

## 62. MELISSA Linnaeus, Sp. Pl. 2: 592. 1753.

蜜蜂花属 mi feng hua shu

Herbs perennial. Leaves petiolate, ovate, margin serrate. Verticillasters axillary; bracts leaflike, smaller than leaves; bracteoles minute. Calyx campanulate, pendulous after anthesis, 13-veined, ± hairy, 2-lipped, upper lip shallowly 3-toothed, lower lip strongly 2-toothed. Corolla white, yellow-white, yellow, or reddish, 2-lipped; tube included or slightly exerted, slightly dilated at throat; upper lip straight, apex emarginate or 2-lobed; lower lip spreading, 3-lobed, with middle lobe entire or emarginate, wider than lateral lobes. Stamens 4, anterior 2 longer, clinging to upper corolla lip, included or slightly exerted; filaments arcuate; anther cells 2, initially divergent at nearly a right angle, becoming divaricate. Style apex equally 2-cleft; lobes subulate, revolute. Nutlets ovoid, smooth.

About four species: Asia, Europe; three indigenous and one cultivated in China.

- 1a. Calyx with subequal lips ..... 1. *M. axillaris*
- 1b. Calyx with lower lip longer.
  - 2a. Calyx blue-purple, inside glabrous ..... 2. *M. flava*
  - 2b. Calyx greenish, inside hairy at least on upper lip inside.
    - 3a. Corolla yellow-white; inside of calyx villous only on upper lip, upper lip 3-toothed, acute, lateral teeth close to middle tooth ..... 3. *M. yunnanensis*
    - 3b. Corolla cream-white; inside of calyx apex villous, upper lip short 3-denticulate or ± undulate, teeth straight, evenly spaced ..... 4. *M. officinalis*

**1. *Melissa axillaris*** (Benth) R. Bakhuizen, Fl. Jav. 2: 629. 1965.

蜜蜂花 mi feng hua

*Geniosporum axillare* Benth, Pl. Asiat. Rar. 2: 18. 1830; *Calaminatha cavalierii* H. Léveillé & Vaniot; *M. hirsuta* Blume; *M. parviflora* Benth; *M. parviflora* var. *purpurea* Hayata.

Stems ± erect, branched, 60–100 cm, pubescent. Petiole 0.2–2.5 cm; leaf blade ovate, 1.2–6×0.9–3 cm, herbaceous, purplish along midrib, sparsely pubescent to subglabrous, base subcordate to cuneate, margin serrate-crenate, apex acute or short acuminate to rounded. Verticillasters widely spaced; bracteoles sublinear, ciliate. Pedicel ca. 2 mm. Calyx 6–8 mm, horizontally projected, villous outside, glabrous inside, teeth of upper lip acute; lower lip almost as long as upper lip, teeth lanceolate. Corolla white or reddish, ca. 1 cm, pubescent, tube slightly exerted, upper lip emarginate, lower lip spreading. Anterior stamens included. Nutlets adaxially ribbed. Fl. and fr. Jun–Nov.

Hills, valleys; 600–2800 m. Guangdong, Guangxi, Guizhou, Hubei, Hunan, Jiangxi, Shaanxi, Sichuan, Taiwan, Xizang, Yunnan [Bhutan, Cambodia, India (Sikkim), Indonesia, Laos, Malaysia, Myanmar, Nepal, Thailand, Vietnam].

Used medicinally for dysentery and snake bites; also used as an essence in hair oil.

**2. *Melissa flava*** Benth ex Wallich, Pl. Asiat. Rar. 1: 65. 1830.

黄蜜蜂花 huang mi feng hua

Stems ca. 2.5 m, pubescent at apex, glabrescent at base. Petiole 1–2.8 cm; leaf blade ovate, (2–)5–7×1–3.5 cm, membranous, pubescent, base rounded to obtuse, margin coarsely serrate to serrate-crenate, apex acute. Verticillasters 2–10-flowered, widely spaced; upper bracts reduced; bracteoles linear to obovate-lanceolate, 3–6×1–2.5 mm, ciliate. Pedicel 3–7 mm. Calyx blue-purple, broadly campanulate, ca. 9 mm in flower, veins villous, inside glabrous; upper lip reflexed, ca. 4×4 mm, lateral teeth ± villous on outer margin; middle tooth erect, broadly triangular, apex acute; lower lip slightly longer, ca. 3 mm wide, 2-toothed to more than 1/2 its length, with lanceolate acuminate teeth; fruiting calyx dilated,

to 1.3 cm, scarious, conspicuously netted. Corolla yellowish, 1.1 cm, villous outside; tube pubescent, gradually dilated beyond middle; upper lip ca. 4×3 mm, 2-lobed; lower lip as long as upper, to 6 mm wide, lobes circular. Stamens included. Immature nutlets brown, ca. 1 mm, corrugate. Fl. Jul–Aug.

Hillside forests; 1800–2800 m. Xizang [Bhutan, India, Nepal].

**3. *Melissa yunnanensis*** C. Y. Wu & Y. C. Huang, Acta Phytotax. Sin. 10: 228. 1965.

云南蜜蜂花 yun nan mi feng hua

Stems erect, ca. 1 m, few branched, finely pubescent. Petiole 0.5–2 cm; leaf blade ovate to lanceolate-ovate, 2–5×0.8–3 cm, ± membranous, adaxially puberulent or subglabrous, abaxially pubescent, base obtuse to cordate, margin irregularly serrate, apex acute. Verticillasters 2–16-flowered, numerous, widely spaced; bracts leaflike; bracteoles sublinear, shorter than pedicels, ciliate. Pedicel ca. 3 mm. Calyx campanulate, dilated after anthesis, 8–12 mm, villous, lateral teeth of upper lip close to middle tooth, teeth of lower lip lanceolate. Corolla yellow-white, to 1.5 cm, pubescent; middle lobe of lower lip rounded, slightly overlapping circular lateral lobes. Stamens included. Nutlets oblong-ovoid. Fl. Jul–Aug, fr. Sep.

• Forests, forest margins; 2100–3200 m. Xizang, Yunnan.

**4. *Melissa officinalis*** Linnaeus, Sp. Pl. 2: 592. 1753.

香蜂花 xiang feng hua

Stems ± erect, pyramidally much branched, pubescent, base glabrescent. Petiole slender, 0.5–2(–4) cm; leaf blade ovate, 1–5(–6.5)×0.8–4(–5) cm, ± membranous or herbaceous, adaxially villous, abaxially villous along veins, base rounded to subcordate rarely obtuse or acute, margin serrate-crenate to obtusely serrate, apex acute to obtuse. Verticillasters 2–14-flowered, short pedunculate; bracts leaflike, much smaller than leaves, villous, ciliate. Pedicel ca. 4 mm. Calyx campanulate, ca. 8 mm, villous outside, villous inside apically; upper lip short 3-denticulate or ± undulate, teeth with short erect apices; lower lip slightly longer than upper, teeth narrowly triangular, apex spinescent. Corolla creamy white,

1.2–1.3 cm, villous outside; upper lip emarginate; middle lobe of lower lip obliquely spreading, rounded. Fl. Jun-Aug.

Cultivated in China [Kyrgyzstan, Russia, Tajikistan, Turkmenistan; Africa, SW Asia, Europe].

Used for flavoring salads, soups, and liqueurs. Oil employed in perfumery; commonly known as balm tea; a home remedy sometimes used for headaches and toothaches.

