

## 12. BYTTNERIA Loefling, Iter Hispan. 313. 1758, nom. cons.

刺果藤属 ci guo teng shu

*Butneria* Duhamel du Monceau.

Lianas, shrubs, or subshrubs, rarely small trees. Stems armed or unarmed (in Flora area). Leaves simple, stipulate, petiolate; leaf blade various shapes, but usually orbicular or ovate; foliar nectaries present. Inflorescences axillary, cymes. Flowers bisexual, small. Sepals 5, connate at base. Petals 5, base clawed, upper part deeply concave, apex with long narrow appendage. Stamens 5, opposite petals; filaments connate into tube; anthers 2-celled, extrorse; staminodes 5, lamellate, apex obtuse, alternate with staminodes. Ovary sessile, 5-celled; ovules 2 per cell, anatropous, lower one aborted; style united almost to apex; stigma apical, inconspicuous or 5-lobed. Capsule globose, spiny, septicidally and loculicidally or only septicidally dehiscent into 5 valves, valves falling from axis. Seeds 1 per locule; endosperm absent; cotyledons foliaceous, 2-lobed.

About 130 species: mostly in tropical America, also Africa, SE Asia, Madagascar; three species in China.

The genus name has often been incorrectly spelled as "*Buettneria*."

- 1a. Leaf margin serrulate, leaf blade scabrous; capsule spines branched, soft ..... 1. *B. pilosa*  
1b. Leaf margin entire, leaf blade not scabrous; capsule spines not branched, hard.  
2a. Leaf blade abaxially densely white stellate tomentose; capsule 3–4 cm in diam., spines short and robust;  
seeds ca. 12 mm, black when mature ..... 2. *B. grandifolia*  
2b. Leaf blade abaxially glabrous or sparsely stellate pubescent on veins; capsule 1.5–2 cm in diam., spines long  
and needlelike; seeds ca. 5 mm, gray-brown with dark brown mottling ..... 3. *B. integrifolia*

1. *Byttneria pilosa* Roxburgh, Fl. Ind. 2: 381. 1824 [*"Buettneria"*].

粗毛刺果藤 cu mao ci guo teng

*Byttneria elegans* Ridley; *B. pilosa* var. *pellita* Gagnepain.

Woody climbing lianas. Branchlets dark brown when dry, stellate hairy, glabrescent. Stipules linear, ca. 14 mm, caducous; petiole 12–15 cm, hairy; leaf blade orbicular or cordate, usually 3–5-lobed, 14–24 × 13–21 cm, both surfaces yellowish brown stellate puberulent and hirsute, denser abaxially, basal veins 7, base cordate, margin serrulate, apex obtuse or acute. Inflorescence a flat-topped cyme, axillary, few-flowered. Pedicels slender, ca. 2.5 mm. Sepals ca. 3 mm, abaxially hairy, adaxially glabrous. Petals 4-lobed, lobes obtuse. Staminodes partly connate, ca. 1.5 cm. Ovary globose, verrucose. Capsule yellowish pink, globose, ca. 2 cm in diam., densely spiny, spines branched and soft, 4–6 mm. Seed yellow with brown mottling, ovoid, ca. 5 mm.

Mixed forest margins; 500–1000 m. S Yunnan [Bangladesh, India, Indonesia, Laos, Malaysia, Myanmar, Thailand, Vietnam].

2. *Byttneria grandifolia* Candolle, Prodr. 1: 486. Jan 1824 [*"Buettneria"*].

刺果藤 ci guo teng

*Byttneria aspera* Colebrooke ex Wallich (Mar–Jun 1824); *B. siamensis* Craib.

Woody, big lianas. Branchlets sparsely puberulent when young. Petiole 2–8 cm, hairy; leaf blade broadly ovate, cordate, or nearly orbicular, 7–23 × 5.5–16 cm, abaxially white stellate

puberulent, adaxially glabrous, basal veins 5, base cordate, margin entire, apex obtuse or acute. Sepals ovate, ca. 2 mm, puberulent, apex acute. Petals yellowish white, and purple-red adaxially, apex 2-lobed, with long ligulate appendix, nearly as long as sepals. Capsule globose or ovoid-globose, 3–4 cm in diam., spiny, spines short and robust, puberulent. Seeds oblong, ca. 12 mm, black when mature. Fl. spring and summer.

Open forests, valley streamsides; 200–300 m. Guangdong, Guangxi, Hainan, Yunnan [Bangladesh, Bhutan, Cambodia, India, Laos, Nepal, Thailand, Vietnam].

3. *Byttneria integrifolia* Lace, Bull. Misc. Inform. Kew 1915: 396. 1915 [*"Buettneria"*].

全缘刺果藤 quan yuan ci guo teng

Large, woody lianas. Branchlets unarmed, purple-brown when dry, with several striate lines, sparsely stellate puberulent when young. Petiole 4–13 cm; leaf blade broadly ovate or elliptic-ovate, 15–22 × 9–16 cm, nearly glabrous or sparsely stellate on veins only, basal veins 5, veinlets parallel, base cordate or shallowly cordate, apex long acuminate or acute. Inflorescences umbel-like, slightly hairy. Pedicels slender, 4–7 cm, articulate near middle. Flowers 8–10 mm wide. Sepals lanceolate, 4–5 mm, connate basally, very sparsely pilose. Petals ca. 2 × 2–2.5 mm, with narrowly lanceolate ca. 3 mm appendix, adnate to staminal tube at base. Ovary very small, hairy. Capsule globose, 1.5–2 cm in diam., black when dry, with hard and pointed spines, spines 4–5 mm. Seeds gray-brown with dark brown mottling, oblong, ca. 5 mm.

Open forests; 800–1600 m. S Yunnan (Xishuangbanna) [Myanmar, Thailand].

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