

### 19. NICOTIANA Linnaeus, Sp. Pl. 1: 180. 1753.

烟草属 yan cao shu

Herbs, shrubs, or small trees; pubescence of simple and glandular hairs. Leaves petiolate or sessile, entire or subentire. Inflorescences paniculate, racemose, or reduced to solitary flowers; peduncle mostly erect; bracts mostly present. Flowers sometimes showy, mostly fragrant, zygomorphic, 4- or 5-merous, pedicellate. Calyx regular or irregular, tubular or tubular-campanulate, lobed. Corolla tubular, funnelform, or salverform; tube lobed to subentire. Stamens inserted below middle of corolla tube; filaments slender; anthers dehiscing longitudinally. Disc ringlike, nectariferous. Ovary 2-locular. Stigma 2-lobed. Fruiting calyx persistent, slightly inflated, partially or completely enveloping fruit. Fruit a dry capsule dehiscing by apical valves. Seeds numerous, minute; embryo erect or slightly bent; cotyledons linear.

About 95 species: Africa, Americas, Australia, and Oceania; three species are cultivated in China as drug plants or as ornamentals, at least one is naturalized.

- 1a. Shrubs glabrescent; leaves glaucous, subleathery, slender petiolate; corolla glabrous; filaments glabrous, subequal 1. *N. glauca*
- 1b. Herbs glandular hairy; leaves membranous, often winging stem; corolla puberulent adaxially; filaments pubescent at base, 1 shorter than others.
  - 2a. Petiole not winged; corolla tubular, greenish yellow, less than 2.5 cm; stamens included ..... 2. *N. rustica*
  - 2b. Petiole winged or leaves sessile; corolla funnelform, pink or pale green, more than 3 cm; stamens exerted ..... 3. *N. tabacum*

**1. *Nicotiana glauca*** Graham, Edinburgh New Philos. J. 5: 175. 1828.

光烟草 guang yan cao

*Nicotiana glauca* var. *angustifolia* Comes; *N. glauca* var. *grandiflora* Comes.

Shrubs or small trees 2–6 m tall, glabrescent. Petiole slender, 3–12 cm; leaf blade ovate, 5–25 cm, leathery, base obtuse to cordate, entire, apex obtuse or acute, glaucous, subleathery. Inflorescences many-flowered, lax panicles. Pedicel 3–12 mm. Calyx tubular, 1–1.5 cm; lobes deltate, acute, equal. Corolla yellow to red, tubular, 2.5–4.5 cm; lobes short. Stamens subequal, included. Capsules ellipsoid, 0.7–1.5 cm. Seeds brown, ca. 0.5 mm.

Cultivated in China [native of Argentina].

**2. *Nicotiana rustica*** Linnaeus, Sp. Pl. 1: 180. 1753.

黄花烟草 huang hua yan cao

Herbs annual, 40–60(–120) cm tall, with viscid, glandular hairs. Petiole 5–15 cm; leaf blade ovate, oblong, or lanceolate, 10–30 cm, membranous, glandular hairy, base cordate or rounded. Inflorescences many-flowered, compact to lax panicles. Pedicel 3–7 mm. Calyx cup-shaped, 7–12 mm; lobes deltate, unequal. Corolla greenish yellow, tubular; tube 1.2–2 cm; limb ca. 4 mm in diam.; lobes short, obtuse, apiculate. Stamens unequal. Capsules subglobose, 1–1.6 cm. Seeds brown, oblong, ca. 1 mm. Fl. Jul-Aug.

Cultivated in Gansu, Guangdong, Guizhou, Qinghai, Shanxi, Sichuan, Xinjiang, Yunnan [native to South America].

Used for tobacco and as an insecticide.

**3. *Nicotiana tabacum*** Linnaeus, Sp. Pl. 1: 180. 1753.

烟草 yan cao

*Nicotiana chinensis* Fischer ex Lehmann.

Herbs viscid, annual or short-lived perennial, 0.7–2 m tall, glandular hairy overall. Leaves decurrent, winging stems; leaf blade ovate to elliptic or lanceolate, 30(–70)×8–15(–30)

cm, membranous, glandular hairy, base narrowed, nearly half clasping, apex acuminate. Inflorescences many-flowered, much-branched panicles. Pedicel 0.5–2 cm. Calyx tubular or tubular-campanulate, 2–2.5 cm; lobes deltate, acuminate, unequal. Corolla yellowish at base, yellowish, greenish, red, or pink distally, funnelform, 3.5–5 cm; limb 1–1.5 cm in diam., with acute unequal lobes. Stamens unequal, sometimes partly exerted. Capsules ellipsoid or ovoid. Seeds brown, rounded, ca. 0.5 mm in diam. Fl. summer, fr. autumn.

Widely cultivated throughout China [native to South America].

Used for tobacco and as an insecticide, also medicinally for anaesthetic, inducing sweat, or vomiting.

