## 15. BACCAUREA Loureiro, Fl. Cochinch. 2: 661. 1790.

## 木奶果属 mu nai guo shu

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

Gatnaia Gagnepain; Pierardia Roxburgh ex Jack.

Trees or shrubs, dioecious; indumentum of simple hairs. Leaves alternate, usually clustered apically; stipules caducous; leaf blade simple, margin entire or crenate-serrate, venation pinnate. Inflorescences axillary, often cauliflorous, compound spikelike or racemelike panicles, pendent, many flowered. Male flowers: sepals 4–8, usually unequal, imbricate; petals absent; disk absent or obscurely glandular and between stamens (sometimes interpreted as staminodes); stamens 4–8, as long as or longer than sepals; filaments free; anthers 2-locular, introrse or extrorse, longitudinally dehiscent; pistillode usually enlarged at apex, depressed and bifid, usually pubescent. Female flowers: sepals 4–8, larger than male, pubescent on both surfaces; petals absent; disk absent; ovary shorter than sepals, 2- or 3(–5)-locular; ovules 2 per locule; styles 2–5, very short. Fruit a berry or tardily loculicidally dehiscent fleshy capsule, ovoid, fusiform, or globose. Seeds enclosed by fleshy edible aril; endosperm fleshy or thick; embryo curved; cotyledon broad and flattened.

About 80 species: Bhutan, Cambodia, China, India, Indonesia, Laos, Malaysia, Myanmar, Nepal, New Guinea, Thailand, Vietnam; Pacific islands; two species (one introduced) in China.

## 1. Baccaurea ramiflora Loureiro, Fl. Cochinch. 2: 661. 1790.

## 木奶果 mu nai guo

Baccaurea cauliflora Loureiro; B. oxycarpa Gagnepain; B. sapida (Roxburgh) Müller Argoviensis; B. wrayi King ex J. D. Hooker; Gatnaia annamica Gagnepain; Pierardia sapida Roxburgh.

Evergreen trees to 20 m tall, to 60 cm d.b.h.; stem graybrown; branchlets hispid, glabrescent at maturity. Petiole 3-5 cm, glabrous; leaf blade obovate-oblong, oblanceolate, or oblong, 9-15 × 3-8 cm, papery, green adaxially, yellowish green abaxially, glabrous on both surfaces, base cuneate, margin entire or shallowly repand, apex shortly acuminate to acute; lateral veins 5-7 pairs, flattened above, elevated below. Flowers small, dioecious, apetalous, many flowered, compound into racemelike panicles. Male inflorescences densely papillose, often fascicled on branchlets as well as on trunk, to 15 cm; bracts ovate-lanceolate, 2-3 mm, chestnut-yellowish, puberulent outside. Male flowers: sepals 4 or 5, oblong, 5-6 mm, puberulent outside; stamens 4-8; pistillode terete, bipartite. Female inflorescences to 35 cm; bracts as in male. Female flowers: sepals 4–6, lanceolate, ca. 6 mm, puberulent outside; ovary ovoid or globose, 3-celled, densely ferruginous hispid; styles very short, ca. 0.5 mm; stigma depressed, bifid at apex. Capsules baccate, ovoid or subglobose,  $2-2.5 \times 1.5-2$  cm, red-yellow to purple when mature, indehiscent, or 3-valved when dry; arils white. Seeds flat-elliptic or rotund, 1-1.3 cm. Fl. May-Apr, fr. Mar-

Evergreen forests; 100–1300 m. Guangdong, Guangxi, Hainan, Yunnan [Bhutan, Cambodia, India, Laos, Malaysia (peninsular), Myanmar, Nepal, Thailand, Vietnam].

The fruits are edible; the pulpy, yellow aril is somewhat acid with an agreeable taste. The wood is used for furniture and cabinetwork.

**2. Baccaurea motleyana** (Müller Argoviensis) Müller Argoviensis in A. Candolle, Prodr. 15(2): 461. 1866.

多脉木奶果 duo mai mu nai guo

Pierardia motleyana Müller Argoviensis, Flora 47: 516. 1864.

Trees 6–10 m tall; branches terete, ferruginous pubescent. Stipules lanceolate, ca. 8 mm, usually caducous; petiole 5–10 cm, pubescent; leaf blade elliptic or elliptic-lanceolate, 20–35 × 7.5–17 cm, papery, pubescent abaxially and on midvein adaxially, base rounded to shallowly cordate, apex acute to shortly acuminate; lateral veins 12–16 pairs, parallel, reticulate veins trapeziform. Racemelike panicles axillary or cauliflorous, 13–35 cm; bracts lanceolate. Male flowers: pedicels to 1.5 mm, pubescent; sepals oblong-ovate, 1–1.5 mm, acute at apex, gray papillose-puberulent; stamens 4–6; pistillode retuse at apex, pubescent. Female flowers: pedicels to 2 mm; sepals oblong, 4–5 mm, gray papillose-puberulent; ovary ovoid or globose, 3-locular, sericeous. Capsules baccate, ovoid or globose, 2.5–3 cm, indehiscent, pubescent, 1-seeded. Seeds ca. 1.5 cm. Fl. May–Jul, fr. Jul–Oct.

Cultivated. S Yunnan [native to Indonesia, Malaysia (peninsular), and Thailand].

The fruits are edible; the aril is sweet to acid and eaten raw, cooked, or preserved. The bark is rich in tannins and is used in dyeing.