

## 51. CERASUS Miller, Gard. Dict. Abr., ed. 4, [300]. 1754.

櫻屬 ying shu

Li Chaoluan (李朝銓 Li Chao-luang); Bruce Bartholomew

*Padellus* Vassilczenko.

Trees or shrubs, deciduous. Branches unarmed. Axillary winter buds 1 or 3, lateral buds flower buds, central bud a leaf bud; terminal winter buds present. Stipules soon caducous, margin serrulate, teeth often gland-tipped. Leaves simple, alternate or fascicled on short branchlets, conduplicate when young; petiole usually with 2 apical nectaries or nectaries sometimes at base of leaf blade margin; leaf blade margin singly or doubly serrate, rarely serrulate. Inflorescences axillary, fasciculate-corymbose or 1- or 2-flowered, base often with an involucre formed by floral bud scales. Flowers opening before or at same time as leaves, pedicellate, with persistent scales or conspicuous bracts. Hypanthium campanulate or tubular. Sepals 5, reflexed or erect. Petals 5, white or pink. Stamens 15–50, inserted on or near rim of hypanthium. Carpel 1. Ovary superior, 1-loculed, hairy or glabrous; ovules 2, collateral, pendulous. Style terminal, elongated, hairy or glabrous; stigma emarginate. Fruit a drupe, glabrous, not glaucous, without a longitudinal groove. Mesocarp succulent, not splitting when ripe; endocarp globose to ovoid, smooth or ± rugose.

About 150 species: temperate Asia, Europe, North America; 44 species (30 endemic, five introduced) in China.

The Himalayan species *Cerasus rufa* (J. D. Hooker) T. T. Yu & C. L. Li (*Prunus rufa* J. D. Hooker) was reported from Xizang by both T. T. Yu et al. (Fl. Xizang. 2: 693. 1985) and T. T. Yu & C. L. Chao (FRPS 38: 80. 1986). However, it is now believed that this species does not occur in Xizang.

The present authors have seen no material of the following species described from Taiwan: *Prunus matuurae* Sasaki; *P. takasagomontana* Sasaki; and *P. transarisanensis* Hayata. Their status is uncertain and they are not included in this treatment.

Many species of cherry are cultivated for their edible fruit or as garden ornamentals.

- 1a. Winter buds 3 per leaf axil with 2 lateral flower buds and 1 central leaf.
  - 2a. Pedicel to 2.5 mm or flowers sessile; hypanthium longer than wide; sepals erect or spreading; style villous basally or throughout.
    - 3a. Leaf blade ovate-elliptic to obovate-elliptic, 2–7 cm, adaxially pilose, abaxially densely tomentose ..... 1. *C. tomentosa*
    - 3b. Leaf blade obovate-oblongate, 0.8–1.6 cm, glabrous ..... 2. *C. tianshanica*
  - 2b. Pedicel 4–20 mm; hypanthium as long as wide; sepals reflexed; style pilose basally or glabrous throughout.
    - 4a. Leaf blade broadest basally from middle, base rounded ..... 3. *C. japonica*
    - 4b. Leaf blade broadest at about middle or apically (basally sometimes in *C. pogonostyla* var. *obovata* and *C. glandulosa*), base cuneate or broadly so.
      - 5a. Leaf blade abaxially hirsute to pilose along veins.
        - 6a. Leaf blade abaxially pilose along veins or sometimes between veins; style basally pilose ..... 4. *C. pogonostyla*
        - 6b. Leaf blade abaxially densely brown hirsute; style glabrous ..... 5. *C. dictyonera*
      - 5b. Leaf blade abaxially glabrous, sparsely pubescent, or with tufted hairs in vein axils.
        - 7a. Leaf blade secondary veins 6–8 on either side of midvein; hypanthium outside pilose; style slightly shorter than stamens; drupe 1.5–1.8 cm in diam. .... 6. *C. humilis*
        - 7b. Leaf blade secondary veins 4 or 5 on either side of midvein; hypanthium outside glabrous; style slightly longer than stamens; drupe 1–1.3 cm in diam. .... 7. *C. glandulosa*
  - 1b. Winter bud 1 per leaf axil.
    - 8a. Bracts green, persistent.
      - 9a. Teeth of leaf blade margin non-glandular, with an apical cartilaginous mucro, or with an inconspicuous apical gland.
        - 10a. Inflorescences corymbose, 5–10-flowered; endocarp markedly sculptured ..... 8. *C. maximowiczii*
        - 10b. Inflorescences umbellate, 2–4-flowered; endocarp smooth.
          - 11a. Shrubs 0.2–1 m tall; sepals shorter than hypanthium; drupe ca. 1 cm ..... 9. *C. fruticosa*
          - 11b. Trees 10–25 m tall; sepals nearly as long as hypanthium; drupe 1.2–2.5 cm.
            - 12a. Petiole 1–2 cm; leaf blade glabrous; inflorescence inner involucre bracts straight; mesocarp sour ..... 10. *C. vulgaris*
            - 12b. Petiole 2–7 cm; leaf blade abaxially sparsely villous; inflorescence inner involucre bracts curved; mesocarp sweet ..... 11. *C. avium*
        - 9b. Teeth of leaf blade margin with a distinct apical gland.
          - 13a. Glands disciform or depressed at apex of teeth along bract margins and sometimes along leaf blade margins.
            - 14a. Inflorescences subcorymbose-racemose or racemose.
              - 15a. Style glabrous or sparsely pilose ..... 12. *C. szechuanica*
              - 15b. Style sparsely villous basal to middle ..... 13. *C. discadenia*
            - 14b. Inflorescences umbellate.

- 16a. Flowers opening at same time as leaves; hypanthium outside glabrous; petals apically rounded ..... 14. *C. tatsienensis*  
16b. Flowers opening before leaves; hypanthium outside pilose; petals apically 2-lobed ..... 15. *C. discoidea*
- 13b. Glands not disciform or depressed at apex of teeth along bract and leaf blade margins (sometimes depressed in *C. patentipila*).
- 17a. Inflorescences umbellate.
- 18a. Petiole glabrous; bracts 5–20 mm; sepals spreading ..... 16. *C. setulosa*  
18b. Petiole ± hairy (sometimes glabrous in *C. clarofolia* and *C. conradinae*); bracts 2–8 mm; sepals reflexed.
- 19a. Branchlets densely villous; leaf blade abaxially densely spreading villous; hypanthium outside densely villous ..... 18. *C. polytricha*  
19b. Branchlets glabrous or pilose; leaf blade abaxially pilose along veins or glabrous; hypanthium outside glabrous.
- 20a. Winter buds ovoid, glabrous; petiole glabrous or pilose; stamens 20–30; drupe long ellipsoid .... 17. *C. clarofolia*  
20b. Winter buds ellipsoid-ovoid, pilose; petiole densely spreading villous; stamens 32–54; drupe ovoid to subglobose ..... 36. *C. conradinae*
- 17b. Inflorescences corymbose-racemose (umbellate-racemose in *C. claviculata*).
- 21a. Peduncles, rachises, pedicels, and outside of sepals glabrous.
- 22a. Young branchlets brown; bracts 0.5–2.5 cm; hypanthium ca. 5 mm in diam.; style nearly as long as stamens; endocarp ± sculptured ..... 19. *C. conadenia*  
22b. Young branchlets tinged reddish brown to reddish green; bracts 0.2–0.5 cm; hypanthium 3–4 mm in diam.; style slightly longer than stamens; endocarp markedly sculptured ..... 20. *C. pleiocerasus*
- 21b. Peduncles, rachises, pedicels, and outside sepals distinctly hairy.
- 23a. Leaf blade abaxially pilose or sparsely pubescent; teeth along bract margins and sometimes along leaf blade margins aristate and with a clavicate apical gland; hypanthium outside basally pilose to subglabrous; sepal margin sparsely ciliate ..... 21. *C. dolichadenia*  
23b. Leaf blade abaxially densely horizontally spreading villous to hirsute; teeth along bract and leaf blade margins with a capitate to flattened-capitate (depressed) apical gland; hypanthium outside pilose; sepal margin glandular serrate ..... 22. *C. patentipila*
- 8b. Bracts brown or rarely greenish brown, rarely persistent.
- 24a. Leaf blade margin coarsely incised biserrate or lobed; inflorescences 1- or 2-flowered.
- 25a. Prostrate shrubs; petiole 2–7 mm.
- 26a. Leaf blade obovate to obovate-elliptic, margin biserrate but not lobed, apex obtuse to acute ..... 24. *C. mugus*  
26b. Leaf blade elliptic-ovate to elliptic-lanceolate, margin biserrate and lobed, apex acute to acuminate ..... 25. *C. crataegifolia*
- 25b. Tree or shrubs; petiole 4–13 mm.
- 27a. Branchlets, pedicels, and outside of sepals hairy; style glabrous ..... 29. *C. caudata*  
27b. Branchlets, pedicels, and outside of sepals glabrous (sometimes pilose in *C. trichostoma*); style hairy.
- 28a. Flowers opening at same time as leaves; stipules usually lanceolate to linear, 3–5 mm ..... 30. *C. trichostoma*  
28b. Flowers opening slightly before leaves or nearly so; stipules on vegetative branches usually ovate and auriculate, 5–10 mm ..... 31. *C. stipulacea*
- 24b. Leaf blade margin biserrate, serrate, or obtusely glandular crenate; inflorescences usually more than 2-flowered (sometimes 1-flowered in *C. serrula* and *C. schneideriana*).
- 29a. Inflorescences ± hairy or at least hairy when young.
- 30a. Style glabrous.
- 31a. Leaf blade lanceolate to ovate-lanceolate, apex acuminate to long acuminate; endocarp markedly sculptured ..... 39. *C. serrula*  
31b. Leaf blade ovate to broadly ovate, apex usually caudate; endocarp smooth or ± sculptured.
- 32a. Petals apically emarginate; sepals nearly 1/2 or more as long as hypanthium ..... 40. *C. pseudocerasus*  
32b. Petals apically 2-lobed; sepals nearly 2 × as long as hypanthium ..... 41. *C. dielsiana*
- 30b. Style hairy.
- 33a. Petals abaxially hairy; pedicels 3.5–4.8 cm ..... 44. *C. yaoana*  
33b. Petals glabrous; pedicels not more than 3 cm.
- 34a. Inflorescences subcorymbose-racemose to long racemose; petals apically subundulate to emarginate; hypanthium tubular-campanulate ..... 42. *C. yunnanensis*  
34b. Inflorescences umbellate or umbellate-racemose; petals apically emarginate or lobed; hypanthium tubular.
- 35a. Sepals reflexed; hypanthium densely hirtellous outside ..... 43. *C. schneideriana*  
35b. Sepals erect or spreading; hypanthium pilose outside.

- 36a. Secondary veins 10–14 on each side of midvein, straight and nearly parallel; inflorescences umbellate, 2- or 3-flowered; pedicel 1–2 cm; sepals nearly as long as hypanthium, apically laxly serrate ..... 27. *C. subhirtella*
- 36b. Secondary veins 7–10 on each side of midvein, slightly curved; inflorescences umbellate-racemose, 3- or 4-flowered; pedicel 2–2.5 cm; sepals slightly shorter than hypanthium, apically serrate ..... 28. *C. yedoensis*
- 29b. Inflorescences glabrous.
- 37a. Petals apically rounded (sometimes emarginate in *C. pusilliflora*).
- 38a. Style glabrous ..... 23. *C. mahaleb*
- 38b. Style hairy.
- 39a. Flowers solitary or umbellate; hypanthium densely hairy outside ..... 26. *C. trichantha*
- 39b. Flowers in a corymbose-racemose inflorescence; hypanthium glabrous outside.
- 40a. Inflorescence distinctly pedunculate; pedicel 4–8 cm; hypanthium tubular-campanulate ..... 32. *C. henryi*
- 40b. Inflorescence short pedunculate; pedicel 1–1.5 cm; hypanthium campanulate ..... 33. *C. pusilliflora*
- 37b. Petals apically 2-lobed or emarginate.
- 41a. Sepals reflexed ..... 34. *C. cyclamina*
- 41b. Sepals straight or spreading.
- 42a. Leaf blade margin serrulate or biserrate with acuminate to aristate teeth ..... 35. *C. serrulata*
- 42b. Leaf blade sharply serrate.
- 43a. Flowers opening at same time as leaves; drupe purplish black; endocarp apex obtuse ..... 38. *C. cerasoides*
- 43b. Flowers opening before leaves; drupe red; endocarp apex acute.
- 44a. Leaf blade abaxially glabrous; involucre bracts 6–8 × 4–5 mm; hypanthium ca. 4 mm; petals apically 2-lobed ..... 36. *C. conradinae*
- 44b. Leaf blade abaxially with tufts of hairs in vein axils; involucre bracts ca. 5 × 3 mm; hypanthium ca. 6 mm; petals apically emarginate or rarely entire ..... 37. *C. campanulata*

**1. *Cerasus tomentosa*** (Thunberg) Wallich, Numer. List no. 715. 1829.

毛櫻桃 mao ying tao

*Prunus tomentosa* Thunberg in Murray, Syst. Veg. ed. 14, 464. 1784; *Cerasus tomentosa* var. *pendula* B. Y. Feng & S. M. Xie; *P. batalinii* (C. K. Schneider) Koehne; *P. cinerascens* Franchet; *P. tomentosa* var. *batalinii* C. K. Schneider; *P. tomentosa* var. *breviflora* Koehne; *P. tomentosa* var. *endotricha* Koehne; *P. tomentosa* var. *heteromera* Koehne; *P. tomentosa* var. *kashkarovii* Koehne; *P. tomentosa* var. *souliei* Koehne; *P. tomentosa* var. *trichocarpa* (Bunge) Koehne; *P. tomentosa* var. *tsuluensis* Koehne; *P. trichocarpa* Bunge.

Shrubs usually 0.3–1 m tall, rarely arborescent and 2–3 m tall. Branchlets purplish to grayish brown; young branchlets densely tomentose or glabrous. Winter buds ovoid, sparsely pubescent or glabrous. Stipules linear, 3–6 mm, villous. Petiole 2–8 mm, tomentose, glabrescent; leaf blade ovate-elliptic to obovate-elliptic, 2–7 × 1–3.5 cm, abaxially grayish green and densely gray tomentose but glabrescent, adaxially dark green and pilose, base cuneate, margin coarsely and acutely serrate, apex acute to acuminate; secondary veins 4–7 on either side of midvein. Flowers solitary or 2 in a fascicle, opening before or at same time as leaves. Pedicel almost absent to 2.5 mm. Hypanthium tubular to cup-shaped, 4–5 mm, outside pubescent or glabrous. Sepals triangular-ovate, 2–3 mm, both surfaces pubescent or glabrous, apex obtuse to acute. Petals pink or white, obovate, apex rounded. Stamens 20–25, shorter than petals. Ovary hairy or only hairy at base or apex. Style exerted, slightly longer than stamens. Drupe red, subglobose, 5–12 mm in diam.; endocarp sides sparsely ribbed. Fl. Apr–May, fr. Jun–Sep.

• Forests on mountain slopes, forest margins, thickets, scrub, meadows, also cultivated; 100–3700 m. Gansu, Guizhou, Hebei, Heilongjiang, Henan, Hubei, Jilin, Liaoning, Nei Mongol, Ningxia, Qinghai, Shaanxi, Shandong, Shanxi, Sichuan, Xizang, Yunnan.

This species is widely cultivated in temperate E Asia for its flowers and edible fruit.

**2. *Cerasus tianshanica*** Pojarkov, Bot. Zhurn. S.S.S.R. 24(3): 242. 1939.

天山櫻桃 tian shan ying tao

*Cerasus prostrata* (Labillardière) Seringe var. *concolor* Boissier; *Prunus prostrata* Labillardière var. *concolor* (Boissier) Lipsky.

Shrubs 1–1.5 m tall. Branchlets grayish brown; young branchlets grayish white tomentose. Winter buds ovoid, sparsely white tomentose. Stipules linear, ca. 2 mm. Petiole 1–2 mm, glabrous; leaf blade obovate-oblongate, 8–16 × 3–7 mm, glabrous, abaxially pale green, adaxially green, base cuneate, margin acutely serrate, apex obtuse to acute; secondary veins 4 or 5 on either side of midvein. Flowers solitary, opening at same time as leaves. Pedicel ca. 1.5 mm, glabrous. Hypanthium tubular, 2–8 × ca. 2.5 mm, outside glabrous. Sepals ovate-triangular, outside glabrous, inside white tomentose, apex acute. Petals pale red, obovate. Stamens ca. 22, usually included in hypanthium. Style nearly as long as stamens, basally sparsely villous. Drupe purplish red, globose, 6–7 mm in diam., apex sparsely villous; endocarp smooth. Fl. Apr–May, fr. Jun–Jul.

Forests, meadows on mountain slopes; 700–1600 m. Xinjiang [C Asia].

**3. *Cerasus japonica*** (Thunberg) Loiseleur-Deslongchamps, Traité Arbr. Arbust. 5: 33. 1812.

郁李 *yu li*

Shrubs 1–1.5 m tall. Branchlets grayish brown; young branchlets green to greenish brown, glabrous. Winter buds ovoid, glabrous. Stipules linear or semiovate, 4–6 mm, margin glandular serrate, lacinate or not. Petiole 2–10(–15) mm, glabrous or pilose; leaf blade ovate to ovate-lanceolate, 3–7 × 1.5–2.5 cm, abaxially pale green and glabrous or pilose along veins, adaxially dark green and glabrous, base rounded, margin acutely incised biserrate or deeply serrate, apex acuminate; secondary veins 5–8 on either side of midvein. Flowers solitary or to 3 in a fascicle, opening at same time as leaves or before. Pedicel 0.5–2 cm, glabrous or pilose. Hypanthium turbinate, 2.5–3 × 2.5–3 mm, outside glabrous. Sepals elliptic, slightly longer than hypanthium, margin serrulate, apex rounded. Petals pink or white, obovate-elliptic. Stamens ca. 32. Style nearly as long as stamens, glabrous. Drupe dark red or black, subglobose, ca. 1 cm in diam.; endocarp smooth. Fl. May, fr. Jun–Aug.

Forests on mountain slopes, thickets, grassy scrub on waste mountains, sunny mountain slopes, also cultivated; 100–1300 m. Hebei, Heilongjiang, Henan, Jilin, Liaoning, Shandong, Zhejiang [Japan, Korea].

- 1a. Petiole 7–10(–15) mm; stipules semiovate, margin lacinate; drupe black ..... 3c. var. *zhejiangensis*  
 1b. Petiole 2–5 mm; stipules linear, margin not lobed; drupe dark red.  
 2a. Petiole 2–3 mm; leaf blade margin acutely incised biserrate; pedicel 0.5–1 cm ..... 3a. var. *japonica*  
 2b. Petiole 3–5 mm; leaf blade margin deeply serrate; pedicel 1–2 cm ..... 3b. var. *nakaii*

### 3a. *Cerasus japonica* var. *japonica*

郁李(原变种) *yu li* (*yuan bian zhong*)

*Prunus japonica* Thunberg in Murray, Syst. Veg. ed. 14, 463. 1784; *P. japonica* var. *kerii* (Steudel) Koehne; *P. kerii* Steudel; *Microcerasus japonica* (Thunberg) M. Roemer.

Stipules linear, margin not lobed. Petiole 2–3 mm; leaf blade ovate to ovate-lanceolate, margin acutely incised biserrate. Pedicel 0.5–1 cm. Drupe dark red. Fl. May, fr. Jul–Aug.

Forests on mountain slopes, thickets, also cultivated; 100–200 m. Hebei, Heilongjiang, Henan, Jilin, Liaoning, Shandong, Zhejiang [Japan, Korea].

This variety is used medicinally.

### 3b. *Cerasus japonica* var. *nakaii* (H. Léveillé) T. T. Yu & C. L. Li, Fl. Reipubl. Popularis Sin. 38: 86. 1986.

长梗郁李 *chang geng yu li*

*Prunus nakaii* H. Léveillé, Repert. Spec. Nov. Regni Veg. 7: 198. 1909; *Cerasus nakaii* (H. Léveillé) A. I. Baranov & Liou; *C. nakaii* var. *porphyrea* Takenouchi; *P. japonica* Thunberg var. *nakaii* (H. Léveillé) Rehder.

Stipules linear, margin not lobed. Petiole 3–5 mm; leaf blade ovate, margin deeply serrate. Pedicel 1–2 cm. Drupe dark red. Fl. May, fr. Jun–Jul.

Sunny mountain slopes; ca. 200 m. Heilongjiang, Jilin, Liaoning

[Korea].

### 3c. *Cerasus japonica* var. *zhejiangensis* (Yun B. Chang) T. C. Ku ex B. Bartholomew, *comb. nov.*

浙江郁李 *zhe jiang yu li*

Basionym: *Prunus japonica* var. *zhejiangensis* Yun B. Chang, Bull. Bot. Res., Harbin 12: 271. 1992.

Stipules semiovate, margin lacinate. Petiole 7–10(–15) mm. Drupe black.

• Grassy scrub on waste mountains; ca. 1300 m. Zhejiang (Sui-chang Xian).

### 4. *Cerasus pogonostyla* (Maximowicz) T. T. Yu & C. L. Li, Fl. Reipubl. Popularis Sin. 38: 81. 1986.

毛柱郁李 *mao zhu yu li*

Shrubs or small trees, 0.5–1.5 m tall. Branchlets gray; young branchlets green, glabrous or sparsely pilose. Winter buds ovoid, glabrous or sparsely pubescent. Stipules linear, 5–6 mm, margin glandular serrate. Petiole 2–4 mm, sparsely pubescent; leaf blade obovate-elliptic to elliptic-lanceolate, 2.5–4.5 × 1–2 cm, abaxially pale green and pilose or only pilose along veins, adaxially dark green and subglabrous, base cuneate to broadly cuneate, margin obtusely rarely acutely biserrate and teeth with a minute apical gland, apex shortly acuminate, rounded, or long caudate. Flowers solitary or 2 in a fascicle, opening at same time as leaves. Pedicel 8–10 mm, sparsely pubescent. Hypanthium turbinate, 2.5–3 × 2.5–3 mm, outside subglabrous or basally pubescent. Sepals long ovate to triangular ovate, 4–5 mm, slightly longer than hypanthium, margin glandular serrate, apex acute. Petals pink, obovate to elliptic. Stamens 25–30. Style longer than stamens, basally pilose. Drupe ellipsoid to subglobose, 8–10 × 4–5 mm; endocarp smooth. Fl. Mar, fr. Apr–May.

• Forests on mountain slopes, sunny places in ravines; 200–500 m. Fujian, Guangdong, Hunan, Jiangxi, Taiwan, Zhejiang.

- 1a. Leaf blade apex shortly acuminate to rounded; drupe ca. 8 mm ..... 4a. var. *pogonostyla*  
 1b. Leaf blade apex long caudate; drupe ca. 10 mm ..... 4b. var. *obovata*

### 4a. *Cerasus pogonostyla* var. *pogonostyla*

毛柱郁李(原变种) *mao zhu yu li* (*yuan bian zhong*)

*Prunus pogonostyla* Maximowicz, Bull. Soc. Imp. Naturalistes Moscou 54: 11. 1879; *Celtis caudata* Hance; *P. caudata* (Hance) Koidzumi (1913) not Franchet (1890); *P. caudata* (Hance) Koidzumi var. *globosa* (Koehne) F. P. Metcalf; *P. formosana* Matsumura; *P. pogonostyla* var. *globosa* Koehne.

Leaf blade obovate-elliptic, abaxially pilose or only pilose along veins, apex shortly acuminate to rounded. Drupe ca. 8 × 4–5 mm. Fl. Mar, fr. May.

• Forests on mountain slopes; 200–500 m. Fujian, Jiangxi, Taiwan, Zhejiang.

### 4b. *Cerasus pogonostyla* var. *obovata* (Koehne) T. T. Yu & C. L. Li, Fl. Reipubl. Popularis Sin. 38: 82. 1986.

长尾毛櫻桃 chang wei mao ying tao

*Prunus pogonostyla* Maximowicz var. *obovata* Koehne in Sargent, Pl. Wilson. 1: 265. 1912; *P. caudata* (Hance) Koidzumi var. *obovata* (Koehne) F. P. Metcalf.

Leaf blade obovate-elliptic to elliptic-lanceolate, abaxially pilose, apex long caudate. Drupe ca. 10 × 5 mm. Fl. Mar, fr. Apr–May.

• Sunny places in ravines; ca. 200 m. Fujian, Guangdong, Hunan, Taiwan.

**5. *Cerasus dictyoneura*** (Diels) Holub, Folia Geobot. Phytotax. 11: 82. 1976.

毛叶欧李 mao ye ou li

*Prunus dictyoneura* Diels, Bot. Jahrb. Syst. 36(Beibl. 82): 57. 1905; *P. humilis* Bunge var. *villosula* Bunge.

Shrubs 0.3–1(–2) m tall. Branchlets grayish brown; young branchlets densely pubescent. Winter buds ovoid, densely downy. Stipules linear, 3–4 mm, margin glandular serrate. Petiole usually 2–3 mm, densely pubescent; leaf blade obovate-elliptic, usually 2–4 × 1–2.5 cm, abaxially pale green and densely brown hirsute, adaxially dark green and glabrous or pubescent and usually crisp, base cuneate, margin serrate or biserrate, apex rounded to acute; secondary veins 5–8 on either side of midvein; reticulate veins conspicuous. Flowers solitary or to 3 in a fascicle, opening before leaves. Pedicel 4–8 mm, densely pubescent. Hypanthium campanulate, ca. 3 × 3 mm, outside pubescent. Sepals ovate, ca. 3 mm, apex acute. Petals pink or white, obovate. Stamens 30–35. Style nearly as long as stamens. Drupe red, globose, 1–1.5 cm in diam.; endocarp sides sparsely ribbed. Fl. Apr–May, fr. Jul–Sep.

• Thickets in sunny places on mountain slopes, also cultivated; 400–2300 m. Gansu, Hebei, Henan, Jiangsu, Ningxia, Shaanxi, Shanxi.

This species is used medicinally.

**6. *Cerasus humilis*** (Bunge) Sokolov, Trees & Shrubs URSS 3: 751. 1954.

欧李 ou li

*Prunus humilis* Bunge, Mém. Acad. Imp. Sci. St.-Petersbourg Divers Savans 2: 97. 1835; *P. glandulosa* Thunberg var. *salicifolia* (B. M. Komarov) Koehne; *P. japonica* Thunberg var. *salicifolia* B. M. Komarov.

Shrubs 0.4–1.5 m tall. Branchlets grayish brown, pubescent. Winter buds ovoid, sparsely pubescent to subglabrous. Stipules linear, 5–6 mm, margin glandular. Petiole 2–4 mm, glabrous or sparsely pubescent; leaf blade narrowly obovate-elliptic to obovate-oblongate, 2.5–5 × 1–2 cm, abaxially pale green and glabrous or sparsely pubescent, adaxially dark green and glabrous, base cuneate, margin serrate or biserrate, apex acute to shortly acuminate; secondary veins 6–8 on either side of midvein. Flowers solitary or to 3 in a fascicle, opening at same time as leaves. Pedicel 5–10 mm, sparsely pubescent. Hypanthium campanulate, ca. 3 × 3 mm, outside pilose. Sepals triangular-ovate, apex acute to obtuse. Petals pink or white, oblong to obovate. Stamens 30–35. Style nearly as long as stamens, glabrous. Drupe red to purplish red, subglobose, 1.5–1.8

cm in diam.; endocarp sides sparsely ribbed. Fl. Apr–May, fr. Jun–Oct.

• Thickets, mountain slopes, sunny sandy slopes, also cultivated; 400–1800 m. Hebei, Heilongjiang, Henan, Jiangsu, Jilin, Liaoning, Nei Mongol, Shandong, Shanxi, Sichuan.

This species is used medicinally and for its edible fruit.

**7. *Cerasus glandulosa*** (Thunberg) Sokolov, Trees & Shrubs URSS 3: 751. 1954.

麦李 mai li

*Prunus glandulosa* Thunberg in Murray, Syst. Veg. ed. 14, 463. 1784; *Cerasus japonica* (Thunberg) Loiseleur-Deslongchamps var. *glandulosa* (Thunberg) Komarov & Alissova; *P. glandulosa* f. *paokangensis* (C. K. Schneider) Koehne; *P. glandulosa* var. *purdomii* Koehne; *P. glandulosa* f. *sinensis* (Persoon) Koehne; *P. glandulosa* var. *trichostyla* Koehne; *P. japonica* Thunberg var. *paokangensis* C. K. Schneider; *P. sinensis* Persoon.

Shrubs 0.5–1.5(–2) m tall. Branchlets grayish brown to brown, glabrous or pubescent when young. Winter buds ovoid, glabrous or pubescent. Stipules linear, ca. 5 mm. Petiole 1.5–3 mm, glabrous or pilose; leaf blade oblong to elliptic-lanceolate, 2.5–6 × 1–2 cm, abaxially pale green and glabrous or pilose along midvein, adaxially green, base cuneate, margin obtusely finely biserrate, apex acuminate; secondary veins 4 or 5 on either side of midvein. Flowers solitary or 2 in a fascicle, opening at same time as leaves or nearly so. Pedicel 6–8 mm, subglabrous. Hypanthium campanulate, nearly as long as wide, outside glabrous. Sepals triangular-elliptic, as long as hypanthium, recurved, margin frequently glandular dentate, apex acute. Petals pink or white, obovate. Stamens ca. 30. Style slightly longer than stamens, glabrous or basally pilose. Drupe red to purplish, subglobose, 1–1.3 cm in diam. Fl. Mar–Apr, fr. May–Aug.  $2n = 16$ .

Thickets, mountain slopes, ravine sides, also cultivated; 800–2300 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, N Hebei (Weichang Xian), Henan, Hubei, Hunan, Jiangsu, Shaanxi, Shandong, Sichuan, Yunnan, Zhejiang [Japan].

**8. *Cerasus maximowiczii*** (Ruprecht) Komarov in Komarov & Alissova, Key Pl. Far. East. Reg. URSS 2: 657. 1932.

黑櫻桃 hei ying tao

*Prunus maximowiczii* Ruprecht, Bull. Cl. Phys.-Math. Acad. Imp. Sci. Saint-Petersbourg 15: 131. 1857; *Padellus maximowiczii* (Ruprecht) Eremin & Yushev; *Padus maximowiczii* (Ruprecht) Sokolov.

Trees to 7 m tall. Bark dark gray. Branchlets grayish brown; young branchlets tinged brown, densely villous. Winter buds long ovoid, appressed pubescent. Stipules linear, soon caducous after anthesis, margin with distant dark purple glands. Petiole 0.5–1.5 cm, densely villous; leaf blade obovate to obovate-elliptic, 3–9 × 1.5–4 cm, abaxially pale green and glabrous except appressed pilose along midvein and secondary veins, adaxially green and glabrous or appressed pilose along midvein, base cuneate to rounded, margin biserrate and non-glandular, apex cuspidate to shortly caudate; secondary veins 6–9 on

either side of midvein. Inflorescences corymbose, 5–10-flowered; involucre bracts spatulate-oblong, 10–15 × 5–6 mm, soon caducous after anthesis, abaxially pilose, margin with distinct dark red tiny glands; rachis densely appressed villous; bracts green, leaflike, ovate, 5–7 × 5–4 cm, margin acutely serrate and non-glandular or inconspicuously glandular. Flowers ca. 1.5 cm in diam., opening at same time as leaves. Pedicel 0.5–1.5 cm, densely appressed villous. Hypanthium obconical, 3–4 × 2.5–3 mm, outside appressed pubescent. Sepals elliptic-triangular, ± as long as hypanthium, margin distantly serrate and teeth with an inconspicuous minute apical gland or non-glandular, apex acuminate. Petals white, elliptic, 6–7 × 5–6 mm. Stamens ca. 36. Style nearly as long as stamens; stigma capitate. Drupe black when ripe, ovoid, 7–8 × 5–6 mm; endocarp markedly sculptured. Fl. Jun, fr. Sep.

Shady mountain forests, stony places with humus-rich soil, sometimes on open mountain slopes with shrubby or herbaceous vegetation; 1000–1100 m. Heilongjiang, Jilin, Liaoning, Zhejiang [Japan, Korea, Russia (Far East)].

**9. *Cerasus fruticosa*** (Pallas) Woronow, Trudy Prikl. Bot. Selektiv. 14(3): 52. 1925.

草原櫻桃 cao yuan ying tao

*Prunus fruticosa* Pallas, Fl. Ross. 1: 19. 1784; *P. chamaecerasus* Jacquin.

Shrubs 0.2–1 m tall. Branchlets purplish brown; young branchlets green, glabrous. Winter buds ovoid, glabrous; scale margins glandular. Stipules narrowly linear, margin dentate. Petiole 0.8–1.5 cm, glabrous; leaf blade obovate, obovate-oblong, or lanceolate, 3–6 × 1.5–2.5 cm, abaxially light green and glabrous, adaxially dark green, shiny, and glabrous, base cuneate, margin obtusely to acutely dentate and teeth with an indurate cartilaginous margin and non-glandular, apex acute to obtuse; secondary veins 6–9 on either side of midvein. Inflorescences umbellate, (1–)3- or 4-flowered, sessile or shortly pedunculate. Flowers opening before or at same time as leaves. Pedicel 1.5–2.5 cm, glabrous. Hypanthium campanulate, outside glabrous. Sepals reflexed or erect. Petals white, obovate, 6–7 mm, apex usually notched. Stamens many. Style glabrous. Drupe red, ovoid, sour-sweet, ca. 1 × 0.8 cm; endocarp smooth. Fl. Apr–May, fr. Jul.

Forest-steppes and steppe zone, broad-leaved forest margins, shrubby thickets, steppes, grooves, open dry slopes, also cultivated. Xinjiang [Kazakhstan, Russia (Siberia); SW Asia, S Europe].

**10. *Cerasus vulgaris*** Miller, Gard. Dict., ed. 8, *Cerasus* no. 1. 1768.

歐洲酸櫻桃 ou zhou suan ying tao

*Prunus cerasus* Linnaeus, Sp. Pl. 1: 474. 1753; *C. hortensis* Miller; *P. vulgaris* (Miller) Schur.

Trees to 10 m tall, usually producing root suckers; crown subglobular. Bark dark brown, with lateral lined lenticels, exfoliating. Branches spreading to drooping; young branchlets green, becoming reddish brown, glabrous. Stipules linear, to 8 mm, margin glandular serrate. Petiole 1–2(–5) cm, with or

without 1 or 2 nectaries; leaf blade elliptic-obovate to ovate, 5–7(–12) × 3–5(–8) cm, abaxially glabrous or pubescent when young, base cuneate and often with 2–4 nectaries, margin finely biserrulate and teeth with a very short cartilaginous apical cusp, apex acuminate to tapering to a short mucro. Inflorescences umbellate, 2–4-flowered, often with erect leaflike bracts. Flowers 2–2.5 cm in diam., opening at same time as leaves. Pedicel 1.5–3.5 cm. Hypanthium campanulate to obconical, outside glabrous. Sepals triangular, reflexed, margin glandular serrate. Petals white, 1–1.3 cm. Drupe pale red, globose to apically flattened, 1.2–1.5 cm in diam.; mesocarp yellowish and sour; endocarp brown, globose, 7–8 mm in diam., smooth, adnate to mesocarp. Fl. Apr–May, fr. Jun–Jul.  $2n = 32$ .

Cultivated throughout China [native to SW Asia and Europe].

This species is cultivated for its fruit and as an ornamental.

**11. *Cerasus avium*** (Linnaeus) Moench, Methodus 672. 1794.

歐洲甜櫻桃 ou zhou tian ying tao

*Prunus cerasus* Linnaeus var. *avium* Linnaeus, Sp. Pl. 1: 474. 1753; *Cerasus nigra* Miller; *P. avium* (Linnaeus) Linnaeus.

Trees to 25 m tall, producing no root suckers. Bark blackish, splitting transversely. Branchlets grayish brown; young branchlets green, glabrous. Winter buds ovoid-ellipsoid, glabrous. Stipules linear, ca. 1 cm, margin glandular serrate. Petiole 2–7 cm, glabrous, apically with 2 nectaries; leaf blade obovate-elliptic to elliptic-ovate, 3–13 × 2–6 cm, abaxially pale green and sparsely villous, adaxially green and glabrous, base cuneate to rounded, margin obtusely incised biserrate and teeth with a cartilaginous apical mucro, apex cuspidate to shortly acuminate; secondary veins 7–12 on either side of midvein. Inflorescences umbellate, 3- or 4-flowered; inner involucre bracts recurved at flowering; peduncle inconspicuous. Flowers opening at same time as leaves. Pedicel 2–6 cm, glabrous. Hypanthium cyathiform, ca. 5 × 4 mm, outside glabrous. Sepals long elliptic, ± as long as hypanthium, recurved after anthesis, margin entire, apex obtuse. Petals white, obovate, apex emarginate. Stamens ca. 34. Style nearly as long as stamens, glabrous. Drupe red to purplish black, subglobose to ovoid, 1.5–2.5 cm in diam.; endocarp smooth. Fl. Apr–May, fr. Jun–Jul.  $2n = 16, 24, 32$ .

Cultivated mainly in Hebei, Liaoning, and Shandong [native to SW Asia and Europe].

This species is cultivated for its fruit and as an ornamental.

**12. *Cerasus szechuanica*** (Batalin) T. T. Yu & C. L. Li, Fl. Reipubl. Popularis Sin. 38: 49. 1986.

四川櫻桃 si chuan ying tao

*Prunus szechuanica* Batalin, Trudy Imp. S.-Peterburgsk. Bot. Sada 14: 167. 1895.

Tree or shrubs, 3–7 m tall. Branchlets gray or reddish brown, glabrous or sparsely pilose. Winter buds oblong-ovoid, glabrous. Stipules green, ovate to broadly ovate, margin incised serrate, teeth with a capitate apical gland. Petiole 1–1.8 cm, gla-

brous or pilose, apically usually with 2 disciform to capitate nectaries; leaf blade ovate-elliptic, obovate-elliptic, or long elliptic, 5–9 × 2.5–4 cm, abaxially pale green and glabrous or pilose, adaxially green and usually glabrous or pilose along midvein, base broadly cuneate to rounded, margin biserrate or serrate and teeth with a minute disciform, capitate, or conical apical gland, apex caudate to cuspidate; secondary veins 7–9 on either side of midvein. Inflorescences subcorymbose-racemose, 4–9 cm, 2–5-flowered; involucre bracts brown, obovate-oblong, 10–15 × 5–6 mm, glabrous or nearly so, margin with capitate glands; rachis glabrous or pilose; bracts green, basally on rachis mostly sterile or only terminal 1–3 fertile, suborbicular, broadly ovate, or long ovate, 0.5–2.5 × 0.5–1.2 cm, margin with disciform glands, apex rounded. Pedicel 1–2 cm, glabrous or sparsely pilose. Hypanthium campanulate, ca. 5 × 4–5 mm, outside glabrous or pilose. Sepals triangular-lanceolate, slightly shorter than hypanthium, margin with capitate glands, apex acuminate. Petals white or pink, suborbicular, apex erose. Stamens 40–47. Style nearly as long as stamens, glabrous; stigma disciform. Drupe purplish red, ovoid, 8–10 × 7–8 mm; endocarp sculptured. Fl. Apr–Jun, fr. Jun–Aug.

• Forests, forest margins; 1500–2600 m. Henan, Hubei, Hunan, Shaanxi, Sichuan.

**13. *Cerasus discadenia* (Koehne) C. L. Li & S. Y. Jiang, *comb. nov.***

盘腺樱桃 pan xian ying tao

Basionym: *Prunus discadenia* Koehne in Sargent, Pl. Wilson. 1: 200. 1912.

Shrubs 4–6 m tall or trees 10–13 m tall. Stems 20–40 cm in diam. Branches gray to dark gray; branchlets usually dark red, darker in autumn, glabrous. Winter buds ca. 3 mm, glabrous. Stipules oblong to lanceolate, 3–4 mm, herbaceous, persistent, margin serrate, teeth gland-tipped fimbriate. Petiole sometimes dark red, 0.7–1.8 cm, glabrous, usually with 2 conspicuous nectaries at apex or at leaf blade base; leaf blade ovate, obovate, or sometimes oblong-obovate, 4–10 × 2.5–5 cm, glabrous or rarely abaxially conspicuously pilose along veins, base cordate, rounded, or rarely subacute, margin irregularly serrate and teeth with a prominently depressed-disciform apical gland, apex acuminate to caudate; secondary veins 8–10 on either side of midvein, pallid, adaxially light green, abaxially pale. Racemes 3–6 cm excluding peduncle, 3–9-flowered; involucre bracts 1–4, scalelike, usually 1–1.8 cm, inner ones sometimes persistent at anthesis; peduncles 1–2 cm, glabrous; rachis glabrous; bracts 4–9, rotund to ovate-oblong, 8–10 mm but basally to 25 mm and sterile, margin serrate, teeth with a depressed-disciform apical gland. Flowers opening at same time as leaves. Pedicel 0.8–2.3 cm, glabrous. Hypanthium 4–5.5 or longer × 4–5.5 mm, outside glabrous. Sepals triangular, as long as or slightly longer than hypanthium, reflexed, glabrous, margin gland-tipped very shortly fimbriate, apex acute. Petals white, rotund, 6–8 mm in diam., apex erose-denticulate. Stamens 40–47, mostly 7–11 mm. Ovary ca. 1.1 cm. Style as long as or slightly shorter than stamens, sparsely villous basally to middle. Drupe red, subglobose, ca. 9 × 7 mm; endocarp ovoid, 5.5–6 × ca. 4 × 3.5 mm, obscurely few sulcate, smooth near keel. Fl. May, fr.

Jul.

• Mountain slopes, thickets; 1300–2600 m. Gansu, Henan, Hubei, Ningxia, Shaanxi, Sichuan, Yunnan.

**14. *Cerasus tatsienensis* (Batalin) T. T. Yu & C. L. Li, Fl. Reipubl. Popularis Sin. 38: 52. 1986.**

康定樱桃 kang ding ying tao

*Prunus tatsienensis* Batalin, Trudy Imp. S.-Peterburgsk. Bot. Sada 14: 322. 1895; *P. maximowiczii* Ruprecht var. *adenophora* Franchet; *P. tatsienensis* var. *adenophora* (Franchet) Koehne.

Shrubs or small trees, 2–5 m tall. Bark grayish brown. Branchlets gray, pilose or glabrous. Winter buds ovoid, glabrous. Stipules elliptic-lanceolate to ovate-lanceolate, margin serrate, teeth with a disciform apical gland. Petiole 8–10 mm, glabrous or pilose, apex with or without nectaries; leaf blade ovate to ovate-elliptic, 1–4.5 × 1–2.5 cm, abaxially pale green, glabrous or with tufted hairs in vein axils, adaxially green and subglabrous, base rounded, margin biserrate and teeth with a minute apical gland, apex acuminate; secondary veins 6–9 on either side of midvein. Inflorescences umbellate or subumbellate, 2–4-flowered; involucre bracts purplish brown, spatulate, ca. 8 × 4 mm, abaxially glabrous or sparsely villous; peduncle 5–12 mm, glabrous or pilose; bracts green, elliptic to suborbicular, 3–5 mm in diam., margin with disciform glands. Flowers ca. 1.5 cm in diam., opening at same time as leaves. Pedicel 1–2 cm, glabrous. Hypanthium campanulate, 3–4 × 2–3 mm, outside glabrous. Sepals ovate-triangular, nearly 1/2 as long as hypanthium, margin entire or distantly serrate, apex acute to obtuse. Petals white or pink, ovate. Stamens 20–35. Style nearly as long as stamens; stigma capitate. Fl. Apr–Jul, fr. Jun–Jul.

• Forests; 900–2600 m. Henan, Hubei, Shaanxi, Shanxi, Sichuan, Yunnan.

**15. *Cerasus discoidea* T. T. Yu & C. L. Li, Acta Phytotax. Sin. 23: 211. 1985.**

迎春樱桃 ying chun ying tao

Trees 2–3.5 m tall. Bark dark grayish white. Branchlets purplish brown; young branchlets pilose, glabrescent. Winter buds ovoid, glabrous. Stipules narrowly lorate, 5–8 mm, margin with tiny disciform glands. Petiole 5–7 mm, sparsely pilose when young, glabrescent, apex with 1–3 nectaries; leaf blade obovate-oblong to elliptic, 4–8 × 1.5–3.5 cm, abaxially pale green and pilose, more densely so when young, adaxially dark green and appressed pilose, base cuneate to rarely subrounded, margin shallowly obtusely serrulate and teeth with a minute conical apical gland, apex caudate, cauda acutely incised serrate; secondary veins 8–10 on either side of midvein. Inflorescences umbellate, (1 or)2(or 3)-flowered; involucre bracts brown, obovate-elliptic, 3–4 × 2–3 mm, abaxially glabrous, adaxially appressed pilose, margin with tiny capitate glands, apex serrate-lobed; peduncle 1–1.5 cm, sparsely pilose or glabrous; bracts green, suborbicular, 2–4 mm in diam., leathery, subglabrous, margin with tiny disciform to depressed glands. Flowers opening before or rarely at same time as leaves. Pedicel 1–1.5 cm, pilose. Hypanthium tubular-campanulate, 4–5 ×

2–3 mm, outside sparsely pilose. Sepals oblong, 2–3 mm, apex rounded or mucronate. Petals pink, long elliptic, apically 2-lobed. Stamens 32–40. Style glabrous; stigma dilated. Drupe red, ca. 1 cm in diam.; endocarp ± sculptured. Fl. Mar, fr. May.

• Forest in ravines, thickets beside streams; 200–1100 m. Anhui, Jiangxi, Zhejiang.

**16. *Cerasus setulosa*** (Batalin) T. T. Yu & C. L. Li, Fl. Reipubl. Popularis Sin. 38: 67. 1986.

刺毛櫻桃 ci mao ying tao

*Prunus setulosa* Batalin, Trudy Imp. S.-Peterburgsk. Bot. Sada 12: 165. 1892; *P. gracilifolia* Koehne.

Shrubs or small trees, 1.5–5 m tall. Bark grayish brown. Branchlets grayish white to brown, glabrous. Winter buds ovoid, glabrous. Stipules ovate-oblong to obovate-oblong, 4–8 × 1.5–3 mm, margin gland-tipped fimbriate. Petiole 4–8 mm, glabrous; leaf blade ovate, obovate, or ovate-elliptic, 2–5 × 1–2.5 cm, abaxially pale green, pilose along veins, and with tufted hairs in vein axils, adaxially green and appressed strigose, base rounded, margin obtusely biserrate gland-tipped fimbriate, apex caudate-acuminate to cuspidate; secondary veins 6–8 on either side of midvein. Inflorescences umbellate, 2- or 3-flowered; involucre bracts brown, spatulate, ca. 5 × 1.5 mm, soon caducous, adaxially hairy, margin glandular; peduncle 5–7 mm, glabrous; bracts 2 or 3, green, foliose, ovate, 0.5–2 cm, both surfaces sparsely strigose, margin gland-tipped serrate. Flowers 6–8 mm in diam., opening at same time as leaves. Pedicel 0.8–1.2 cm, pilose or glabrous. Hypanthium tubular, 5–6 × 3–4 mm, outside sparsely strigose. Sepals triangularly long ovate, 2–3 mm, spreading, both surfaces pilose, margin distantly serrate, apex acute. Petals pink, obovate to suborbicular. Stamens 30–40, shorter than sepals. Style slightly longer than or nearly equaling stamens, pilose basal to middle. Drupe red, ovoid-ellipsoid, ca. 8 × 6 mm; endocarp ± sculptured. Fl. Apr–Jun, fr. Jun–Aug.

• Forests or thickets in ravines, mountain slopes; 1300–2600 m. Gansu, Guizhou, Hubei, Ningxia, Qinghai, Shaanxi, Sichuan.

**17. *Cerasus clarofolia*** (C. K. Schneider) T. T. Yu & C. L. Li, Fl. Reipubl. Popularis Sin. 38: 54. 1986.

微毛櫻桃 wei mao ying tao

*Prunus clarofolia* C. K. Schneider, Repert. Spec. Nov. Regni Veg. 1: 67. 1905; *P. litigiosa* C. K. Schneider; *P. litigiosa* var. *abbreviata* Koehne; *P. pilosiuscula* (C. K. Schneider) Koehne; *P. pilosiuscula* var. *media* Koehne; *P. pilosiuscula* var. *subvestita* Koehne; *P. rehderiana* Koehne; *P. sprengeri* Pamp. Pamp. Pamp.; *P. tatsienensis* Batalin var. *pilosiuscula* C. K. Schneider; *P. variabilis* Koehne; *P. venusta* Koehne.

Shrubs or small trees, 2.5–20 m tall. Bark grayish black. Branchlets grayish brown; young branchlets purple or green, glabrous or ± pilose. Winter buds ovoid, glabrous. Stipules lanceolate, margin gland-tipped fimbriate. Petiole 8–10 mm, glabrous or pilose; leaf blade ovate, ovate-elliptic, or obovate-elliptic, 3–6 × 2–4 cm, abaxially pale green and glabrous or pilose, adaxially green and sparsely pubescent or glabrous, base rounded, margin acuminately serrate or biserrate, teeth with a minute to inconspicuous apical gland; secondary veins 7–12 on

either side of midvein. Inflorescences umbellate or subumbellate, 2–4-flowered; involucre bracts brown, spatulate, ca. 8 × 3–4 mm, abaxially glabrous, adaxially pilose; peduncle 4–10 mm, glabrous or pilose; bracts green, subovate, ovate-oblong, or suborbicular, 2–5 mm in diam., persistent in fruit, margin serrate, teeth with a conical to capitate apical gland. Flowers opening at same time as leaves. Pedicel 1–2 cm, glabrous or sparsely pilose. Hypanthium campanulate, outside glabrous or nearly so. Sepals ovate-triangular to lanceolate-triangular, margin glandular serrate or entire, apex acute to acuminate. Petals white or pink, obovate to suborbicular. Stamens 20–30. Style ± as long as stamens, basally pilose; stigma capitate. Drupe red, ellipsoid, 7–8 × 4–5 mm; endocarp ± sculptured. Fl. Apr–Jun, fr. Jun–Jul.

• Forests or thickets on mountain slopes; 600–3600 m. Anhui, S Gansu, Guizhou, Hebei, Henan, Hubei, Hunan, Ningxia, Shaanxi, Shanxi, Sichuan, Xizang, Yunnan, Zhejiang.

**18. *Cerasus polytricha*** (Koehne) T. T. Yu & C. L. Li, Fl. Reipubl. Popularis Sin. 38: 56. 1986.

多毛櫻桃 duo mao ying tao

*Prunus polytricha* Koehne in Sargent, Pl. Wilson. 1: 204. 1912.

Trees or shrubs, 2–10 m tall. Bark black to grayish brown. Branchlets grayish reddish brown, densely villous. Winter buds ellipsoid-ovoid; scales abaxially pilose. Stipules oblong-lanceolate, sparsely villous, margin gland-tipped fimbriate. Petiole 8–10 mm, densely spreading villous, apex usually with 1–3 nectaries; leaf blade obovate to obovate-oblong, 4–8 × 2–4 cm, abaxially pale green, densely laterally spreading villous, and sparsely and appressed pubescent between veins, adaxially green and sparsely pubescent, base subrounded, margin serrate or biserrate and teeth with a minute apical gland, apex acuminate; secondary veins 7–11 on either side of midvein. Inflorescences umbellate or subumbellate, 2–4-flowered; involucre bracts obovate-elliptic, 6–8 × 4–5 mm, abaxially subglabrous, adaxially sparsely villous; peduncle 2–10 mm, spreading pilose; bracts green, ovate to suborbicular, 4–8 mm, persistent in fruit, margin serrate, teeth with a capitate apical gland. Pedicel 1–2 cm, densely villous. Hypanthium campanulate, 4–5 × 4–5 mm, outside densely villous. Sepals ovate-triangular, margin glandular serrate, apex obtuse to acute. Petals white or pink, ovate. Stamens 20–30. Style basally pilose; stigma capitate. Drupe red, globose, 7–8 mm in diam.; endocarp sculptured. Fl. Apr–May, fr. Jun–Jul.

• Forests on mountain slopes, forest margins beside streams; 900–3300 m. Gansu, Guizhou, Henan, Hubei, Shaanxi, Sichuan.

**19. *Cerasus conadenia*** (Koehne) T. T. Yu & C. L. Li, Fl. Reipubl. Popularis Sin. 38: 50. 1986.

锥腺櫻桃 zhui xian ying tao

*Prunus conadenia* Koehne in Sargent, Pl. Wilson. 1: 197. 1912; *P. macradenia* Koehne; *P. macradenia* var. *mairei* Koehne.

Trees or arborescent shrubs, 6–10 m tall. Stems ca. 30 cm

in diam.; branches glabrous; older branchlets dark brown to grayish white; young branchlets brown. Winter buds ca. 3 mm, glabrous. Stipules 3–4 mm, herbaceous, caducous, margin glandular serrate. Petiole 1.2–1.8 cm, glabrous, usually with 2 to several distinct nectaries at apex or at leaf blade base; leaf blade obovate, 3–9 × 2–4.8 cm, papery, abaxially glabrous or pilose along midvein, adaxially sparsely strigulose when young, more densely strigulose along veins, and glabrescent, base cordate, rounded, or broadly cuneate, margin mostly biserrate and teeth with a conical apical gland, apex caudate-acuminate; secondary veins 8–14 on either side of midvein. Inflorescences subcorymbose-racemose, 2–3 cm excluding peduncle, 3.4–8 cm in fruit, 4–8-flowered; involucre bracts soon caducous; peduncle 5–10 mm, longer in fruit, glabrous; rachis glabrous; bracts 7–10, 1–3 basal ones usually sterile and ovate to orbicular, apical ones fertile and oblong, 0.5–2.5 × 0.4–1 cm, margin serrate, teeth with a conical apical gland. Flowers opening at same time as leaves. Pedicel 0.5–2 cm, glabrous. Hypanthium tubular, ca. 4 × 5 mm, outside glabrous. Sepals oblong triangular, ca. 3.5 mm, reflexed, glabrous, margin sparsely glandular denticulate, apex acute. Petals white, rotund-ovate, ca. 6 × 4.5 mm, apex erose. Stamens 27–30. Style nearly as long as stamens, basally sparsely villous. Drupe red, ovoid, ca. 1 × 0.8 cm; endocarp obliquely compressed ovoid, ca. 7 × 4–5 mm, markedly furrowed along keel, apex slightly pitted. Fl. Jun, fr. Jul.

• Forest, woodlands; 2300–3000 m. Gansu, Guizhou, Henan, Qinghai, Shaanxi, Sichuan, Xizang, Yunnan.

**20. *Cerasus pleiocerasus*** (Koehne) T. T. Yu & C. L. Li, Fl. Reipubl. Popularis Sin. 38: 51. 1986.

雕核樱桃 diao he ying tao

*Prunus pleiocerasus* Koehne in Sargent, Pl. Wilson. 1: 198. 1912; *P. tatsienensis* Batalin var. *stenadenia* Koehne.

Trees 3–7 m tall. Bark dark grayish brown. Branchlets grayish brown; young branchlets tinged reddish brown to reddish green, glabrous. Winter buds ellipsoid-ovoid, glabrous. Stipules ovate to ovate-elliptic, margin serrate, teeth with a conical apical gland. Petiole 0.8–2 cm, glabrous, apex with 1–3 nectaries; leaf blade usually ovate-oblong to obovate-oblong, 4–8.5 × 2–3.5 cm, abaxially pale green and glabrous or with tufted hairs in vein axils, adaxially dark green and glabrous, base cuneate to rounded, margin shallowly obtusely serrulate, teeth with a minute conical apical gland; secondary veins 9–12 on either side of midvein. Inflorescences subcorymbose-racemose, 4–6 cm, 2–9-flowered, basally usually with several sterile bracts; involucre bracts brown, obovate-elliptic, 4–8 × 4–5 mm, margin with conical glands; rachis glabrous; bracts broadly ovate, 2–5 × 2–5 mm, margin with conical glands. Pedicel 1–1.5 cm, glabrous. Hypanthium campanulate, 3–4 × 3–4 mm, outside glabrous. Sepals triangular to triangular-lanceolate, margin with conical glands, apex acuminate. Petals white, suborbicular. Stamens 30–34. Style slightly longer than stamens; stigma slightly dilate, minutely disciform. Drupe red to black, globose, 7–8 mm in diam.; endocarp markedly sculptured. Fl. Jun–Jul, fr. Aug–Sep.

• Forests on mountain slopes; 2000–3400 m. W Sichuan, N Yunnan.

**21. *Cerasus dolichadenia*** (Cardot) C. L. Li & S. Y. Jiang,

**comb. nov.**

长腺樱桃 chang xian ying tao

Basionym: *Prunus dolichadenia* Cardot, Notul. Syst. (Paris) 4(1): 29. 1930; *Cerasus claviculata* T. T. Yu & C. L. Li.

Small trees or arborescent shrubs, 5–13 m tall. Branchlets grayish brown, pilose and pubescent when young. Winter buds ovoid, glabrous. Stipules ca. 6 mm, margin strongly fimbriate, fimbria tipped with a clavate gland. Petiole 0.8–2 cm, pilose, apex sometimes with 2 stalked or sessile nectaries; leaf blade broadly elliptic to obovate-oblong, 4–9 × 3–5 cm, abaxially green and pilose or more sparsely hairy between veins, adaxially dark green and sparsely pubescent, base broadly cuneate, rounded, or subcordate, margin acutely biserrate and teeth aristate and with a clavicate apical gland, apex abruptly caudate; secondary veins 8–12 on either side of midvein. Inflorescences umbellate-racemose, 4–9 cm, 4- or 5-flowered; involucre bracts brown, obovate-oblong, 10–12 × ca. 5 mm, abaxially glabrous, adaxially sparsely villous, margin with distant clavate glands; rachis pilose; bracts green, mostly fertile but basal 1 or 2 sterile, orbicular to ovate, 7–12 × 5–10 mm, persistent and slightly enlarged in fruit, abaxially subglabrous, adaxially sparsely pubescent, margin with distant clavate glands. Flowers opening at same time as leaves. Pedicel 1–2.5 cm, pilose. Hypanthium tubular-campanulate, ca. 7 × 6 mm, outside basally pilose to subglabrous, base slightly swollen. Sepals broadly triangular, 1.5–2 mm, margin entire and sparsely ciliate, apex acute. Petals white or pink, broadly elliptic, 7–8 mm in diam., slightly longer than wide. Stamens 36. Style nearly as long as stamens; stigma dilated. Drupe ellipsoid-ovoid, ca. 8 × 6 mm; endocarp sculptured. Fl. Jul, fr. Aug.

• Dense forests on mountain slopes, shady ravines; 1400–2300 m. Gansu, Shaanxi, Shanxi, Sichuan.

**22. *Cerasus patentipila*** (Handel-Mazzetti) T. T. Yu & C. L. Li, Fl. Reipubl. Popularis Sin. 38: 46. 1986.

散毛樱桃 san mao ying tao

*Prunus patentipila* Handel-Mazzetti, Symb. Sin. 7: 529. 1933.

Trees or shrubs, 5–13 m tall. Branchlets gray, densely villous and pubescent when young, glabrescent. Winter buds ovoid-ellipsoid, glabrous. Stipules lanceolate, margin with long-stalked glands. Petiole 0.8–2 cm, densely spreading villous, hairs thicker and yellowish brown with age, apex with 1–3 depressed to capitate nectaries; leaf blade obovate-oblong to ovate-elliptic, 4–12 × 3–5 cm, abaxially pale green, densely horizontally spreading villous along veins, sparsely pubescent between veins, and hairs yellowish brown with age, adaxially green and pilose when young but glabrescent, base broadly cuneate, rounded, or subcordate, margin mostly incised biserrate and teeth with a capitate to depressed apical gland, apex caudate to abruptly caudate; secondary veins 8–11 on either side of midvein. Inflorescences subcorymbose-racemose, 4–8 cm, 2–4-flowered; involucre bracts tinged brown, obovate-oblong, 7–8 × 4–5 mm, margin with stalked capitate glands; rachis densely villous, hairs thicker and yellowish brown with age; bracts mostly fertile but rarely 1 or 2 sterile basally on rachis, ovate to

ovate-elliptic, 1–1.5(–1.8) × 0.5–1.2 cm, both surfaces pilose but glabrescent, margin with stalked disciform-capitate glands. Pedicel 1.5–2.5 cm, densely villous. Hypanthium subtubular, ca. 6 × 3–4 mm, outside pilose, base swollen. Sepals ovate-triangular, ca. 2 mm, markedly reflexed after anthesis. Stamens ca. 36. Ovary glabrous. Style exerted, sparsely pilose except at apex; stigma capitate. Drupe red, ovoid, ca. 10 × 8 mm; endocarp shallowly sculptured. Fl. Apr–May, fr. Jul.

- Forests on mountain slopes; 2400–3000 m. NW Yunnan.

**23. *Cerasus mahaleb*** (Linnaeus) Miller, Gard. Dict. ed. 8, *Cerasus* no. 4. 1768.

圓叶櫻桃 yuan ye ying tao

*Prunus mahaleb* Linnaeus, Sp. Pl. 1: 474. 1753; *Padellus mahaleb* (Linnaeus) Vassilczenko; *Padus mahaleb* (Linnaeus) Borkhausen.

Shrubs, rarely trees, sometimes attaining 10–13 m tall. Branchlets grayish brown, densely pubescent. Winter buds ovoid, densely pubescent, glabrescent. Stipules ovate-lanceolate, caducous, margin gland-tipped fimbriate. Petiole 2–3 cm, pubescent when young, glabrescent, with 1 or 2 nectaries at apex or at leaf blade base; leaf blade ovate, suborbicular, or elliptic, 3.5–5 × 2.5–3.5 cm, abaxially pale green and pubescent, adaxially green and glabrous, base rounded, margin obtusely glandular crenate, apex obtusely cuspidate to tapering-acuminate; secondary veins 8–12 on either side of midvein. Inflorescences corymbose-racemose, 4–5 cm, 5–8-flowered, with 2 or 3 small leaves near base; rachis glabrous; bracts brown, ovate, 0.5–1 mm in diam., membranous, apex serrate. Flowers opening ± before leaves. Pedicel 1–1.5 cm, glabrous. Hypanthium obconical to campanulate, ca. 3 × 3 mm, outside glabrous. Sepals oblong-ovate, slightly shorter than hypanthium, margin entire, apex rounded. Petals white, obovate to shortly elliptic, ca. 5 × 4 mm, apex rounded. Stamens 20–25, slightly shorter than petals. Ovary glabrous; stigma capitate. Drupe black when ripe, subglobose, 7–8 mm in diam.; endocarp ovoid but laterally compressed, smooth. Fl. May, fr. Jul.

Cultivated. Hebei, Liaoning [native to SW Asia and Europe].

This species is cultivated as an ornamental and as grafting stock for other cultivated Prunoideae.

**24. *Cerasus mugus*** (Handel-Mazzetti) Handel-Mazzetti, Vegetationsbilder 17(Heft 7/8): [8]. 1927.

偃櫻桃 yan ying tao

*Prunus mugus* Handel-Mazzetti, Anz. Akad. Wiss. Wien, Math.-Naturwiss. Kl. 60: 152. 1923.

Shrubs to 1 m tall, prostrate. Bark grayish brown. Branchlets brown to grayish brown; young branchlets densely appressed villous. Winter buds ovoid-ellipsoid, glabrous, apex acuminate. Stipules linear, 5–8 mm, margin gland-tipped fimbriate. Petiole 2–7 mm, glabrous; leaf blade obovate to obovate-elliptic, 1–3.5 × 0.7–2 cm, abaxially pale green and glabrous, adaxially dark green and glabrous or pilose when young, base cuneate, margin acutely biserrate, apex obtuse to acute; secondary veins 5–9 on either side of midvein. Inflorescences 1-flow-

ered or 2-flowered in a fascicle; involucre bracts obovate-oblong, 5–8 × 2–3 mm, abaxially glabrous, adaxially pilose, margin glandular hairy; peduncle absent. Flowers usually opening at same time as leaves. Pedicel 0.3–3 cm, glabrous. Hypanthium tubular, 6–8 × 2–3 mm. Sepals triangularly long ovate, 2–3 mm, margin glandular serrate, apex acuminate to acute. Petals white or pink, suborbicular, apex erose. Stamens 30–45. Style exerted after anthesis, much longer than stamens, glabrous. Drupe dark red, ca. 1 × 0.8 cm; endocarp markedly sculptured. Fl. May–Jul, fr. Jul–Aug.

- Forest margins on mountain slopes, thickets; 3200–3700 m. NW Yunnan.

**25. *Cerasus crataegifolia*** (Handel-Mazzetti) Handel-Mazzetti, Vegetationsbilder 17(Heft 7/8): [8]. 1927.

山楂叶櫻桃 shan zha ye ying tao

*Prunus crataegifolia* Handel-Mazzetti, Anz. Akad. Wiss. Wien, Math.-Naturwiss. Kl. 60: 153. 1923.

Shrubs 1–2 m tall, prostrate to ascending. Bark grayish brown. Branchlets purplish brown, densely villous; young branchlets densely appressed pubescent. Winter buds long ovoid, glabrous, apex acute. Stipules brown, linear, 5–10 mm. Petiole 3–5 mm, pilose; leaf blade elliptic-ovate to elliptic-lanceolate, 1.5–4 × 1–2 cm, abaxially pale green and glabrous or appressed pubescent along midvein when young, adaxially dark green and sparsely pubescent, base cuneate to broadly so, margin acutely incised biserrate and lobed, apex acuminate to acute. Inflorescences 1-flowered or 2-flowered in a fascicle; involucre bracts soon caducous; peduncle absent. Flowers 1.2–1.5 cm in diam., opening at same time as leaves. Pedicel 1.5–2.5 cm, glabrous. Hypanthium tubular, 6–8 × 2–3 mm, outside glabrous. Sepals triangular, 2–3 mm, margin glandular serrate, apex acute to obtuse. Petals pink or white, suborbicular, apex erose. Stamens 27–31. Style exerted, much longer than stamens after anthesis, glabrous. Drupe red, ovoid, 8–10 × 6–8 mm; endocarp sculptured. Fl. Jun–Jul, fr. Aug–Sep.

- Alpine forests, thickets on rocky slopes; 3400–4200 m. SE Xizang, NW Yunnan.

**26. *Cerasus trichantha*** (Koehne) C. L. Li & S. Y. Jiang, **comb. nov.**

毛瓣藏櫻 mao ban zang ying

Basionym: *Prunus trichantha* Koehne in Sargent, Pl. Wilson. 1: 254. 1912; *Cerasus rufa* (J. D. Hooker) T. T. Yu & C. L. Li var. *trichantha* (Koehne) T. T. Yu & C. L. Li; *P. imanishii* S. Kitamura; *P. rufa* J. D. Hooker var. *trichantha* (Koehne) H. Hara.

Trees 2–10 m tall. Young branchlets pubescent, soon glabrescent. Winter buds ovoid, glabrous or apex of bud scales pilose. Stipules linear to lanceolate. Petiole 5–10 mm, densely hairy or pilose; leaf blade obovate-lanceolate to obovate-elliptic, (3–)5–12 × 2.5–5.5 cm, abaxially villous along veins, adaxially pilose but soon glabrescent, base cuneate, margin sharply serrulate and teeth apically with conical to capitate glands, apex acuminate to caudate-acuminate; secondary veins 9–11 on each side of midvein. Inflorescences 1- or 2-flowered or

several in an umbel, 3–4.5 cm; involucre bracts brown, spatulate-oblong, 7–10 × 3–4 mm, outside glabrous, inside densely villous, margin glandular serrate; peduncle very short to subsessile, glabrous; bracts green or brown, 10–12 × 1.2–2.5 mm, margin glandular. Flowers opening at same time as leaves. Pedicel 1–2.2 cm, glabrous. Hypanthium tubular to campanulate, (8–)10–15 × 4–5 mm, outside hairy. Sepals straight or spreading, ovate-triangular, 2–3(–4) mm, ca. 1/2 as long as hypanthium to very short, margin sparsely glandular. Petals white or pink, ovate, 5–6 × 4–6 mm, margin entire or apically erose, outside pilose. Stamens ca. 45. Ovary glabrous, apex obtuse and not lobed. Style pubescent basally from middle. Drupe ellipsoid to obovoid, ca. 1.1 × 1.8 cm. Fl. May–Jun, fr. Jul.

Sparse forests, forest margins, thickets, mountain slopes; 2800–3900 m. Xizang [Nepal, Sikkim].

**27. *Cerasus subhirtella*** (Miquel) S. Y. Sokolov, *Trees & Shrubs URSS* 3: 734. 1954.

大叶早樱 da ye han ying

Trees 3–10 m tall. Bark grayish brown. Young branchlets green, densely white pubescent. Winter buds ovoid; bud scale margin pilose. Stipules brown, linear, shorter than petiole, margin glandular dentate. Petiole 5–8 mm, white pubescent; leaf blade ovate to ovate-oblong, 3–6 × 1.5–3 mm, abaxially pale green and appressed white pilose or more densely so along midvein, adaxially dark green and glabrous or appressed pilose on veins, base broadly cuneate, margin sharply biserrate, apex acuminate; secondary veins 10–14 on each side of midvein, straight and parallel. Inflorescences umbellate, 2- or 3-flowered; involucre bracts obovate, ca. 4 × 3 mm, outside pilose, soon deciduous after flowering. Flowers opening at same time as leaves. Pedicels 1–2 cm, pilose. Hypanthium tubular to nearly urceolate, 4–5 × 2–3 mm, base dilated, outside appressed white pilose. Sepals oblong-ovate, nearly as long as hypanthium, margin laxly dentate, apex acuminate. Petals pale red, obovate to oblong, apex concave. Stamens ca. 10. Style base pilose. Drupe black, ovoid; endocarp sculptured. Fl. Apr, fr. Jun.

Cultivated. Mainly in Anhui, Hubei, Jiangxi, Sichuan, Taiwan, and Zhejiang [native to Japan].

- 1a. Branches erect; branchlets not pendulous; hypanthium abaxially white pubescent ..... 27a. var. *subhirtella*  
 1b. Branches spreading and curved; branchlets pendulous; hypanthium abaxially glabrous ..... 27b. var. *pendula*

**27a. *Cerasus subhirtella* var. *subhirtella***

大叶早樱(原变种) da ye han ying (yuan bian zhong)

*Prunus subhirtella* Miquel, *Ann. Mus. Bot. Lugduno-Batavi* 2: 91. 1865–1866; *Cerasus herincquiana* Lavallée; *P. herincquiana* (Lavallée) Koehne; *P. herincquiana* var. *biloba* Koehne; *P. microlepis* Koehne; *P. subhirtella* var. *ascendens* E. H. Wilson.

Branches erect; branchlets not pendulous. Hypanthium abaxially white pubescent. Fl. Apr, fr. Jun.

Cultivated. Mainly in Anhui, Hubei, Jiangxi, Sichuan, and Zhe-

jiang [native to Japan].

**27b. *Cerasus subhirtella* var. *pendula*** (Yo. Tanaka) T. T. Yu & C. L. Li, *Fl. Reipubl. Popularis Sin.* 38: 74. 1986.

垂枝大叶早樱 chui zhi da ye han ying

*Prunus subhirtella* var. *pendula* Yo. Tanaka, *Useful Pl. Jap.* 70, no. 620. 1891; *P. itosakura* Siebold var. *taiwaniana* (Hayata) Kudô & Masamune; *P. taiwaniana* Hayata.

Branches spreading and curved; branchlets pendulous; hypanthium abaxially glabrous.

Cultivated. Taiwan [native to Japan].

**28. *Cerasus yedoensis*** (Matsumura) A. V. Vassiljeva, *Trans. Sukhumi Bot. Gard. Fasc.* 10: 124. 1957.

东京樱花 dong jing ying hua

*Prunus yedoensis* Matsumura, *Bot. Mag. (Tokyo)* 15: 100. 1901; *P. paracerasus* Koehne; *P. yedoensis* var. *nudiflora* Koehne.

Trees 4–16 m tall. Bark gray. Branchlets pale purplish brown, glabrous; young branchlets green, pilose. Winter buds ovoid, glabrous. Stipules lanceolate, pubescent. Petiole 1.3–1.5 cm, densely pubescent, with or without 1 or 2 glands at apex; leaf blade elliptic to obovate, 5–12 × 2.5–7 cm, abaxially pale green and pilose on veins, adaxially dark green, glabrous, base rounded to rarely cuneate, margin sharply glandular serrate, apex acuminate to cuspidate; secondary veins 7–10 on each side of midvein. Inflorescences umbellate-racemose, 3- or 4-flowered; involucre bracts brown, elliptic-ovate, 6–7 × 4–5 mm, pilose on both surfaces; peduncle very short; bracts brown, spatulate-oblong, ca. 5 × 2–3 mm, margin glandular. Flowers opening before leaves, 3–3.5 cm in diam. Pedicel 2–2.5 cm, pubescent. Hypanthium tubular, 7–8 × ca. 3 mm, outside pilose, margin glandular serrate, apex emarginate or 2-lobed. Stamens ca. 32, shorter than petals. Style base pilose. Drupe black, subglobose, 0.7–1 cm in diam.; endocarp slightly sculptured. Fl. Apr, fr. May. *2n* = 16.

Cultivated mainly in Beijing, Jiangsu (Nanjing Shi), Jiangxi (Nanchang Shi), and Shandong (Qingdao Shi) [native to Japan and Korea (Cheju Island)].

**29. *Cerasus caudata*** (Franchet) T. T. Yu & C. L. Li, *Fl. Reipubl. Popularis Sin.* 38: 68. 1986.

尖尾樱桃 jian wei ying tao

*Prunus caudata* Franchet, *Pl. Delavay.* 196. 1890.

Trees. Bark gray, lenticellate. Branchlets densely hirtellous. Stipules linear to subulate, margin with stalked glands. Petiole 4–8 mm, hirtellous; leaf blade ovate, obovate, or ovate-oblong, 2–3.8 × 1–2 cm, abaxially hirtellous along midvein but other part glabrous, adaxially strigulose, base obtuse, margin incised biserrate with teeth broadly ovate and apically subobtusate with a capitate apical gland, apex oblique and narrowly caudate; secondary veins ca. 10 on either side of midvein. Inflorescences racemose-corymbose, umbellate, or 1- or 2-flowered, densely pubescent; involucre bracts caducous; peduncle to 8 mm or absent; bracts 2–3 mm, tinged brown. Flowers opening at same

time as leaves. Pedicel 4–9 mm, densely pubescent. Hypanthium broadly campanulate, 5–6 mm, outside densely pubescent. Sepals triangular, ca. 2.5 mm, suberect, both surfaces pilose, margin entire or nearly so, apex acute. Petals white, broadly elliptic, ca. 8 × 5.5 mm. Stamens 27, ca. 1 cm. Ovary and style glabrous. Fl. Apr–Jun, fr. Jul–Sep.

• Forested slopes in mountains, forest margins, grassy slopes; 3000–3200 m. Sichuan, Xizang, Yunnan.

**30. *Cerasus trichostoma*** (Koehne) T. T. Yu & C. L. Li, Fl. Reipubl. Popularis Sin. 38: 69. 1986.

川西櫻桃 chuan xi ying tao

*Prunus trichostoma* Koehne in Sargent, Pl. Wilson. 1: 216. 1912; *P. droseracea* Koehne; *P. glyptocarya* Koehne; *P. latidentata* Koehne; *P. latidentata* var. *trichostoma* (Koehne) C. K. Schneider; *P. lobulata* Koehne; *P. oxydonta* Koehne; *P. pleuroptera* Koehne; *P. podadenia* Koehne; *P. zappeyana* Koehne; *P. zappeyana* var. *subsimplex* Koehne.

Trees (1.5–)2–10 m tall. Bark grayish black. Branchlets grayish brown; young branchlets glabrous or pilose. Winter buds ovoid to long ovoid, glabrous. Stipules lanceolate to linear, 3–5 mm, margin 2- or 3-serrate or lobed, teeth acute to acuminate. Petiole 6–8 mm, glabrous or pilose; leaf blade ovate, obovate, or elliptic-lanceolate, 1.5–3 × 0.5–2 cm, abaxially pale green and pilose along veins or sometimes between veins, adaxially dark green and pilose or glabrous, base cuneate, broadly cuneate, or subrounded, margin acutely incised biserrate with teeth non-glandular or with a minute apical gland, apex acute to acuminate; secondary veins 6–10 on either side of midvein. Inflorescences (1 or)2(or 3)-flowered; involucre bracts brown, obovate-elliptic, abaxially glabrous, adaxially densely appressed hairy; peduncle to 5 mm or absent; bracts brown, rarely greenish brown, usually soon caducous, rarely persistent in fruit, margin glandular serrate. Flowers opening at same time or rarely slightly before leaves. Pedicel 0.8–2 cm, 1–2.5 cm and apically thickened in fruit, glabrous or pilose. Hypanthium campanulate, 5–6 × 3–4 mm, outside glabrous or pilose. Sepals triangular to ovate, 2–3 mm, inside glabrous or appressed pilose, margin glandular serrate, apex acute to obtuse. Petals white or pale pink, obovate, apex rounded. Stamens 25–36, shorter than petals. Style ± as long as stamens, basally pilose. Drupe purplish red, ovoid, 7–8 mm in diam.; endocarp markedly sculptured. Fl. Apr–May, fr. Jun–Jul.

• Alpine forests, woods, thickets, cliffs; 1000–4000 m. Gansu, Hubei, Qinghai, Sichuan, Xizang, Yunnan.

**31. *Cerasus stipulacea*** (Maximowicz) T. T. Yu & C. L. Li, Fl. Reipubl. Popularis Sin. 38: 68. 1986.

托叶櫻桃 tuo ye ying tao

*Prunus stipulacea* Maximowicz, Bull. Acad. Imp. Sci. Saint-Petersbourg 29: 97. 1884.

Shrubs or trees, 1–7 m tall. Branchlets gray to grayish brown; young branchlets glabrous. Winter buds long ovoid, glabrous, apex acuminate. Stipules on vegetative branch leaflike, ovate, 5–10 × 4–8 mm; stipules on reproductive branchlets green, ovate-lanceolate, 4–6 × 2–3 mm, margin acutely serrate.

Petiole 1–1.3 cm, glabrous; leaf blade ovate, ovate-elliptic, or obovate-elliptic, 3–6.5 × 2–4 cm, abaxially pale green and glabrous or with tufted hairs in vein axils, adaxially dark green and sparsely pubescent, base rounded, margin acutely incised biserrate, apex acuminate to abruptly caudate; secondary veins 6–10 on either side of midvein. Inflorescences umbellate, usually 2(or 3)-flowered; involucre bracts brown, elliptic, 5–7 × 3–4 mm, abaxially glabrous, adaxially appressed villous, margin glandular; peduncle absent or very short; bracts brown to greenish brown, elliptic, 5–6 × 3–4 mm, caducous after anthesis, margin glandular serrate. Flowers 1.2–1.3 cm in diam., opening slightly before leaves or nearly so. Pedicel 0.7–1.3 cm, 1–1.5 cm and apically thickened in fruit, glabrous. Hypanthium tubular-campanulate, 4–5 × 3–4 mm, outside glabrous. Sepals triangular, 3–4 mm, margin entire, apex acute. Petals pale red or white, broadly obovate, apex obtuse to acute. Stamens 35–40, slightly shorter than petals. Style exerted, much longer than stamens, basally pilose. Drupe red, ellipsoid, 1–1.2 × 0.8–1 cm; endocarp ± sculptured. Fl. May–Jun, fr. Jul–Aug.

• Forests in ravines, thickets on mountain slopes, mountain slopes; 1800–3900 m. Gansu, Qinghai, Shaanxi, Sichuan.

**32. *Cerasus henryi*** (C. K. Schneider) T. T. Yu & C. L. Li, Fl. Reipubl. Popularis Sin. 38: 64. 1986.

蒙自櫻桃 meng zi ying tao

*Prunus yunnanensis* Franchet var. *henryi* C. K. Schneider, Repert. Spec. Nov. Regni Veg. 1: 66. 1905; *P. henryi* (C. K. Schneider) Koehne; *P. neglecta* Koehne.

Trees to 3 m tall. Branchlets purplish brown, glabrous. Winter buds ovoid, glabrous. Stipules narrowly lorate, shorter than petiole, margin gland-tipped fimbriate. Petiole 5–13 mm, glabrous, apex with 1 or 2 nectaries; leaf blade long ovate to ovate-oblong, ca. 4 × 2 cm, abaxially pale green and glabrous or with tufts of hair at axils of veins, adaxially green and glabrous, base cuneate to rounded, margin acutely serrate or biserrate and teeth with a minute capitate apical gland, apex acuminate; secondary veins 7–10 on either side of midvein. Inflorescences subcorymbose-racemose, 2.5–4 cm, 3–7-flowered; involucre bracts obovate, 4–5 × ca. 3 mm, soon caducous, abaxially glabrous, adaxially densely villous, margin glandular serrate; bracts brown to slightly greenish, obovate, 2–3 mm, glabrous or pilose, margin glandular serrate. Flowers ca. 1.5 cm in diam. Pedicel 0.6–1.5 cm, glabrous. Hypanthium tubular-campanulate, 3–4 × 2–3 mm, outside glabrous. Sepals oblong-triangular, nearly 1/2 as long as hypanthium, reflexed after anthesis, apex acute to obtuse. Petals white, ovate, ca. 1 cm, apex rounded to subundulate. Stamens 30–45, nearly as long as petals. Style nearly as long as stamens, basally sparsely villous; stigma dilated. Fl. Mar, fr. Apr–May.

• Forests on mountain slopes; ca. 1800 m. Yunnan.

**33. *Cerasus pusilliflora*** (Cardot) T. T. Yu & C. L. Li, Fl. Reipubl. Popularis Sin. 38: 66. 1986.

细花櫻桃 xi hua ying tao

*Prunus pusilliflora* Cardot, Notul. Syst. (Paris) 4(1): 27.

1920.

Trees or shrubs, 3–10 m tall. Bark grayish brown to grayish black. Branchlets gray; young branchlets green, glabrous or nearly so. Winter buds ovoid, glabrous. Stipules lorate, slightly shorter than petiole, soon caducous, margin gland-tipped fimbriate. Petiole 5–8 mm, pilose, glabrescent, with 1 or 2 purplish black nectaries at apex or leaf blade base; leaf blade obovate-oblong to ovate-elliptic, 4–6 × 2–3.5 cm, abaxially pale green and pilose along veins but glabrescent, adaxially dark green and glabrous, base rounded to rarely subcordate, margin acutely serrate and/or biserrate and teeth with a minute apical gland, apex acute to rarely acuminate. Inflorescences umbellate-racemose, 3–5-flowered; involucre bracts ovate-elliptic, 3–4 mm, abaxially glabrous, adaxially appressed pilose, margin glandular serrate; peduncle very short, slightly elongate in fruit; bracts brown, ca. 1.5 mm. Flowers 1–1.5 cm in diam. Pedicel 5–10 mm, glabrous. Hypanthium campanulate, 4–5 × 2–3 mm, outside glabrous. Sepals long ovate, 1/2 or more as long as hypanthium, margin distantly serrate, apex acute. Petals white, ovate, apex rounded to sometimes emarginate. Stamens 25–40. Style basally pilose. Drupe red, ovoid, ca. 8 × 6–7 mm; endocarp ± sculptured. Fl. Feb–Mar, fr. Apr–May.

• Forests in mountains, ravines, also cultivated; 1400–2100. Yunnan.

**34. *Cerasus cyclamina*** (Koehne) T. T. Yu & C. L. Li, Fl. Reipubl. Popularis Sin. 38: 58. 1986.

襄阳山櫻桃 xiang yang shan ying tao

Trees 5–10 m tall. Bark grayish blackish brown. Branchlets grayish to purplish brown, glabrous, rarely pilose. Winter buds ovoid, glabrous. Stipules linear, shorter than petiole, margin gland-tipped fimbriate. Petiole 0.8–1.2 cm, glabrous, rarely pilose, with 2 nectaries in apical or middle part or at leaf blade base; leaf blade obovate-oblong or broadly elliptic, 4.5–12 × 2.7–5.5 cm, abaxially pale green and glabrous or initially sparsely pilose along veins but glabrescent, adaxially dark green and glabrous, base broadly cuneate to rounded, margin serrate or acutely biserrate and teeth with a minute apical gland, apex abruptly acuminate; secondary veins 8–12 on either side of midvein. Inflorescences umbellate or subumbellate, 2–4-flowered; involucre bracts obovate, 0.8–1.3 cm in diam., abaxially subglabrous, adaxially densely villous; peduncle 0.8–2 cm, glabrous or scattered pilose; bracts orbicular, 3–5 mm in diam., margin with long-stalked glands. Flowers opening at same time as leaves. Pedicel 1.5–2.6 cm, glabrous or sparsely pilose. Hypanthium campanulate, ca. 4 mm, outside glabrous. Sepals lanceolate, 6–8 mm, reflexed, apex obtuse. Petals pink, oblong, apically 2-lobed. Stamens ca. 32, slightly shorter than petals. Style slightly longer than stamens, glabrous. Drupe red, subglobose, 7.5–8.3 mm in diam.; endocarp ± sculptured. Fl. Apr–May, fr. May–Jul.

• Woodlands, thickets; 1000–1300 m. Guangdong, Guangxi, Hubei, Hunan, Sichuan.

1a. Leaf blade obovate-oblong, abaxially initially sparsely pilose along veins but glabrescent,

adaxially glabrous; inflorescences

subumbellate, 3- or 4-flowered ..... 34a. var. *cyclamina*

1b. Leaf blade broadly elliptic, both surfaces

glabrous; inflorescences umbellate,

2-flowered ..... 34b. var. *biflora*

**34a. *Cerasus cyclamina* var. *cyclamina***

襄阳山櫻桃(原变种) xiang yang shan ying tao (yuan bian zhong)

*Prunus cyclamina* Koehne in Sargent, Pl. Wilson. 1: 207. 1912; *P. malifolia* Koehne; *P. malifolia* var. *rosthornii* Koehne.

Leaf blade obovate-oblong, abaxially initially sparsely pilose along veins but glabrescent, adaxially glabrous. Inflorescences subumbellate, 3- or 4-flowered. Fl. Apr, fr. May–Jun.

• Woodlands; 600–1500 m. Chongqing (Nanchuan Xian), Guangdong, Guangxi, Hubei, Hunan, Sichuan.

**34b. *Cerasus cyclamina* var. *biflora*** (Koehne) T. T. Yu & C. L. Li, Fl. Reipubl. Popularis Sin. 38: 59. 1986.

双花襄阳山櫻桃 shuang hua xiang yang shan ying tao

*Prunus cyclamina* Koehne var. *biflora* Koehne in Sargent, Pl. Wilson. 1: 243. 1912.

Leaf blade broadly elliptic, glabrous; secondary veins 8–12 on either side of midvein. Inflorescences umbellate, 2-flowered. Fl. May, fr. Jun–Jul.

• Thickets; ca. 1300 m. Hunan, Sichuan.

**35. *Cerasus serrulata*** (Lindley) Loudon, Hort. Brit. 480. 1830.

山櫻花 shan ying hua

Trees 3–8 m tall. Bark grayish brown to grayish black. Branchlets grayish white or tinged brown, glabrous. Winter buds ovoid, glabrous. Stipules linear, 5–8 mm, margin gland-tipped fimbriate. Petiole 1–1.5 cm, glabrous, sparsely pilose, or pubescent, apex with 1–3 rounded nectaries; leaf blade ovate-elliptic to obovate-elliptic, 5–9 × 2.5–5 cm, abaxially pale green and glabrous, sparsely pilose, or pubescent, adaxially dark green and glabrous or sparsely pilose, base rounded, margin acuminately serrate or biserrate and teeth with a minute apical gland, apex acuminate; secondary veins 6–8 on either side of midvein. Inflorescences corymbose-racemose or subumbellate, 2- or 3-flowered; involucre bracts brownish red, obovate-oblong, ca. 8 × 4 mm, abaxially glabrous, adaxially villous; peduncle 5–10 mm, glabrous; bracts brown or tinged greenish brown, 5–8 × 2.5–4 mm, margin glandular serrate. Pedicel 1.5–2.5 cm, glabrous, sparsely pilose, or pubescent. Hypanthium tubular, 5–6 × 2–3 mm, apically enlarged. Sepals triangular-lanceolate, ca. 5 mm, margin entire, apex acuminate to acute. Petals white or rarely pink, obovate, apex emarginate. Stamens ca. 38. Style glabrous. Drupe purplish black, globose to ovoid, 8–10 mm in diam. Fl. Apr–May, fr. May–Jul.

Forests in ravines, forests on mountain slopes, also cultivated; 400–1500 m. Anhui, Guizhou, Hebei, Heilongjiang, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Liaoning, Shaanxi, Shandong, Shanxi, Zhejiang [Japan, Korea].

1a. Leaf blade margin biserrate, teeth acu-

- minate with a long awn apically ..... 35c. var. *lannesiana*
- 1b. Leaf blade margin serrate or biserrate, teeth with a minute gland apically.
- 2a. Petioles, both surfaces of leaf blades, and pedicels glabrous or sparsely pilose ..... 35a. var. *serrulata*
- 2b. Petioles, abaxial surface of leaf blades, and pedicels pubescent ..... 35b. var. *pubescens*

### 35a. *Cerasus serrulata* var. *serrulata*

山櫻花(原变种) shan ying hua (yuan bian zhong)

*Prunus serrulata* Lindley, Trans. Hort. Soc. London 7: 238. 1830; *Cerasus serrulata* var. *taishanensis* Yi Zhang & C. D. Shi; *Padus serrulata* (Lindley) Sokolov; *Prunus tenuiflora* Koehne, p.p.

Petioles, both surfaces of leaf blades, and pedicels glabrous or sparsely pilose. Leaf blade margin serrate or biserrate; teeth with a minute gland apically. Fl. Apr–May, fr. May–Jul.

Forests in ravines, also cultivated; 500–1500 m. Anhui, Guizhou, Hebei, Heilongjiang, Henan, Hunan, Jiangsu, Jiangxi, Shandong, Zhejiang [Japan, Korea].

**35b. *Cerasus serrulata* var. *pubescens*** (Makino) T. T. Yu & C. L. Li, Fl. Reipubl. Popularis Sin. 38: 75. 1986.

毛叶山櫻花 mao ye shan ying hua

*Prunus pseudocerasus* Lindley var. *jamasakura* (Siebold & Zuccarini) Makino subvar. *pubescens* Makino, Bot. Mag. (Tokyo) 22: 98. 1908; *P. serrulata* var. *pubescens* (Makino) E. H. Wilson; *P. tenuiflora* Koehne, p.p.; *P. veitchii* Koehne; *P. wildeniana* Koehne.

Petioles, abaxial surface of leaf blades, and pedicels pubescent. Leaf blade margin serrate or biserrate; teeth with a minute gland apically. Fl. Apr–May, fr. May–Jul.

• Forests on mountain slopes, also cultivated; 400–800 m. Anhui, Hebei, Heilongjiang, Henan, Hubei, Liaoning, Shaanxi, Shandong, Shanxi, Zhejiang.

**35c. *Cerasus serrulata* var. *lannesiana*** (Carrière) T. T. Yu & C. L. Li, Fl. Reipubl. Popularis Sin. 38: 76. 1986.

日本晚櫻 ri ben wan ying

*Cerasus lannesiana* Carrière, Rev. Hort. 1872: 198. 1872; *Prunus lannesiana* (Carrière) E. H. Wilson; *P. serrulata* var. *lannesiana* (Carrière) Makino.

Leaf blade margin biserrate; teeth acuminate with a long awn apically.

Widely cultivated in China [native to Japan].

This variety is widely cultivated in gardens as a ornamental tree.

**36. *Cerasus conradinae*** (Koehne) T. T. Yu & C. L. Li, Fl. Reipubl. Popularis Sin. 38: 76. 1986.

华中櫻桃 hua zhong ying tao

*Prunus conradinae* Koehne in Sargent, Pl. Wilson. 1: 211. 1912; *Cerasus glabra* (Pampanini) T. T. Yu & C. L. Li; *P. con-*

*radinae* var. *trichogyna* Cardot; *P. glabra* (Pampanini) Koehne; *P. helenae* Koehne; *P. hirtipes* Hemsley var. *glabra* Pampanini; *P. rufoides* C. K. Schneider var. *glabrifolia* C. K. Schneider; *P. twymaniana* Koehne.

Trees 3–10 m tall. Bark grayish brown. Branchlets grayish brown; young branchlets green, glabrous. Winter buds ovoid to elliptic-ovoid, glabrous or pilose. Stipules linear to oblong-lanceolate, ca. 6 mm, soon caducous after anthesis, margin gland-tipped fimbriate. Petiole 6–10 mm, glabrous or densely spreading villous, with 1–3 nectaries; leaf blade obovate, elliptic, or obovate-oblong, 4.5–9 × 2.5–4 cm, both surfaces glabrous, abaxially pale green, adaxially green, base rounded to broadly cuneate, margin biserrate or sharply serrulate and teeth with a punctiform apical gland, apex abruptly acuminate to caudate; secondary veins 6–9 on either side of midvein. Inflorescences umbellate, 2–5-flowered; involucre bracts brown, obovate-elliptic, 6–8 × 4–5 mm, abaxially glabrous or subglabrous, adaxially densely villous; peduncle 2–15 mm, rarely absent, glabrous or spreading pilose; bracts brown or green, ovate, suborbicular, or broadly fan-shaped, 1.3–8 mm, caducous or persistent in fruit, margin glandular serrate. Flowers ca. 1.5 cm in diam., opening before or nearly at same time as leaves. Pedicel 1–2.5 cm, glabrous. Hypanthium campanulate to tubular-campanulate, ca. 4 × 3 mm, outside glabrous. Sepals triangular to triangular-ovate, 2–2.5 mm, reflexed after flowering, apex obtuse to acute. Petals white or pink, oblong, ovate, or obovate, apically 2-lobed. Stamens 32–54. Style shorter to slightly longer than stamens, glabrous. Drupe red, ovoid to subglobose, 8–11 × 5–9 mm; endocarp ± sculptured, apex acute. Fl. Mar, fr. Apr–May.

• Forests in ravines, slopes; 500–2600 m. Fujian, Gansu, Guangxi, Guizhou, Henan, Hubei, Hunan, Shaanxi, Sichuan, Yunnan, Zhejiang.

**37. *Cerasus campanulata*** (Maximowicz) A. N. Vassiljeva, Trans. Sukhumi Bot. Gard., Fasc. 10, 119. 1957.

钟花櫻桃 zhong hua ying tao

*Prunus campanulata* Maximowicz, Bull. Acad. Imp. Sci. Saint-Petersbourg 29: 103. 1884; *P. cerasoides* Buchanan-Hamilton ex D. Don var. *campanulata* (Maximowicz) Koidzumi.

Trees or shrubs, 3–8 m tall. Bark blackish brown. Branchlets grayish brown to purplish brown; young branchlets green, glabrous. Winter buds ovoid, glabrous. Stipules soon caducous. Petiole 0.8–1.3 cm, glabrous, apex with 2 nectaries; leaf blade ovate, ovate-elliptic, or obovate-elliptic, 4–7 × 2–3.5 cm, abaxially pale green and glabrous or with tufts of hairs in vein axils, adaxially green and glabrous, base rounded, margin acutely and usually somewhat irregularly serrate, apex acuminate; secondary veins 8–12 on either side of midvein. Inflorescences umbellate, 2–4-flowered; involucre bracts elliptic, ca. 5 × 3 mm, both surfaces appressed villous; peduncle 2–4 mm; bracts brown, rarely greenish brown, 1.5–2 mm, margin glandular serrate. Flowers 1.5–2 cm in diam., opening before leaves. Pedicel 1–1.3 cm, 1.5–2.5 in fruit and apically slightly swollen, glabrous or sparsely pubescent. Hypanthium campanulate, ca. 6 ×

3 mm, outside glabrous or very sparsely pilose, base slightly swollen. Sepals oblong, ca. 2.5 mm, persistent in fruit, margin entire, apex obtuse. Petals pink, obovate-oblong, apically darker and emarginate or rarely entire. Stamens 39–41. Style longer or rarely shorter than stamens, glabrous. Drupe red, ovoid, ca. 10 × 5–6 mm; endocarp ± sculptured. Fl. Jan–Mar, fr. Apr–May.

Forests in ravines, forest margins; 100–1300 m. Fujian, Guangdong, Guangxi, Hainan, Hunan, Taiwan, Zhejiang [Japan, Vietnam].

**38. *Cerasus cerasoides*** (Buchanan-Hamilton ex D. Don) S. Y. Sokolov, *Trees & Shrubs URSS* 3: 736. 1954.

高盆櫻桃 gao peng ying tao

*Prunus cerasoides* Buchanan-Hamilton ex D. Don, *Prodr.* Fl. Nepal. 239. 1825; *Cerasus puddum* Roxburgh ex Seringe; *C. cerasoides* var. *rubea* (Ingram) T. T. Yu & C. L. Li; *Maddenia pedicellata* J. D. Hooker; *P. carmesina* H. Hara; *P. cerasoides* var. *majestica* (Koehne) Ingram; *P. cerasoides* var. *rubea* Ingram; *P. majestica* Koehne; *P. puddum* (Roxburgh ex Seringe) Brandis (1874), not Miquel (1865–1866).

Trees 3–10(–30) m tall. Branches grayish black; branchlets green, pubescent, glabrescent. Stipules linear, basally strongly gland-tipped fimbriate. Petiole 1.2–2 cm, apex with 2–4 nectaries; leaf blade ovate-lanceolate, oblong-lanceolate, oblong-ovate, or oblong-obovate, (4–)8–12 × (2.2–)3.2–5 cm, subleathery, abaxially pale green and glabrous or villous along veins, adaxially dark green, base rounded, margin acutely biserrulate, biserrate, or serrate and teeth with a minute capitate apical gland, apex acuminate to long acuminate; secondary veins 10–15 on either side of midvein; reticulate veins fine. Inflorescences umbellate, 1–4-flowered; involucre bracts 1–1.2 cm, apically divided, withered after anthesis; peduncle 1–1.5 cm, glabrous; bracts brownish to greenish brown, suborbicular, papery, persistent or caducous after anthesis, margin glandular serrate. Flowers opening at same time as or before leaves. Pedicel 1–2.3 cm, elongated to 3 cm and apically thickened in fruit. Hypanthium red to dark red, campanulate to broadly campanulate. Sepals usually reddish, triangular, 0.4–5.5 cm, erect, margin entire, apex acute to obtuse. Petals white or pink, ovate to obovate, apically entire or emarginate. Stamens 32–34, shorter than petals. Style as long as stamens, glabrous; stigma disciform. Drupe purplish black, ovoid, 1.2–1.5 × 0.8–1.2 cm; endocarp ovoid, laterally deeply furrowed and pitted, apex obtuse. Fl. Oct–Dec, Feb–Mar.

Forests in ravines; 700–3700 m. S Xizang, NW Yunnan [Bhutan, N India, Kashmir, N Laos, Myanmar, Nepal, Sikkim, N Thailand, N Vietnam].

This species is cultivated for its fruit.

**39. *Cerasus serrula*** (Franchet) T. T. Yu & C. L. Li, *Fl. Reipubl. Popularis Sin.* 38: 80. 1986.

细齿櫻桃 xi chi ying tao

*Prunus serrula* Franchet, *Pl. Delavay.* 196. 1890; *P. cerasoides* Buchanan-Hamilton ex D. Don var. *tibetica* (Batalin) C. K. Schneider; *P. odontocalyx* H. Léveillé; *P. puddum* Roxburgh ex Wallich var. *tibetica* Batalin; *P. serrula* var. *tibetica* (Batalin) Koehne.

Trees 2–12 m tall. Bark grayish to purplish brown. Branchlets purplish brown, glabrous; young branchlets appressed pilose. Winter buds acutely ovoid, glabrous or appressed pilose. Stipules linear, shorter than petiole, caducous after anthesis. Petiole 5–8 mm, pilose, glabrescent; leaf blade lanceolate to ovate-lanceolate, 3.5–7 × 1–2 cm, abaxially pale green and glabrous or pilose on lateral sides of midvein, adaxially dark green and pilose, base rounded, margin acutely serrate or biserrate and teeth with a minute capitate apical gland, apex acuminate; secondary veins 11–16 on either side of midvein. Inflorescences 1- or 2-flowered; involucre bracts brown, narrowly elliptic, ca. 6 × 3 mm, abaxially glabrous, adaxially pilose, margin glandular serrate; peduncle short or absent; bracts brown, narrowly ovate-oblong, 2–2.5 mm, margin glandular serrate. Flowers ca. 1 cm in diam., opening at same time as leaves. Pedicel 6–12 mm, 1.5–2 cm in fruit and apically slightly enlarged, pilose. Hypanthium tubular-campanulate, 5–6 × ca. 3 mm, base outside pilose. Sepals ovate-triangular, ca. 3 mm. Petals white, obovate-elliptic, apex obtuse. Stamens 38–44. Style longer than stamens, glabrous. Drupe purplish black, ovoid, ca. 1 × 0.6–0.7 cm; endocarp markedly sculptured. Fl. May–Jun, fr. Jul–Sep.

• Mountain slopes, forest in ravines, forest margins, grassy mountain slopes; 1200–4000 m. Guizhou, Qinghai, Sichuan, Xizang, Yunnan.

**40. *Cerasus pseudocerasus*** (Lindley) Loudon, *Hort. Brit.* 200. 1830.

櫻桃 ying tao

*Prunus pseudocerasus* Lindley, *Trans. Hort. Soc. London* 6: 90. 1826; *Cerasus scopulorum* (Koehne) T. T. Yu & L. C. Li; *P. ampla* Koehne; *P. involucreata* Koehne; *P. pauciflora* Bunge; *P. saltuum* Koehne; *P. scopulorum* Koehne.

Trees 2–8 m tall. Bark grayish white to reddish brown. Branchlets grayish brown; young branchlets green, glabrous or pilose. Winter buds ovoid to long elliptic, glabrous or subglabrous. Stipules lanceolate to narrowly lorate, soon caducous, margin gland-tipped fimbriate. Petiole 0.5–1.5 cm, glabrous or pilose, apex with 1–3 large nectaries; leaf blade ovate, oblong-ovate, or long elliptic, 5–12 × 3–6 cm, abaxially pale green and pilose along and between veins, adaxially dark green and subglabrous, base rounded, margin acutely biserrate or incised serrate, teeth with a minute apical gland; secondary veins 9–11 on either side of midvein. Inflorescences corymbose or subumbellate, 3–7-flowered; involucre bracts brown, obovate-elliptic, ca. 5 × 3 mm, margin glandular serrate. Flowers opening before leaves. Pedicel 0.8–1.9 cm, pilose. Hypanthium campanulate, 3–6 × 2–3 mm, outside pilose. Sepals triangular-ovate to ovate-oblong, 1/2 or more as long as hypanthium, margin entire, apex acute to obtuse. Petals white, ovate to long elliptic, apically emarginate or 2-lobed. Stamens 30–35(–50 in cultivated varieties). Style nearly as long as stamens, glabrous. Drupe red, subglobose, 0.9–1.3 cm in diam.; endocarp ± sculptured. Fl. Mar–Apr, fr. May–Jun.

• Sunny mountain slopes, sides of ravines, glades, usually cultivated; 300–1300 m. Anhui, Chongqing (Nanchuan Xian), Fujian, Gansu, Guizhou, Hebei, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Liaoning, Shaanxi, Shandong, Shanxi, Sichuan, Yunnan, Zhejiang.

**41. *Cerasus dielsiana*** (C. K. Schneider) T. T. Yu & C. L. Li, Fl. Reipubl. Popularis Sin. 38: 59. 1986.

尾叶樱桃 wei ye ying tao

Trees or shrubs, 5–10 m tall. Branchlets grayish brown, glabrous; young branchlets glabrous or densely brown villous. Winter buds ovoid, glabrous. Stipules narrowly lorate, 0.8–1.5 cm, margin glandular serrate. Petiole 0.8–1.7 cm, densely spreading villous, glabrescent, with 1–3 nectaries at apex or on apical part; leaf blade elliptic to elliptic-obovate, 6–14 × 2.5–4.5 cm, abaxially pale green, densely spreading-villous on mid and secondary veins but other part pilose, adaxially dark green and glabrous, base broadly cuneate to rounded, margin acutely serrate or biserrate and teeth with a minute apical gland, apex caudate-acuminate; secondary veins 10–13 on either side of midvein. Inflorescences umbellate or subumbellate, 2–6-flowered; involucre bracts brown, long elliptic, adaxially densely appressed villous; peduncle 0.6–2 cm or nearly absent, spreading yellow villous; bracts ovate, 3–6 mm in diam., margin strongly fimbriate, fimbria with a long-stalked gland. Flowers opening before leaves or nearly so. Pedicel 1–3.5 cm, spreading brown pilose. Hypanthium campanulate, 3.5–5 mm, outside pilose. Sepals elliptic to elliptic-lanceolate, nearly twice as long as hypanthium, reflexed, margin ciliate, apex acute to obtuse. Petals white or pink, ovate, apically 2-lobed. Stamens 32–36, nearly as long as petals. Style ± as long as stamens, glabrous. Drupe red, subglobose, 8–9 mm in diam.; endocarp smooth. Fl. Mar–Apr, fr. May–Jun.

• Forests, ravines, stream banks; 500–1400 m. Anhui, Chongqing, Guangdong, Guangxi, Guizhou, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Sichuan.

- 1a. Inflorescences 3–6-flowered; peduncle 0.6–2 cm ..... 41a. var. *dielsiana*  
 1b. Inflorescences 2(or 3)-flowered; peduncle very short to nearly absent ..... 41b. var. *abbreviata*

**41a. *Cerasus dielsiana* var. *dielsiana***

尾叶樱桃(原变种) wei ye ying tao (yuan bian zhong)

*Prunus dielsiana* C. K. Schneider, Repert. Spec. Nov. Regni Veg. 1: 68. 1905; *P. dielsiana* var. *conferta* Koehne; *P. dielsiana* var. *laxa* Koehne; *P. rufoides* C. K. Schneider.

Inflorescences 3–6-flowered; peduncle 0.6–2 cm. Fl. Mar–Apr, fr. May–Jun.

• Forests, ravines, stream banks; 500–900 m. Anhui, Guangdong, Guangxi, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Sichuan.

**41b. *Cerasus dielsiana* var. *abbreviata*** (Cardot) T. T. Yu & C. L. Li, Fl. Reipubl. Popularis Sin. 38: 60. 1986.

短梗尾叶樱桃 duan geng wei ye ying tao

*Prunus dielsiana* var. *abbreviata* Cardot, Notul. Syst. (Paris) 4(1): 29. 1920.

Inflorescences 2(or 3)-flowered, rarely more; involucre bracts persistent; peduncle very short to nearly absent. Fl. Mar, fr. May–Jun.

• Forests; 1200–1300 m. Chongqing (Nanchuan Xian), Guizhou.

**42. *Cerasus yunnanensis*** (Franchet) T. T. Yu & C. L. Li, Fl. Reipubl. Popularis Sin. 38: 64. 1986.

云南樱桃 yun nan ying tao

Trees 4–8 m tall. Bark gray. Branchlets grayish brown, glabrous; young branchlets green, hirtellous, soon glabrescent. Winter buds ovoid to long ovoid, glabrous. Stipules narrowly lorate, slightly shorter than petiole, soon caducous, margin glandular serrate. Petiole 6–12 mm, hirtellous to glabrous, glabrescent, apex with 2 orbicular nectaries; leaf blade elliptic, oblong, obovate-oblong, or ovate-oblong, 3.5–6 × 2–3.5 cm, abaxially green, hirtellous when young, and more densely so along veins, adaxially dark green and pilose, both surfaces glabrescent, base rounded to cuneate, margin acutely serrate and sometimes biserrate and teeth with a capitate apical gland, apex abruptly acute to acuminate; secondary veins 7–14 on either side of midvein. Inflorescences subcorymbose-racemose or long racemose, 3.5–7 cm, 3–9-flowered; involucre bracts brown, elliptic, spatulate-oblong, or obovate-oblong, 3.5–12 mm, abaxially glabrous or pilose, adaxially pilose, both surfaces glabrescent, margin glandular serrate, apex rounded; bracts brown to greenish, ovate to obovate, 2–3 mm in diam., membranous to leathery, margin glandular serrate. Flowers ca. 1.5 cm in diam., opening at same time as leaves or slightly before. Pedicel 0.3–2 cm, hirtellous. Hypanthium tubular-campanulate, 3–5 × 3–4 mm, outside densely hirtellous. Sepals ovate, nearly 1/2 or less as long as hypanthium, apex obtuse. Petals white, ovate to sub-orbicular, apex subundulate to emarginate. Stamens 33–45, nearly as long as petals. Style basally pilose. Drupe purplish red, ellipsoid to ovoid, 7–10 × 5–8 mm; endocarp ± sculptured. Fl. Mar–May, fr. May–Jun.

• Forests in ravines, mountain slopes, also cultivated; 1900–2600 m. Guangxi, W Hubei, Sichuan, Yunnan.

- 1a. Inflorescences subcorymbose-racemose, 3–5(–7)-flowered; bracts deciduous after anthesis ..... 42a. var. *yunnanensis*  
 1b. Inflorescences long racemose, 5–9-flowered; bracts persistent after anthesis ..... 42b. var. *polybotrys*

**42a. *Cerasus yunnanensis* var. *yunnanensis***

云南樱桃(原变种) yun nan ying tao (yuan bian zhong)

*Prunus yunnanensis* Franchet, Pl. Delavay. 195. 1890; *Cerasus duclouxii* (Koehne) T. T. Yu & C. L. Li; *P. duclouxii* Koehne; *P. duclouxii* var. *hirtissima* Koehne; *P. hirtifolia* Koehne; *P. macgregoriana* Koehne.

Inflorescences subcorymbose-racemose, 3–5(–7)-flowered; involucre bracts deciduous after anthesis. Fl. Mar–May, fr. May–Jun.

• Forests in ravines, mountain slopes, also cultivated; 1900–2600 m. Guangxi, W Hubei (Badong Xian), Sichuan, Yunnan.

**42b. *Cerasus yunnanensis* var. *polybotrys*** (Koehne) T. T. Yu & C. L. Li, Fl. Reipubl. Popularis Sin. 38: 64. 1986.

多花云南樱桃 duo hua yun nan ying tao

*Prunus yunnanensis* Franchet var. *polybotrys* Koehne, Repert. Spec. Nov. Regni Veg. 11: 525. 1913.

Inflorescences long racemes, 5–9-flowered; involucre bracts persistent after anthesis. Fl. Apr–May, fr. May–Jun.

- Mountain slopes; 2300–2500 m. Yunnan.

**43. *Cerasus schneideriana*** (Koehne) T. T. Yu & C. L. Li, Fl. Reipubl. Popularis Sin. 38: 60. 1986.

浙闽樱桃 zhe min ying tao

*Prunus schneideriana* Koehne in Sargent, Pl. Wilson. 1: 242. 1912.

Trees 2.5–6 m tall. Branchlets purplish brown; young branchlets grayish green, densely grayish brown hirtellous. Winter buds ovoid, glabrous. Stipules brown, 4–7 mm, soon caducous, margin with distant long-stalked glands. Petiole 5–8 mm, densely brown hirtellous, apex with 2 (or 3) black nectaries; leaf blade elliptic, ovate-oblong, or obovate-oblong, 4–8 × 1.5–4.5 cm, abaxially grayish green, grayish yellow hirtellous, and more densely hirtellous along veins, adaxially dark brown and subglabrous, base rounded to broadly cuneate, margin acuminately serrate and biserrate and teeth with a capitate apical gland; secondary veins 8–11 on either side of midvein. Inflorescences umbellate, (1 or)2 (or 3)-flowered; involucre bracts oblong, apex rounded; peduncle 1.8–3.8 mm, hairy; bracts greenish brown, margin serrate, teeth with a stalked conical apical gland. Flowers opening before leaves. Pedicel 1–1.4 cm, densely brown hirtellous. Hypanthium tubular, 3–4 ×

2–3 mm, outside appressed brown pubescent. Sepals lorate-lanceolate, nearly as long as hypanthium, reflexed, apex obtuse. Petals ovate, apically 2-lobed. Stamens ca. 40, shorter than petals. Ovary and basal part of style sparsely hirtellous. Drupe purplish red, ellipsoid, ca. 8 × 5 mm; endocarp sculptured. Fl. Mar, fr. May.

- Forests; 600–1300 m. Fujian, Guangxi, Zhejiang.

**44. *Cerasus yaoana*** W. L. Zheng, Acta Phytotax. Sin. 38: 195. 2000.

西藏樱桃 xi zang ying tao

Trees to 8 m tall. Branchlets brown, hispid. Stipules long subulate, 4–10 × ca. 0.5 mm, margin glandular serrate. Petiole 0.7–1.2 cm, sparsely hispid or subglabrous; leaf blade rhomboid-elliptic or ovate-elliptic, 2.2–9 × 1.6–5 cm, abaxially strigose on veins, adaxially sparsely strigose; secondary veins 6–12 on either side of midvein. Inflorescences umbellate, (1 or)2- or 3-flowered; involucre bracts green, leaflike, narrowly elliptic, margin glandular serrate; peduncle 0.7–2.8 cm, hairy; bracts ovate-lanceolate. Flowers opening at same time as leaves, ca. 8 mm in diam.; pedicel 3.5–4.8 cm, hairy. Hypanthium cylindrical, ca. 6 × 3 mm. Sepals spreading, ovate, both surfaces sparsely long strigose, apex obtuse. Petals broadly ovate, abaxially hairy, apex subrounded. Style much longer than stamens, base villous. Drupe ellipsoid, ca. 8 × 5 mm, apex sparsely villous. Fl. May, fr. Jun–Jul.

- Forests; ca. 3000 m. E Xizang (Nyingchi Xian).

The following taxa have been described from China, but we have seen no specimens and are therefore unable to treat them in this account. Further revision is necessary.

*Prunus bonatii* Koehne (Repert. Spec. Nov. Regni Veg. 11: 265. 1912), described from Yunnan: *Maire 3719*.

*Prunus canescens* M. Vilmorin & Bois (Frutic. Vilmor. 66. 1904), described from Hubei: *E. H. Wilson 65*.

*Prunus carcharias* Koehne (in Sargent, Pl. Wilson. 1: 267. 1912), described from Chongqing: *A. von Rosthorn s.n.*

*Prunus concinna* Koehne (in Sargent, Pl. Wilson. 1: 210. 1912), described from Hubei: *E. H. Wilson 2825*.

*Prunus giraldiana* C. K. Schneider (Repert. Spec. Nov. Regni Veg. 1: 65. 1905), described from Shaanxi: *G. Giraldis 3789*.

*Prunus phyllopoda* Koehne (in Sargent, Pl. Wilson. 1: 257. 1912), described from Shaanxi: *G. Giraldis s.n.*

*Prunus plurinervis* Koehne (in Sargent, Pl. Wilson. 1: 208. 1912), described from Sichuan: *E. H. Wilson 907*.

*Prunus pulchella* Koehne (in Sargent, Pl. Wilson. 1: 197. 1912), described from Hubei: *E. H. Wilson 2827*.

*Prunus rossiana* Koehne (in Sargent, Pl. Wilson. 1: 223. 1912), described from Hubei: *E. H. Wilson 182*.

ROSACEAE