## 5. BERCHEMIELLA Nakai, Bot. Mag. (Tokyo) 37: 30. 1923.

小勾儿茶属 xiao gou er cha shu

Trees or shrubs, subglabrous. Leaves alternate, pinnately veined, with strongly parallel secondary veins, base often asymmetrical, margin entire. Flowers bisexual, 5-merous, pedicellate, in lax terminal cymose racemes or axillary fascicles; flower buds globose; bracts small, caducous. Calyx tube cup-shaped; lobes triangular, valvate, adaxially medially keeled, with a basally inserted beaklike protrusion. Petals obovate-cucullate, ca. as long as sepals, base shortly clawed, apex rounded or emarginate. Stamens dorsifixed, enfolded by petals. Disk pentagonous, thick, not persisting at fruit. Ovary superior, almost up to half immersed in disk, 2-loculed, each locule with 1 lateral ovule near base; styles short, stout, deciduous after flowering; stigma emarginate or 2-fid. Drupe 1-loculed, 1-seeded, with persistent calyx tube at base.

Three species: China, Japan; two species (both endemic) in China.

This genus is closely related to *Berchemia* but differs in having sepals with beaklike protrusions at the keeled adaxial midvein; disk pentagonous, not persisting in fruit; drupe 1-loculed, 1-seeded; and leaves often asymmetrical.

1a. Shrubs; leaf blade 7–10 × 3–5 cm, lateral veins 8–10 pairs1. B. wilsonii1b. Small trees; leaf blade 4–8 × 2–3 cm, lateral veins 6 or 7 pairs2. B. yunnanensis

# **1. Berchemiella wilsonii** (C. K. Schneider) Nakai, Bot. Mag. (Tokyo) 37: 31. 1923.

### 小勾儿茶 xiao gou er cha

Shrubs deciduous, 3-6 m tall. Branchlets brown, glabrous, with dense, conspicuous lenticels and longitudinal slits; old branches gray. Stipules broadly triangular, abaxially connate, surrounding buds; petiole 4-5 mm, glabrous or pilose; leaf blade adaxially gray-white, elliptic, 7–10 × 3–5 cm, papery, abaxially densely pubescent or with barbate vein axils, adaxially glabrous, lateral veins 8-10 pairs, base rounded, asymmetrical, apex obtuse, mucronulate. Inflorescences ca. 3.5 cm, glabrous. Flowers greenish, glabrous, in terminal cymose racemes or few in axillary cymes; flower buds globose, ca. 1.5 mm in diam., shorter than pedicels. Calyx tube cup-shaped; lobes triangular, adaxially slightly keeled and with minute basal beak. Petals broadly obovate, very short, ca. 1 mm, apex emarginate, hooded. Disk thin, lining calyx tube, marginally slightly thickened and prominent. Ovary globose, basally surrounded but not immersed into disk; style cylindric, short, undivided; stigma capitate, distinctly 2- or 3-lobed. Fruit red when young, nearly black at maturity, cylindric to slightly obovoid. Fl. Jul, fr. Aug-Sept.

- $\bullet$  Forests, valley forests; 500–1500 m. Anhui, W Hubei, Zhejiang.

#### 1a. Berchemiella wilsonii var. wilsonii

小勾儿茶(原变种) xiao gou er cha (yuan bian zhong)

Chaydaia wilsonii C. K. Schneider in Sargent, Pl. Wilson. 2: 221. 1914; Berchemia wilsonii (C. K. Schneider) Koidzumi.

Petiole glabrous; leaf blade with barbate vein axils abaxially.

• Forests, valley forests; ca. 1300 m. W Hubei (Xingshan).

#### 1b. Berchemiella wilsonii var. pubipetiolata H. Qian, var.

#### nov

#### 毛柄小勾儿茶 mao bing xiao gou er cha

Type: China. Anhui: Huoshan, L. M. Chen 099 (fl.) (holotype, AAUF).

Validating Latin diagnosis: that of "Berchemiella wilsonii var. pubipetiolata" (H. Qian, Bull. Bot. Res., Harbin 8(4): 124. 1988).

Petiole pilose; leaf blade densely pubescent abaxially.

• Valley forests; 500-1500 m. Anhui, Zhejiang.

When *Berchemiella wilsonii* var. *pubipetiolata* was originally described by Qian (loc. cit.), two gatherings were indicated as types, one flowering and one fruiting, with the result that the name was not validly published (*Vienna Code*, Art. 37.2).

**2. Berchemiella yunnanensis** Y. L. Chen & P. K. Chou, Bull. Bot. Lab. N. E. Forest. Inst., Harbin 5: 20. 1979.

# Flora of China 12: 130-131. 2007.

# 滇小勾儿茶 dian xiao gou er cha

Trees to 5 m tall, subglabrous. Branchlets dark brown, asperous, with longitudinal slits. Stipules ovate-lanceolate, short, caducous; petiole 4–5 mm; leaf blade abaxially greenish, adaxially dark green, elliptic, rarely oblong, 4–8 × 2–3 cm, papery, abaxially often with barbate vein axils, lateral veins 6 or 7 pairs, base subrounded, often asymmetrical, margin entire, apex obtuse or shortly acuminate, rarely acute or subrounded. Flowers 3–9 in terminal lax cymose racemes, 2–3 cm; peduncles 1–5 mm; flower buds green, globose. Pedicel 1–2 mm. Sepals triangular, adaxially medially keeled and with minute basal beak. Petals obovate. Disk pentagonous, thick. Ovary up to half immersed in disk, 1- or 2-loculed, 2-ovuled; styles short, emarginate. Fruit not seen. Fl. and fr. unknown.

• Slopes, stony crevices; ca. 1000 m. SE Yunnan (Funing).

Flora of China 12: 130-131. 2007.