## **29. CLEIDION** Blume, Bijdr. 612. 1826.

### 棒柄花属 bang bing hua shu

Qiu Huaxing (丘华兴 Chiu Hua-hsing, Kiu Hua-shing, Kiu Hua-xing); Michael G. Gilbert

Trees or shrubs, monoecious or dioecious. Branchlets frequently glabrous. Leaves alternate, glandular-crenulate, penninerved; stipule small, deciduous. Inflorescences spicate or racemose, axillary; bracts eglandular. Male flowers fascicled to glomerulose, rarely solitary along axis; calyx closed in bud; sepals 3 or 4, valvate; petals absent; disk absent; stamens 25–80(–100); filaments free; anthers dorsifixed, 4-locellate, connective shortly produced; pistillode absent. Female inflorescences frequently 1-flowered. Female flowers: pedicel long, thickened at tip; sepals 3–5, imbricate, accrescent or scarcely enlarged in fruit; ovary 2- or 3-locular; styles 2 or 3, base often connate, deeply 2-cleft, filiform, stigmatic surface papillose; ovules 1 per locule. Fruit a capsule, 2- or 3-locular; pedicels rigid, club-shaped. Seeds subglobose, smooth, marbled.

About 25 species: Old- and New-World tropics and subtropics; three species in China.

- 1a. Male flowers available.

  - 2b. Male flowers 3–15 per bract; sepals equal, 2–2.5 mm; stamens 40–70.

    - 3b. Plants dioecious; pedicel 2–3 mm; petiole 2–7 cm 2. C. spiciflorum
- 1b. Female flowers or fruits available.

  - 4b. Ovary 3-locular, styles 1–1.5 cm; fruit 3-lobed, 1.2–1.5 cm in diam.
    - 5a. Female sepals unequal, larger, 6-7(-20) mm, accrescent 9-15(-30) mm in fruit; petiole 0.3-3 cm ... 1. C. brevipetiolatum

# **1. Cleidion brevipetiolatum** Pax & K. Hoffmann in Engler, Pflanzenr. 63(IV. 147. VII): 292. 1914.

#### 棒柄花 bang bing hua

Small trees, 5–12 m tall, monoecious. Branchlets glabrous. Stipules lanceolate, ca. 3 mm; petiole 3-8 mm or 1-3 cm; leaf blade obovate or obovate-lanceolate to lanceolate,  $7-21 \times 3.5-7$ cm, thinly leathery, abaxially bearded in vein axils, base obtuse, with 2-4 maculate glands, apex acuminate; veins 5-9 pairs. Male inflorescences unbranched, 5-20 cm, puberulent; bracts broadly triangular, ca. 1.5 mm. Male flowers 3-7 per bract, clusters widely spaced; pedicel 1-1.5 mm; sepals 3, 2-2.5 mm; stamens (40–)55–65. Female flowers axillary; pedicel thick, 2– 3.5(-7) cm; bracts 2 or 3 at base, triangular, 1.5-2 mm; sepals 5, unequal, 3 lanceolate,  $6-7(-20) \times 2-3(-6)$  mm, 2 triangular, 2-4 × 0.5-1.5 mm; ovary globose, densely yellow villous; styles 3, ca. 1 cm, deeply 2-cleft, filiform. Fruiting sepals: 3 or 4 oblong,  $9-15(-30) \times 4-6(-10)$  mm; 1 or 2 shorter, 3-5 mm. Capsule 3-lobed, 1.2-1.5 cm in diam., pilose. Seeds subglobose, 6-7 mm, brownish marbled. Fl. and fr. Mar-Oct.

Evergreen forests, on limestone hills; 200–800(–1000) m. Guangdong, Guangxi, Guizhou, Hainan, Yunnan [Laos, N Thailand, N Vietnam].

**2. Cleidion spiciflorum** (N. L. Burman) Merrill, Interpr. Herb. Amboin. 322. 1917.

#### 长棒柄花 chang bang bing hua

*Acalypha spiciflora* N. L. Burman, Fl. Indica, 203. 1786; *Cleidion javanicum* Blume.

Trees, 5–30 m tall, dioecious. Branchlets glabrous. Stipules triangular, 2–5 mm; petiole 2–7 cm; leaf blade elliptic to oblong-lanceolate or ovate,  $(7-)9-30 \times (2.5-)4-14$  cm, thinly leathery,

abaxially bearded in vein axils, base obtuse or cuneate, margin sinuate-toothed or subentire, apex acute or acuminate; lateral veins 5–9 pairs. Male inflorescences unbranched, (5–)12–21 cm, puberulent; bracts ovate, ca. 1 mm. Male flowers (3–)5–15 per bract, clusters widely spaced; pedicel 2–3 mm; sepals 3, ca. 2.5 mm; stamens 40–70. Female flower axillary, solitary; pedicel 1–7 cm, base with some bracts; sepals 4 or 5, ovate-triangular, 1.5–3 mm, scarcely enlarged in fruit; ovary 2(or 3)-locular, densely villous; styles 2(or 3), deeply 2-cleft, 1.5–3 cm. Fruiting

pedicel 3.5–15 cm, ca. 5 mm in diam. at tip; capsule often 2-lobed, 2.5–3 cm wide, smooth. Seeds subglobose, 9–12 mm in diam., brownish marbled. Fl. Apr–Jun, fr. May–Oct.

Valleys in evergreen or monsoon forests; 600–800(–1400) m. SE Xizang (Mêdog), SW Yunnan [Bhutan, India, Malaysia, Myanmar, Nepal; N Australia, Pacific islands].

**3. Cleidion bracteosum** Gagnepain, Bull. Soc. Bot. France 71: 569. 1924.

#### 灰岩棒柄花 hui yan bang bing hua

Small trees, 5–15 m tall, dioecious. Branchlets glabrous. Petiole 2–7 cm; leaf blade oblong-ovate or ovate, (5–)9–19 × 4–9 cm, thinly leathery, abaxially bearded in vein axils, base obtuse, with 2–4 maculate glands, margin serrate, apex acute or acuminate; veins 5–7 pairs. Male inflorescences axillary or subterminal, 6–14 cm, puberulent; bracts triangular, 2–2.5 mm. Male flower solitary, remote along axis; pedicel 1–2 mm; sepals 2 or 4, ca. 4 mm; stamens 100–200. Female flower solitary, axillary; pedicel 2–4 cm; bracts at base triangular, ca. 1.5 mm; sepals 5, triangular, unequal, 2–4 mm, scarcely enlarged in fruit; ovary ovoid, 3-locular, densely yellow villous; styles ca. 1.5 cm, deeply 2-cleft. Fruiting pedicel 6–7 cm in fruit, club-shaped; capsule 3-lobed, ca. 1.5 cm in diam., smooth. Seeds ovoid, ca. 7 mm in diam., brownish marbled. Fl. Dec–Feb, fr. Apr–May.

Evergreen forests, commonly on limestone hills. Guangxi, S Guizhou, E and S Yunnan [N Vietnam].