

15. PHOTINIA Lindley, Trans. Linn. Soc. London 13: 96, 103. 1821.¹

石楠属 shi nan shu

Lu Lingdi (陆玲娣 Lu Ling-ti); Stephen A. Spongberg

Pourthiaea Decaisne.

Trees or shrubs, deciduous or evergreen. Winter buds small; scales imbricate, few. Leaves alternate, simple, papery or leathery, venation camptodromous, margin serrate, rarely entire, shortly petiolate; stipules present, usually subulate. Inflorescences terminal, umbellate or corymbose, rarely shortly paniculate, many flowered, sometimes flowers 2- or 3-clustered or solitary. Hypanthium cupular or campanulate to cylindrical, adnate to ovary or free near apex. Sepals 5, persistent, short. Petals 5, contorted or imbricate in bud, base clawed. Stamens usually ca. 20. Carpels 2–5, rarely 1; ovary semi-inferior, (1 or)2–5-loculed, in fruit free apically or to 1/3 length; styles (1 or)2–5, free or ± connate, short, dilated apically; stigmas truncate; ovules 2 per locule, erect. Fruit a pome, globose, ovoid, or ellipsoid, somewhat fleshy, (1- or)2–5-loculed, free from calyx only near apex or to 1/3 length, with persistent, incurved sepals; carpel crustaceous or membranous, each locule 1- or 2-seeded; seeds erect, testa leathery; cotyledons plano-convex.

About 60 species: E, S, and SE Asia, also in Mexico; 43 species (32 endemic) in China.

Wu Zhengyi (editor's note) believes that *Pourthiaea* is morphologically distinct from *Photinia* and should be treated as a separate genus.

Many species of *Photinia* are ornamental trees and shrubs with large lustrous leaves and attractive white flowers in the spring followed by red fruits in the autumn. The wood is hard and heavy, suitable for making furniture and other small articles.

- 1a. Plant evergreen; inflorescence compound-corymbose; rachis and pedicels without lenticels in fruit.
 - 2a. Leaves entire, rarely with few inconspicuous teeth.
 - 3a. Inflorescences glabrous, rarely slightly pilose; leaves leathery, not revolute, both surfaces glabrous 1. *P. integrifolia*
 - 3b. Inflorescences densely tomentose; leaves thickly leathery, slightly revolute, adaxially glabrous, abaxially densely tomentose.
 - 4a. Petiole 20–30 mm; lateral veins 20–25 pairs 4. *P. megaphylla*
 - 4b. Petiole 1.5–5 mm; lateral veins 13–17 pairs.
 - 5a. Hypanthium campanulate, abaxially glabrous 2. *P. crassifolia*
 - 5b. Hypanthium cylindrical, abaxially tomentose 3. *P. tushanensis*
 - 2b. Leaves wholly or partly serrate.
 - 6a. Leaf blade abaxially with black glands.
 - 7a. Inflorescence branches and hypanthium abaxially villous; petiole 10–25(–30) mm, glandular and toothed 21. *P. prunifolia*
 - 7b. Inflorescence branches and hypanthium abaxially gray tomentose; petiole 8–15 mm, without glands and teeth 22. *P. raupingensis*
 - 6b. Leaf blade abaxially without black glands.
 - 8a. Inflorescence branches glabrous or pilose.
 - 9a. Inflorescences pilose 9. *P. bodinieri*
 - 9b. Inflorescences glabrous.
 - 10a. Petiole usually 2–4 cm 5. *P. serratifolia*
 - 10b. Petiole usually 0.4–1.5 cm.
 - 11a. Petiole 10–15 mm; leaf blade elliptic, oblong, or oblong-obovate, apex acuminate 6. *P. glabra*
 - 11b. Petiole 4–10 mm; leaf blade oblong-lanceolate, lorate-lanceolate, or oblanceolate, apex acute or obtuse.
 - 12a. Leaf blade oblong-lanceolate or lorate-lanceolate, margin crenate, veins 18–20 pairs 7. *P. stenophylla*
 - 12b. Leaf blade oblanceolate, margin sharply serrate, veins 9–13 pairs 8. *P. lochengensis*
 - 8b. Inflorescence branches usually tomentose.
 - 13a. Leaf margin spiny-serrate.
 - 14a. Branchlets, petioles, and inflorescences tomentose; leaf blade 4.5–7 × 4–5 cm 19. *P. prionophylla*
 - 14b. Branchlets, petioles, and inflorescences villous; leaf blade 2–5 × 1–2 cm 20. *P. berberidifolia*
 - 13b. Leaf margin sharply serrate or obtusely serrate.
 - 15a. Leaf blade abaxially glabrous.
 - 16a. Leaf blade oblong, elliptic, or oblong-obovate, apex acute, veins 12–14 pairs 10. *P. beckii*
 - 16b. Leaf blade obovate or oblanceolate, apex obtuse, veins 9–11 pairs 11. *P. lasiogyne*
 - 15b. Leaf blade abaxially pubescent or tomentose.
 - 17a. Leaf blade abaxially pilose.

¹ Extensive contributions were received from Kenneth R. Robertson (ILL.S), Herbarium, Illinois Natural History Survey, 607 East Peabody Drive, 172 Natural Resources Building, Champaign, Illinois 61820-6970, U.S.A.

ROSACEAE

- 18a. Inflorescences gray lanuginose; leaf veins 18–20 pairs; petiole 2.5–4 cm 14. *P. lanuginosa*
 18b. Inflorescences villous; leaf veins 12–15 or 20 pairs; petiole 0.6–2(–2.5) cm.
 19a. Leaf margin serrate at least in part, leaf blade oblong-elliptic to obovate-oblong, veins ca. 20 pairs, petiole 0.6–1.2 cm 12. *P. chingiana*
 19b. Leaf margin wholly serrate, leaf blade oblong-ovate, oblong-obovate, or oblong-lanceolate, veins 12–15 pairs, petiole 1–2(–2.5) cm 13. *P. kwangsiensis*
 17b. Leaf blade abaxially tomentose.
 20a. Petiole 2–4 cm; hypanthium abaxially tomentose 15. *P. glomerata*
 20b. Petiole usually less than 2 cm; hypanthium abaxially glabrous or tomentose.
 21a. Hypanthium glabrous abaxially; leaf veins 30–40 pairs 16. *P. anlungensis*
 21b. Hypanthium tomentose abaxially; leaf veins 10–20 pairs.
 22a. Leaf blade oblong-lanceolate or oblanceolate, abaxially gray tomentose when young, glabrescent, apex acute or shortly acuminate, margin sparsely minutely sharply serrate, veins 12–15 pairs 17. *P. chihsiniana*
 22b. Leaf blade lorate-oblong or narrowly lanceolate, abaxially densely and persistently yellow tomentose, apex obtuse or acute, margin with sparse, sharp or spiny teeth, veins 10–20 pairs 18. *P. loriformis*
 1b. Plant deciduous, very rarely evergreen; inflorescence umbellate, corymbose, or compound-corymbose; rachis and pedicels with prominent lenticels in fruit.
 23a. Inflorescence an umbel or corymb, 2–9-flowered, sometimes flowers solitary, rarely more than 9.
 24a. Branchlet, petiole, pedicel, and hypanthium abaxially densely pubescent.
 25a. Deciduous shrub; flowers 3–8 in umbels or corymbs; pedicel 3–10 mm; leaf apically acuminate to caudate 42. *P. hirsuta*
 25b. Evergreen shrub; flowers 1 or 2, or 3–6 in umbels or corymbs; pedicel 10–20 mm; leaf apically acute to shortly acuminate 43. *P. zhejiangensis*
 24b. Branchlet, petiole, pedicel, and hypanthium abaxially glabrous.
 26a. Flowers several to more than 10 in umbels or corymbs; pedicel 1–2.5(–3.2) cm; petals villous adaxially 39. *P. parvifolia*
 26b. Flowers solitary or 2- or 3(–5)-fascicled; pedicel 2–5 cm; petals glabrous.
 27a. Shrub 2(–5) m tall, erect; pedicel often 3–5 cm, glabrous; sepals not toothed; petals white or stained yellow 40. *P. komarovii*
 27b. Shrub smaller, decumbent; pedicel 0.5–1.8 cm, sparsely villous when young, glabrous when old; sepals irregularly minutely toothed; petals white 41. *P. chingshuiensis*
 23b. Inflorescence a corymb or compound corymb, usually more than 10-flowered.
 28a. Inflorescence pubescent or tomentose.
 29a. Peduncle and pedicels verticillate 32. *P. benthamiana*
 29b. Peduncle and pedicels alternate.
 30a. Leaf blade glabrous or pilose abaxially.
 31a. Leaf blade abaxially glabrous, apex acuminate, margin sharply serrate, veins 9 or 10 pairs 33. *P. pilosicalyx*
 31b. Leaf blade abaxially pilose, apex caudate or acute to shortly acuminate, margin sharply or shallowly serrate, veins 5–10(–12) pairs.
 32a. Leaf apically caudate, margin densely sharply serrate apically, veins 5–7 pairs 34. *P. villosa*
 32b. Leaf apically acute to shortly acuminate, margin sparsely shallowly serrate, veins 8–10(–12) pairs 35. *P. calleryana*
 30b. Leaf blade abaxially tomentose.
 33a. Leaf margin sparsely serrate or subentire, leaf blade lanceolate or lorate-lanceolate, abaxially densely gray tomentose when young, subglabrous when old 38. *P. podocarpifolia*
 33b. Leaf margin sharply serrate along entire length, leaf blade oblong to oblong-lanceolate or lanceolate, abaxially yellowish gray or long gray tomentose at least initially.
 34a. Leaf blade oblong or oblong-elliptic to oblong-lanceolate, abaxially persistently yellowish gray tomentose, lateral veins 10–15 pairs; rachis, pedicels, and hypanthium abaxially sparsely villous, usually glabrate 36. *P. schneideriana*
 34b. Leaf blade lanceolate, abaxially initially long gray tomentose, glabrescent, lateral veins 8–10 pairs; rachis, pedicels, and hypanthium abaxially densely long gray tomentose 37. *P. arguta*
 28b. Inflorescence glabrous.
 35a. Leaf blade abaxially tomentose.
 36a. Leaf blade 4–8.5 × 1–2 cm, abaxially floccose-tomentose, margin densely minutely serrate, apex acuminate, veins conspicuous, 8–11 pairs 30. *P. tsaii*

- 36b. Leaf blade 3–4 × 0.8–1 cm, abaxially densely yellow tomentose, margin entire or inconspicuously crenulate, apex ± obtuse or ± acute, veins inconspicuous 31. *P. blinii*
- 35b. Leaf blade abaxially glabrous, rarely puberulous only along veins.
- 37a. Leaf veins adaxially deeply impressed 29. *P. impressivena*
- 37b. Leaf veins adaxially slightly impressed.
- 38a. Leaf apically acute, rarely shortly acuminate.
- 39a. Leaf basally symmetrical, leaf blade broadly lanceolate, both surfaces glabrous, veins not oblique, petiole 5–7 mm; fruit obovoid, 6–7 mm in diam. 27. *P. bergerae*
- 39b. Leaf basally asymmetric, leaf blade oblong or oblanceolate, abaxially villous along midvein, veins very oblique, petiole 7–10 mm; fruit ovoid to ellipsoid, 3–4 mm in diam. 28. *P. obliqua*
- 38b. Leaf apically acuminate to caudate.
- 40a. Leaf margin densely minutely sharply serrate, veins 7–9 pairs 26. *P. fokiensis*
- 40b. Leaf margin sparsely serrate, veins 6–16 pairs.
- 41a. Leaf blade lanceolate or oblong-lanceolate, margin revolute, shallowly sharply serrate, sometimes subentire, lateral veins 12–16 pairs; fruiting pedicel 5–9 mm 25. *P. callosa*
- 41b. Leaf blade elliptic, oblong, obovate-oblong, ovate-lanceolate, or obovate-lanceolate, margin not revolute, sharply serrate, lateral veins 6–14 pairs; fruiting pedicel 1–2.5 cm.
- 42a. Leaf blade adaxially glabrous, sparsely pilose along veins abaxially, veins 9–14 pairs; fruit ovoid or subglobose; fruiting pedicel 1–2 cm 23. *P. beauverdiana*
- 42b. Leaf blade glabrous on both surfaces, veins 6–8 pairs; fruit obovoid or obovoid-ellipsoid; fruiting pedicel 1.5–2.5 cm 24. *P. lucida*

1. *Photinia integrifolia* Lindley, Trans. Linn. Soc. London 13: 103. 1822.

全缘石楠 *quan yuan shi nan*

Trees evergreen, 5–7 m tall. Branchlets brown, terete, glabrous, blackish gray when old, with scattered suborbicular or oblong lenticels. Petiole (1–)2–4 cm, glabrous; leaf blade oblong, lanceolate, or oblanceolate, 6–12 × 3–5 cm, leathery, veins 12–17 pairs, both surfaces glabrous, base cuneate, rarely rounded, margin entire, apex acute or shortly acuminate. Compound corymbs terminal, much branched, 7–12 × 8–15 cm, many flowered; rachis and pedicels glabrous, rarely puberulous. Pedicel 3–5 mm. Flowers 4–5(–8) mm in diam. Hypanthium cupular, 1–1.5 mm, abaxially glabrous. Sepals broadly triangular, 1–1.5 mm, apex obtuse. Petals white or yellowish, orbicular, 1–2 mm in diam., glabrous, base shortly clawed. Stamens 20, nearly as long as or slightly longer than petals. Ovary pilose apically; styles 2, shorter than or nearly as long as stamens. Fruit purplish red, subglobose, 5–6 mm in diam., glabrous. Fl. May–Jun, fr. Sep–Oct. $2n = 34$.

Evergreen forests; 1200–2700 m. W Guangxi, Guizhou, SE Xizang, W Yunnan [Bhutan, India, Laos, Myanmar, Nepal, Sikkim, Thailand, Vietnam].

- 1a. Flowers 4–5 mm in diam., white 1a. var. *integrifolia*
 1b. Flowers 7–8 mm in diam., yellowish
 1b. var. *flavidiflora*

1a. *Photinia integrifolia* var. *integrifolia*

全缘石楠(原变种) *quan yuan shi nan (yuan bian zhong)*

Eriobotrya integrifolia (Lindley) Kurz; *Photinia integrifolia* var. *notoniana* (Wight & Arnott) Vidal; *P. integrifolia* var. *yunnanensis* T. T. Yu; *P. notoniana* Wight & Arnott; *P. sambuciflora* W. W. Smith; *P. scandens* Stapf; *Stranvaesia scandens* (Stapf) Handel-Mazzetti.

Flowers 4–5 mm in diam. Petals white.

Evergreen forests; 1500–2500 m. W Guangxi, Guizhou, SE Xizang, W Yunnan [Bhutan, India, Laos, Myanmar, Nepal, Sikkim, Thailand, Vietnam].

1b. *Photinia integrifolia* var. *flavidiflora* (W. W. Smith) J. E. Vidal, *Adansonia*, n.s., 5: 227. 1965.

黄花全缘石楠 *huang hua quan yuan shi nan*

Photinia flavidiflora W. W. Smith, Notes Roy. Bot. Gard. Edinburgh 10: 59. 1917.

Flowers 7–8 mm in diam. Petals yellowish.

Evergreen forests on slopes; 1200–2700 m. W Yunnan [Myanmar].

2. *Photinia crassifolia* H. Léveillé, Fl. Kouy-Tchéou, 349. 1915.

厚叶石楠 *hou ye shi nan*

Photinia crassifolia var. *denticulata* Cardot.

Shrubs evergreen, 4–5 m tall. Branches brown cinereous, rusty tomentose when young, glabrous when old, with inconspicuous lenticels. Petiole 1.5–4 mm, tomentose; leaf blade oblong, 6–15 × 1.5–4.5 cm, thickly leathery, veins 15–17 pairs, reticulate veins prominent, abaxially somewhat purple when dry, tomentose along veins, adaxially shiny, glabrous, base rounded, margin slightly revolute, entire or inconspicuously dentate, apex acute or obtuse and shortly pointed. Compound corymbs terminal, 9–14 cm in diam., numerous flowered; rachis and pedicels densely tomentose. Pedicel 2–3 mm. Flowers 5–6 mm in diam. Hypanthium campanulate, ca. 1 mm, abaxially glabrous. Sepals triangular, 0.5–1 mm, apex acute. Petals white, obovate, 2–3 mm, glabrous, base shortly clawed, apex obtuse. Stamens 20, slightly longer than or nearly as long as petals. Ovary white tomentose apically; styles 2, free, not exceeding stamens. Fruit brownish red, ovoid, 6–7 × 5–6 mm. Fl. May–Jun, fr. Sep–Nov.

• Sunny slopes, slope thickets; 500–1700 m. Guangxi, Guizhou, Yunnan.

3. *Photinia tushanensis* T. T. Yu, Acta Phytotax. Sin. 8: 229. 1963.

独山石楠 du shan shi nan

Shrubs evergreen, to 5 m tall. Branchlets grayish brown or grayish black when old, densely gray tomentose when young, gradually glabrescent. Petiole nearly absent or short, 3–5 mm, thick, initially densely tomentose, glabrate; leaf blade oblong-elliptic, 11–17 × 3–5 cm, thickly leathery, veins 13–15 pairs, robust midvein prominently raised abaxially and deeply impressed adaxially, abaxially densely yellowish brown tomentose, glabrate, adaxially initially tomentose, gradually glabrescent or subglabrous, base rounded, margin slightly revolute, entire, undulate, or inconspicuously shallowly serrate, apex acute or obtuse and shortly pointed. Compound corymbs terminal, compact, 9–10 cm in diam., numerous flowered; rachis and pedicels densely gray tomentose. Pedicel 2–3 mm or nearly absent. Flowers 5–6 mm in diam. Hypanthium cylindrical, 3–5 mm, abaxially tomentose. Sepals ovate, ca. 1 mm, apex obtuse. Petals obovate or broadly elliptic, 2–2.5 mm, glabrous, base shortly clawed. Stamens 20, shorter than petals. Ovary tomentose; styles 2, free. Fruit not seen. Fl. Jun–Jul.

• Thickets at mountain summits; 800–900 m. S Guizhou (Dushan Xian).

4. *Photinia megaphylla* T. T. Yu & T. C. Ku, Acta Phytotax. Sin. 18: 493. 1980.

大叶石楠 da ye shi nan

Shrubs evergreen, ca. 3 m tall. Branchlets angulate, densely brownish yellow tomentose. Petiole 2–3 mm, densely brownish yellow tomentose; stipules caducous; leaf blade elliptic or elliptic-obovate, 16–27 × 10–12 cm, veins 20–25 pairs, raised abaxially and impressed adaxially, abaxially densely brownish yellow tomentose, adaxially glabrous, base broadly cuneate or subrounded, margin obscurely crenate, apex acuminate to caudate. Compound corymbs terminal, many flowered; rachis and pedicels densely brownish yellow tomentose. Pedicel 2–5 mm. Hypanthium campanulate, abaxially puberulous or subglabrous. Sepals triangulate-ovate, shorter than tube, apex acute. Ovary with 2 ovules per locule; styles 2, basally connate. Fruit not seen. Fl. May–Jun.

• Broad-leaved forests on slopes; ca. 1800 m. SE Xizang.

5. *Photinia serratifolia* (Desfontaines) Kalkman, Blumea 21: 424. 1973.

石楠 shi nan

Shrubs or trees, evergreen, 4–6(–12) m tall. Branchlets brown or reddish brown when young, brownish gray when old, glabrous; buds ovoid, 4–7 mm, apex acute to shortly acuminate; scales several, brown. Petiole 2–4 cm, pubescent when young, glabrescent; leaf blade narrowly elliptic, narrowly obovate, or obovate-elliptic, (6–)9–22 × 3–6.5 cm, leathery, veins 20–30 pairs, midvein raised abaxially and impressed adaxially, abaxially long pubescent along veins when young, both surfaces gla-

brous when mature, adaxially lustrous, base rounded or broadly cuneate, margin sparsely or inconspicuously toothed or entire, apex acuminate. Compound corymbs terminal, 8–12 × 10–16 cm; rachis and pedicels glabrous, villous, or tomentose. Pedicel 3–5 mm. Flowers 6–8 mm in diam. Hypanthium cupular, 1–1.5 mm, usually glabrous, sometimes abaxially tomentose or basally villous. Sepals broadly triangular, 1–1.5 mm, apex acute or obtuse. Petals white, suborbicular, 3–4 mm in diam., glabrous or villous. Stamens 20, outer ones longer than inner ones. Ovary pilose apically; styles 2, sometimes 3, connate at base, not exceeding stamens; stigma capitate. Fruit red when immature, brownish purple when mature, globose, 5–6 mm in diam., with 1 seed; seeds brownish, ovoid, 2–2.5 mm, smooth. Fl. Apr–May, fr. Sep–Oct.

Mixed forests, roadsides, slopes, fields, mountain areas, sea shores; sea level to 2500 m. Anhui, Fujian, Gansu, Guangdong, Guangxi, Guizhou, Hebei, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Shaanxi, Sichuan, Taiwan, Yunnan, Zhejiang [S India, Indonesia, Japan, Philippines].

- 1a. Leaf margin prominently serrate, entire only near base.
 - 2a. Rachis, pedicels, hypanthium, and petals glabrous; leaf blade narrowly elliptic, narrowly obovate, or obovate-elliptic 5a. var. *serratifolia*
 - 2b. Rachis, pedicels, hypanthium, and petals basally villous; leaf blade obovate-elliptic 5b. var. *lasiopetala*
- 1b. Leaf margin entire or very inconspicuously shallowly minutely toothed.
 - 3a. Leaf blade elliptic or obovate-elliptic, 8–16 cm; rachis and pedicels tomentose; hypanthium and petals glabrous 5c. var. *daphniphyloides*
 - 3b. Leaf blade obovate-lanceolate or spatulate-lanceolate, 6–10 cm; rachis and pedicels tomentose; hypanthium abaxially tomentose; petals glabrous 5d. var. *ardisiifolia*

5a. *Photinia serratifolia* var. *serratifolia*

石楠(原变种) shi nan (yuan bian zhong)

Crataegus serratifolia Desfontaines, Tabl. École Bot., ed. 3, 288. 1829; *Photinia glabra* (Thunberg) Maximowicz var. *chinensis* Maximowicz; *P. pustulata* Lindley; *P. serrulata* Lindley.

Leaf blade narrowly elliptic, narrowly obovate, or obovate-elliptic, 9–22 cm, margin prominently serrate, entire only near base. Rachis, pedicels, hypanthium and petals glabrous.

Mixed forests, roadsides, slopes, fields; 700–2500 m. Anhui, Fujian, Gansu, Guangdong, Guangxi, Guizhou, Hebei, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Shaanxi, Sichuan, Taiwan, Yunnan, Zhejiang [S India, Indonesia, Japan, Philippines].

5b. *Photinia serratifolia* var. *lasiopetala* (Hayata) H. Ohashi, J. Jap. Bot. 63: 234. 1988.

毛瓣石楠 mao ban shi nan

Photinia lasiopetala Hayata, Icon. Pl. Formosan. 6: 17. 1916; *P. serrulata* Lindley f. *lasiopetala* (Hayata) T. Shimizu; *P. serrulata* var. *lasiopetala* (Hayata) K. C. Kuan.

Leaf blade obovate-lanceolate, 8–15 cm, margin distinctly serrate, entire only near base. Rachis, pedicels, hypanthium, and petals basally villous.

- Low mountain areas; ca. 900 m. C Taiwan.

5c. *Photinia serratifolia* var. *daphniphyloides* (Hayata) L. T. Lu, Acta Phytotax. Sin. 38: 277. 2000.

宽叶石楠 kuan ye shi nan

Photinia daphniphyloides Hayata, Icon. Pl. Formosan. 7: 30. 1918; *P. serrulata* Lindley f. *daphniphyloides* (Hayata) H. L. Li; *P. serrulata* var. *daphniphyloides* (Hayata) K. C. Kuan.

Leaves elliptic or obovate-elliptic, 8–16 cm, margin entire or very inconspicuously minutely dentate. Rachis and pedicels tomentose; hypanthium and petals glabrous.

- Sea shores; sea level. E Taiwan.

5d. *Photinia serratifolia* var. *ardisiifolia* (Hayata) H. Ohashi, J. Jap. Bot. 63: 234. 1988.

紫金牛叶石楠 zi jin niu ye shi nan

Photinia ardisiifolia Hayata, Icon. Pl. Formosan. 5: 65. 1915; *P. serrulata* Lindley f. *ardisiifolia* (Hayata) H. L. Li; *P. serrulata* var. *ardisiifolia* (Hayata) K. C. Kuan.

Leaves obovate-lanceolate or spatulate-lanceolate, 6–11 cm, margin entire or inconspicuously shallowly minutely dentate. Rachis, pedicels, and hypanthium abaxially tomentose; petals glabrous.

- Mountain areas; medium elevations. E Taiwan.

6. *Photinia glabra* (Thunberg) Maximowicz, Bull. Acad. Imp. Sci. Saint-Petersbourg, sér. 3, 19: 178. 1874.

光叶石楠 guang ye shi nan

Crataegus glabra Thunberg in Murray, Syst. Veg., ed. 14, 465. 1784.

Trees evergreen, 3–5 m tall, rarely to 7 m tall. Branchlets brown to grayish brown when young, grayish black when old, glabrous, with scattered brownish black orbicular lenticels; buds narrowly ovate, 3–5 mm, apex acuminate, rarely acute; scales dark brown, glabrous. Petiole 1–1.5 cm, glabrous; leaf blade initially reddish, elliptic, oblong, or oblong-obovate, 5–9 × 2–4 cm, thickly leathery, veins 10–18 pairs, both surfaces glabrous, base cuneate, margin with sparse, shallowly crenulate teeth, apex acuminate. Compound corymbs terminal, 6–11 × 7–12 cm, numerous flowered; rachis and pedicels glabrous. Pedicel 5–8 mm. Flowers 7–8 mm in diam. Hypanthium cupular, abaxially glabrous. Sepals triangular, 1–1.5 mm, apex acute. Petals white, obovate, 2–3 mm, adaxially white tomentose near base, base shortly clawed, margin revolute, apex obtuse. Stamens 20, nearly as long as or slightly shorter than petals. Ovary pilose apically; styles 2, rarely 3, basally free or connate; stigma capitate. Fruit red, obovate or ovoid, ca. 5 mm, glabrous. Fl. Apr–May, fr. Sep–Oct.

Slopes, mixed forests; 500–800 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hubei, Hunan, Jiangsu, Jiangxi, Sichuan, Yunnan, Zhejiang [Japan, Myanmar, Thailand].

7. *Photinia stenophylla* Handel-Mazzetti, Symb. Sin. 7: 480. 1933.

窄叶石楠 zhai ye shi nan

Shrubs evergreen, 1–2 m tall. Branchlets brownish to reddish brown when young, grayish brown when old, initially slightly pilose, glabrate, with sparse, orbicular lenticels; buds small; scales ± subulate, glabrous. Petiole 4–10 mm, broad, grooved, initially pilose, glabrescent; stipules caducous, brownish, subulate or linear-subulate, 4–7 mm, glabrous; leaf blade lorate-lanceolate or oblong-lanceolate, 3.5–9 × 1–3 cm, leathery, veins 18–20 pairs, midvein raised abaxially, both surfaces glabrous, basally gradually attenuate, margin slightly revolute, crenate, apex acute or obtuse and mucronate. Compound corymbs terminal, 3–4 cm in diam., 15–25-flowered; rachis and pedicels glabrous. Pedicel 5–10 mm. Hypanthium cupular, 1.5–2 mm, abaxially glabrous. Sepals triangular, 1–2 mm, apex acute. Petals white, 2–3 mm, adaxially white pilose, apex emarginate. Stamens 20, ca. as long as petals. Ovary pilose apically; styles 2, connate, only free near apex, not exceeding stamens. Fruit red, ovoid, 5–7 × 3–5 mm, fleshy, glabrous, smooth, 4-seeded; sepals incurved. Fl. Apr–May, fr. Jul–Aug.

Near water courses in mountain valleys, thickets alongside rivers; 200–400 m. Guangxi, Guizhou [Thailand].

8. *Photinia lochengensis* T. T. Yu, Acta Phytotax. Sin. 8: 226. 1963.

罗城石楠 luo cheng shi nan

Trees or shrubs, evergreen. Branchlets purple brown or blackish brown, sparsely pubescent when young; buds ovoid, small, glabrous, apex acute. Petiole 5–8 mm, initially pubescent, glabrescent; leaf blade yellowish brown abaxially when dried, dark green adaxially, oblanceolate, 3.5–5 × 1–2 cm, leathery, veins 9–13 slender pairs, somewhat raised abaxially, both surfaces glabrous except slightly pubescent along midvein when young, base cuneate, margin slightly revolute and somewhat undulate, with minute sharp incurved teeth, apex acute, usually shortly pointed. Compound corymbs terminal, 5–7 cm in diam.; rachis and pedicels glabrous. Flowers 3–4 mm in diam. Hypanthium campanulate, ca. 1.5 mm × 1.5 mm, abaxially glabrous. Sepals erect, broadly triangular, ca. 1 cm. Petals white, obovate, ca. 2 mm, base shortly clawed, apex obtuse. Stamens 20, shorter than petals. Ovary white pilose apically; styles 2, rarely 3, free. Fruit subglobose to ovoid-globose, ca. 3 mm in diam., glabrous; sepals incurved.

- Rocks, stream sides; 100–300 m. NC Guangxi (Luocheng Xian), Zhejiang.

9. *Photinia bodinieri* H. Léveillé, Repert. Spec. Nov. Regni Veg. 4: 334. 1907.

贵州石楠 gui zhou shi nan

Trees evergreen, 6–15 m tall. Branchlets yellowish brown

when young, gray when old, sparsely appressed pubescent when young, glabrous when old. Petiole (0.8–)1–1.5 cm, glabrous; leaf blade oblong, elliptic or obovate to oblanceolate or narrowly lanceolate, 5–10(–15) × (1.5–)2–5 cm, veins 10–16(–20) pairs, both surfaces glabrous or initially slightly pubescent along veins, glabrescent, base cuneate, margin serrate, apex acute to acuminate. Compound corymbs terminal, compact, 5–8 × 5–10 cm, many flowered; rachis and pedicels appressed pubescent; bracts caducous, lanceolate or linear, 2–4 mm, pubescent. Pedicel 5–7 mm. Flowers 1–1.2 cm in diam. Hypanthium cupular, abaxially sparsely appressed pubescent. Sepals broadly triangular, 1–2 mm, apex acute or obtuse. Petals white, suborbicular, 3–4 mm in diam., glabrous, shortly clawed, apex obtuse or emarginate. Stamens 20, shorter than petals. Styles 2 or 3, connate from base to middle, white villous basally. Fruit yellowish red, globose or ovoid, 7–10 mm in diam., glabrous; seeds 2–4, brown, ovoid, 4–5 mm. Fl. Apr–May, fr. Sep–Oct.

Forest margins, thickets, valleys, slopes, roadsides, forests; 300–1300 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hubei, Hunan, Jiangsu, Shaanxi, Sichuan, Yunnan, Zhejiang [Indonesia, N Vietnam].

- 1a. Leaf blade oblong, elliptic, or obovate to oblanceolate, 2–5 cm wide, margin sharply serrate 9a. var. *bodinieri*
 1b. Leaf blade narrowly lanceolate, 1.5–3 cm wide, margin obtusely serrate 9b. var. *longifolia*

9a. Photinia bodinieri var. *bodinieri*

贵州石楠(原变种) gui zhou shi nan (yuan bian zhong)

Hiptage esquirolii H. Léveillé; *Photinia davidsoniae* Rehder & E. H. Wilson.

Leaf blade oblong, elliptic, or obovate to oblanceolate, 5–10(–15) × 2–5 cm, margin sharply serrate.

Forest margins, thickets, valleys, rocky slopes; 300–1000 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hubei, Hunan, Jiangsu, Shaanxi, Sichuan, Yunnan, Zhejiang [Indonesia, N Vietnam].

9b. Photinia bodinieri var. *longifolia* Cardot, Notul. Syst. (Paris) 3: 374. 1918.

长叶贵州石楠 chang ye gui zhou shi nan

Leaf blade narrowly lanceolate, 6.5–13 × 1.5–3 cm, margin obtusely serrate.

- Roadsides, slopes, forests; 600–1300 m. Guizhou.

10. Photinia beckii C. K. Schneider, Ill. Handb. Laubholz. 1: 707. 1906.

椭圆叶石楠 tuo yuan ye shi nan

Trees evergreen, 4–5 m tall. Branchlets grayish brown when old, gray pubescent when young, gradually glabrescent, glabrous when old; buds ovoid, 3–5 mm, apex acute; scales tomentose. Petiole 0.8–1.5 cm, pubescent when young, glabrescent; stipules lanceolate, 3–5 mm, tomentose; leaf blade oblong, elliptic, or oblong-obovate, 5–8 × 2–3.5 cm, leathery, shiny adaxially, veins 12–14 slender inconspicuous pairs, both surfaces glabrous or abaxially puberulous only along midvein

when young, glabrous when old, base rounded or broadly cuneate, margin slightly revolute, shallowly obtusely dentate, entire near base, apex acute and abruptly pointed. Compound corymbs terminal, 6–8 × 7–9 cm, compact, numerous flowered; rachis and pedicels densely yellow tomentose; bracts dark brown, lanceolate, 2.5–4 mm, tomentose. Pedicel 1–2 mm. Flowers 5–7 mm. Hypanthium glabrous abaxially. Sepals triangular-ovate, 1–2 mm, glabrous, margin minutely glandular serrate, apex obtuse. Petals orbicular, 2–3 mm in diam., adaxially pilose, base shortly clawed. Stamens 20, shorter than or nearly as long as petals. Ovary pilose apically; styles 2, connate basally. Fruit ellipsoid, 6–7 × 4–5 mm. Fl. Apr–May, fr. Sep–Oct.

- Thickets, forest margins, stream sides; 1500–1800 m. SE Yunnan.

11. Photinia lasiogyna (Franchet) C. K. Schneider, Repert. Spec. Nov. Regni Veg. 3: 153. 1906.

倒卵叶石楠 dao luan ye shi nan

Shrubs or small trees, evergreen, 1–2 m tall. Branchlets purplish brown when old, pilose when young, glabrous when old, with yellowish brown lenticels. Petiole 1.5–1.8 cm, initially slightly puberulous, glabrous when old; leaf blade obovate or oblanceolate, 5–10 × 2.5–3.5 cm, leathery, veins 9–11 pairs and inconspicuous, both surfaces glabrous or abaxially tomentose-pilose along veins when young, glabrescent, adaxially lustrous, base cuneate or gradually attenuate, margin obscurely dentate, apex obtuse or abruptly shortly pointed. Compound corymbs terminal, 3–5 cm in diam.; rachis and pedicels tomentose, sometimes glabrescent; bracts subulate, 1–2 cm. Pedicel 3–4 mm. Flowers 6–12 mm in diam. Hypanthium cupular, abaxially tomentose or glabrous. Sepals broadly triangular. Petals white, obovate, 4–6 × 3–4 mm, glabrous, base shortly clawed. Stamens 20, shorter than petals. Ovary pubescent apically; styles 2–4, connate basally. Fruit red, obovoid, 4–5 mm in diam., with prominent lenticels. Fl. May–Jun, fr. Sep–Nov.

- Thickets, forests, grassy and calcareous slopes, fields, foothills; 200–2600 m. Fujian, Guangdong, Guangxi, Hunan, Jiangxi, Sichuan, Yunnan, Zhejiang.

- 1a. Rachis, pedicels, and hypanthium abaxially densely tomentose 11a. var. *lasiogyna*
 1b. Rachis and pedicels sparsely tomentose-pilose when young, soon glabrescent, glabrous when old; hypanthium glabrous abaxially 11b. var. *glabrescens*

11a. Photinia lasiogyna var. *lasiogyna*

倒卵叶石楠(原变种) dao luan ye shi nan (yuan bian zhong)

Eriobotrya lasiogyna Franchet, Pl. Delavay. 225. 1890; *Photinia mairei* H. Léveillé; *Stranvaesia glaucescens* Lindley var. *yunnanensis* Franchet.

Rachis, pedicels, and hypanthium abaxially densely tomentose.

- Thickets, forests, grassy slopes, fields; 1900–2600 m. Sichuan, Yunnan.

11b. Photinia lasiogyna var. *glabrescens* L. T. Lu & C. L. Li, Acta Phytotax. Sin. 38: 278. 2000.

脱毛石楠 *tu mao shi nan*

Rachis and pedicels sparsely tomentose-pilose when young, soon glabrescent, glabrous when old; hypanthium glabrous abaxially.

• Mixed forests, foothills, calcareous slopes; 200–1500 m. Fujian, Guangdong, Guangxi, Hunan, Jiangxi, Sichuan, Yunnan, Zhejiang.

12. *Photinia chingiana* Handel-Mazzetti, *Sinensia* 2: 125. 1932.

宜山石楠 *yi shan shi nan*

Shrubs or small trees, evergreen, to 5 m tall. Branchlets gray when old, tomentose-villous when young, subglabrous when old, with inconspicuous lenticels. Petiole robust, 6–12 mm, villous; leaf blade oblong-elliptic to obovate-oblong or elliptic-lanceolate, 10–15 × 3–6 cm, leathery, veins ca. 20 pairs, raised abaxially and impressed adaxially, abaxially tomentose-villous, glabrescent, or densely floccosely tomentose, adaxially glabrous, base rounded, margin revolute, serrate at least in part, apex acuminate to long caudate. Compound corymbs terminal, 5–9 × 6–10 cm; peduncles and pedicels densely tomentose-villous. Pedicel 2–5 mm. Hypanthium cupular, 1–1.5 mm, abaxially densely gray villous. Sepals triangular, 1–1.5 mm, apex acute. Young fruit green, obovoid, 5–6 mm, densely villous, apex with erect triangular sepals and 2 styles. Fr. Aug–Sep.

• Forests, valley thickets, river banks; below 1200 m. Guangxi, Guizhou.

- 1a. Leaf blade oblong-elliptic to obovate-oblong, abaxially tomentose-villous, margin sparsely minutely incurved-serrate apically, subtire or with few inconspicuous teeth basally 12a. var. *chingiana*
 1b. Leaf blade elliptic-lanceolate, abaxially densely floccosely tomentose, margin prominently sharply serrate 12b. var. *lipingensis*

12a. *Photinia chingiana* var. *chingiana*宜山石楠(原变种) *yi shan shi nan* (*yuan bian zhong*)

Photinia austroguizhouensis Y. K. Li; *P. simplex* Y. K. Li & X. M. Wang.

Leaf blade oblong-elliptic to obovate-oblong, abaxially tomentose-villous, margin sparsely minutely incurved-serrate apically, subtire or with few inconspicuous teeth basally.

• Evergreen broad-leaved forests, open forests, valley thickets, river banks; below 1200 m. Guangxi, Guizhou.

12b. *Photinia chingiana* var. *lipingensis* (Y. K. Li & M. Z. Yang) L. T. Lu & C. L. Li, *Acta Phytotax. Sin.* 38: 277. 2000.

黎平石楠 *li ping shi nan*

Photinia lipingensis Y. K. Li & M. Z. Yang, *Bull. Bot. Res.*, Harbin 8(3): 134. 1988.

Leaf blade elliptic-lanceolate, abaxially densely floccosely tomentose, margin prominently sharply serrate.

• Forests; ca. 400 m. SE Guizhou (Liping Xian).

13. *Photinia kwangsiensis* H. L. Li, *J. Arnold Arbor.* 26: 62. 1945.

广西石楠 *guang xi shi nan*

Trees evergreen, to 15 m tall. Branchlets dark brown or grayish brown when young, grayish black when old, terete, initially densely appressed brownish villous, subglabrous when old, with inconspicuous lenticels. Petiole 1–2(–2.5) cm, densely villous; leaf blade oblong-ovate, oblong-obovate, or oblong-lanceolate, 7–12 × 3–4.5 cm, thinly leathery, veins 12–15 pairs, reticulate veins prominent, abaxially densely brownish villous, adaxially glabrous except villous along midvein, base subrounded or broadly cuneate, margin slightly revolute, unevenly serrate to doubly serrate, apex acuminate or caudate. Compound corymbs, terminal, 8–9 × 12–13 cm, many flowered; rachis and pedicels densely brownish villous. Pedicel 3–5 mm. Hypanthium cupular, 1–2 mm, abaxially brownish villous. Sepals triangular, 1–1.5 mm, apex acute. Petals slightly longer than sepals. Stamens ca. 20. Fruit orange, subglobose, 5–6 mm in diam., villous or subglabrous; sepals incurved. Fr. Sep–Oct.

• Mixed forests, river banks; below 3000 m. E Guangxi.

14. *Photinia lanuginosa* T. T. Yu, *Acta Phytotax. Sin.* 8: 227. 1963.

绵毛石楠 *mian mao shi nan*

Trees or shrubs, evergreen. Branchlets blackish brown when old, terete, gray lanuginose when young, gradually glabrescent, subglabrous when old; buds ovoid, 3–4 mm, apex acute; scales blackish brown, glabrous. Petiole 2.5–4 cm, initially densely gray lanuginose, glabrate; leaf blade dark green adaxially, narrowly elliptic, rarely elongated and elliptic-obovate, 8–15 × 4–5 cm, leathery, lateral veins 18–20 pairs, abaxially pale, villous only along midvein, adaxially lustrous, glabrous, base broadly cuneate or subrounded, margin sharply serrate, entire near base, apex sharply acuminate. Compound corymbs terminal, 7–8 × 9–12 cm, compact, many flowered; rachis and pedicels densely gray lanuginose, glabrescent. Pedicel 2–5 cm. Flowers 5–6 mm in diam. Hypanthium cupular, 1–1.5 mm, glabrous or slightly villous. Sepals ovate, 1–1.5 mm, apex obtuse. Petals white, suborbicular, ca. 2 mm in diam., glabrous, base shortly clawed. Stamens 20, shorter than petals. Ovary 2-loculed, apex densely villous; styles 2, nearly free. Fruit not seen. Fl. Apr.

• Mountain areas. Hunan (Xuefeng Shan), Zhejiang.

15. *Photinia glomerata* Rehder & E. H. Wilson in Sargent, *Pl. Wilson.* 1: 190. 1912.

球花石楠 *qiu hua shi nan*

Eriobotrya griffithii (Decaisne) Franchet; *Photinia franchetiana* Diels; *P. glomerata* Rehder & E. H. Wilson var. *cuneata* T. T. Yu; *P. glomerata* var. *microphylla* T. T. Yu; *P. griffithii* Decaisne; *P. serrulata* Lindley var. *congestiflora* Car-dot.

Shrubs or small trees, evergreen, 6–10 m tall. Branchlets purplish brown or grayish brown when old, terete, densely

yellow tomentose when young, glabrous when old, with many scattered lenticels; buds ovoid, 3–4 mm, pubescent, apex obtuse; scales dark brown. Petiole 2–4 cm, initially densely tomentose, later subglabrous; leaf blade oblong or lanceolate to oblanceolate, leathery, (5–)6–18 × 2.5–6 cm, lateral veins 12–20 pairs, abaxially densely yellow tomentose, later partly or wholly glabrescent, adaxially initially tomentose along midvein, glabrate, base obliquely cuneate to rounded, margin somewhat revolute, serrate, apex shortly acuminate. Compound corymbs terminal, densely glomerate, 5–10 × 6–12 cm, many flowered; rachis and pedicels densely yellow tomentose. Pedicel nearly absent or very short. Flowers fragrant, 4–5 mm in diam. Hypanthium cupular, 1–1.5 mm, abaxially densely yellow tomentose. Sepals erect, ovate, 1–1.5 mm, apex acute. Petals white, suborbicular, 2–2.5 mm in diam., adaxially pilose near base, base shortly clawed, apex obtuse. Stamens 20, nearly as long as petals. Styles 2, connate nearly to middle, not exceeding stamens. Fruit red, ovoid, 5–7 × 2.5–4 mm, glabrous. Fl. May–Jun, fr. Aug–Sep.

• Mixed forests, thickets, roadsides, slopes; 1500–2600 m. Hubei, Sichuan, Yunnan.

16. *Photinia anlungensis* T. T. Yu, Acta Phytotax. Sin. 8: 228. 1963.

安龙石楠 an long shi nan

Shrubs evergreen, to 2 m tall. Branchlets dark brown when old, initially densely gray tomentose, glabrous when old, with scattered lenticels; buds oblong, 6–8 mm; scales brown, glabrous. Petiole 0.8–1.5 cm, initially densely tomentose, subglabrous when old; leaf blade oblong, oblong-lanceolate, or oblong-oblanceolate, 10–15 × 3–4.5 cm, leathery, midvein robust, lateral veins ca. 30–34 pairs, raised, slender, abaxially sparsely gray tomentose along veins, adaxially initially pilose, glabrescent, base broadly cuneate to subrounded, margin sharply serrate, apex acute or shortly acuminate. Compound corymbs terminal, ca. 15 cm in diam., many flowered; rachis and branches densely tomentose. Pedicel 2–3 mm, glabrous. Hypanthium cupular, abaxially glabrous. Sepals ovate-triangular, shorter. Ovary 2-loculed, apex villous; styles 2. Immature fruit obovoid, 3–4 mm, glabrous. Fl. May–Jun, fr. Aug–Oct.

• Slopes, forest margins; ca. 1300 m. SW Guizhou (Anlong Xian).

17. *Photinia chihsiniana* K. C. Kuan, Acta Phytotax. Sin. 8: 227. 1963.

临桂石楠 lin gui shi nan

Trees evergreen, small, to 4 m tall. Branchlets grayish black when old, densely gray tomentose when young, subglabrous when old, with few lenticels; buds brownish, ovoid, 2–3 mm, gray tomentose, apex acute. Petiole 0.5–2 cm, initially gray tomentose, glabrate; stipules caducous, subulate, 3–4 mm, gray tomentose; leaf blade greenish abaxially, dark green adaxially, oblong-lanceolate or oblanceolate, 5–11 × 1.5–3 cm, leathery, lateral veins 12–15 pairs, both surfaces initially gray tomentose, glabrate, adaxially shiny, base gradually attenuate, margin somewhat revolute, sparsely minutely sharply serrate,

apex acute or shortly acuminate. Compound corymbs terminal, 6–7 cm in diam.; rachis and pedicels densely gray tomentose. Pedicel 3–7 mm. Flowers ca. 5 mm in diam. Hypanthium cupular, 1–1.5 mm, abaxially gray tomentose. Sepals ovate-triangular, 1–1.5 mm, apex obtuse. Petals suborbicular, 3–4 mm in diam., glabrous. Stamens 20, nearly as long as or slightly longer than petals. Ovary pilose apically; styles 2, free, not much exceeding stamens. Fruit dark red, ovoid, 3–4 × 2–3 mm; sepals gray tomentose; seeds black, 2 or 3, ellipsoid, 2–3 mm, Fl. Apr–May, fr. Oct–Nov.

• Sparse forests in mountain valleys, slopes; 300–1000 m. NE Guangxi (Guilin Shi, Lingui Xian), Hunan.

18. *Photinia loriformis* W. W. Smith, Notes Roy. Bot. Gard. Edinburgh 10: 60. 1917.

带叶石楠 dai ye shi nan

Shrubs or small trees, evergreen, to 3 m tall. Branchlets grayish brown when old, initially densely appressed yellow tomentose, subglabrous when old, with scattered lenticels; buds ellipsoid, yellow tomentose, apex acute. Petiole 3–12 mm, densely yellow tomentose; leaf blade lorate-oblong or narrowly lanceolate, 4–9 × 1–2 cm, leathery, veins 10–20 pairs, raised abaxially and impressed adaxially, abaxially densely yellow tomentose, adaxially lustrous, glabrous when old, base broadly cuneate, margin revolute when dry, with sparse, sharp or spiny teeth, apex obtuse and mucronate, or acute and spiny pointed. Compound corymbs terminal, 4–7 cm in diam., numerous flowered, glomerate; rachis and pedicels yellow tomentose, glabrate in fruit; bracts caducous, linear. Pedicel 2–5 mm. Flowers 3–5 mm. Hypanthium cupular, ca. 2 mm, abaxially tomentose. Sepals ovate, 1–1.5 cm, apex obtuse. Petals white, orbicular, ca. 3 mm in diam., glabrous. Stamens 20, much shorter than petals; styles 2, free, long tomentose basally. Fruit red, ovoid, 4–6 × 3–5 mm; sepals erect, sparsely pubescent; seeds 2–4. Fl. Apr–May, fr. Aug–Sep.

• Forests on dry slopes, fields, mountain valleys; 2100–2700 m. Sichuan, Yunnan.

19. *Photinia prionophylla* (Franchet) C. K. Schneider, Repert. Spec. Nov. Regni Veg. 3: 153. 1906.

刺叶石楠 ci ye shi nan

Shrubs or small trees, evergreen, 1–3 m tall, tomentose throughout or glabrescent. Branchlets brownish to reddish brown when young, grayish brown to grayish black when old, terete, initially short tomentose, glabrous when old; buds ovoid, apex acute; scales brownish, shortly gray tomentose. Petiole 6–15 mm, stout, gray tomentose; stipules subulate or acicular-linear, sparsely tomentose, margin with red glands; leaf blade obovate or elliptic-obovate, 4.5–7 × 4–5 cm, leathery, veins 10–14 pairs, midvein raised abaxially and impressed adaxially, abaxially densely gray tomentose, adaxially initially sparsely tomentose, glabrescent, base narrowly cuneate, margin spiny-serrate, apex obtuse or acute to acuminate. Compound corymbs terminal, 4–8 × 6–10 cm, many flowered; rachis and pedicels densely tomentose; bracts subulate, 2–2.5 mm. Pedicel 2–4 mm. Flowers 7–9 mm in diam. Hypanthium cupular, 2–3 mm, abaxially densely tomentose. Sepals triangular, 1–2 mm, mar-

gin with black glands, apex acute or obtuse. Petals white, sub-orbicular, 3–4 mm in diam., adaxially tomentose. Stamens 20, slightly shorter than or nearly as long as petals. Ovary densely long tomentose; styles 2, connate toward base, somewhat not exceeding stamens. Fruit red, ovoid or obovoid, 6–8 mm in diam., initially tomentose, glabrescent. Fl. May, fr. Sep–Nov.

• Sunny rocky slopes, near water courses, thickets, roadsides, mixed forests; 1800–3000 m. Yunnan.

1a. Plant tomentose throughout 19a. var. *prionophylla*

1b. Plant glabrous when mature 19b. var. *nudifolia*

19a. Photinia prionophylla var. **prionophylla**

刺叶石楠(原变种) ci ye shi nan (yuan bian zhong)

Eriobotrya prionophylla Franchet, Pl. Delavay. 225. 1890.

Plants tomentose throughout.

• Sunny rocky slopes, near water courses, thickets by roadsides; 2500–3000 m. NW Yunnan.

19b. Photinia prionophylla var. **nudifolia** Handel-Mazzetti, Symb. Sin. 7: 480. 1933.

无毛刺叶石楠 wu mao ci ye shi nan

Plants glabrous when mature.

• Mixed forests, roadsides; ca. 1800 m. Yunnan.

20. Photinia berberidifolia Rehder & E. H. Wilson in Sargent, Pl. Wilson. 1: 191. 1912.

小檗叶石楠 xiao bo ye shi nan

Shrubs evergreen, to 60 cm tall. Branchlets purplish brown when old, densely appressed villous when young, glabrous when old. Petiole 2.5–6 mm, initially villous, glabrate; stipules linear-lanceolate, nearly as long as petiole, with 2–4 teeth per side; leaf blade obovate or oblong-obovate, 2–5 × 1–2 cm, leathery, midvein prominent, raised abaxially and impressed adaxially, veins 6–10 pairs, abaxially appressed villous, later subglabrous, adaxially lucid, glabrous, base cuneate, margin somewhat incurved, spiny-serrate, apex acute or obtuse. Compound corymbs terminal, 2.5–3 cm; rachis angulate, villous; bracts persistent, linear-lanceolate, subglabrous, with few teeth. Pedicel 2–5 mm, villous. Flowers 9–10 mm in diam. Hypanthium cupular, ca. 3 mm in diam., abaxially sparsely villous. Sepals broadly ovate, apex obtuse. Petals white, suborbicular, 3.5–4 mm in diam., apex usually emarginate. Stamens 20, ca. 1/2 length of petals. Ovary 2-loculed, densely pilose apically; styles 2, connate to middle, villous, not exceeding stamens. Fruit not seen. Fl. May, fr. Aug–Oct.

• Mountain valleys; 2200–2400 m. W Sichuan.

21. Photinia prunifolia (Hooker & Arnott) Lindley, Bot. Reg., n.s., 10: sub t. 1956. 1837.

桃叶石楠 tao ye shi nan

Trees evergreen, 10–20 m tall. Branchlets dark purplish brown to grayish black, glabrous, with yellowish brown sub-orbicular lenticels; buds ovoid, 2.5–4 mm, apex shortly acuminate or acute; scales several, dark brown, puberulous when

young, glabrous when old. Petiole 1–2.5(–3) cm, glabrous, with many glands, sometimes with teeth; leaf blade oblong or oblong-lanceolate, 7–13 × 3–5 cm, leathery, veins 13–15 pairs, both surfaces glabrous, rarely slightly pilose when young, soon glabrescent, abaxially with black glands, adaxially lustrous, base rounded to cuneate, margin densely minutely sharply serrate or doubly serrate, apex acuminate or acute. Compound corymbs terminal, 8–11 × 12–16 cm, compact, many flowered; rachis and pedicels slightly villous; bracts caducous, lanceolate or linear, 2–4 mm, somewhat villous, later glabrous. Pedicel 4–8 mm. Flowers 7–8 mm in diam. Hypanthium cupular, 2–2.5 mm, abaxially glabrous or initially villous, glabrescent. Sepals triangular, 1–2 mm, apex acuminate or acute. Petals white, obovate, 3–4.5 mm, base tomentose, apex obtuse. Stamens 20, slightly shorter than or nearly as long as petals. Ovary pubescent apically; styles 2(or 3), connate basally, somewhat not exceeding stamens. Fruit red, ellipsoid, 7–11 × 4–7 mm, glabrous, with 2(or 3) seeds. Fl. Mar–Apr, fr. Oct–Nov.

Hills, slopes, stream sides, forests, bamboo forests by roadsides; 200–1700 m. Fujian, Guangdong, Guangxi, Guizhou, Hunan, Jiangxi, Yunnan, Zhejiang [Indonesia, Japan, Malaysia, Vietnam].

- 1a. Leaf margin minutely sharply serrate, apex acuminate, blade oblong or oblong-lanceolate, base broadly cuneate to rounded; hypanthium villous 21a. var. *prunifolia*
- 1b. Leaf margin prominently doubly serrate, apex acute, blade oblong-lanceolate, base cuneate; hypanthium glabrous 21b. var. *denticulata*

21a. Photinia prunifolia var. **prunifolia**

桃叶石楠(原变种) tao ye shi nan (yuan bian zhong)

Photinia serrulata Lindley var. *prunifolia* Hooker & Arnott, Bot. Beechey Voy. 185. 1833; *P. consimilis* Handel-Mazzetti; *P. melanostigma* Hance.

Leaf blade oblong or oblong-lanceolate, base broadly cuneate to rounded, margin minutely sharply serrate, apex acuminate. Hypanthium villous.

Hills, grassy slopes, stream sides, forests; 200–1700 m. Fujian, Guangdong, Guangxi, Guizhou, Hunan, Jiangxi, Yunnan, Zhejiang [Indonesia, Japan, Malaysia, Vietnam].

21b. Photinia prunifolia var. **denticulata** T. T. Yu, Acta Phytotax. Sin. 8: 228. 1963.

重齿桃叶石楠 chong chi tao ye shi nan

Leaf blade oblong-lanceolate, base cuneate, margin prominently doubly serrate, apex acute. Hypanthium glabrous.

• Slopes, bamboo forests by roadsides. Fujian, Guangxi, Zhejiang.

22. Photinia raupingensis K. C. Kuan, Acta Phytotax. Sin. 8: 228. 1963.

饶平石楠 rao ping shi nan

Trees evergreen, 4–5 m tall. Branchlets densely villous, gradually glabrescent, purplish black and glabrous when old,

lenticels smaller. Petiole 0.8–1.5 cm, usually glabrous, without glands and teeth; leaf blade oblong, obovate, or oblong-elliptic, 4–8 × 2–3 cm, leathery, midvein initially sparsely villous, later glabrous, prominently raised abaxially, impressed adaxially, lateral veins 12–17 pairs, abaxially with black glands, adaxially glabrous, base cuneate, margin minutely serrate, entire near base, apex acute or obtuse. Compound corymbs terminal, 3–7 cm in diam., dense, numerous flowered; rachis and pedicels densely gray tomentose; bracts subulate or linear, 3–4 mm, gray tomentose. Flowers 7–8 mm in diam. Hypanthium cupular, 1–2 mm, abaxially densely gray tomentose. Sepals triangular, 1–1.5 mm, apex acute. Petals white, obovate, 2–3 mm, basally tomentose, apex obtuse. Stamens 20, shorter than petals. Ovary 2-loculed, apex pilose; styles 2, connate basally. Fruit red, ovoid, 5–6 × 3–4 mm; seeds brownish, ovoid, ca. 2 mm. Fl. May–Jun, fr. Oct–Nov.

• Mixed forests on slopes, mountain valleys, rocky areas; 500–1000 m. Guangdong, Guangxi.

23. *Photinia beauverdiana* C. K. Schneider, Bull. Herb. Boissier, sér. 2, 6: 319. 1906.

中华石楠 zhong hua shi nan

Shrubs or small trees, deciduous, 3–10 m tall. Branchlets purplish brown to blackish brown, terete, usually glabrous, with scattered gray lenticels; buds ovoid, puberulous, apex acute; scales several, dark brown. Petiole 5–10 mm, puberulous; leaf blade oblong, ovate, or elliptic to obovate, (3–)5–13 × 2–5 cm, papery, veins (6–)9–14 pairs, abaxially pilose along veins, adaxially lustrous, glabrous, base cuneate to rounded, margin serrate, apex acute or shortly acuminate to caudate. Compound corymbs terminal, 4–7 × 5–10 cm, many flowered; rachis and pedicels glabrous, with numerous oblong lenticels; bracts brown, linear, 3–5 mm, glabrous. Pedicel 0.7–1.5 cm, to 2 cm in fruit. Flowers 5–7 mm in diam. Hypanthium cupular, 1–1.5 mm, abaxially usually glabrous. Sepals broadly triangular or triangular-ovate, 1–2 mm, apex acute or ± obtuse. Petals white, ovate or obovate, 2–4 × 2.5–3.5 mm, glabrous, apex obtuse. Stamens 20, slightly shorter than or nearly as long as petals. Styles (2 or)3, somewhat not exceeding stamens, basally connate. Fruit purplish red, ovoid or subglobose, 7–8 × 5–6 mm, glabrous, slightly lenticellate. Fl. Apr–May, fr. Jul–Aug.

Slopes, rocks, mountain sides, valleys, river sides, thickets, forests; 200–3000 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Shaanxi, Sichuan, Taiwan, Yunnan, Zhejiang [Bhutan, N Vietnam].

- 1a. Leaf blade 5–13 cm, apex acute to shortly acuminate, lateral veins 9–14 pairs 23a. var. *beauverdiana*
 1b. Leaf blade 3–6 cm, apex shortly acuminate to caudate, lateral veins 6–8 pairs 23b. var. *brevifolia*

23a. *Photinia beauverdiana* var. *beauverdiana*

中华石楠(原变种) zhong hua shi nan (yuan bian zhong)

Photinia beauverdiana var. *notabilis* (C. K. Schneider) Rehder & E. H. Wilson; *P. cavaleriei* H. Léveillé; *P. kudoi* Ma-

samune; *P. notabilis* C. K. Schneider; *Pourthiaea beauverdiana* (C. K. Schneider) Hatusima; *P. beauverdiana* var. *notabilis* (C. K. Schneider) Hatusima.

Leaf blade oblong, elliptic, oblong-elliptic, or obovate-oblong, 5–13 cm, lateral veins 9–14 pairs, apex acute to shortly acuminate.

Slopes, mountain sides, valleys, thickets, forests; 200–3000 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Shaanxi, Sichuan, Taiwan, Yunnan, Zhejiang [Bhutan, N Vietnam].

23b. *Photinia beauverdiana* var. *brevifolia* Cardot, Notul. Syst. (Paris) 3: 378. 1918.

短叶中华石楠 duan ye zhong hua shi nan

Pourthiaea beauverdiana var. *brevifolia* (Cardot) Iketani & H. Ohashi.

Leaf blade ovate or elliptic to obovate, 3–6 cm, lateral veins 6–8 pairs, apex shortly acuminate to caudate.

• Slopes, rocks in valleys, river sides, forests; 400–1400 m. ?Guizhou, Hubei, Hunan, Jiangsu, Shaanxi, Sichuan, Zhejiang.

24. *Photinia lucida* (Decaisne) C. K. Schneider, Ill. Handb. Laubholz. 1: 710. 1906.

台湾石楠 tai wan shi nan

Pourthiaea lucida Decaisne, Nouv. Arch. Mus. Hist. Nat. 10: 148. 1874; *Photinia taiwanensis* Hayata; *P. villosa* (Thunberg) Candolle var. *formosana* Hance; *Pourthiaea formosana* (Hance) Koidzumi.

Trees deciduous, small, 4–5(–6) m tall. Branchlets reddish brown when young, grayish brown or purplish brown when old, terete, gray pubescent when young, glabrous when old, with oblong lenticels; buds ovoid, 2–4 mm, puberulous, apex acute or ± obtuse; scales several, dark brown. Petiole 3–7 mm, glabrous; leaf blade obovate-oblong or obovate-lanceolate, 5–9 × 2–3 cm, papery, veins 6–8 pairs, both surfaces glabrous, base gradually attenuate, margin sparsely minutely serrate, entire toward base, apex caudate. Compound corymbs terminal, 3–6 × 4–6 cm, many flowered; rachis and pedicels glabrous or slightly pubescent when young, glabrate. Pedicel 5–10 mm, to 2.5 cm in fruit, with a pair of subulate bracts 2–3 mm at base. Flowers 7–10 mm. Hypanthium cupular, 2–2.5 mm, abaxially glabrous. Sepals triangular, 1–1.5 mm, apex acute. Petals white, orbicular or broadly obovate, 3–3.5 mm in diam., base shortly clawed and pilose, apex obtuse, sometimes emarginate. Stamens 15–20, unequal in length. Styles 2 or 3, connate, only free apically, pilose basally, not exceeding stamens. Fruit dark red, obovoid or obovoid-ellipsoid, 5–8 × 3–6 mm, glabrous, with dense, sub-orbicular lenticels. Fl. Apr–May, fr. Aug–Sep.

• Broad-leaved forests, thickets; 300–400 m. Taiwan.

25. *Photinia callosa* Chun ex T. T. Yu & K. C. Kuan, Acta Phytotax. Sin. 8: 229. 1963.

厚齿石楠 hou chi shi nan

Pourthiaea callosa (Chun ex T. T. Yu & K. C. Kuan) Ike-

tani & H. Ohashi.

Shrubs or trees, deciduous, to 12 m tall. Branchlets grayish brown to blackish brown, glabrous, with few yellow lenticels; buds ovoid, 2–3 mm; scales brown, glabrous. Petiole 0.5–1.5 cm, glabrous; leaf blade lanceolate or oblong-lanceolate, 5.5–13 × 1.5–3.5 cm, papery, veins 12–16 pairs, midvein prominently raised abaxially and impressed adaxially, both surfaces glabrous, base cuneate, margin slightly revolute, shallowly sharply serrate, sometimes subentire, apex caudate or acuminate. Compound corymbs terminal, 4–6 cm in diam., many flowered; rachis and pedicels glabrous, lenticellate. Pedicel 3–7 mm. Flowers 6–9 mm in diam. Hypanthium campanulate, 1–2 mm, abaxially glabrous. Sepals ovate, ca. 1/2 as long as hypanthium, apex obtuse. Petals white, obovate-oblong, 2–3 mm, glabrous, base shortly clawed, apex obtuse. Stamens 20, slightly shorter than petals. Styles 2 or 3, mostly connate, glabrous. Fruit ovoid-globose, 4–6 × 3–4 mm, glabrous; fruiting pedicels 5–9 mm, with distinct lenticels; seeds black, ovoid, ca. 4 mm. Fl. Apr–May, fr. Aug–Sep.

• Sparse forests in mountain valleys, slopes; 400–800 m. Guangdong, Guangxi.

26. *Photinia fokienensis* (Finet & Franchet) Franchet ex Cardot, Bull. Mus. Natl. Hist. Nat. 26: 570. 1920.

福建石楠 fu jian shi nan

Photinia glabra Hemsley var. *fokienensis* Finet & Franchet, Bull. Soc. Bot. France 46: 207. 1899; *Pourthiaea fokienensis* (Finet & Franchet) Iketani & H. Ohashi.

Shrubs or small trees, deciduous, 3–5 m tall. Branchlets brownish to brownish black, slender, with scattered lenticels; buds ovoid, 3–5 mm, glabrous. Petiole 5–10 mm, glabrous; leaf blade lanceolate or oblong-lanceolate, 7–11 × 1.5–4 cm, thinly papery, veins 7–9 pairs, midvein raised abaxially and impressed adaxially, both surfaces glabrous or puberulous along midvein abaxially, base cuneate, margin densely minutely sharply serrate, apex long acuminate. Compound corymbs terminal, 3–7 × 3–5 cm, loose, few flowered; rachis and pedicels glabrous, lenticellate. Pedicel 0.8–1.2 cm, slender. Flowers 1–1.2 cm in diam. Hypanthium cupular, 2–3 mm, abaxially glabrous. Sepals triangular-ovate, 1–2 mm and nearly as broad, apex acute. Petals white, broadly obovate or suborbicular, 4–6 mm in diam., base clawed, apex emarginate. Stamens ca. 20, shorter than petals. Ovary pilose apically; styles 3, connate nearly to apex, equaling or lower than stamens. Fruit reddish brown, obovoid or subglobose, 6–8 mm in diam., glabrous. Fl. Apr–May, fr. July–Sep.

• Mountain valley forests; 500–700 m. Fujian, Zhejiang.

27. *Photinia bergerae* C. K. Schneider, Ill. Handb. Laubholz. 1: 709. 1906.

湖北石楠 hu bei shi nan

Pourthiaea bergerae (C. K. Schneider) Iketani & H. Ohashi.

Shrubs deciduous, to 1.5 m tall. Branchlets reddish brown or purplish brown, lucid, glabrous, with sparse lenticels; buds ovoid; scales several, brown, glabrous. Petiole 5–7 mm, gla-

brous; leaf blade broadly lanceolate, 4–6 × 1–2 cm, papery, lateral veins 4–7 pairs, both surfaces glabrous, adaxially lustrous, base cuneate, margin sharply serrate, apex acute. Compound corymbs terminal, 3–4 × 4–6 cm; rachis and pedicels sparsely lenticellate, glabrous. Pedicel 6–8(–10) mm. Flowers ca. 1 cm in diam. Hypanthium campanulate, 3–4 mm in diam., glabrous. Sepals broadly ovate, slightly shorter than hypanthium, ciliate, apex obtuse. Petals broadly elliptic, adaxially slightly pilose, base shortly clawed. Stamens 20–25, slightly longer than petals. Ovary villous apically; styles 3, mostly connate, only free apically. Fruit purplish red, obovoid, 7–8 × 6–7 mm. Fl. Apr–May, fr. Sep–Oct.

• Slopes; ca. 1000 m. W Hubei.

28. *Photinia obliqua* Stapf, Bot. Mag. 149: t. 9008. 1924.

斜脉石楠 xie mai shi nan

Pourthiaea obliqua (Stapf) Iketani & H. Ohashi.

Shrubs deciduous. Branchlets blackish purple, glabrous, sparsely lenticellate; buds narrowly ovoid, 3–5 mm; scales several, blackish purple. Petiole 7–10 mm, slightly pubescent or glabrous; leaf blade oblong or oblanceolate, 5–9 × 2.5–3 cm, veins very oblique, 5–7 pairs, prominent abaxially, glabrous except abaxially villous along midvein, base very obliquely cuneate, margin minutely sharply serrate, apex acute or shortly acuminate. Inflorescences and flowers not seen. Infructescences compound corymbs, 6–8 × 8–10 cm; rachis and pedicels glabrous, lenticellate. Fruit ovoid to ellipsoid, 5–6 × 3–4 mm; fruiting pedicels 1–1.5 cm.

• E Fujian (Fuzhou Shi).

29. *Photinia impressivena* Hayata, Icon. Pl. Formosan. 5: 67. 1915.

陷脉石楠 xian mai shi nan

Shrubs or small trees, deciduous, 2–6 m tall. Branchlets purplish brown, terete, villous when young, glabrescent, with suborbicular lenticels; buds reddish brown, ovoid, apex acute. Petiole reddish, very short, 1–2(–8) mm, glabrous; leaf blade oblong-obovate or oblong-oblancoate, 5–10 × 1.5–3 cm, thinly leathery, veins 6–9 pairs, raised abaxially and deeply impressed adaxially, anastomosing at leaf margin, both surfaces glabrous, adaxially shiny, base cuneate or attenuate into petioles, margin sparsely minutely serrate, apex acuminate. Compound corymbs terminal, 3–4(–10) mm in diam., few to many flowered; rachis and pedicels glabrous or tomentose, lenticellate. Pedicel (2–)4–10 mm. Flowers 6–7 mm in diam. Hypanthium campanulate, 4–5 mm in diam., abaxially glabrous. Sepals triangular-ovate, slightly shorter than hypanthium, apex acute. Petals white, ovate, 3–4 mm, glabrous, apex obtuse. Stamens 20, longer than petals, glabrous. Styles 2, connate nearly to middle. Fruit red, ovoid-ellipsoid, 8–10 × 6–8 mm, glabrous, few lenticellate; sepals urceolate; fruiting pedicels 1–1.8 cm, with dense lenticels. Fl. Apr–May, fr. Sep–Oct.

Forests, thickets, mountain valleys, stream sides; 400–3000 m. Fujian, Guangdong, Guangxi, Hainan [Vietnam].

1a. Petiole 1–2 mm; compound corymb

- 3–4 cm in diam., few flowered; rachis, pedicels, and hypanthium abaxially glabrous; pedicel 4–10 mm 29a. var. *impressivena*
 1b. Petiole 5–8 mm; compound corymb 5–10 cm in diam., many flowered; rachis, pedicels, and hypanthium abaxially white tomentose; pedicel 2–3 mm 29b. var. *urceolocarpa*

29a. Photinia impressivena var. *impressivena*

陷脉石楠(原变种) xian mai shi nan (yuan bian zhong)

Photinia euphlebica Merrill & Chun; *Pourthiaea impressivena* (Hayata) Iketani & H. Ohashi; *Stranvaesia impressivena* (Hayata) Masamune.

Petiole 1–2 mm. Compound corymbs 3–4 mm in diam., few flowered; rachis, pedicels, and hypanthium abaxially glabrous. Pedicel 4–10 mm.

• Mixed forests, mountain valleys, stream sides; 400–3000 m. Fujian, Guangdong, Guangxi, Hainan.

29b. Photinia impressivena var. *urceolocarpa* (J. E. Vidal) J. E. Vidal, Fl. Cambodge, Laos & Vietnam 6: 51. 1968.

毛序陷脉石楠 mao xu xian mai shi nan

Photinia lancilimba J. E. Vidal var. *urceolocarpa* J. E. Vidal, Notul. Syst. 13: 299. 1948; *Pourthiaea impressivena* var. *urceolocarpa* (J. E. Vidal) Iketani & H. Ohashi.

Petiole 5–8 mm. Compound corymbs 5–10 cm in diam., many flowered; rachis, pedicels, and hypanthium abaxially white tomentose. Pedicel 2–3 mm.

Forests, thickets; ca. 500 m. Guangxi [Vietnam].

30. Photinia tsaii Rehder, J. Arnold Arbor. 19: 274. 1938.

福贡石楠 fu gong shi nan

Pourthiaea tsaii (Rehder) Iketani & H. Ohashi.

Shrubs deciduous, 0.5–1.5 m tall, or trees to 7 m tall. Branchlets purplish brown when old, initially densely gray floccose-tomentose, subglabrous when old, lenticellate. Petiole 3–10 mm, gray floccose-tomentose when young, gradually glabrescent; leaf blade lanceolate or oblong, 4–8.5 × 1–2 cm, papery, veins 8–11 pairs, midvein raised abaxially and impressed adaxially, abaxially initially floccose-tomentose, glabrescent, adaxially slightly rugulose, glabrous, base gradually attenuate, margin densely minutely serrate, apex acuminate. Inflorescences and flowers not seen. Infructescences terminal, 4–5 cm in diam.; rachis and pedicels glabrous, with dense, prominent lenticels; fruiting pedicels 2–5 mm. Fruit red, ovoid, 8–10 × 6–8 mm, glabrous; sepals persistent, erect, triangular, slightly pilose; ovary 2- or 3-loculed; seeds 2–6, yellowish brown, 4–4.5 mm. Fr. Sep–Oct.

• Slopes, forest margins; 1500–2000 m. NW Yunnan.

31. Photinia blinii (H. Léveillé) Rehder, J. Arnold Arbor. 17: 335. 1936.

短叶石楠 duan ye shi nan

Cotoneaster blinii H. Léveillé, Cat. Pl. Yunnan 229. 1917; *Pourthiaea blinii* (H. Léveillé) Iketani & H. Ohashi.

Shrubs deciduous. Branchlets purplish red when young, purplish brown when old, densely tomentose when young, glabrous when old, with scattered small lenticels. Petiole very short or nearly absent, densely yellow tomentose; leaf blade lanceolate, 3–4 × 0.8–1 cm, veins inconspicuous, midvein somewhat raised abaxially and slightly impressed adaxially, abaxially densely yellow tomentose, adaxially initially tomentose, gradually glabrescent, base cuneate and gradually attenuate, margin entire or rarely inconspicuously crenulate, apex ± obtuse or ± acute. Inflorescences and flowers not seen. Infructescences terminal, corymbose, 1.8–2 cm, compact; rachis and pedicels purplish brown, short, glabrous, with distinct lenticels. Stamens ca. 20. Styles 3. Fruit ovoid-globose, 6–7 mm, ovary 3-loculed; sepals incurved, triangular, 1–1.5 mm. Fl. Aug–Sep, fr. Oct.

• River beds; ca. 600 m. Guizhou.

32. Photinia benthamiana Hance, Ann. Sci. Nat., Bot., sér. 5, 5: 213. 1866.

闽粤石楠 min yue shi nan

Shrubs or small trees, deciduous, 3–10 m tall. Branchlets dark reddish brown or purplish brown when young, grayish black when old, initially densely gray villous, glabrous when old, with elliptic lenticels; buds narrowly ovoid, 3–5 × 2–3 mm, apex acute; scales several, brown, villous. Petiole 3–10 mm, gray villous; leaf blade obovate-oblong or oblong-lanceolate to narrowly lanceolate, 5–11 × 2–5 cm, papery, veins 5–8 pairs, both surfaces sparsely gray villous when young, later glabrous or only with few long hairs along veins abaxially, base attenuate or broadly cuneate, margin sparsely serrate, apex acute or obtuse. Compound corymbs terminal, 4–6(–7) × 5–7 cm, numerous flowered; peduncles and pedicels gray villous; bracts subulate, 2–4 mm, villous. Pedicel 3–5 mm. Flowers 7–8 mm in diam. Hypanthium cupular, 3–4 mm, abaxially villous. Sepals triangular, 1–1.5 mm. Petals white, obovate or orbicular, 3–4 mm, adaxially glabrous or puberulous, apex obtuse or emarginate. Stamens 20, nearly as long as or slightly shorter than petals. Styles 2 or 3, somewhat not exceeding stamens, glabrous, connate basally. Fruit ovoid or subglobose, 4–6 × 3–5 mm, sparsely yellow pubescent. Fl. Mar–May, fr. Jul–Aug.

Slopes, mountain valleys, forests, thickets, roadsides, river banks; 200–2500 m. Fujian, Guangdong, Guangxi, Hainan, Hubei, Hunan, Yunnan, Zhejiang [Laos, Thailand, Vietnam].

- 1a. Leaf blade obovate-oblong or oblong-lanceolate, base attenuate 32a. var. *benthamiana*
 1b. Leaf blade oblong-obovate or narrowly lanceolate to ovate-lanceolate, base broadly cuneate or attenuate.
 2a. Leaf blade oblong-obovate, 3–4 cm wide, base broadly cuneate 32b. var. *obovata*
 2b. Leaf blade narrowly lanceolate to ovate-lanceolate, 1–2.5 cm wide, base attenuate 32c. var. *salicifolia*

32a. Photinia benthamiana var. **benthamiana**

闽粤石楠(原变种) min yue shi nan (yuan bian zhong)

Pourthiaea benthamiana (Hance) Nakai; *Stranvaesia benthamiana* (Hance) Merrill.

Leaf blade obovate-oblong or oblong-lanceolate, 2–5 cm wide, base attenuate.

Slopes, mountain valleys, forests, thickets, roadsides; 200–2500 m. Fujian, Guangdong, Hubei, Hunan, Yunnan, Zhejiang [Vietnam].

32b. Photinia benthamiana var. **obovata** H. L. Li, J. Arnold Arbor. 25: 208. 1944.

倒卵叶闽粤石楠 dao luan ye min yue shi nan

Pourthiaea benthamiana var. *obovata* (H. L. Li) Iketani & H. Ohashi.

Leaf blade oblong-obovate, 3–4 cm wide, base broadly cuneate.

- Dense forests on slopes; ca. 1000 m. Hainan.

32c. Photinia benthamiana var. **salicifolia** Cardot, Notul. Syst. (Paris) 3: 376. 1918.

柳叶闽粤石楠 liu ye min yue shi nan

Pourthiaea benthamiana var. *salicifolia* (Cardot) Iketani & H. Ohashi.

Leaf blade narrowly lanceolate to ovate-lanceolate, 1–2.5 cm wide, base attenuate.

Mountain forests, thickets, river banks; 900–1700 m. Guangxi, Hainan, Yunnan [Laos, Thailand, Vietnam].

33. Photinia pilosicalyx T. T. Yu, Acta Phytotax. Sin. 8: 231. 1963.

毛果石楠 mao guo shi nan

Pourthiaea pilosicalyx (T. T. Yu) Iketani & H. Ohashi.

Shrubs deciduous, ca. 4 m tall. Branchlets purplish brown, glabrous, lenticellate; buds dark brown, ovoid, sparsely pilose, apex acute. Petiole 5–7 mm, glabrous; leaf blade yellowish brown abaxially, dark green adaxially, lanceolate or oblong-lanceolate, 5–11 × 1.5–4.5 cm, membranous, midvein prominent abaxially and impressed adaxially, veins 9 or 10 pairs, adaxially somewhat lustrous, both surfaces glabrous, base cuneate, margin sharply serrate, apex acuminate. Compound corymbs terminal, 4–8 cm in diam., many flowered; rachis and pedicels yellow pilose; hypanthium yellow pilose abaxially. Flowers not seen. Young fruit ovoid, 5–6 × 3–4 mm, pilose, with suberect incurved sepals, and 2 free styles.

- Mixed forests, forests on foothills; 1000–1200 m. SW Guizhou (Anlong Xian, Xingyi Xian).

34. Photinia villosa (Thunberg) Candolle, Prodr. 2: 631. 1825.

鸡丁子 ji ding zi

Shrubs or trees, deciduous, 2–5 m tall. Branchlets dark brown to reddish brown when young, grayish brown when old, initially white villous, glabrous when old, with scattered oblong

or elliptic lenticels; buds ovoid, 2–4 mm, apex acute to shortly acuminate; scales brown, glabrous. Petiole 2–6 mm, villous; leaf blade obovate, oblong-obovate, or elliptic, 3–8 × 2–4 cm, herbaceous, veins 5–7 pairs, both surfaces initially white villous, glabrescent or subglabrous adaxially and villous only along veins abaxially, base cuneate, margin densely sharply serrate apically, apex caudate. Inflorescences terminal, corymbose, rarely umbellate, 2–5 × 3–6 cm, (5–)10–20- or more flowered; rachis and pedicels villous, with dense, oblong or elliptic small lenticels in fruit; bracts caducous, subulate or linear, 2–4 mm. Pedicel 1.5–2.5 cm. Flowers 7–12 mm. Hypanthium cupular, 2–3 mm, abaxially white villous or glabrous. Sepals triangular-ovate, 2–3 mm, apex obtuse. Petals white, suborbicular, 4–5 mm in diam., adaxially pilose near base, shortly clawed. Stamens 20, shorter than petals. Ovary densely white villous apically; styles 3, free from middle, glabrous. Fruit red or yellowish red, ellipsoid or ovoid, 8–10(–16) × 6–8(–11) mm, slightly pilose; sepals erect. Fl. Apr–May, fr. Aug–Sep.

Slopes, forests, thickets, stream sides, roadsides, waste places; 100–1600 m. Anhui, Fujian, Gansu, Guangdong, Guangxi, Guizhou, Hubei, Hunan, Jiangsu, Jiangxi, Shaanxi, Shandong, Sichuan, Yunnan, Zhejiang [Japan, Korea].

- 1a. Petiole, leaf blade, pedicel, and hypanthium white villous; inflorescence compound-corymbose, 10–20-flowered or more; fruit 6–8 mm in diam. 34a. var. *villosa*
- 1b. Petiole, leaf blade, and pedicel sparsely white villous; inflorescence simple corymbose, rarely umbellate, 5–8(–15)-flowered; fruit 9–11 mm in diam.
 - 2a. Hypanthium sparsely villous; leaf blade elliptic or oblong-elliptic, rarely oblong-obovate 34b. var. *sinica*
 - 2b. Hypanthium glabrous; leaf blade usually obovate or oblong-obovate 34c. var. *glabricalycina*

34a. Photinia villosa var. **villosa**

毛叶石楠(原变种) mao ye shi nan (yuan bian zhong)

Crataegus villosa Thunberg in Murray, Syst. Veg., ed. 14, 465. 1784; *Photinia variabilis* Hemsley, nom. illeg. (included *C. villosa*); *Pourthiaea variabilis* Palibin; *P. villosa* (Thunberg) Decaisne.

Petioles, leaf blade, pedicels, and hypanthium white villous. Leaf blade obovate or oblong-obovate. Compound corymbs 10- to more than 20-flowered. Fruit 8–10 × 6–8 mm.

Slopes, thickets; 800–1200 m. Anhui, Hubei, Jiangsu, Shandong, Zhejiang [Japan, Korea].

34b. Photinia villosa var. **sinica** Rehder & E. H. Wilson in Sargent, Pl. Wilson. 1: 186. 1912.

庐山石楠 lu shan shi nan

Photinia cardotii F. P. Metcalf; *P. parvifolia* (E. Pritzl) C. K. Schneider var. *kankaensis* (Hatusima) T. T. Yu & K. C. Kuan; *P. subumbellata* Rehder & E. H. Wilson var. *villosa*

Cardot; *Pourthiaea kankaoensis* Hatusima; *P. villosa* var. *sinica* (Rehder & E. H. Wilson) Migo.

Petioles, leaf blade, and pedicels sparsely white villous. Leaf blade elliptic or oblong-elliptic, rarely oblong-obovate. Inflorescences usually simple corymbose, 5–8(–15)-flowered. Hypanthium sparsely villous. Fruit 0.8–1.6 × 0.9–1.1 cm.

• Forests, thickets, grassy slopes, stream sides, waste places; 1000–1600 m. Anhui, Fujian, Gansu, Guangdong, Guangxi, Guizhou, Hubei, Hunan, Jiangsu, Jiangxi, Shaanxi, Shandong, Sichuan, Zhejiang.

34c. *Photinia villosa* var. *glabricalycina* L. T. Lu & C. L. Li, Acta Phytotax. Sin. 38: 279. 2000.

光萼石楠 *guang e shi nan*

Petioles, leaf blade, and pedicels sparsely white villous. Leaf blade obovate or oblong-obovate. Inflorescences simple corymbose or umbellate, 5–8-flowered or slightly more. Hypanthium glabrous abaxially. Fruit 0.8–1.4 cm × 9–10 mm.

• Sunny slopes, roadsides, mixed forests, thickets; 100–1100 m. Guangxi, Guizhou, Hunan, Jiangsu, Jiangxi, Zhejiang.

35. *Photinia calleryana* (Decaisne) Cardot, Notul. Syst. (Paris) 3: 377. 1918.

城口石楠 *cheng kou shi nan*

Pourthiaea calleryana Decaisne, Nouv. Arch. Mus. Hist. Nat. 10: 147. 1874; *Cotoneaster esquirolii* H. Léveillé; *Photinia brevipetiolata* Cardot; *P. esquirolii* (H. Léveillé) Rehder; *Stranvaesia calleryana* (Decaisne) Decaisne.

Shrubs or small trees, deciduous. Branchlets brown, pubescent when young, glabrous when old, lenticellate. Petiole 3–10 mm, initially pubescent, glabrescent; leaf blade oblong or oblong-elliptic, 7–10 × 3–5 cm, veins 8–10(–12) pairs, both surfaces flocculose-pubescent when young, glabrescent or only with few soft hairs along veins abaxially, base broadly cuneate, margin sparsely shallowly serrate, apex acute to shortly acuminate. Inflorescences terminal, corymbose, few flowered; rachis and pedicels villous; bracts lanceolate or linear, 3–5 mm, villous. Flowers 0.8–1.2 cm in diam. Hypanthium cupular or campanulate, abaxially villous. Sepals triangular, 1–1.5 mm, apex acute. Petals suborbicular, 4–5 × 3–4 mm, abaxially slightly pilose when young, glabrate, base clawed, apex emarginate. Stamens 20, somewhat shorter than petals; filaments glabrous, base dilated. Ovary densely villous apically; styles 3, connate to above middle. Fruit ovoid, 5–7 × 3–5 mm, glabrous; fruiting pedicels prominently minutely lenticellate. Fl. May–Jun, fr. Jul–Aug.

• Mountain regions; ca. 2000 m. Chongqing, Guizhou, ?E Sichuan, Yunnan.

36. *Photinia schneideriana* Rehder & E. H. Wilson in Sargent, Pl. Wilson 1: 188. 1912.

绒毛石楠 *rong mao shi nan*

Shrubs or small trees, deciduous, to 7 m tall. Branchlets purplish brown when young, grayish brown when old, initially

sparsely villous, subglabrous when old, with prominent brownish fusiform lenticels; buds broadly ovoid, 2–4 mm, apex acute; scales dark brown, glabrous or margin puberulous. Petiole 6–10 mm, initially villous, glabrescent; leaf blade oblong or oblong-elliptic to oblong-lanceolate, 6–11 × 2–5.5 cm, veins 10–15 pairs, slightly raised abaxially, abaxially yellowish gray tomentose, adaxially initially sparsely villous, glabrescent, base broadly cuneate, margin sharply serrate, apex acuminate. Compound corymbs terminal, (3–)5–8 × 5–11 cm, many flowered; rachis and pedicels glabrous or sparsely villous, glabrescent, with brownish lenticels in fruit; bracts linear or lanceolate, 2–4 mm, puberulous. Pedicel 3–8 mm. Hypanthium cupular, 3–4 mm, abaxially sparsely villous, later subglabrous or glabrous. Sepals spreading, suborbicular, 1–1.5 mm, apex abruptly pointed. Petals white, suborbicular, 4–5 mm in diam., glabrous or adaxially villous at base, base shortly clawed, apex obtuse. Stamens 20, nearly as long as petals. Ovary pilose apically; styles 2 or 3, not exceeding stamens, basally connate. Fruit reddish, obovoid or obovoid-ellipsoid, 7–10 × 6–8 mm, glabrous, minutely lenticellate; seeds blackish brown, ovoid, 5–6 mm, apex acute. Fl. Apr–May, fr. Sep–Oct.

• Forests, river valleys, near water courses, fields; 400–1600 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hubei, Hunan, Jiangxi, Sichuan, Taiwan, Zhejiang.

- 1a. Rachis, pedicels, and hypanthium abaxially sparsely villous, glabrescent; petals glabrous 36a. var. *schneideriana*
 1b. Rachis, pedicels, and hypanthium abaxially glabrous; petals adaxially villous near base 36b. var. *parviflora*

36a. *Photinia schneideriana* var. *schneideriana*

绒毛石楠(原变种) *rong mao shi nan* (yuan bian zhong)

Photinia beauverdiana C. K. Schneider var. *lohfauiensis* F. P. Metcalf; *P. dabeishanensis* M. P. Deng & K. Yao; *P. fauriei* Cardot; *P. zhijiangensis* T. C. Ku; *Pourthiaea schneideriana* (Rehder & E. H. Wilson) Iketani & H. Ohashi.

Rachis, pedicels, and hypanthium abaxially sparsely villous, glabrescent; petals glabrous.

• Forests, river valleys, near water courses; 400–1600 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hubei, Hunan, Jiangxi, Sichuan, Taiwan, Zhejiang.

36b. *Photinia schneideriana* var. *parviflora* (Cardot) L. T. Lu & C. L. Li, Acta Phytotax. Sin. 38: 277. 2000.

小花石楠 *xiao hua shi nan*

Photinia parviflora Cardot, Notul. Syst. (Paris) 3: 378. 1918, not L. O. Williams (1972); *Pourthiaea parviflora* (Cardot) Iketani & H. Ohashi.

Rachis, pedicels, and hypanthium abaxially glabrous; petals adaxially villous near base.

• Fields; low elevations. Guizhou.

One of us (Spongberg) prefers to treat this variety as a synonym of the species because of the slight differences.

37. *Photinia arguta* Lindley, Bot. Reg. 23: sub t. 1956. 1837.

锐齿石楠 *rui chi shi nan*

Shrubs or small trees. Branchlets purplish brown when young, brownish gray when old, angulate, initially tomentose, glabrous when old; buds narrowly ovoid or oblong, 3–5 mm, apex acute; scales several, purplish brown. Petiole 4–6 mm, tomentose when young; leaf blade lanceolate, oblong-lanceolate, or oblong-oblancheolate, 4.5–8 × 2–3 cm, veins 8–10 pairs, both surfaces long gray tomentose when young, glabrate or with hairs only along veins when old, base cuneate, margin minutely sharply serrate, apex acuminate. Compound corymbs terminal, 2–5(–8) × 1.5–3 cm, several to many flowered; rachis and pedicels long gray tomentose; bracts linear or linear-lanceolate, 3–4 mm, initially slightly long tomentose, glabrescent. Pedicel 3–6 mm. Hypanthium cupular, 1.5–2 × 2–3 mm, abaxially densely long gray tomentose. Sepals triangular, 1–2.5 × ca. 2 mm, apex ± acute or obtuse. Petals obovate, 3–4 × 2–3 mm, adaxially usually tomentose near base, base shortly clawed, apex obtuse. Stamens 20. Ovary densely long tomentose; styles 3, connate basally. Fruit subglobose, 6–7 mm in diam., glabrous or pubescent.

Thickets, gullies, near water courses; 300–1300 m. Guangxi, Guizhou, S Yunnan [India, Laos, Myanmar, Thailand, Vietnam].

Two varieties occur in China; var. *arguta* occurs in India and has leaf blade lanceolate, compound corymb 2–5 cm, several flowered, and fruit glabrous.

- 1a. Compound corymb 5–8 cm, more numerous flowered; fruit pubescent 37a. var. *hookeri*
 1b. Compound corymb 2–5 cm, relatively less flowered, fruit glabrous 37b. var. *salicifolia*

37a. *Photinia arguta* var. *hookeri* (Decaisne) J. E. Vidal, *Adansonia*, n.s., 5: 229. 1965.

锐齿石楠 *rui chi shi nan*

Pourthiaea hookeri Decaisne, *Nouv. Arch. Mus. Hist. Nat.* 10: 148. 1874; *Photinia hookeri* (Decaisne) Merrill; *P. mollis* J. D. Hooker; *Pourthiaea arguta* (Lindley) Decaisne var. *hookeri* (Decaisne) J. D. Hooker.

Leaf blade lanceolate or oblong-lanceolate. Compound corymbs 5–8 cm, many flowered. Fruit pubescent.

Thickets along river sides; 300–900 m. S Yunnan (Xishuangbanna) [India, Thailand].

37b. *Photinia arguta* var. *salicifolia* (Decaisne) J. E. Vidal, *Adansonia*, n.s., 5: 229. 1965.

柳叶锐齿石楠 *liu ye rui chi shi nan*

Pourthiaea salicifolia Decaisne, *Nouv. Arch. Mus. Hist. Nat.* 10: 148. 1874; *Photinia lancifolia* Rehder & E. H. Wilson; *P. lancilimba* J. E. Vidal; *P. mollis* J. D. Hooker var. *angustifolia* Fischer; *P. salicifolia* (Decaisne) C. K. Schneider; *Pourthiaea arguta* var. *salicifolia* (Decaisne) Iketani & H. Ohashi.

Leaf blade narrowly lanceolate, oblong-lanceolate, or oblong-oblancheolate. Compound corymbs 2–5 cm. Fruit glabrous.

Mountain thickets, gullies, near water courses; 1100–1300 m. Guangxi, Guizhou, S Yunnan [India, Laos, Myanmar, Thailand, Viet-

nam].

38. *Photinia podocarpifolia* T. T. Yu, *Acta Phytotax. Sin.* 8: 230. 1963.

罗汉松叶石楠 *luo han song ye shi nan*

Pourthiaea podocarpifolia (T. T. Yu) Iketani & H. Ohashi.

Shrubs 1–2 m tall. Branchlets purplish brown when old, terete, gray tomentose when young, glabrous when old, with small orbicular lenticels. Petiole 2–5 mm, initially densely gray tomentose, glabrescent; leaf blade greenish abaxially, dark green adaxially, lanceolate or lorate-lanceolate, 4–6 × 0.8–1.5 cm, leathery, veins 7–10 pairs, abaxially densely gray tomentose when young, subglabrous when old, adaxially glabrous, base attenuate into short petiole, margin sparsely serrate or subentire, apex acuminate, rarely acute. Compound corymbs terminal, 4–6 × 3–5 cm, densely 10–20-flowered; rachis and pedicels densely gray tomentose, glabrous in fruit, with brown lenticels; bracts caducous, linear, membranous. Pedicel 1–3 mm. Flowers 5–8 mm in diam. Hypanthium campanulate, 3.5–4.5 mm in diam., abaxially densely gray tomentose. Sepals ovate, 1–1.5 mm, apex acute. Petals white, obovate, 5–6 × 3–4 mm, glabrous, base very shortly clawed, apex obtuse or emarginate. Stamens 20, much shorter than petals. Ovary 3-loculed, apex densely pilose; styles 3, connate at base, 4–5 mm; stigma subcapitate. Fruit ovoid-globose or subglobose, 5–7 × 5–6 mm, glabrous, with puberulous sepals; seeds 4–5 mm. Fl. Apr–May, fr. Sep–Oct.

• Thickets on sunny slopes, forests by river sides; 200–1000 m. Guangxi, Guizhou.

39. *Photinia parvifolia* (E. Pritzl) C. K. Schneider, *Ill. Handb. Laubholz.* 1: 711. 1906.

小叶石楠 *xiao ye shi nan*

Shrubs deciduous, 1–3 m tall. Branchlets reddish brown, blackish brown when old, slender, glabrous, with scattered oblong or elliptic yellow lenticels; buds ovoid, 3–4 mm, apex acute. Petiole 1–2 mm, glabrous; leaf blade ovate, elliptic, or elliptic-ovate to rhombic-ovate, 4–8 × 1–3.5 cm, veins 6–9 pairs, somewhat raised abaxially, both surfaces glabrous or slightly puberulous when young, base cuneate to subrounded, margin sharply serrate, apex acuminate or caudate. Inflorescences umbellate or simple corymbose, terminating lateral branchlets, several to slightly more than 10-flowered, nearly without peduncle; bracts caducous, subulate. Pedicel 1–2.5(–3.2) cm, slender, glabrous or sparsely villous, lenticellate. Flowers 0.5–1.5 cm in diam. Hypanthium cupular, 2–3 mm in diam., abaxially glabrous or sparsely villous. Sepals ovate, 1–1.5 mm, apex acute. Petals white, orbicular, 4–5 mm in diam., adaxially sparsely villous basally, base very shortly clawed, apex obtuse. Stamens 20, shorter than petals. Ovary densely villous apically; styles 2 or 3, connate nearly to middle. Fruit orangish red or purple, ellipsoid or ovoid, 9–12 × 5–7 mm, glabrous; sepals erect; seeds ovoid; fruiting pedicels 1–2.5 cm, with dense lenticels. Fl. Apr–May, fr. Jul–Aug.

• Hills, mountain valleys, rocky slopes, fields, forests, thickets; 300–2500 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Sichuan, Zhejiang.

- 1a. Pedicels and hypanthium abaxially glabrous 39a. var. *parvifolia*
 1b. Pedicels and hypanthium abaxially sparsely villous 39b. var. *subparvifolia*

39a. *Photinia parvifolia* var. *parvifolia*

小叶石楠(原变种) xiao ye shi nan (yuan bian zhong)

Pourthiaea parvifolia E. Pritzl, Bot. Jahrb. Syst. 29: 389. 1900; *Photinia subumbellata* Rehder & E. H. Wilson; *P. villosa* (Thunberg) Candolle var. *parvifolia* (E. Pritzl) P. S. Hsu & L. C. Li; *Pourthiaea laevis* (Thunberg) Koidzumi var. *parvifolia* (E. Pritzl) Migo; *P. villosa* (Thunberg) Decaisne var. *parvifolia* (E. Pritzl) Iketani & H. Ohashi.

Pedicels and hypanthium abaxially glabrous.

• Hills, mountain valleys, rocky slopes, fields, forests, thickets; 300–2500 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Sichuan, Zhejiang.

39b. *Photinia parvifolia* var. *subparvifolia* (Y. K. Li & X. M. Wang) L. T. Lu & C. L. Li, Acta Phytotax. Sin. 38: 278. 2000.

假小叶石楠 jia xiao ye shi nan

Photinia subparvifolia Y. K. Li & X. M. Wang, Bull. Bot. Res., Harbin 6(4): 108. 1986.

Pedicels and hypanthium abaxially sparsely villous.

• Forests in mountain valleys; 500–600 m. S Guizhou (Libo Xian).

One of us (Spongberg) prefers to treat this variety as a synonym of the species because of the slight differences.

40. *Photinia komarovii* (H. Léveillé & Vaniot) L. T. Lu & C. L. Li, Acta Phytotax. Sin. 38: 278. 2000.

垂丝石楠 chui si shi nan

Viburnum komarovii H. Léveillé & Vaniot, Repert. Spec. Nov. Regni Veg. 9: 78. 1910; *Crataegus cavaleriei* H. Léveillé (1915), not H. Léveillé & Vaniot (1908); *Photinia parvifolia* (E. Pritzl) C. K. Schneider var. *tenuipes* (P. S. Hsu & L. C. Li) P. L. Chiu; *P. villosa* (Thunberg) Candolle var. *tenuipes* P. S. Hsu & L. C. Li; *P. wuyishanensis* Z. X. Yu; *Pourthiaea villosa* (Thunberg) Decaisne var. *tenuipes* (P. S. Hsu & L. C. Li) Iketani & H. Ohashi.

Shrubs deciduous, to 3 m tall. Branchlets reddish brown or dark brown, gray villous when young, glabrous when old; buds reddish brown, narrowly ovoid, glabrous. Petiole 1–2 mm, initially slightly villous, later glabrous; leaf blade elliptic or rhomboidal-ovate to ovate-lanceolate, 2–5 × 1–2.2 cm, veins 4–6 pairs, raised abaxially and impressed adaxially, both surfaces glabrous or slightly gray villous along veins when young, glabrescent, base broadly cuneate or ± rounded, margin sharply serrate, apex acuminate to caudate. Inflorescences 2- or 3-fascicled or flowers solitary, without peduncle. Pedicel (2–)3–5 cm, slender, glabrous, sparsely minutely lenticellate. Flowers 6–8 mm in diam. Hypanthium glabrous abaxially. Sepals triangular-ovate, 1–1.5 mm. Petals white, suborbicular, 3–3.5 mm in diam., glabrous, apex obtuse. Stamens 15–20, shorter than or nearly as long as petals. Ovary densely gray villous apically;

styles 2, connate from base nearly to middle or apex, glabrous. Fruit red, ellipsoid or oblong-ovate, 6–7 × 5–6 mm, glabrous; sepals incurved; fruiting pedicels 3–5 mm, lenticellate. Fl. Jun.

• Slopes, roadsides, sparse woods, forests; 400–1500 m. Fujian, Guizhou, Hubei, Jiangxi, Sichuan, Zhejiang.

41. *Photinia chingshuiensis* (T. Shimizu) T. S. Liu & H. J. Su, Fl. Taiwan 3: 74. 1977.

清水石楠 qing shui shi nan

Pourthiaea chingshuiensis T. Shimizu, J. Fac. Text. Sci. & Technol., Shinshu Univ., no. 36, ser. A (Biol.): 36. 1963; *Photinia parvifolia* C. K. Schneider var. *chingshuiensis* (T. Shimizu) S. S. Ying; *Pourthiaea villosa* (Thunberg) Decaisne var. *chingshuiensis* (T. Shimizu) Iketani & H. Ohashi.

Shrubs deciduous, decumbent, much branched. Branches brown or purplish brown to grayish brown, sparsely lenticellate; buds ovoid, small, 2–3 mm, apex ± obtuse or ± acute; scales several, brown, glabrous. Petiole blackish purple, 1–2 mm, villous; leaves usually 3–5-fascicled on short shoots, alternate on flowering branches; leaf blade pale green abaxially, dark green adaxially, elliptic to obovate-lanceolate, 1–4 × 0.5–1.5 cm, papery, lateral veins 6–8 pairs, somewhat raised abaxially, both surfaces glabrous or abaxially slightly villous along mid-vein when young, base cuneate, margin minutely sharply serrate, apex acute to shortly acuminate. Umbels terminal, 3–5-flowered, without peduncle, sometimes flowers solitary; bracts caducous, subulate, 1–2 mm, glabrous, apex acute. Pedicel 0.5–1.8 cm, slender, glabrous or sparsely villous when young, lenticellate. Flowers 5–7 mm in diam. Hypanthium cupular, 2–3 × 3–4 mm, abaxially glabrous. Sepals triangular or ovate-triangular, 1.5–2 × 2–2.5 mm, margin irregularly minutely serrate, apex acute. Petals white, suborbicular, 5–6 × 6–7 mm, glabrous, base shortly clawed, apex obtuse. Stamens ca. 20. Ovary densely villous apically; styles not exceeding stamens, connate basally. Inflorescences and fruit not seen.

• Sunny gravel ridges of Chingshui Shan; 600–2100 m. Taiwan.

42. *Photinia hirsuta* Handel-Mazzetti, Symb. Sin. 7: 481. 1933.

褐毛石楠 he mao shi nan

Shrubs or small trees, deciduous, 1–2 m tall. Branchlets reddish brown to purplish brown when young, blackish brown when old, terete, densely brown hirsute, with orbicular lenticels; buds ovoid, apex acute; scales dark reddish brown, brown hirsute. Petiole 2–4 mm, thick, densely brown hirsute; leaf blade elliptic, elliptic-lanceolate, or subovate, 3–7.5 × 1.5–3 cm, papery, lateral veins 5 or 6 pairs, abaxially brown hirsute, gradually glabrate, adaxially sparsely pilose when young, glabrescent, base broadly cuneate or subrounded, margin sparsely sharply serrate, apex acuminate to caudate, sometimes 3-lobed. Inflorescences umbellate or simple corymbose, 0.8–1.5 × 0.8–2 cm, nearly without peduncle, 3–8-flowered; bracts subulate, 4–5 mm, slightly pubescent. Pedicel 3–10 mm, densely brown hirsute. Flowers 5–7 mm in diam. Hypanthium campanulate, abaxially densely brown hirsute. Sepals triangular, 2–2.5 mm. Petals white or pinkish, obovate, 2.5–3.5 mm, adaxially puber-

lous. Stamens 20, somewhat shorter than petals. Styles 2, connate basally, not exceeding stamens, base pubescent. Fruit red, ellipsoid, 7–9 mm, subglabrous, lenticellate; seeds blackish brown, ellipsoid, 2–3 mm, smooth. Fl. Apr–May, fr. Aug–Sep.

• Forests, river valleys, waste places; 100–800 m. Anhui, Fujian, ?Guangdong, Hubei, Hunan, Jiangxi, Zhejiang.

1a. Leaf blade apically not divided 42a. var. *hirsuta*

1b. Leaf blade apically 3-lobed 42b. var. *lobulata*

42a. *Photinia hirsuta* var. *hirsuta*

褐毛石楠(原变种) he mao shi nan (yuan bian zhong)

Pourthiaea hirsuta (Handel-Mazzetti) Iketani & H. Ohashi.

Leaf blade not divided apically.

• Forests on slopes, river valleys, waste places; 100–800 m. Anhui, Fujian, ?Guangdong, Hubei, Hunan, Jiangxi, Zhejiang.

42b. *Photinia hirsuta* var. *lobulata* T. T. Yu, Acta Phytotax. Sin. 8: 231. 1963.

裂叶褐毛石楠 lie ye he mao shi nan

Pourthiaea hirsuta var. *lobulata* (T. T. Yu) Iketani & H. Ohashi.

Leaf blade 3-lobed apically.

• Mixed forests. W Fujian (Liancheng Xian).

One of us (Spongberg) prefers to treat this variety as a synonym of the species because of the slight differences.

43. *Photinia zhejiangensis* P. L. Chiu, Acta Phytotax. Sin. 18: 97. 1980.

浙江石楠 zhe jiang shi nan

Pourthiaea zhejiangensis (P. L. Chiu) Iketani & H. Ohashi.

Shrubs evergreen, 1–1.5 m tall. Branchlets blackish brown to nearly black when old, initially densely brown pubescent, glabrous when old, with brown lenticels; buds conical, ± with soft yellowish brown hairs, apex acute. Petiole 1–2 mm, yellowish brown hairy; leaf blade green adaxially, elliptic to obovate-elliptic, 2–5 × 1.5–2.8 cm, leathery, veins 6–8 pairs, inconspicuous, abaxially pale initially, yellowish brown villous along midvein, glabrate, sometimes villous only basally when old, adaxially initially sparsely yellowish brown villous, glabrescent, base cuneate, margin sharply serrate, apex acute or abruptly shortly apiculate. Inflorescences 1- or 2-flowered, or in terminal 3–6-flowered corymb; bracts subulate, 1.5–2 mm. Pedicel 1–2 cm, sparsely yellowish brown villous. Hypanthium campanulate, abaxially sparsely yellowish brown villous. Sepals triangular, 1.5–2 mm. Stamens 20. Styles 2 or 3, connate basally. Fruit red, ovoid-ellipsoid or urceolate, glabrous, with sparse, small lenticels; fruiting pedicels 1–2 cm, slender, minutely lenticellate, sparsely villous or subglabrous; sepals persistent, erect, 8–10 mm. Fl. Apr–May, fr. Oct–Nov.

• Thickets; 100–700 m. Zhejiang.

ROSACEAE