

# 1. ERYTHROXYLUM P. Browne, Civ. Nat. Hist. Jamaica, 278. 1756.

古柯属 gu ke shu

Shrubs or small trees, usually glabrous. Stipules intrapetiolar, often imbricating on short branches. Leaves alternate, often subdistichous, simple. Flowers axillary, solitary or fascicled, small, often heterostylous. Sepals 5(or 6), usually basally connate. Petals 5, white or pink, clawed, usually with a ligule on inner face at base, imbricate. Stamens 10; filament usually basally connate into a glandular or nonglandular tube. Ovary 3(or 4)-locular, with 1(or 2) ovules in single fertile locule; styles distinct or connate; stigmas oblique. Drupe 1-seeded. Seed with a thin testa; endosperm variable in quantity or absent; embryo straight.

About 230 species: widely distributed in the tropics and subtropics, especially South America; two species (one introduced) in China.

- 1a. Leaf blade secondary veins obviously anastomosing into an intramarginal vein in each side of midvein; stipules narrowly triangular, margin often entire; filaments without papillary trichomes; drupe with 5 longitudinal ribs ..... 1. *E. novogranatense*
- 1b. Leaf blade secondary veins not anastomosing into an intramarginal vein in each side of midvein; stipules broadly triangular to lanceolate, margin fimbriate or dissected; filaments with papillary trichomes; drupe with 3 longitudinal ribs ..... 2. *E. sinense*

**1. Erythroxylum novogranatense** (D. Morris) Hieronymus, Bot. Jahrb. Syst. 20(Beibl. 49): 35. 1895.

古柯 gu ke

*Erythroxylum coca* Lamarck var. *novogranatense* D. Morris, Bull. Misc. Inform. Kew 1889: 5. 1889.

Shrubs or small trees. Stipules triangular, 1.5–3 mm, margin often entire. Leaves alternate, simple; petiole 4–7 mm; leaf blade obovate to narrowly elliptic, 1.2–4.7 × 1–1.8 cm, midvein adaxially impressed, secondary veins anastomosing into an obvious intramarginal vein in each side of midvein, base attenuate, margin entire, apex obtuse to retuse and with a mucro. Flowers solitary or fascicled, small. Pedicel to 4 mm at anthesis. Sepals 5, ca. 1.5 mm, basally connate. Petals 5, whitish yellow, ovate-oblong, 3–3.5 mm, with 2 ligules on inner face at base. Stamens 10; filament basally connate into a tube, 2–4 mm. Ovary globose to oblong, 1–3.5 mm, 3-locular, with 1 ovule in only fertile locule; styles distinct, 1–3 mm, persistent. Mature drupe red, oblong, 7–8 × ca. 3 mm, with 5 longitudinal ribs, 1-seeded. Fl. most of year but mostly Feb–Mar, fr. May–Dec.

Cultivated. Guangdong, Hainan, Taiwan, Yunnan [native to South America].

This species is used medicinally and as a narcotic.

**2. Erythroxylum sinense** Y. C. Wu, Bot. Jahrb. Syst. 71: 189. 1940.

东方古柯 dong fang gu ke

*Erythroxylum kunthianum* Kurz (1872), not A. St.-Hilaire (1829).

Shrubs or small trees, 1–6 m tall. Branches glabrous. Stipules triangular to lanceolate, 1–3 mm or longer, margin entire, fimbriate, or dissected. Leaves alternate, simple; petioles 3–8 mm; leaf blade narrowly elliptic, oblanceolate, or obovate, 2–14 × 1–4 cm, papery, costa slender, base narrowly cuneate, margin entire, apex caudate, shortly acuminate, acute, or obtuse. Flowers axillary, solitary or 2–7-fascicled on a very

short peduncle. Pedicel 4–6 mm, to 9 mm in fruit. Sepals 5, basally connate, lobes 1–1.5 mm. Petals pink, ovate-oblong, 3–6 mm, with 2 ligules on inner face at base. Stamens 10; filament with papillary trichomes, bases connate into a tube. Ovary oblong, 3-locular, with 1 fertile locule; styles distinct. Drupe oblong,

6–17 × 3–6 mm, slightly curved, with 3 longitudinal ribs. Fl. Aug–May, fr. May–Oct.

Mountainous areas, trailsides, valley forests; 200–2200 m. Fujian, Guangdong, Guangxi, Guizhou, Hainan, Hunan, Jiangxi, Yunnan, Zhejiang [NE India, N Myanmar, Vietnam].

This species is used medicinally and as a narcotic.

