

3. LAGERSTROEMIA Linnaeus, Syst. Nat., ed. 10, 2: 1068, 1076, 1372. 1759.

紫薇属 *zi wei shu*

Qin Haining (覃海宁); Shirley Graham

Trees or shrubs. Young stems terete to frequently 4-angled or subulate, glabrous, puberulous, pubescent, or tomentose, often glabrescent. Leaves variably subopposite to subalternate or alternate, rarely opposite or truly alternate, subsessile or petiolate; stipules minute, caducous. Inflorescences terminal and axillary paniculate cymes. Flowers actinomorphic, campanulate to turbinate, flexibly 5–7-merous. Floral tube leathery, smooth walled with 6–12(–14) veins visible as dark lines, or with broad to narrow ribs or ridges; sepals narrowly to broadly deltate, sometimes subtended within by a narrow annulus; epicalyx segments alternating with sepals, small to prominent, or absent. Petals 6(–12), rose, purple, or white, crinkled, slenderly clawed. Stamens (6–)12–100+, inserted at or near base of floral tube, exerted, dimorphic in most species, 6 solitary in front of sepals with thick filaments and large anthers, 12–100+ in clusters in front of petals with thin filaments and small anthers, rarely monomorphic, then all filaments thin, subequal. Ovary globose to oblong, 3–6-loculed; style long-exserted; stigma capitate. Fruit dry, indurate capsules, surrounded at base by persistent floral tube, loculicidally dehiscent, 3–6-valved. Seeds numerous, obpyramidal, unilaterally winged from raphe; cotyledons rolled.

About 55 species: tropical and subtropical Asia to Australia, north to Japan; 15 species (eight endemic) in China.

Lagerstroemia is in need of more extensive gatherings and study in order better to understand the extent of variability among and within the species.

The flowers are typically 6-merous, but can be 5–7-merous on the same plant. The floral tubes contract ± abruptly below the base of the ovary (campanulate) or taper gradually to the paired bracteoles of the pedicel (turbinate). The length of the floral tube is measured from the base of the ovary to the apex of the sepals; the pedicellate base (epipodium) extending from the base of the ovary to the bracteoles is not included.

A specimen of *Lagerstroemia micrantha* Merrill (J. Arnold Arbor. 21: 378. 1940, described from Vietnam) was reported by Furtado and Montien (Gard. Bull. Singapore 24: 276. 1969) from Taiwan (*Faurie 8076*, A) but without further information. One of us (Graham) saw this specimen, and another so named, at US from Hong Kong, but without collector or further data. Inclusion of *L. micrantha* in this Flora is deferred until the taxonomic status of the species is better understood.

In addition to the species mentioned below as being cultivated in China, the following have also been recorded as cultivated: *Lagerstroemia siamica* Gagnepain (native to Malaysia, Myanmar, and Thailand) in Taiwan (1950, no further data, A); *L. reginae* Roxburgh (native to India, Myanmar, and New Guinea) in Guangzhou (*Hooker s.n.*, E); and *L. floribunda* var. *brevifolia* Craib (native to Cambodia and Thailand) without locality (*Macartney s.n.*, BM).

- 1a. Leaves, panicles, and flowers densely tomentose; trichomes dendritic, golden- to red-brown.
 - 2a. Ovary and adaxial surface of sepals densely tomentose; floral tube smooth walled, densely tomentose, 10–12 mm 1. *L. balansae*
 - 2b. Ovary densely tomentose, adaxial surface of sepals completely glabrous; floral tube 12-ribbed, 8–10 mm 2. *L. tomentosa*
- 1b. Leaves, panicles, and floral tubes glabrous, variously pubescent, or puberulous (grayish tomentose in *L. suprareticulata*); trichomes simple, grayish white or yellow-brown.
 - 3a. Floral tubes prominently undulate-winged from sinus of sepals, wings attenuate on pedicellate floral base; floral tubes densely white pubescent; epicalyx absent 3. *L. villosa*
 - 3b. Floral tubes smooth walled or 6–12(–14)-ribbed; ribs broad and flat or sharply ridged, without undulate wings; floral tubes glabrous or pubescent; epicalyx present or absent.
 - 4a. Epicalyx prominent at sinus between sepals.
 - 5a. Epicalyx segments broad, flat, auriculate, ca. 1/2 as long as sepals; sepals deltate with caudate apex 4. *L. limii*
 - 5b. Epicalyx segments linear or deltate and keeled, ca. as long as sepals; sepals deltate with acute to shortly acuminate apex.
 - 6a. Epicalyx segments linear, ca. as long as or surpassing sepals; branchlets and panicles glabrous; floral tubes prominently sharply 6-ribbed 5. *L. guilinensis*
 - 6b. Epicalyx segments deltate, abaxially keeled, slightly incurved in bud; branchlets and panicles densely gray puberulous; floral tubes 6- or 7-ribbed; ribs rounded or obscure 6. *L. venusta*
 - 4b. Epicalyx absent or minute at sinus between sepals.
 - 7a. Floral tubes 7–15 mm from apex of sepals to base of ovary.
 - 8a. Floral tubes glabrous, smooth walled or obscurely to decidedly 6-ribbed; leaves, at least some, suborbicular to obovate, 2.5–7(–10) × 1.5–4 cm 7. *L. indica*
 - 8b. Floral tubes gray or yellow-brown puberulous or pubescent, obscurely to distinctly 12-ribbed or dark veined; leaves ovate-elliptic or lanceolate.
 - 9a. Floral tubes yellow-brown puberulous, (8–)12–15 mm; sepals adaxially glabrous; leaves 7–18 × 4–8 cm, apex shortly acuminate; stamens 70 to ca. 130 8. *L. intermedia*

- 9b. Floral tubes gray pubescent or tomentose, 9–11 mm; sepals adaxially sparsely to densely gray-pubescent or tomentose; leaves 3–10 × 2.5–4 cm, apex shortly to long acuminate or caudate; stamens 25–40.
- 10a. Floral tubes distinctly 10–12-ribbed; leaves (3–)6–10 × 2.5–4 cm, adaxial venation not raised, apex acuminate to caudate; sepals adaxially sparsely pubescent in distal half 9. *L. fordii*
- 10b. Floral tubes ± smooth walled with (10–)12 dark veins; leaves 4–6.2 × 2.5–3.5 cm, adaxial venation distinctly raised, apex shortly acuminate; sepals adaxially densely gray tomentose 10. *L. suprareticulata*
- 7b. Floral tubes 2–5 mm from apex of sepals to base of ovary.
- 11a. Branchlets yellow-brown pubescent; floral tubes distinctly 8–12-ribbed; sepals adaxially densely pubescent 11. *L. anhuiensis*
- 11b. Branchlets glabrous or gray puberulous to pubescent; floral tubes smooth walled with 10–12(–14) dark veins or obscurely 12-ribbed; sepals adaxially glabrous or sparsely puberulous.
- 12a. Stamens 6–12; sepals adaxially sparsely puberulous at apex 12. *L. excelsa*
- 12b. Stamens 15–30, mostly more than 20; sepals adaxially glabrous.
- 13a. Petals broadly ovate, claw ca. as long as blade, 7–10 mm including claw 3.5–6 mm, white, pink, or purple, base rounded to obtuse; leaves ovate to lanceolate, or elliptic, or less often obovate, 2–9(–11) × 1–5 cm 13. *L. subcostata*
- 13b. Petals lanceolate, oblong, or elliptic, claw shorter than blade, 6–9 mm including claw 1.5–3 mm, white, base acute; leaves broadly elliptic or ovate to elliptic or lanceolate, 4.5–12 × 2.2–5 cm.
- 14a. Leaves ovate-elliptic or ovate-lanceolate, 4.5–6.5(–11) × 2–3(–4) cm; petiole 2–5 mm; ultimate branches of inflorescence glabrous; petals 6–7 mm; capsules 6–8 × 4–5 mm 14. *L. glabra*
- 14b. Leaves broadly elliptic, 7–12 × 3–5.5 cm; petiole 6–10 mm; ultimate branches of inflorescence puberulous; petals ca. 9 mm; capsules 8–11 × 6–9 mm 15. *L. caudata*

1. Lagerstroemia balansae Koehne, Bot. Jahrb. Syst. 23(Beibl. 57): 35. 1897.

毛萼紫薇 mao e zi wei

Shrubs to small or tall trees, 5–25 m tall. Bark yellowish, smooth; young branches, leaves, petioles, inflorescences, and floral tubes golden to red-brown tomentose; trichomes dendritic, partially to completely glabrescent. Petiole 4–8 mm; leaf blade oblong-lanceolate or elliptic, 6–12[–15] × 2–5.5[–6] cm, thickly papery to thinly leathery, abaxially glabrescent except on veins, lateral veins 5–8 pairs, base acute to subrounded, apex acute or shortly acuminate. Panicles 6–15[–20] cm, open, few flowered, sometimes interrupted by leaves, densely red-brown tomentose. Floral tube 6-merous, 1–1.2 cm, smooth walled, densely golden-brown tomentose; sepals 5–6 mm, adaxially densely tomentose; annulus absent; epicalyx absent. Petals purple-red, orbicular to obovate, ca. 1.8 cm including claw 2–4 mm. Stamens 60–70, dimorphic, antepetalous stamens mostly included. Ovary densely tomentose. Capsules ovoid, 1.2–1.5 cm, 5- or 6-valved, apex tomentose. Seeds including wing ca. 1.1 cm. Fl. Jun–Jul, fr. Oct–Nov.

Common in mixed forests; low elevations. Hainan [Laos, Thailand, Vietnam].

2. Lagerstroemia tomentosa C. Presl, Bot. Bemerk. 142. 1844.

绒毛紫薇 rong mao zi wei

Lagerstroemia tomentosa var. *caudata* Koehne; *Murtughas tomentosa* (C. Presl) Kuntze.

Trees, 20–30[–35] m tall. Bark gray, fibrous, to 1 cm thick;

stem, petioles, leaves, floral tubes, and ovaries densely golden tomentose; trichomes dendritic. Petiole 4–8 mm; leaf blade oblong-lanceolate or ovate, 8–18 × 4–6.5 cm, abaxially tomentose, glabrescent except on midvein, lateral veins 9–11 pairs, base rounded, apex acute to shortly acuminate. Panicles 8–20 cm, relatively open. Floral tube 6-merous, 8–10 mm, 12-ribbed, densely golden tomentose; sepals 3–4 mm, adaxially completely glabrous; annulus absent; epicalyx absent. Petals white, pale pink, or purple, ovate, 1–1.6 cm including claw 3–5 mm, base obtuse. Stamens 24–70, dimorphic. Ovary densely golden tomentose. Capsules globose to ovoid-oblong, 1–1.5 × 0.8–1.1 cm, 6-valved, apex tomentose. Seeds 6–7 mm including wing. Fl. May, fr. Aug–Nov.

Mixed forests; 600–1200 m. Yunnan [Laos, Myanmar, Thailand, Vietnam].

3. Lagerstroemia villosa Wallich ex Kurz, J. Asiat. Soc. Bengal, Pt. 2, Nat. Hist. 42: 234. 1873.

毛紫薇 mao zi wei

Murtughas villosa (Wallich ex Kurz) Kuntze.

Trees, 10–15[–30] m tall. Bark dark, roughly fissured; branchlets, both surfaces of leaves, and inflorescence white pubescent. Petiole 2–4[–6] mm; leaf blade ovate to broadly lanceolate or elliptic, 6–10 × 2.5–4 cm, papery to leathery, abaxially soft whitish puberulous when young, glabrescent except on veins, lateral veins [5 or]6[–8] pairs, base subacute to rounded, apex acute to shortly acuminate, sometimes mucronate. Panicles 3[–8] cm, nearly globose, densely flowered. Floral tube 5- or 6-merous, 4–5 mm, densely white pubescent, with 5 or 6

prominent undulate winged ribs; wings attenuate on pedicellate floral base; sepals 1.5–2.5 mm, glabrous or slightly granular at apex; annulus absent; epicalyx absent. Petals white, lanceolate, 1.5–3 mm, not crumpled, much shorter than floral tube, possibly sometimes missing, not or scarcely clawed. Stamens ca. 25, dimorphic. Ovary glabrous. Capsules subglobose to narrowly ovoid-oblong, 1.5(–2.2) × ca. 1.1 cm, 3- or 4-valved. Seeds including wing (3.5–)9–10 mm. Fl. and fr. autumn and winter.

Forests; 700–1000 m. SW Yunnan [Myanmar, Sri Lanka, Thailand].

4. Lagerstroemia limii Merrill, Philipp. J. Sci. 27: 165. 1925.

福建紫薇 fu jian zi wei

Lagerstroemia chekiangensis Cheng.

Shrubs or small trees, ca. 4 m tall, much branched. Branchlets terete, densely gray or yellow-brown pubescent. Petiole 2–5 mm, pubescent; leaf blade elliptic or oblong-elliptic, 4.5–3 × 2.5–6 cm, leathery, abaxially puberulous on midvein and lateral veins, lateral veins 10–17 pairs, base attenuate to subrounded, apex shortly acuminate or acute. Panicles 8–18 cm, open, densely pubescent. Floral tube (5 or)6-merous, 5–8 mm, 12–14-deeply ribbed to sharply ridged, densely yellow-brown pubescent to nearly glabrous at anthesis; sepals deltate, 2–3.5 mm, adaxially glabrous, caudate, pubescent at apex; annulus subtending sepals thickened; epicalyx segments conspicuous, typically spreading, broad, flattened, ca. 1/2 as long as sepals, auriculate. Petals reddish to pink, ovate to suborbicular, 9–12 mm including claw 4–6 mm, base obtuse. Stamens ca. 35, dimorphic. Ovary glabrous. Capsules 8–12 × 5–8 mm, 4- or 5-valved. Seeds including wing ca. 8 mm. Fl. May–Jun, fr. Jul–Aug.

• Mixed forests, low mountains. Fujian, Hubei, Zhejiang.

5. Lagerstroemia guilinensis S. K. Lee & L. F. Lau, Bull. Bot. Res., Harbin 2(1): 143. 1982.

桂林紫薇 gui lin zi wei

Shrubs, ca. 2 m tall. Branchlets terete, glabrous. Petiole ca. 2 mm; leaf blade ovate-lanceolate or elliptic-lanceolate, 4.5–7 × 1.5–2.5 cm, papery, glabrous, lateral veins 5 or 6 pairs, base broadly cuneate to subrounded, apex long acuminate. Panicles 5–8 × 2–3 cm, slender, glabrous. Floral tube 6-merous, 1–1.2 cm, prominently sharply 6-ribbed, glabrous; sepals ca. 2 mm, adaxially glabrous; annulus absent; epicalyx segments prominent, linear, to 3 mm, ca. as long as or surpassing sepals. Petals white, suborbicular, ca. 1.4 cm including claw ca. 6 mm. Stamens ca. 36, dimorphic. Ovary glabrous. Capsules subglobose or oblong, ca. 7 mm, 4-valved, smooth walled. Seeds unknown. Fl. May–Jun, fr. Sep.

• Scrub on limestone mountains. Guangxi.

6. Lagerstroemia venusta Wallich ex C. B. Clarke in J. D. Hooker, Fl. Brit. India 2: 576. 1879.

西双紫薇 xi shuang zi wei

Lagerstroemia colletii Craib; *L. corniculata* Gagnepain.

Trees, to 8[–17] m tall. Branchlets terete, densely gray pu-

berulous. Petiole 3–6 mm; leaf blade oblong or oblong-elliptic, 10–14 × 3–5.5 cm, gray puberulous, glabrescent, lateral veins [5–]8 or 9 pairs, base usually oblique, apex obtuse. Panicles 11–27(–45) cm, densely gray puberulous, open, sparsely flowered. Floral tube 6(or 7)-merous, 5–9 mm, gray puberulous, 6- or 7-ribbed or ribs rounded, obscure; sepals ca. 3 mm, adaxially glabrous; annulus absent; epicalyx segments deltate, ca. as long as sepals, abaxially keeled, slightly incurved in bud. Petals pink-purple, oblong, 7–9 mm including claw 2–3 mm. Stamens numerous, dimorphic. Ovary glabrous. Capsules ovoid, ca. 1.3 × 1.2–2 cm, 5-valved, finely wrinkled at maturity. Seeds including wing ca. 1.8 cm. Fl. Oct, fr. Dec–Nov.

Rain forests, rain forest margins. S Yunnan [Cambodia, Laos, Myanmar, Thailand, Vietnam].

7. Lagerstroemia indica Linnaeus, Sp. Pl., ed. 2, 1: 734. 1762.

紫薇 zi wei

Lagerstroemia chinensis Lamarck; *Murtughas indica* (Linnaeus) Kuntze.

Shrubs or small trees, to 7 m tall. Branchlets slender, 4-angled or subulate, puberulous, glabrescent. Leaves sessile or with petiole to ca. 2 mm; leaf blade elliptic, oblong, obovate, or suborbicular, typically at least some suborbicular to obovate and mucronate, 2.5–7[–10] × 1.5–4 cm, papery to slightly leathery, glabrous or with slight indumentum on veins abaxially, lateral veins 3–7 pairs, base broadly cuneate to rounded, apex acute, obtuse with small mucro, or retuse. Panicles subpyramidal, 7–20 cm, puberulous, densely flowered. Floral tube 6-merous, 7–11 mm, smooth walled or obscurely to decidedly 6-ribbed, glabrous; sepals 3.5–5.5 mm, adaxially glabrous; annulus present; epicalyx absent. Petals purple, fuchsia, pink, or white, orbicular, 1.2–2 cm including claw 6–9 mm. Stamens 36–42, dimorphic. Ovary glabrous. Capsules ellipsoidal, 1–1.3 × 0.7–1.2 cm, 4–6-valved. Seeds including wing ca. 8 mm. Fl. Jun–Sep, fr. Sep–Nov. $2n = 48, 50$.

Semishaded places, rich fields, wild or cultivated. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hainan, Henan, Hubei, Hunan, Jiangxi, Jilin, Shandong, Shanxi, Sichuan, Taiwan, Yunnan, Zhejiang [Bangladesh, Bhutan, Cambodia, India, Indonesia, Japan, Laos, Malaysia, Myanmar, Nepal, Pakistan, Philippines, Singapore, Sri Lanka, Thailand, Vietnam; widely cultivated throughout these and other warm regions of the world].

8. Lagerstroemia intermedia Koehne in Engler, Pflanzenr. 17(IV. 216): 260. 1903.

云南紫薇 yun nan zi wei

Lagerstroemia speciosa (Linnaeus) Persoon var. *intermedia* (Koehne) Furtado & Montien.

Trees, 6–12 m tall. Branchlets terete, glabrous. Petiole 1.2–1.5 cm; leaf blade elliptic or oblong-elliptic, rarely elliptic-obovate, 7–18 × 4–8 cm, papery to thinly leathery, abaxially paler and conspicuously reticulate, lateral veins 10 or 11 pairs, base acute to attenuate, apex shortly acuminate. Panicles 10–15 cm, glabrous or puberulous. Floral tube 6-merous, 1.2–1.5 cm, smooth walled or with 12 shallow, broad ribs, densely yellow-brown puberulous; sepals narrowly deltate, 5.5–8 mm, ca. 1/2

as long as floral tube, adaxially glabrous; annulus absent; epicalyx segments absent or minute. Petals purple to bluish purple when dry, ovate, 2–2.5 cm including claw 5–7 mm. Stamens 75 to ca. 130, in 2 or 3 whorls, monomorphic. Ovary glabrous. Capsules oblong, 2.5–3.5 × ca. 2 cm, 6-valved. Seeds yellowish brown, ca. 10 mm including wing. Fl. May–Jun, fr. Oct–Dec.

Scrub forests, hillsides, roadsides; 800–1500 m. SW Yunnan [Myanmar].

This species is very similar to the widespread and commonly cultivated *Lagerstroemia speciosa* (Linnaeus) Persoon. The lectotype of *L. intermedia* differs in having slightly smaller, non-apiculate buds and smaller flowers that are very shallowly ribbed or smooth walled. In *L. speciosa*, the buds are typically apiculate and the floral tubes are more deeply and conspicuously ribbed, but it is uncertain if there is a continuum from shallow to deep ribbing. If there is a continuum, then *L. intermedia* is better considered a variety of *L. speciosa*. Epicalyx segments described by Koehne in the protologue of *L. intermedia* that might be a useful character are, in fact, not present on the lectotype.

Lagerstroemia intermedia is very local and of some conservation concern.

9. *Lagerstroemia fordii* Oliver & Koehne in Engler, Pflanzenr. 17(IV. 216): 262. 1903.

广东紫薇 guang dong zi wei

Shrubs or trees, 3–8 m tall. Branchlets gray-white pubescent. Petiole 3–12 mm; leaf blade broadly lanceolate or elliptic-lanceolate to elliptic-ovate, (3–)6–10 × 2.5–4 cm, papery, abaxially slightly pubescent to glabrescent, lateral veins 4 or 5(–8) pairs, adaxially venation not raised, base attenuate, apex long acuminate to caudate. Panicles terminal, 6–20 cm, gray-white pubescent. Floral tube 6-merous, 7–9 mm, distinctly 10–12-ribbed, gray-white pubescent; sepals ca. 2 mm, adaxially slightly pubescent on distal half; annulus absent; epicalyx absent. Petals ?color, ovate, 8–12 mm including claw 3–5 mm, base cordate. Stamens 25–30, dimorphic. Ovary glabrous. Capsules 1–1.2 cm × 7–9 mm. Seeds 6–8 mm including wing. Fr. Aug.

• Sparse forests on low mountains. Fujian, Hong Kong (Lantau Island).

10. *Lagerstroemia suprareticulata* S. K. Lee & L. F. Lau, Bull. Bot. Res., Harbin 2(1): 146. 1982.

网脉紫薇 wang mai zi wei

Small trees or shrubs, ca. 9 m tall. Branchlets gray-brown, terete, glabrous. Petiole 2–5 mm; leaf blade ovate or elliptic-ovate, 4–6.2 × 2.5–3.5 cm, thick, papery, lateral veins 4 or 5 pairs, abaxially reticulate veins obscure, adaxially venation distinctly raised and reticulate, base rounded or broadly cuneate, apex shortly acuminate. Panicles terminal, 11–13(–17) cm, whitish powdery-tomentose. Floral tube (5 or)6-merous, ca. 9 mm, with 10–12 dark veins, dense gray tomentose; sepals ca. 2 mm, adaxially densely gray tomentose; annulus unknown; epicalyx absent. Petals white, ovate, ca. 8 mm including claw ca. 3 mm, base cordate. Stamens 30–40, subequal, possibly monomorphic. Ovary ca. 1.5 mm in diam., glabrous. Fruit unknown.

• Stony mountains. SW Guangxi (Longzhou, Wuming).

11. *Lagerstroemia anhuiensis* X. H. Guo & S. B. Zhou, Bull. Bot. Res., Harbin 24: 392. 2004.

安徽紫薇 an hui zi wei

Shrubs or small trees, ca. 2 m tall. Branchlets terete to slightly 4-angular, yellow-brown pubescent. Petiole ca. 2 mm; leaf blade abaxially green, adaxially dark green, elliptic or narrowly elliptic, 2–5.5 × 1.5–2.5 cm, membranous, abaxially densely villous, adaxially densely pubescent, lateral veins 4 or 5 pairs, base broadly cuneate or rounded, apex acute or shortly acuminate. Panicles ca. 15 cm, densely villous. Floral tube (4–)6-merous, 3–4 mm, 8–12-ribbed; sepals ca. 1 mm, broadly deltate, adaxially densely pubescent; annulus thick, brown; epicalyx absent. Petals white, suborbicular, 5–6 mm including claw ca. 3 mm, base cordate. Stamens 16–30, dimorphic. Ovary glabrous. Young capsules dark brown, globose, ca. 1 mm in diam. Seeds unknown. Fl. Jul–Sep, fr. Aug–Oct.

• S Anhui (Guichi).

12. *Lagerstroemia excelsa* (Dode) Chun ex S. K. Lee & L. F. Lau, Fl. Reipubl. Popularis Sin. 52(2): 104. 1983.

川黔紫薇 chuan qian zi wei

Orias excelsa Dode, Bull. Soc. Bot. France 56: 232. 1909; *Lagerstroemia subcostata* Koehne var. *ambigua* Pampanini; *L. excelsa* var. *ambigua* (Pampanini) Furtado & Montien; *L. yangii* Chun.

Trees, 20–30 m tall. Branchlets terete, sparsely to densely gray pubescent, glabrescent. Leaves mostly opposite; petiole 4–8 mm, pubescent; leaf blade adaxially dark green, elliptic to broadly elliptic, 7–13 × 3.5–5 cm, membranous, abaxially pubescent on veins, adaxially glabrous, lateral vein 7–9 pairs, base acute, apex narrowly to broadly acuminate. Panicles 11–30 cm, densely gray-brown pubescent, densely flowered. Floral tube 6-merous, 2.5–3.5 mm, smooth walled, densely pubescent, glabrescent, with 12 dark veins; sepals 1.5–2 mm, adaxially sparsely puberulous at apex, glabrescent; annulus absent; epicalyx segments minute, ca. 0.3 mm, or absent. Petals yellowish white, ovate, 3–3.5 mm including claw 1–1.2 mm. Stamens (5 or)6–12, dimorphic, 6 antesealous, also sometimes up to 6 antepetalous. Ovary glabrous. Capsules subglobose to oblong, 3.5–5 × 3–4 mm, (3 or)4-valved. Seeds including wing 3.5–4.8 mm. Fl. Apr, fr. Jul.

• Dense forests in mountain valleys; 1200–2000 m. Guizhou, Hubei, Sichuan.

13. *Lagerstroemia subcostata* Koehne, Bot. Jahrb. Syst. 4: 20. 1883.

南紫薇 nan zi wei

Lagerstroemia subcostata var. *hirtella* Koehne; *L. unguiculosa* Koehne.

Trees or shrubs, to 14 m tall. Branchlets glabrous to gray puberulous or pubescent. Petiole 2–4 mm; leaf blade oblong, ovate-lanceolate, elliptic, obovate-elliptic, or infrequently obovate, 2–9(–11) × 1–5 cm, papery, abaxially glabrous or slightly pubescent, lateral veins 3–10 pairs, base broadly cuneate to subrounded, apex acuminate. Panicles pyramidal, 7–16(–30) cm, gray-brown pubescent, densely flowered. Floral tube 6-merous, 3.5–4.5 mm, with (10 or)12(or 14) dark veins or obscurely (10

or)12(or 14)-ribbed, glabrous to densely gray pubescent; sepals 1–2 mm, adaxially glabrous; annulus thin or apparently absent; epicalyx absent. Petals white, pink, or purple, broadly ovate with obtuse base, 7–10 mm including claw 3.5–6 mm, claw ca. as long as blade. Stamens 15–30, dimorphic. Ovary glabrous. Capsules globose to mostly oblong, 6–9(–11) mm, 3–6-valved. Seeds including wing ca. 4 mm. Fl. Jun–Aug, fr. Jul–Oct.

Forest margins, streamsides; low to medium elevations. Anhui, Fujian, Guangdong, Guangxi, Hunan, Hubei, Jiangsu, Jiangxi, Qinghai, Sichuan, Taiwan, Zhejiang [Japan, Philippines].

It is difficult to separate the following two species, *Lagerstroemia glabra* (including *L. stenopetala*) and *L. caudata*, from the widespread *L. subcostata*. Further knowledge about the degree of development of indumentum and variability of leaf shape and size is needed. More abundant gatherings may erase apparent differences between the species.

14. *Lagerstroemia glabra* (Koehne) Koehne, Bot. Jahrb. Syst. 41: 102. 1907.

光紫薇 *guang zi wei*

Lagerstroemia subcostata Koehne var. *glabra* Koehne, Bot. Jahrb. Syst. 4: 20. 1883; *L. stenopetala* Chun.

Trees, small, 7–10 m tall. Branchlets 4-angled, glabrous.

Petiole 2–5 mm; leaf blade ovate-elliptic or elliptic-lanceolate, 4.5–6.5(–11.5) × 2.2–3(–4) cm, papery, glabrous, lateral veins 5–7 pairs, base cuneate to subrounded, apex shortly to long acuminate. Panicles pyramidal, 5–12 cm. Floral tube (4 or)5 or 6-merous, 4–5 mm, smooth walled, with 12 dark veins or obscurely 12-ribbed; sepals 1.5–2 mm, adaxially glabrous; annulus present, thin, scarcely developed; epicalyx absent. Petals white, oblong-lanceolate to elliptic, 6–7 mm including claw 1.5–3 mm. Stamens ca. 20, dimorphic. Ovary glabrous. Capsules ellipsoidal, 6–8 × 4–5 mm. Seeds including wing ca. 6 mm. Fl. Jul, fr. Oct.

● Guangdong, Guangxi, Hubei.

No consistent and taxonomically useful differences were found between *Lagerstroemia stenopetala* and *L. glabra*, although the lectotype of *L. stenopetala* was studied. The longer acuminate-caudate tip of the leaves of *L. stenopetala* seems to be the primary difference between the entities, and this condition can be found in some leaves of *L. glabra*. Given the variability of leaf shape generally found in *Lagerstroemia*, it is questionable whether this is significant at the species level. Petals of *L. glabra* and *L. stenopetala* are also similar and unusual for the genus, being lanceolate and not wrinkled in the proximal half. Furtado and Montien (Gard. Bull. Singapore 24: 185–334. 1969) also treated *L. stenopetala* as a synonym of *L. glabra*.

15. *Lagerstroemia caudata* Chun & F. C. How ex S. K. Lee & L. F. Lau, Bull. Bot. Res., Harbin 2(1): 144. 1982.

尾叶紫薇 *wei ye zi wei*

Trees, 18–30 m tall. Branchlets terete, glabrous. Leaves alternate, rarely subopposite; petiole 6–10 mm; leaf blade adaxially dark green, shiny, broadly elliptic, rarely ovate-elliptic, 7–12 × 3–5.5 cm, papery to slightly leathery, abaxially glabrous or pubescent on veins, lateral veins 5–7 pairs, base broadly cuneate to subrounded, apex acuminate to long acuminate. Panicles 3.5–8 cm; ultimate branches puberulous. Floral tube (5 or)6-merous, ca. 5 mm, with 10–12 dark veins; sepals ca. 2 mm, adaxially glabrous, annulus present; epicalyx absent. Petals white, oblong, ca. 9 mm including claw ca. 2 mm, base acute. Stamens 18–28, dimorphic. Ovary glabrous. Capsules oblong-globose, 8–11 × 6–9 mm, 5- or 6-valved. Seeds including wing 5–7 mm. Fl. Apr–May, fr. Jul–Oct.

● Forests, forest margins, limestone mountains. Guangdong, Guangxi, Jiangxi.

Flora of China 13: 277–281. 2007.