Female flowers: pedicel 1.5–2 cm. Sepals 1.2–1.5 cm, outer 3 ovate-lanceolate, inner 3 linear-lanceolate. Staminodes as long as petals; connective apically appendaged, longer than anthers. Carpels ovoid. Stigma subulate. Fruit obovoid-oblong, ca. 3.5 × 2 cm, minutely tuberculate. Fl. Nov.

Forests on mountain slopes; 900–1500 m. S Yunnan [NE India, Myanmar, Thailand, Vietnam].

3. *Stauntonia elliptica* Hemsley, Hooker's Icon. Pl. 29: t. 2844. 1907.

牛藤果 *niu teng guo*

Parvatia brunoniana (Wallich) Decaisne subsp. *elliptica* (Hemsley) H. N. Qin; *P. elliptica* (Hemsley) Gagnepain.

Monoecious, androgynous or not. Winter bud scales inconspicuous. Petiole slender, 10–17 cm; leaf blade pinnately 3-foliolate; leaflets elliptic, oblong, ovate-oblong, or obovate, 3–11 × 2–6 cm, papery, abaxially pale green to grayish green, adaxially dark green, both ends obtuse or base rounded and apex acute; midvein impressed; secondary veins 4 or 5 pairs, abaxially prominent and adaxially impressed; tertiary veinlets impressed. Racemes several, 4–6 cm, many flowered; bracts persistent, broadly ovate, less than 1 mm;

peduncle slender. Flowers pale green to whitish; bracteoles subulate, less than 1 mm. Male flowers: pedicel 1–1.2 cm. Outer 3 sepals ovate, ca. 8 mm, apex acute; inner 3 sepals lanceolate. Petals ovate-lanceolate, shorter than filaments. Filaments connate into a tube to near apex; connective apical appendage hornlike, as long as anther. Pistillodes subulate, concealed within filament tube. Female flowers: pedicel 1.8–2 cm, ± thick. Outer 3 sepals narrowly lanceolate, ca. 15 × 3–4 mm; inner 3 sepals linear-lanceolate, ca. 14 × 2 mm. Staminodes ca. 1 mm. Fruit pale brown, grayish brown when dry, oblong to subglobose, 2–4 cm in diam. Seeds subtriangular, slightly compressed; seed coat blackish, shiny. Fl. May–Aug, fr. May–Dec.

300–1200 m. Guangdong, Guangxi, Guizhou, Hubei, Hunan, Jiangxi, Sichuan, Yunnan [NE India].

4. *Stauntonia maculata* Merrill, *Lingnan Sci. J.* 13: 24. 1934.
斑叶野木瓜 *ban ye ye mu gua*

Monoecious. Stems green tinged with purple. Outer winter bud scales broadly ovate-triangular; inner scales lanceolate, 2–3 cm. Petiole 3.5–9 cm; leaf blade palmately 5–7-foliolate, sometimes 3- or 4-foliolate apically on branches; petiolules 0.5–2 cm; leaflets lanceolate to oblong-lanceolate, 5–10(–12) × 1–3 cm, leathery, abaxially pale green and densely and conspicuously pale colored maculate, adaxially dark green and dull, base obtuse, cuneate, or sometimes rounded, margin thickened and slightly revolute, apex long acuminate; veins abaxially prominent, adaxially inconspicuous. Racemes several, 5–6 cm, pendulous; bracts persistent; peduncle and pedicels slender. Flowers pale yellowish green. Male flowers: pedicel ca. 2 cm. Outer 3 sepals ovate-oblong, 1.5–1.8 × ca. 0.7 cm, apex obtusely acuminate; inner 3 sepals linear-lanceolate, 12–17 × 2–2.5 mm. Petals spreading, oblong, 2.5–3 mm. Filaments connate into a tube; anthers straight, ca. 3 mm; connective apical appendage hornlike, as long as anther. Female flowers: pedicel ca. 2 cm. Outer 3 sepals adaxially streaked purplish red, lanceolate, 1.8–2.1 cm; inner 3 sepals linear-lanceolate, ca. 2 cm. Petals 2–3 mm. Staminodes 6; connective apically appendaged. Carpels conical-terete. Fruit ellipsoid to oblong, 4–6 × ca. 2.5 cm. Seeds brown when dry, subtriangular, slightly compressed. Fl. Aug–Oct.

• Open forest on mountain slopes, sunny place by streams along valleys; 600–1000 m. S Fujian, C Guangdong.

5. *Stauntonia chinensis* de Candolle, *Syst. Nat.* 1: 514. 1817.
野木瓜 *ye mu gua*

Stauntonia hainanensis T. Chen.

Monoecious. Stems green, striate; bark pale grayish brown, thick, rough. Petiole 5–10 cm; leaf blade palmately 5–7-foliolate; petiolules 0.6–2.5 cm; leaflets oblong, elliptic, or oblong-lanceolate, 6–9(–11.5) × 2–4 cm, leathery, abaxially pale green and densely pale colored maculate, adaxially dark green and shiny, base obtuse, rounded, or cuneate, margin slightly revolute,

apex acuminate; midvein adaxially impressed; secondary veins and tertiary veinlets conspicuously prominent on both surfaces. Corymbose racemes 3- or 4-flowered; bracts persistent, linear-lanceolate, 1.5–1.8 cm. Pedicel 2–3 cm; bracteoles linear-lanceolate, 1.5–1.8 cm. Sepals pale yellow to creamy white abaxially, adaxially purplish red. Petals 6, slightly purplish red at apex, ca. 1.5 mm, ligulate. Male flowers: outer 3 sepals lanceolate, ca. 1.8 × 0.6 cm; inner 3 sepals linear-lanceolate, ca. 16 × 3 mm. Filaments connate into a tube ca. 4 mm; anthers ca. 3 mm; connective apical appendage hornlike, as long as anther. Pistillodes minute, subulate. Female flowers: outer 3 sepals lanceolate 2.2–2.5 × ca. 0.6 cm; inner 3 sepals like those of male flowers. Staminodes ca. 1 mm. Carpels ovoid-clavate. Stigma oblique, capitate. Fruit oblong, 7–10 × 3–5 cm. Seeds subtriangular, ca. 1 cm, compressed; seed coat dark brown to blackish, shiny. Fl. Apr–May, fr. Jun–Oct.

• Dense forest on mountain slopes, open forest by streams along valleys, among shrubs; 500–1300 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hainan, Hunan, Jiangxi, Yunnan, Zhejiang.

6. *Stauntonia glauca* Merrill & Metcalf, *Lingnan Sci. J.* 16: 80. 1937.

粉叶野木瓜 *fen ye ye mu gua*

Dioecious. Branches brown to blackish when dry, striate. Petiole terete, 4–14 cm, less than 2 mm in diam.; leaf blade palmately 3–5-foliolate; petiolules 2–4 cm; leaflets elliptic, broadly elliptic, or sometimes obovate, 8–14 × 6–9.5 cm but lateral ones smaller, leathery, abaxially grayish green and farinaceous, adaxially dark green but yellowish green when dry, base rounded to slightly cordate, margin revolute, apex acute, obtuse, rounded, or sometimes emarginate and cuspidate; primary veins 3, abaxially strongly prominent, adaxially plane or slightly impressed; secondary veins 3–5 pairs, prominent on both surfaces; tertiary veinlets reticulate, prominent on both surfaces. Racemes 2–5-flowered; bracts persistent; peduncle 2–3(–5) cm. Pedicel 2–4 cm, ± slender. Male flowers: sepals pale yellow, base adaxially purple; outer 3 sepals lanceolate, ca. 18 × 4–5 mm; inner 3 sepals linear, ca. 14 × 1.8–2 mm. Filaments ca. 3 mm, connate into a tube; anthers free, ca. 3 mm; connective apical appendage hornlike, ca. 3 mm. Pistillodes small, subulate. Female flowers not seen. Fruit yellow at maturity, black when dry, ellipsoid, 3–4 × 2–3 cm, densely and minutely tuberculate, apically slightly curved and beaked. Fl. Apr–May, fr. Jul.

• Open forest by streams along valleys; 300–500 m. NE Guangdong.

7. *Stauntonia purpurea* Y. C. Liu & F. Y. Lu, *Quart. J. Chin. Forest.* 11: 110. 1978.

紫花野木瓜 *zi hua ye mu gua*

Monoecious. Young stems and branches green, striate, mature ones grayish brown with rough bark. Petiole 3–6(–8) cm; leaf blade palmately 3–5-foliolate; leaflets

oblong to obovate-oblong, 5–9(–11) × 2.5–5 cm, leathery, abaxially grayish green and densely whitish brown maculate, adaxially green, base obtusely rounded, margin crisp when dry, apex acuminate to obtusely rounded and cuspidate; secondary veins abaxially conspicuous. Corymbose racemes 2 or 3, 3–7-flowered; bracts persistent. Pedicel 2–5 cm. Sepals pale yellow basally with purple stripes or sometimes purple throughout; outer 3 sepals ovate-lanceolate, 10–15 × 3–5 mm, larger in female flowers; inner 3 sepals linear-lanceolate, 9–12 × 2–3 mm. Petals absent. Male flowers: filaments ca. 3 mm, connate into a tube; anthers ca. 4 mm; connective apical appendage hornlike, 2–3 mm. Female flowers: staminodes ca. 1 mm. Carpels ovoid-terete, ca. 4 mm. Stigma capitate, sessile. Fruit yellow at maturity, ellipsoid, colon-shaped when dry, 3–7 × 2–3 cm. Seeds blackish. Fl. Apr–May, fr. Sep–Oct.

• Dense forest along valleys, among shrubs by trailsides; 1000–1600 m. Taiwan.

8. *Stauntonia trinervia* Merrill, Lingnan Sci. J. 13: 24. 1934. 三脉野木瓜 san mai ye mu gua

Stauntonia crassipes T. Chen.

Dioecious. Branches brownish purple, terete, striate when dry. Petiole 3–6 cm; leaf blade palmately 3–5-foliolate; petiolules 1.5–4 cm; leaflets oblong, obovate-oblong, or elliptic, 7–10 × 3–5 cm, leathery, abaxially glaucous, adaxially dark green and shiny, both surfaces brown tinged with yellowish green spots when dry, base rounded to slightly cordate, margin thickened and revolute, apex acutely mucronate to rounded cuspidate; primary veins 3; secondary veins 7 pairs, slightly prominent on both surfaces; tertiary veinlets sparse, slightly prominent on both surfaces. Racemes 4–6 cm, few flowered; bracts persistent; peduncle 1–2.5 cm. Male flowers: pedicel slender, ca. 1 cm. Sepals dull yellow, ca. 1.6 cm, thick, slightly fleshy; outer 3 sepals lanceolate to ovate-lanceolate, ca. 16 × 4–5 mm, adaxially slightly puberulous and 8-striate, apex obtuse; inner 3 sepals linear-lanceolate, ca. 2 mm wide, adaxially glabrous, 3-striate. Petals absent. Filaments ca. 4 mm, connate into a tube; anthers free, ca. 3 mm; connective apical appendage hornlike, ca. 4 mm. Pistillodes 3, ca. 1 mm. Female flowers not seen. Fruit green when young, oblong, ca. 9 × 4.5 cm, farinose, densely and minutely tuberculate, apex mucronate. Seeds subtriangular, ca. 9 mm; seed coat blackish brown, shiny. Fl. Apr, fr. Oct.

• Open forest on mountain slopes, along valleys; 400–1500 m. Guangdong (Zengcheng Xian, Wengyuan Xian)

9. *Stauntonia duclouxii* Gagnepain, Bull. Soc. Bot. France 55: 48. 1908.

羊瓜藤 yang gua teng

Plants large. Branchlets grayish brown when dry, striate. Winter bud scales persistent when leaves young. Petiole terete, slender, 2–9 cm, striate; leaf blade palmately 5–7-foliolate; petiolules 1–3 cm; leaflets obovate to

sometimes oblong, 4–8(–10) × 2–3.5 cm, leathery, abaxially glaucous when dry, adaxially yellowish green, base cuneate to broadly cuneate, apex acute to rounded and uncinately; primary veins 3; tertiary veinlets sparse, abaxially conspicuously prominent, adaxially inconspicuous to slightly prominent. Racemes 8–15 cm, 8–15-flowered; bracts elliptic, deciduous. Pedicel 2–3 cm, filiform. Sepals yellowish green to creamy white, 1.4–1.8 cm, 1.6–2.2 cm in female flower, fleshy; outer 3 sepals ovate-lanceolate, ca. 7 mm wide; inner 3 sepals linear-lanceolate, 3–4 mm wide. Petals absent. Male flowers: filaments ca. 5 mm, connate into a tube, ± free apically; anthers linear, free, 3–3.5 mm; connective apical appendage hornlike, subulate, as long as anther. Pistillodes 3, subulate. Female flowers: staminodes 6, ca. 0.5 mm. Carpels ovoid-terete. Fruit yellow at maturity, brownish black when dry, oblong, 4–7 × 2–3 cm, densely and minutely tuberculate. Fl. Apr, fr. Aug–Oct.

• Shaded areas in mixed forests, among shrubs along valleys, by streams; 700–1500 m. Gansu, Guizhou, Hubei, Hunan, Shaanxi, Sichuan, Yunnan.

10. *Stauntonia libera* H. N. Qin, Cathaya 8–9: 136. 1997.

离丝野木瓜 li si ye mu gua

Monoecious. Stems and branches grayish yellow, striate. Petiole 4–9 cm; leaf blade palmately 5–8-foliolate; petiolules 0.9–1.8 cm; leaflets obovate-oblong to oblanceolate, 6–8 × 1.8–2.9 cm, leathery, abaxially pale green and densely maculate, adaxially dark green and shiny, base cuneate, apex acuminate; veins inconspicuous on both surfaces. Corymbose racemes 2- or 3-flowered; bracts persistent. Sepals greenish white, apex acuminate. Petals absent. Male flowers: sepal margin serrate; outer 3 sepals ovate, ca. 2.2 × 0.7 cm; inner 3 sepals oblong-lanceolate, ca. 18 × 0.3–0.4 cm. Filaments ca. 4 mm, base connate; anthers ca. 4 mm; connective apical appendage hornlike, ca. 3 mm. Pistillodes 3. Female flowers: outer 3 sepals ovate-oblong, ca. 1.6 × 0.6 cm; inner 3 sepals ca. 15 × 4 mm. Staminodes 6, ca. 0.5 mm. Carpels narrowly oblong, ca. 9 mm. Stigma capitate. Fruit narrowly ovoid, ca. 4 × 1.5 cm, smooth. Fl. Apr–May, fr. Aug–Sep.

Forest margins on mountain slopes; 1600–1900 m. Xizang, Yunnan [Myanmar].

11. *Stauntonia oligophylla* Merrill & Chun, Sunyatsenia 5: 54. 1940.

少叶野木瓜 shao ye ye mu gua

Monoecious. Branches and branchlets terete, brown to blackish when dry, striate. Petiole 3–8 cm; leaf blade palmately 3–6-foliolate; petiolules 1–2 cm; leaflets obovate, oblanceolate, or elliptic, 5–7 × 3.5–5 cm, leathery, abaxially glaucous, adaxially pale green, base narrowly rounded to cuneate, margin thickened, apex rounded and mucronate to cuspidate; primary veins 3; secondary veins 5 or 6 pairs, nearly at right angles to primary veins, conspicuously prominent on both

surfaces; tertiary veinlets conspicuously prominent on both surfaces. Corymbose racemes 3 or 4, ca. 10 cm, laxly flowered; bracts persistent; peduncle slender. Pedicel slender, 2.5–4.5 cm; bracteoles linear-lanceolate, caducous. Sepals pale yellow. Petals absent. Male flowers: outer 3 sepals ovate-lanceolate, ca. 8×3 mm; inner 3 sepals narrowly linear, ca. 6×1 mm. Filaments 1.5–2 mm, connate into a short tube but apically free; anthers free, ca. 1.5 mm; connective apically with a ca. 2 mm hornlike appendage. Pistillodes subulate, ca. 1.5 mm. Female flowers: outer 3 sepals oblong-lanceolate, ca. 11×4.5 mm; inner 3 sepals narrowly lanceolate, ca. 2 mm wide. Stamines clavate, ca. 1 mm. Carpels sublanceolate, ca. 5 mm. Fruit not seen. Fl. Aug–Nov.

• Mixed forest on mountain slopes, along valleys; 500–800 m. S Hainan.

12. *Stauntonia obcordatilimba* C. Y. Wu & S. H. Huang in S. H. Huang, Fl. Yunnan. 2: 11. 1979.

倒心叶野木瓜 *dao xin ye ye mu gua*

Monoecious. Stems slender, striate. Winter bud scales broadly ovate. Petiole 4–5 cm; leaf blade palmately 3–5-foliolate; petiolules slender, ca. 1 cm; leaflets obovate-orbicular, sometimes broadly elliptic, leathery, abaxially glaucous, adaxially green and shiny, margin thickened. Racemes 5–7-flowered; bracts persistent; peduncle and pedicel slender. Pedicel 2.5–3.5 cm. Sepals yellowish green, thin, smooth, apex long acuminate; outer 3 sepals lanceolate, ca. 14×3.5 mm but inner 3 sepals narrower in male flowers. Petals absent. Male flowers: stamens ca. 7 mm; filaments ca. 9 mm, connate into a tube nearly to apex; connective apical appendage hornlike, ca. 2 mm. Pistillodes 3, minute. Female flowers: carpels 3, ovoid-terete, with 6 ca. 1.5 mm staminodes at base. Fruit not seen. Fl. Apr.

• Dense forest margins on mountain slopes; ca. 1000 m. SE Yunnan (Funing Xian).

13. *Stauntonia yaoshanensis* F. N. Wei & S. L. Mo, Guihaia 3: 309. 1983.

瑶山野木瓜 *yao shan ye mu gua*

Vines to 30 m. Monoecious. Branchlets striate. Petiole 15–18 cm; leaf blade palmately 5–7-foliolate; petiolules slender, 2.5–5.5 cm; leaflets oblong to oblanceolate-oblong, $12\text{--}17 \times 4\text{--}6.5$ cm, subleathery, abaxially pale green, adaxially green, base obtuse to subrounded, apex abruptly contracted to a ca. 3.5 cm caudate tip; primary veins 3, inconspicuous; secondary veins ca. 7 pairs, anastomosing; tertiary veinlets abaxially crowded. Racemes 12–19 cm, 4- or 5-flowered; bracts persistent. Petals absent but sometimes female flowers with 2 linear ones, ca. 4 mm. Male flowers: sepals pale yellow, adaxially with purple stripes, \pm fleshy; outer 3 sepals $2\text{--}2.5 \times 0.5\text{--}0.6$ cm; inner 3 sepals ca. 2 mm wide. Filaments ca. 3 mm, connate into a tube; anthers ca. 5 mm; connective apical appendage hornlike, ca. 2.5 mm. Pistillodes 3, small, concealed within filament tube. Female flowers: outer 3 sepals ca. 3.2×0.8 cm; inner 3

sepals 3.5–4 mm wide. Stamines 6, linear, ca. 2 mm. Carpels ovoid-terete. Stigma oblique. Fruit oblong to ellipsoid, ca. $14 \times 4\text{--}5$ cm. Seeds numerous. Fl. Apr, fr. Nov.

• Open forest on mountain slopes. Guangxi (Dayao Shan, Yongfu Xian).

14. *Stauntonia conspicua* R. H. Chang, Acta Phytotax. Sin. 25: 235. 1987

腺脉野木瓜 *xian mai ye mu gua*

Young stems and branches green, striate; old stems grayish brown; bark longitudinally fissured. Young branches axillary from winter bud scales; scales short, broad, persistent. Petiole 4–8(–12) cm; leaf blade palmately 3(–5)-foliolate; petiolules 1–4 cm; leaflets oblong to ovate-oblong, $6\text{--}10(–12) \times 2.5\text{--}6(–8)$ cm, leathery, abaxially whitish green, adaxially green, base rounded, margin revolute, apex acute; primary veins 3; secondary veins and tertiary veinlets inconspicuous on both surfaces. Corymbose racemes 8–11 cm, 3- or 4-flowered; bracts short, broad, persistent. Male flowers: pedicel 1.5–4 cm, slender. Sepals 6, purplish red; outer 3 sepals elliptic, $1.4\text{--}1.8 \times 0.5\text{--}0.9$ cm; inner 3 sepals linear to narrowly oblong, $11\text{--}18 \times 2\text{--}3$ mm. Petals absent. Filaments connate into a tube; anthers free, 5–6 mm; connective apical appendage apiculate, ca. 1 mm. Pistillodes small, concealed within filament tube. Female flowers not seen. Fruit yellow at maturity, ellipsoid, ca. 6×3 cm. Seeds black, broadly ovoid, shiny. Fl. May, fr. Oct.

• Dense forest on mountain slopes; 1300–1600 m. Zhejiang (Longquan Xian, Suichang Xian).

15. *Stauntonia pseudomaculata* C. Y. Wu & S. H. Huang in S. H. Huang, Fl. Yunnan. 2: 11. 1979.

假斑叶野木瓜 *jia ban ye ye mu gua*

Monoecious. Stems dark brown to grayish brown when dry, terete, striate, lenticellate. Petiole 2.5–3 cm; leaf blade palmately 5–9-foliolate; petiolules 1–2 cm; leaflets oblong-lanceolate, $7.5\text{--}8 \times 2\text{--}2.5$ cm, subleathery, abaxially pale green and paler green densely maculate, adaxially green, base cuneate, apex caudate-acuminate; primary veins abaxially conspicuously prominent, adaxially inconspicuous; secondary veins anastomosing near margin. Racemes several, 5–6 cm, 4- or 5-flowered; bracts persistent. Pedicel 1–1.5 cm. Sepals 6, yellowish green; outer 3 sepals ovate-lanceolate, ca. 1.7×0.5 cm, apex caudate-acuminate; inner 3 sepals 2–3 mm wide but larger in female flowers. Petals absent. Male flowers: filaments ca. 3 mm, connate into a tube; anthers 2.5–3 mm; connective apical appendage apiculate, ca. 1 mm. Pistillodes 3, subulate. Female flowers: staminodes small, inserted at base of carpels. Fruit not seen.

• Mountain slopes; 1000–1300 m. Yunnan (Funing Xian).

16. *Stauntonia obovatifoliola* Hayata, Icon. Pl. Formos. 8: 4. 1919.

石月 *shi yue*

Monoecious. Branches and branchlets terete, striate. Petiole 3–8 cm; leaf blade palmately 5–7-foliolate; petiolules 1–3 cm; leaflets 4–10 × 2–4.5 cm, papery, subleathery, or leathery, base obtusely rounded to cuneate, apex caudate. Racemes several, 3–5(–7)-flowered; bracts persistent; peduncle and pedicels slender but pedicels of female flowers thicker. Sepals thicker in female flowers; outer 3 sepals ovate-lanceolate; inner 3 sepals linear-lanceolate to lanceolate. Petals absent. Male flowers: sepals pale yellowish green. Filaments connate into a tube; connective apical appendage apiculate, 1–1.5 mm. Pistillodes filiform, very small. Female flowers: staminodes oblong to subulate. Carpels ovoid-terete. Fruit ellipsoid to oblong. Fl. Apr–May, fr. Jun–Nov.

• Open to dense forest by streams along valleys, climbing on trees; 500–900 m. Fujian, Guangdong, Guangxi, Hunan, Jiangxi, Taiwan, Zhejiang.

- 1a. Leaflets papery, adaxially ± shiny
..... 16a. subsp. *obovatifoliola*
1b. Leaflets leathery to subleathery,
adaxially not shiny 16b. subsp. *urophylla*

16a. *Stauntonia obovatifoliola* subsp. *obovatifoliola*

石月(原亚种) shi yue (yuan ya zhong)

Stauntonia hexaphylla (Thunberg) Decaisne f. *cordata* Li; *S. obovatifoliola* Hayata var. *pinninervis* Hayata.

Petiole ca. 3 cm; leaflets obovate to obovate-oblong, 6–10 × 3–4.5 cm, papery, abaxially glaucous, adaxially shiny, base obtuse to rounded, apex abruptly contracted into a 3–5 mm obtuse cauda with a short awn. Male flowers: sepals pale yellowish green, adaxially purplish, outer 3 sepals 13–15 × 5 mm. Connective apical appendage 1–1.5 mm. Female flowers: outer 3 sepals ca. 2 × 0.7 cm. Staminodes oblong, ca. 1 mm. Fruit ellipsoid, 5–9 × 3–5 cm. Fl. Apr–May, fr. Sep–Nov.

• Taiwan.

16b. *Stauntonia obovatifoliola* subsp. *urophylla* (Handel-Mazzetti) H. N. Qin, *Cathaya* 8–9: 164. 1997.

尾叶那藤 wei ye na teng

Stauntonia hexaphylla (Thunberg) Decaisne var. *urophylla* Handel-Mazzetti, *Anz. Akad. Wiss. Wien, Math.-Naturwiss. Kl.* 59: 102. 1922; *S. brachyanthera* Handel-Mazzetti var. *minor* Diels ex Y. C. Wu; *S. brachybotrya* T. Chen; *S. hexaphylla* (Thunberg) Decaisne f. *intermedia* Y. C. Wu.

Petiole 3–8 cm; leaflets obovate to broadly spatulate, 4–10 × 2–4.5 cm but basal 1 or 2 smaller, leathery, base narrowly rounded to broadly cuneate, apex abruptly contracted to a slightly curved 1–2.5 cm cauda. Racemes several, fascicled, 3–5-flowered. Male flowers: sepals pale yellowish green; outer 3 sepals 1–1.2 cm. Filaments connate into a tube; connective apical appendage subulate, ca. 1 mm. Female flowers not seen. Fruit oblong to ellipsoid, 4–6 × 3–3.5 cm. Seeds

triangular, compressed, ca. 10 × 7 mm; seed coat dark brown, shiny. Fl. Apr, fr. Jun–Jul.

• Fujian, Guangdong, Guangxi, Jiangxi, Hunan, Zhejiang.

17. *Stauntonia cavaleriana* Gagnepain, *Bull. Soc. Bot. France* 55: 47. 1908.

西南野木瓜 xi nan ye mu gua

Dioecious. Branches striate. Winter bud scales dark brown, imbricate. Petiole 9–13 cm; leaf blade palmately 7–9-foliolate; petiolules radiate, slender, lateral ones 7–10 mm, terminal one ca. 3 cm; leaflets lanceolate-linear to lanceolate, 7–11 × 2–4 cm, subleathery, membranous when young, abaxially pale green and densely maculate when young, adaxially dark green, base acute, apex slenderly long caudate, cauda ca. 3 cm; secondary veins 9 pairs, arcuately anastomosing remote from margin; tertiary veinlets slender. Inflorescences pyramidal, ca. 12 cm; bracts persistent. Pedicel slender, 1–2 cm, lowest longest; bracteoles linear, 7–9 mm, apex acuminate. Male flowers: outer 3 sepals lanceolate, ca. 11 × 3 mm, apex obtusely acuminate; inner 3 sepals linear, ca. 8 × 1 mm, base attenuate. Petals absent. Stamens 6–9 mm; filaments longer than anthers, connate into a tube; anthers lanceolate; connective apical appendage apiculate, ca. 0.6 mm. Pistillodes subulate, concealed within filament tube. Female flowers and fruit not seen.

Forests by streams along valleys; 500–1500 m. N Guangxi, Guizhou [Laos].

18. *Stauntonia obovata* Hemsley, *Hooker's Icon. Pl.* 29: t. 2847. 1907.

倒卵叶野木瓜 dao luan ye ye mu gua

Akebia cavaleriei Léveillé; *Holboellia obovata* (Hemsley) Chun; *Stauntonia formosana* Hayata; *S. hebandra* Hayata; *S. hebandra* var. *angustata* Y. C. Wu; *S. keitaensis* Hayata; *S. obovata* var. *angustata* (Y. C. Wu) H. L. Li.

Monoecious. Stems and branches slender, striate. Petiole slender, 2–6(–8) cm; leaf blade palmately 3–5(or 6)-foliolate; petiolules 0.8–2(–3) cm; leaflets variable in shape and size, usually obovate, sometimes oblong, broadly elliptic, or oblanceolate, lateral leaflets sometimes slightly asymmetric, 3.5–6(–11) × 1.5–3(–6) cm, subleathery, abaxially farinaceous whitish green, adaxially dark green and shiny, base cuneate to broadly cuneate, margin slightly revolute, apex rounded, sometimes acute to acuminate; primary veins 3; secondary veins 4–7 pairs; tertiary veinlets and secondary veins inconspicuous on both surfaces or abaxially prominent and adaxially slightly impressed. Racemes 2 or 3, 4–5 cm, few flowered; bracts persistent; peduncle and pedicel slender. Flowers whitish yellow; bracteoles small, deciduous. Outer 3 sepals ovate-lanceolate, 9–10 × 3.5–4 mm, margin slightly revolute, apex acuminate; inner 3 sepals linear-lanceolate, less than 1 mm wide.

Petals absent. Male flowers: stamens 3.5–4 mm. Filaments ca. 2 mm, connate into a tube; anthers free; connective apical appendage apiculate, minute. Pistillodes very small, concealed within filament tube. Female flowers: staminodes 6, scalelike, less than 0.5 mm. Carpels 3. Stigma small, capitate. Fruit brownish black when dry, ellipsoid to ovoid, 4–5 cm, densely tuberculate. Seeds ovoid-reniform to subtriangular, slightly compressed, 8–10 × 5–6 mm; seed coat brownish black, shiny. Fl. Feb–Apr, fr. Sep–Nov.

• Open to dense forest on mountain slopes, along valleys; 300–800 m. Fujian, Guangdong, Guangxi, Hunan, Jiangxi, Sichuan, Taiwan.

19. *Stauntonia brachyanthera* Handel-Mazzetti, Anz. Akad. Wiss. Wien, Math.-Naturwiss. Kl. 58: 90. 1921.

黄蜡果 *huang la guo*

Stauntonia dielsiana Y. C. Wu.

Plants large. Monoecious. Young branchlets green, striate, ca. 3 mm in diam.; old branches dark olive-green, with fusiform lenticels. Outer winter bud scales broad, imbricate; inner scales ligulate, ca. 4 cm long. Petiole 5–11 cm; leaf blade palmately 5–9-foliolate; petiolules 1–2.4 cm; leaflets spatulate, 5–13.5 × 2–5 cm, papery, both surfaces yellowish green, abaxially glaucous and densely minutely papillose but farinose white when dry, adaxially dark green and shiny but dull colored when dry, apex abruptly long caudate and with an easily broken, piliferous tip 2–5 mm; midvein abaxially slightly prominent and adaxially impressed in old leaves; secondary veins 6–10 pairs; tertiary veinlets and secondary veins anastomosing remote from margin, abaxially slightly prominent and adaxially impressed in old leaves. Racemes 1 to several, 4–8(–12) cm, 10- or more flowered, 1 or 2 flowers at each node; female flowers 2 or 3, inserted basally on rachis, subulate-lanceolate, ca. 1 cm; male flowers inserted apically; bracts persistent. Sepals whitish green when fresh, brown when dry, slightly fleshy, thicker in female flowers; outer 3 sepals ovate-lanceolate, 0.9–1.2 cm, apex narrowly rounded but cuneate and curved when dry; inner 3 sepals narrowly linear, shorter, adaxially papillose. Male flowers: filaments ca. 3.5 mm, connate into a tube; anthers ca. 2 mm, incurved; connective apical appendage apiculate, minute. Pistillodes minute. Female flowers: carpels ca. 5 mm. Stigma hypocrateriform. Fruit yellow at maturity, ellipsoid, 5–7.5 × 3–5 cm, smooth or tuberculate. Fl. Apr, fr. Aug–Nov.

• Mixed forest on mountain slopes; 500–1200 m. Guangxi, Guizhou, Hunan.

20. *Stauntonia leucantha* Diels ex Y. C. Wu, Notizbl. Bot. Gart. Berlin-Dahlem 13: 373. 1936.

钝药野木瓜 *dun yao ye mu gua*

Monoecious. Branchlets grayish brown when dry, 3–4 mm in diam., striate. Leaves fascicled; petiole 4–6 cm; leaf blade palmately 5–7-foliolate; petiolules 0.7–2 cm, central one longest; leaflets oblong-obovate, subelliptic, or oblong, 5–7(–9) × 2–3 cm, subleathery, membranous when young, abaxially farinose green but yellowish

green when dry, adaxially dark green but grayish olive-green when dry, base subrounded to obtuse, apex acute to sometimes acuminate; primary veins 3, secondary veins 5–7 pairs; tertiary veinlets and secondary veins abaxially slightly prominent and adaxially impressed. Racemes 2 to several; bracts persistent; peduncle slender; bracteoles linear-lanceolate, ca. 4 mm. Sepals subfleshy; outer 3 sepals narrowly linear, 8.5–9 × 0.8–1 mm. Male flowers: stamens 5.5–6 mm; filaments 3.5–4 mm, connate into a slender tube but apically slightly free; anthers unequal in length, free, straight; connective apically unappendaged. Pistillodes filiform. Female flowers: staminodes scalelike, ca. 0.2 mm in diam. Carpels ovoid-terete, ca. 4 mm. Stigma subcapitate. Fruit yellow at maturity, black when dry, oblong, ca. 7 × 4 × 3 cm, smooth or inconspicuously tuberculate, slightly narrowed at both ends. Fl. Apr–May, fr. Aug–Oct.

• Open to dense forests, forest margins on mountain slopes, by streams along valleys; 300–1000 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Jiangsu, Jiangxi, Sichuan, Zhejiang.

