

11. SAUROPUS Blume, Bijdr. 595. 1826.

守宫木属 shou gong mu shu

Li Bingtao (李秉滔 Li Ping-tao); Michael G. Gilbert

Aalius Rumphius ex Kuntze; *Breyniopsis* Beille; *Ceratogynum* Wight; *Diplomorpha* Griffith (1854), not Meisner (1841); *Synostemon* F. Mueller.

Erect shrubs, rarely herbs or climbers, monoecious or dioecious; indumentum of simple or gland-tipped hairs, often absent. Leaves alternate; stipules small, paired, inserted at bilateral base of petiole; leaf blade simple, entire, pinnately veined or rarely obscurely 3-veined from base, petiolate. Flowers smaller, apetalous. Male flowers axillary or cauliflorous, clustered or solitary, rarely in racemelike thyrses or short cymes; pedicels usually bracteolate at base; calyx discoid, cup-shaped, or turbinate, entire or 6-lobed, lobes obscurely biseriata, imbricate, erect, or spreading, margins slightly thick, with a whorl of scalelike adaxial lobes at bases of calyx lobes, rarely absent; petals absent; stamens 3, opposite outer sepals; filaments usually connate into a short cylinder; anthers free, bilocular, thecae 2, extrorse, longitudinally dehiscent; pistillode absent. Female flowers axillary, solitary or paired or with males, rarely inserted at base of male inflorescence; calyx usually 6-parted; sepals biseriata, imbricate, sometimes thickened at fruiting; disk absent; ovary ovoid or depressed globose, truncate or retuse at apex, 3-locular; ovules 2 per locule; styles 3, free or connate at base, much divergent, 2-branched at apex, arms recurved. Fruit a capsule, depressed or ovoid, breaking into 3 2-valved cocci when mature. Seeds not carunculate; endosperm fleshy; cotyledon flattened and broad.

About 56 species: Mascarenes, India, and Sri Lanka to Indo-Malaysia, Philippines, Indonesia, and Australia; 15 species (four endemic, one introduced) in China.

The dividing line between *Sauropus* and the following genus, *Breynia*, is for the most part rather clear-cut but there are a few species that seem to mix characters of the two genera.

- 1a. Creeping or obliquely ascending herbs; sepals with adaxial gland-pits, male sepal margins distally irregularly crenate; stipules awned 1. *S. bacciformis*
- 1b. Erect shrubs; sepals without gland-pits, male sepal margins entire or shallowly undulate; stipules without awns.
 - 2a. Leaf blade 3-veined.
 - 3a. Male inflorescence a raceme; calyx 6-fid to middle, lobes ovate-triangular; female sepals obovate 2. *S. trinervius*
 - 3b. Male inflorescence an axillary cluster; calyx entire, margins undulate; female sepals broadly ovate 3. *S. repandus*
 - 2b. Leaf blade pinnately veined.
 - 4a. Inflorescence with distinct main axis, cauliflorous, arising from base or lower part of stem or main branches at ground level; anther connectives forming triangular head with anthers at angles.
 - 5a. Branches, petioles, and base of leaf blade abaxially pubescent when young; leaves pendent, usually crowded toward stem apex; leaf blade usually spatulate, apex rounded; sepals red or purple 4. *S. spatulifolius*
 - 5b. Branches, leaf blade abaxially, and petioles glabrous; leaves not pendent, never clustered at stem apex; leaf blade oblong-elliptic, ovate-lanceolate, or oblanceolate, apex acuminate or shortly so; sepals yellow-green with red streaks 5. *S. bonii*
 - 4b. Inflorescence without distinct axis, in upper axils of branches; anther connectives not enlarged.
 - 6a. Leaf blade leathery, reticulate veins prominent 6. *S. reticulatus*
 - 6b. Leaf blade membranous to papery, reticulate veins \pm obscure.
 - 7a. Female pedicels 2–6 cm, to 13 cm in fruit 7. *S. macranthus*
 - 7b. Female pedicels 0.1–1.5 cm.
 - 8a. Lateral veins 10–12 pairs, base of midrib on both surfaces and of leaf blade margin equally densely stiffly papillate 8. *S. yanhuianus*
 - 8b. Lateral veins 4–8 pairs, midrib and leaf blade margin more sparsely papillate.
 - 9a. Leaf blade papery or thickly papery.
 - 10a. Leaf apex rounded, mucronulate 11. *S. similis*
 - 10b. Leaf apex acuminate or caudate-acuminate.
 - 11a. Leaf apex acuminate, lateral veins slightly raised on both surfaces; male sepals broadly or obliquely ovate; female sepals ovate 9. *S. pierrei*
 - 11b. Leaf apex caudate-acuminate, lateral veins adaxially flattened, elevated abaxially; male sepals oblong-lanceolate; female sepals spatulate 10. *S. tsiangii*
 - 9b. Leaf blade membranous or thinly papery.
 - 12a. Branchlets 4-sided; leaf blade 0.2–2 \times 0.2–1.2 cm, apex obtuse, rounded, truncate, or retuse, lateral veins obliquely ascendant; male calyx deeply 6-partite.
 - 13a. Branches glabrous; leaf blade apex rounded, not mucronulate, base rounded or broadly cuneate, lateral veins slender 12. *S. quadrangularis*

- 13b. Branches pubescent; leaf blade apex rounded, truncate, or retuse, mucronulate, base shallowly cordate, truncate, or rounded, lateral veins more robust, forked at apex, reticulate nerves prominent 13. *S. delavayi*
- 12b. Branchlets obscurely angular when young, terete with age; leaf blade 2–13 × 1–3.5 cm, apex usually acuminate, rarely acute, lateral veins curved-ascendant; male calyx shallowly 6-fid.
- 14a. Branchlets and veins of young leaves puberulent; female sepals ovate or elliptic; leaf blade glaucous; capsules obovoid to ovoid 14. *S. garrettii*
- 14b. Branchlets and veins of leaves glabrous; female sepals obovate; leaf blade yellowish green; capsules depressed globose or globose 15. *S. androgynus*

1. *Sauropus bacciformis* (Linnaeus) Airy Shaw, Kew Bull. 35: 685. 1980.

艾堇 ai jin

Phyllanthus bacciformis Linnaeus, Mant. Pl. 2: 294. 1771; *Agyneia affinis* Kurz ex Teijsmann & Binnendijk; *A. bacciformis* (Linnaeus) A. Jussieu; *A. bacciformis* var. *angustifolia* Müller Argoviensis; *A. bacciformis* var. *oblongifolia* Müller Argoviensis; *A. gonioclada* (Merrill & Chun) H. Keng; *A. phyllanthoides* Sprengel; *A. taiwaniana* H. Keng; *Diplomorpha bacciformis* (Linnaeus) Kuntze; *D. herbacea* Griffith; *Emblica annua* Rafinesque; *E. grandis* Gaertner; *E. racemosa* (Linnaeus f.) Sprengel; *Phyllanthus goniocladus* Merrill & Chun; *P. racemosus* Linnaeus f.; *Synostemon bacciformis* (Linnaeus) G. L. Webster.

Herbs or subshrubs to 60 cm tall, erect, diffuse or prostrate, monoecious, glabrous throughout; stem solitary or several branched arising from base; branches acutely 4-angled or with narrow membranous wing. Stipules narrowly triangular to falcate, 1.7–3 × 0.5–1.5 mm, apex awned, persistent; petiole to 1 mm; leaf blade oblong, elliptic-obovate, rotund, or lanceolate, (0.7–)1–2.5 × 0.2–1.2 cm, ± fleshy, membranous when dried, abaxially somewhat papillate and glaucous, base rounded, rarely cuneate, margin flat, without asperities, apex obtuse or acute, mucronulate; venation pinnate, lateral veins obscure. Inflorescences axillary, flowers in clusters, green to light purple. Sepals with adaxial gland-pits. Male flowers several in lower axils, 1–2 mm in diam.; pedicels (0.6–)1–1.5 mm; sepals 6, broadly ovate or obovate, 0.4–0.6 × 0.3–0.4 mm, apex irregularly crenate; disk lobes fleshy, at bases of sepals, yellow-green; stamens 3–4 mm; filament column ca. 0.2 mm. Female flowers in distal axils, solitary, 3–4[–5.5] mm in diam.; pedicel 1–1.5[–4] mm; sepals oblong-lanceolate, 2–2.8 × 1–1.4 mm, apex [acute or] acuminate; disk absent. Fruiting sepals reflexed; capsules broadly ovoid, 0.5–0.6 × 0.4–0.5 cm, purple when mature, with rim around styles, endocarp and exocarp separating. Seeds yellowish, 3-angled, slender and curved, 3–4[–4.9] × [1.2–]2 mm, surface strobiculate. Fl. Apr–Jul, fr. Jul–Nov. *x* = 13.

Seashore sandy tracts, especially on brackish clayey soil; near sea level to below 100 m. Guangdong, Guangxi, Hainan, Taiwan [Bangladesh, India, Indonesia, Malaysia, Philippines, Sri Lanka, Thailand, Vietnam; Indian Ocean islands (Mauritius, Réunion)].

2. *Sauropus trinervius* J. D. Hooker & Thomson ex Müller Argoviensis, Linnaea 32: 72. 1863.

三脉守宫木 san mai shou gong mu

Aalius trinervia (J. D. Hooker & Thomson ex Müller Argoviensis) Kuntze.

Erect shrubs to 4 m tall, monoecious, glabrous except for glandular-pubescent branches; branches angular. Stipules lanceolate, 5–8 mm; petiole ca. 3 mm; leaf blade ovate or ovate-lanceolate, 4–12.5 × 2–3.5 cm, base obtuse or rounded, apex acute; basal veins 3, lateral veins 4–6 pairs, slender. Inflorescence axillary. Male flowers in racemes on short peduncles, with minute bracts; pedicels slender, 7–10 mm; calyx enlarging, ca. 5 mm in diam., 6-lobed to middle; sepals ovate-triangular, ca. 4 mm, reflexed; disk segments 6, biseriate, outer shorter and wider than inner, apex obtuse; stamens 3; filaments connate into a cylinder. Female flowers solitary, axillary; pedicel ca. 7 mm; calyx 4–6 mm in diam., 6-lobed; sepals 6, biseriate, usually unequal, obovate, outer 2 × as long as inner; ovary obovoid, apex truncate; styles short. Fruiting pedicel absent; capsule globose, ca. 2.5 cm in diam., exocarp thinly crustaceous stellate, 6-valved, cocci with a large adaxial hollow. Fl. May–Sep, fr. Aug–Nov.

Open forested slopes or valley scrub; 1000–1300 m. Yunnan (Huize, Kaiyuan) [Bangladesh, India].

The epithet was based on the not validly published name “*Phyllanthus trinervius*” (Wallich, Numer. List, no. 7922. 1847).

3. *Sauropus repandus* Müller Argoviensis, Flora 65: 2. 1872.

波萼守宫木 bo e shou gong mu

Erect shrubs ca. 1 m tall, monoecious; stem terete, brown; branches compressed and angular, gray-yellow. Stipules lanceolate, 2–3 mm; petiole ca. 3 mm; leaf blade ovate, elliptic, or ovate-lanceolate, 3–9 × 1.5–3 cm, membranous, abaxially greenish, dark green adaxially, base broadly cuneate or obtuse to rounded, apex acuminate or shortly so; basal veins 3, midrib slightly raised on both surfaces, lateral veins 3–5 pairs. Inflorescence in axillary clusters. Male flowers: pedicels filamentous, 5–6 mm; calyx discoid, 5–6 mm in diam., margins shallowly undulate, greenish; disk segments 6, obcordate, flattened, membranous, depressed at apex, adnate to calyx inside; stamens 3; filaments connate into a short cylinder. Female flowers: pedicels 6–13 mm; calyx 7–9 mm in diam., 6-lobed to base; sepals biseriate, outer broadly ovate, apex obtuse, inner shorter than outer, rotund; ovary turbinate, apex truncate; styles 3, bifid at apex, lobes recurved. Fruit not seen. Fl. Sep–Oct.

Open forested slopes; 800–1300 m. S Yunnan (Menghai) [Bhutan, India (Sikkim)].

4. *Sauropus spatulifolius* Beille in Lecomte, Fl. Gen. Indo-Chine 5: 652. 1927.

龙脷叶 long li ye

Sauropus changianus S. Y. Hu.

Evergreen shrublets 10–40 cm tall, monoecious; stem scabrous; branches terete, 2–5 mm in diam., scorpioid-curved, rugose. Leaves usually clustered apically, often recurved or pendulous; stipules 4–8 × 3–4 mm wide at base, glandular-pubescent when young, persistent; petiole 2–5 mm, glandular-pubescent when young, glabrescent; leaf blade spatulate, obovate-oblong, or ovate, sometimes oblong, 4.5–16.5 × 2.5–6.3 cm, ± fleshy when fresh, thinly leathery or thickly papery when dry, dark green and nerves gray-white adaxially when live, yellow-white when dry, usually glabrous, sometimes abaxially glandular-pubescent at base, glabrescent, base cuneate or obtuse, rarely rounded, apex rounded or obtuse, rarely retuse; venation pinnate, midrib flat when live, raised on both surfaces when dry, lateral veins 6–9 pairs, flat on both surfaces. Inflorescence cauliflorous, 2–5-flowered clusters or leafless branches at middle or lower part, sometimes in short cymes to 15 mm; peduncles short and robust, with many bracts; bracts lanceolate, ca. 2 mm. Male flowers: pedicels filamentous, 3–5 mm; calyx red or purple; sepals 6, biseriate, subequal, obovate, 2–3 × ca. 1.5 mm; disk segments 6, opposite sepals; stamens 3; filaments connate into a short cylinder. Female flowers: pedicels 2–3 mm; sepals as in male; disk absent; ovary subglobose, ca. 1 mm in diam., 3-locular; styles 3, bifid at apex. Fruit not seen. Fl. Feb–Oct.

Cultivated for medicine. Fujian, Guangdong, Guangxi [native to N Vietnam; cultivated in Malaysia, Philippines, Thailand].

The leaves are used as medicine for coughs, sore throat, and acute bronchitis.

5. *Sauropus bonii* Beille in Lecomte, Fl. Indo-Chine 5: 651. 1927.

茎花守宫木 jing hua shou gong mu

Shrubs to 3 m tall, monoecious, glabrous throughout; stem gray; branches angular, green. Stipules triangular, 3–5 mm; petiole 3–6 mm; leaf blade oblong-elliptic, ovate-lanceolate, or oblanceolate, 7–14 × 2.5–5 cm, papery, abaxially greenish, dark green adaxially, base broadly cuneate, apex acuminate or shortly so; venation pinnate, lateral veins 7–11 pairs, obliquely ascending, arcuately anastomosing to before margins. Inflorescences cauliflorous, from base to lower part of stem, narrow racemelike thyrses, usually pendent, 6–15 cm, bisexual; peduncles and pedicels with imbricate bracts and bracteoles. Male flowers: pedicels filamentous, 2–34 mm; calyx cup-shaped, 3–5 mm in diam., margins undulate, membranous, yellowish, with red streak; disk shallowly 6-fid, adnate to calyx; stamens 3; filaments connate into a cylinder; anthers oblong. Female flowers: pedicels 2–3 mm; calyx campanulate, 3–5 mm in diam., 6-lobed; sepals biseriate, spatulate or obovate, outer 3–5 mm, inner 2–4 mm; ovary

ovoid or globose, 3-locular; styles 3, free, bifid at apex, arms recurved. Capsules subglobose, ca. 1.5 × 2 cm, prominently 6-valved when mature. Fl. Apr–Aug, fr. Jun–Oct.

Forests or scrubby slopes on limestone; 200–500 m. NW and SW Guangxi (Longzhou, Tian'e) [Vietnam].

Records of *Sauropus bonii* from Thailand seem to be based on a misidentification of *S. disciflorus* Welzen, which has much shorter inflorescences.

6. *Sauropus reticulatus* X. L. Mo ex P. T. Li, Acta Phytotax. Sin. 25: 133. 1987.

网脉守宫木 wang mai shou gong mu

Shrubs ca. 2 m tall, erect, glabrous throughout. Stipules triangular, caducous; petiole ca. 5 mm; leaf blade oblong, oblong-elliptic, or elliptic-lanceolate, 10–16 × 4–5 cm, leathery, base broadly cuneate to obtuse, apex acuminate; venation pinnate, lateral veins 8–10 pairs, reticulate veins raised on both surfaces. Flowers not seen. Inflorescence axillary, 1-fruited. Fruiting pedicel ca. 3 cm; persistent sepals 6, broadly obovate, ca. 5 × 2.5 mm, thick; capsule depressed globose, ca. 1.5 × 2 cm; persistent styles 3, free, bifid. Fr. Aug–Nov.

• Open forests or scrubby slopes on limestone; 500–800 m. W Guangxi (Jingxi), W Yunnan (Luxi).

Flowers are needed to confirm the generic placement of this plant.

7. *Sauropus macranthus* Hasskarl, Retzia 1: 166. 1855.

长梗守宫木 chang geng shou gong mu

Aalius macrantha (Hasskarl) Kuntze; *A. macrophylla* (J. D. Hooker) Kuntze; *Sauropus grandifolius* Pax & K. Hoffmann; *S. grandifolius* var. *tonkinensis* Beille; *S. longipedicellatus* Merrill & Chun; *S. macrophyllus* J. D. Hooker.

Shrubs 3–4 m tall, erect, monoecious, glabrous throughout; branchlets angular. Stipules subulate-lanceolate, 3–6 mm, gray-brown; petiole 2.5–7 mm; leaf blade ovate-oblong, ovate-elliptic, or elliptic-lanceolate, 4–20 × 3.5–8 cm, papery, conspicuously white-margined, base cuneate to rounded, apex shortly acuminate; venation pinnate, lateral veins 6–10 pairs, nearly flattened. Inflorescence axillary, 1-flowered or several male and female per cluster. Male flowers: pedicels 2–6.5 mm; calyx discoid, 3.5–4.5 mm in diam., shallowly 6–8-fid, with red stripes; sepals narrowly triangular; disk segments 6–8, opposite sepals. Female flowers solitary or several and male mixed in axillary cluster; pedicels 2–6 cm; calyx yellow-green, 6-lobed; sepals slightly thick, biseriate, outer obovate or subspatulate, ovate-elliptic, 6–7 × 3–4 mm, inner shorter, obovate, ca. 5 mm, with purple stripes; disk absent; pistil depressed globose, ca. 2 × 2.7 mm, 3-locular; styles 3, bifid at apex, arms recurved. Fruiting pedicel 9–13 cm; persistent sepals obovate, hooked, ca. 1 cm; capsules subglobose or depressed globose, lobed, ca. 1.5 × 1.5–2.5 cm, red or red-brown, styles persistent at apex. Fl. May–Sep, fr. Aug–Dec.

Broad-leaved forests, valley scrub; 500–1500 m. Guangdong, Hai-

nan, Yunnan [NE India, Indonesia, Laos, Malaysia, Myanmar, Philippines, Thailand, Vietnam; N Australia].

8. *Sauropus yanhuianus* P. T. Li, Acta Phytotax. Sin. 25: 134. 1987.

多脉守宫木 duo mai shou gong mu

Shrubs ca. 1.5 m tall, erect, glabrous throughout; branches angular, gray-green. Stipules triangular, ca. 1.5 mm; petiole ca. 3 mm; leaf blade oblong or oblong-lanceolate, 10–14 × 3–4 cm, thinly papery; lateral veins 10–12 pairs, arcuately anastomosing to before margins. Male flowers not seen. Female flowers axillary, solitary or paired, bracteolate at base; pedicels 6–10 mm, swollen near apex; calyx yellow-green, 6-lobed; sepals oblong-obovate, 2.5–4 × 1.5–3 mm; ovary globose, ca. 3.5 mm in diam., 3-locular; styles 3, free, short. Fruit not seen. Fl. Jun.

• Dense forests; 1000–1100 m. S Yunnan (Cangyuan).

9. *Sauropus pierrei* (Beille) Croizat, J. Arnold Arbor. 21: 494. 1940.

盈江守宫木 ying jiang shou gong mu

Breyniopsis pierrei Beille, Bull. Soc. Bot. France 72: 158. 1925.

Erect shrubs 1–4 m tall, monoecious, glabrous throughout; stem brownish, rugose; branches angular when young, later terete. Stipules ovate-lanceolate, ca. 2 mm; petiole 3–4 mm; leaf blade ovate-lanceolate, 7.5–10.5 × 2.5–3.5 cm, papery or thickly papery, abaxially gray-green, adaxially dark green, base attenuate to obtuse; venation pinnate, midrib elevated abaxially, lateral veins 5–8 pairs, slightly elevated on both surfaces. Inflorescence subtended by leaves. Male flowers in clusters; pedicels slender, 3–4 mm, with many overlapping membranous bracteoles below middle; sepals broadly ovate or obliquely ovate, ca. 1.5 × 2 mm; stamen filaments connate to below middle; anthers ovoid. Female flowers 1 or 2; pedicels ca. 5 mm; sepals ovate, ca. 2 mm; ovary ovoid, ca. 1.5 mm. Capsules globose, 1–1.5 cm in diam.; sepals and styles usually persistent. Fl. Jun–Sep, fr. Sep–Nov.

Open forests; 200–300 m. Yunnan (Yingjiang) [Cambodia, Laos, Malaysia (Borneo), Vietnam].

10. *Sauropus tsiangii* P. T. Li, Acta Phytotax. Sin. 25: 135. 1987.

尾叶守宫木 wei ye shou gong mu

Shrubs ca. 1 m tall, erect, monoecious, glabrous throughout; stem terete; branchlets angular. Stipules caducous; petiole 3–4 mm; leaf blade ovate to ovate-lanceolate, 6.5–9.5 × 3.5–4.5 cm, papery, base rounded, apex caudate-acuminate; venation pinnate, midrib elevated on both surfaces, lateral veins 6 or 7 pairs, flattened adaxially, elevated abaxially. Inflorescence axillary, usually 3-flowered. Male flowers: pedicels filamentous, 5–8 mm; sepals 6, oblong-lanceolate, ca. 2 mm; disk segments 6, semiobicular, shorter and opposite to sepals; stamens 3; filaments connate for less than 1/2 length; anthers oblong. Female flowers: sepals 6, spatulate, ca. 5 mm, apex obtuse; ovary depressed-triangular, ca. 2 mm in diam., 3-locular; styles 3, bifid

at apex, arms recurved. Fruit not seen. Fl. May–Sep.

• Limestone forests; 500–800 m. SW Guangxi (Longzhou).

11. *Sauropus similis* Craib, Bull. Misc. Inform. Kew 1911: 457. 1911.

短尖守宫木 duan jian shou gong mu

Shrubs to 3 m tall, monoecious, glabrous throughout; branches 4-angled. Stipules triangular to basally auriculate to falcate 1–1.5 × 0.4–1.7 mm; petiole 1.2–2 mm; leaf blade ovate, 0.7–3.7 × 0.5–1.9 cm, ± thickly papery, abaxially paler, adaxially with lighter midrib, base cordate to cuneate, apex rounded, mucronulate; venation pinnate, midrib often papillate, lateral veins 5–8 pairs. Inflorescence subtended by leaves, small clusters of male flowers or solitary female flowers. Male flowers: pedicels 4.9–6 mm; calyx discoid, 4.2–4.5 mm in diam., shallowly lobed, lobes 0.4–0.7 × 1.6–2.3 mm, apex entire; anthers ca. 0.3 × 0.6 mm. Female flowers: pedicel 1.5–3.7 mm; calyx yellow to red, 3.6–8.2 mm in diam.; sepals spadelike, 1–2.1 × 1–3.3 mm; ovary 1.3–2 mm in diam. Fruiting pedicel to 1.25 cm; persistent calyx to 12.5 mm in diam.; capsule ovoid, ca. 5.5 × 3.5–4.2 mm, apex with low rim. Seeds 3-angled, 3–3.3 × 2.1–2.3 × 2.4–2.6 mm.

Yunnan [Myanmar, Thailand].

Sauropus similis is included on the basis of the Flora of Thailand account (see http://www.nationaalherbarium.nl/ThaiEuph/ThSpecies/ThSauropusT.htm#Sauropus_similis).

12. *Sauropus quadrangularis* (Willdenow) Müller Argoviensis, Linnaea 32: 73. 1863.

方枝守宫木 fang zhi shou gong mu

Phyllanthus quadrangularis Willdenow, Sp. Pl. 4: 585. 1805; *Aalius ceratogynum* Kuntze; *A. compressa* (Müller Argoviensis) Kuntze; *A. pubescens* (J. D. Hooker) Kuntze; *A. quadrangularis* (Müller Argoviensis) Kuntze; *A. rigida* (Thwaites) Kuntze; *Ceratogynum rhamnoides* Wight; *P. leschenaultii* Müller Argoviensis var. *tenellus* Müller Argoviensis; *P. rhamnoides* Roxburgh (1832), not Retzius (1788); *Sauropus ceratogynum* Baillon; *S. compressus* Müller Argoviensis; *S. concinnus* Collett & Hemsley; *S. pubescens* J. D. Hooker; *S. quadrangularis* Müller Argoviensis var. *compressus* (Müller Argoviensis) Airy Shaw; *S. rigidus* Thwaites.

Erect shrubs to 1 m tall, monoecious, glabrous [to hirsute] throughout; stem gray-brown; branchlets 4-angled or compressed. Stipules lanceolate [to sometimes strongly falcate], 1–2[–2.7] × 0.7–1.2[–3.5 when falcate] mm; petiole 1–1.3 mm; leaf blade ovate, elliptic, or rounded, 5–20(–25) × 3–12 mm, membranous or thinly papery, base rounded or obtuse, apex rounded or obtuse, mucronate; venation pinnate, lateral veins 4 or 5 pairs, slender, obliquely ascending, not raised. Inflorescence subtended by leaves, 1- or 2-flowered. Male flowers 2–3 mm; calyx discoid, ca. 1.5 mm in diam., 6-lobed; sepals apex obtuse or retuse; disk scales very short; anthers spreading. Female flowers: pedicels 2.3–4.3 mm; sepals subobovate, apex acute; disk 6-lobed; ovary small, apex

concave, with crenulate rim; stigmas erect. Capsules ovoid, 5–5.5 × ca. 4 mm, rather woody when dry, with lobed rim around stigmas, exocarp thin, spreading, ± stellate when dry. Seeds 3-angled, ca. 3.5 × 2 × 2 mm. Fl. Jun–Oct, fr. Sep–Dec.

Open forests or valley scrub, broad-leaved forests; 100–2100 m. Guangxi, Xizang, Yunnan [Bhutan, Cambodia, India, Laos, Myanmar, Nepal, Thailand, Vietnam].

Sauropus quadrangularis has distinctive ovaries and fruits, longer than wide and with usually erect stigmas inserted in an apical depression delineated by a distinct rim. Varieties based on variation in stem morphology, whether the branchlets are 4-angled or compressed and only 2-angled (var. *compressus*), and in indumentum (var. *pubescens*), are not well-founded as these characters can vary within populations.

13. *Sauropus delavayi* Croizat, J. Arnold Arbor. 21: 496. 1940.

石山守宫木 shi shan shou gong mu

Erect shrubs to 1 m tall, more branched, monoecious, glabrous except for glandular-pubescent branchlets; stem gray; branches 4-angled, red-brown. Stipules linear, 0.5–1 mm; petiole 0.5–1 mm; leaf blade orbicular, 0.2–0.8 × 0.2–0.8 cm, papery, base rounded or shallowly cordate, apex rounded, truncate, or retuse, sometimes mucronate; venation pinnate, midrib and lateral veins 4 or 5 pairs, elevated on both surfaces, reticulate veins prominent. Inflorescence axillary, usually 1-flowered. Male flowers: pedicels ca. 3 mm; calyx discoid, ca. 2 mm in diam., red; sepals ovate, ca. 1 mm; disk segments 6; stamen filaments connate. Female flowers: pedicels ca. 2 mm; calyx ca. 2 × 3 mm in diam.; sepals obovate, ca. 1.5 mm; ovary ovoid, apex shallowly undulate. Persistent sepals ovate, ca. 3 mm; capsule globose, 0.5–0.8 cm in diam. Fl. May–Sep, fr. Aug–Dec.

• Scrub; 500–1800 m. Guangxi (Longgang), NW Yunnan (Binchuan, Heqing).

14. *Sauropus garrettii* Craib, Bull. Misc. Inform. Kew 1914: 284. 1914.

苍叶守宫木 cang ye shou gong mu

Sauropus chorisepalus Merrill & Chun; *S. yunnanensis* Pax & K. Hoffmann.

Shrubs to 4 m tall, erect, glabrous except for puberulent young branchlets and veins of leaf blade; branches sometimes compressed, usually sharply 2-keeled; branchlets obscurely angular when young, terete with age, slender. Stipules oblong-lanceolate, 2.5–4 mm; petiole ca. 2 mm; leaf blade rhombic-ovate, ovate-lanceolate, rarely oblong or ovate, 2–13 × 1–3.5 cm, membranous or thinly papery, abaxially glaucous or glaucous, adaxially dark green when dry, base broadly cuneate, rounded, or truncate, apex usually acuminate, rarely acute; venation pinnate, lateral veins 5 or 6 pairs. Plants monoecious. Inflorescence axillary, 1- or 2-flowered, or male and female mixed in axillary clusters. Male flowers: pedicels slender, 3–10 mm, with dense bracteoles at base; calyx disk-shaped, 3–5 mm in diam., shallowly 6-fid, segments ovate or subelliptic, apex acute or acuminate, membranous; stamens 3; filaments connate. Female flowers: pedicels slender, 6–15 mm; calyx turbinate;

ovary apex truncate, 3-locular; styles 3, bifid at apex, arms recurved. Capsules obovate or subovoid, 1–2.5 cm in diam. Seeds black, triquetrous. Fl. Apr–Aug, fr. Aug–Nov.

Evergreen forests on slopes or in valleys, moist scrub; 500–2000 m. Guangdong, Guangxi, Guizhou, ?Hainan, Hubei, Sichuan, Yunnan [Laos, Myanmar, Thailand].

15. *Sauropus androgynus* (Linnaeus) Merrill, Bull. Bur. Forest. Philipp. Islands 1: 30. 1903.

守宫木 shou gong mu

Clusia androgyna Linnaeus, Mant. Pl. 1: 128. 1767; *Aalius androgyna* (Linnaeus) Kuntze; *A. retroversa* (Wight) Kuntze; *A. sumatrana* (Miquel) Kuntze; *Agyneia ovata* Poirét; *Andrachne ovata* Lamarck ex Poirét; *Phyllanthus strictus* Roxburgh; *Sauropus albicans* Blume; *S. albicans* var. *gardnerianus* (Wight) Müller Argoviensis; *S. albicans* var. *intermedius* Müller Argoviensis; *S. albicans* var. *zeylanicus* (Wight) Müller Argoviensis; *S. convexus* J. J. Smith; *S. gardnerianus* Wight; *S. indicus* Wight; *S. parviflorus* Pax & K. Hoffmann; *S. retroversus* Wight; *S. scandens* C. B. Robinson; *S. sumatranus* Miquel; *S. zeylanicus* Wight.

Shrubs 1–3 m tall, erect, monoecious, glabrous throughout; branchlets angular when young, terete with age, slender, green. Stipules lanceolate or linear-lanceolate, 1.5–3 mm; petiole 2–4 mm; leaf blade ovate-lanceolate, oblong-lanceolate, or lanceolate, 3–10 × 1.5–3.5 cm, submembranous or thinly papery, base cuneate, rounded, or truncate, apex acuminate; venation pinnate, lateral veins 5–7 pairs, elevated abaxially, flattened adaxially, reticulate veins obscure. Inflorescence axillary, 1- or 2-flowered, or several male and female per cluster. Male flowers: pedicels slender, 5–7.5 mm; calyx shallowly disk-shaped, 5–12 mm in diam., shallowly 6-fid; sepals obovate; disk segments 6, opposite to sepals, incurved distally, covering anthers; stamens 3; fila-

ments connate; anthers extrorse. Female flowers usually solitary, axillary; pedicel 6–8 mm; calyx red, 6-lobed; sepals obovate or obovate-triangular, $5\text{--}6 \times 3\text{--}5.5$ mm, base attenuate into a short claw; disk absent; ovary depressed globose, ca. 0.7×1.5 mm, 3-locular; styles 3, bifid. Fruiting pedicel 0.5–1 cm; persistent calyx red; capsule white, depressed globose or globose, ca. 1.2×1.7 cm, thinly crustaceous. Seeds black, triquetrous, ca. 7×5 mm. Fl. Apr–Jul, fr. Jul–Dec.

Slopes with brushwood, sunny forest margins; 100–400 m. Guangdong, Guangxi, Hainan, Yunnan [Bangladesh, Cambodia, India, Indonesia, Laos, Malaysia, Myanmar, Philippines, Sri Lanka, Thailand, Vietnam].

Sauropus androgynus is widely cultivated. The leaves are used as a medicine for coughs and to soothe the lungs, as a tonic, and as a febrifugal to relieve internal fever; they are also used as a vegetable (“Sweet Leaf Bush”).

