

### 33. LAMIUM Linnaeus, Sp. Pl. 2: 579. 1753.

野芝麻属 ye zhi ma shu

Herbs annual or perennial. Stem leaf blades circular or reniform to ovate-lanceolate, margin coarsely crenate or dentate-serrate. Verticillasters 4–14-flowered; floral leaves similar, much longer than verticillasters; bracts ± linear, early deciduous. Calyx tubular-campanulate to campanulate, 5- or 10-veined, ± hairy outside, throat slightly oblique or regular; teeth 5, subequal, subulate, as long as or longer than tube. Corolla purple-red, reddish, yellowish, to dirty white, 2-lipped, 2(–3)×as long as calyx, hairy outside; tube straight or incurved, cylindrical or widened above annulus, subsaccate; upper lip erect, oblong, rounded or emarginate, ± galeate; lower lip spreading, 3-lobed; middle lobe obcordate, emarginate or 2-lobed; lateral lobes semicircular, margin crenate or dentate. Stamens 4, hairy, anterior 2 longer, ascending beneath upper lip; anther cells 2, divaricate. Ovary lobes apically truncate, glabrous or tuberculate, sometimes with a membranous margin. Style apex subequally 2-cleft.

About 40 species: Africa, Asia, Europe, introduced in North America; four species in China.

- 1a. Corolla tube straight, cylindrical, without hairy annulus inside; leaves circular to reniform, coarsely crenate to shallowly ± palmately lobed ..... 1. *L. amplexicaule*
- 1b. Corolla tube with hairy annulus near base inside, subsaccate beyond hairy annulus; leaves ovate to ovate-lanceolate.
  - 2a. Corolla purple or dark purple; ovary lobes glabrous, with a membranous margin at apex ..... 4. *L. maculatum*
  - 2b. Corolla white or yellowish; ovary lobes glabrous or tuberculate, without membranous margin at apex.
    - 3a. All floral leaves subsessile ..... 2. *L. album*
    - 3b. Lower floral leaves petiolate ..... 3. *L. barbatum*

#### 1. *Lamium amplexicaule* Linnaeus, Sp. Pl. 2: 579. 1753.

宝盖草 bao gai cao

*Galeobdolon amplexicaule* (Linnaeus) Moench; *Lamiopsis amplexicaulis* (Linnaeus) Opiz; *Pollichia amplexicaulis* (Linnaeus) Willdenow.

Herbs annual or biennial. Stems to 30 cm, much branched at base, ascending, subglabrous. Upper leaves sessile; petiole of basal leaves at least as long as blade; leaf blade circular to reniform, 1–2×0.7–1.5 cm, sparsely strigose, base truncate to broadly truncate-cuneate, semi-clasping, margin deeply crenate to almost palmately lobed, apex rounded. Verticillasters 6–10-flowered; bracts ca. 4×0.3 mm, ciliate. Calyx tubular-campanulate, 4–5×1.7–2 mm, densely villous, glabrous except for white villous apically inside; teeth lanceolate-subulate, 1.5–2 mm, margin ciliate. Corolla purple-red or reddish, ca. 1.7 cm, puberulent; tube ca. 1.3 cm, throat ca. 3 mm wide, annulus absent; upper lip densely purple-red pubescent on outside, straight, oblong, ca. 4 mm, apex slightly curved; lower lip slightly longer; middle lobe obcordate, 2-lobulate. Filaments glabrous; anthers hirsute. Nutlets grayish yellow, obovoid, triquetrous, constricted at base, ca. 2×1 mm, white tuberculate. Fl. Mar–May, fr. Jul–Aug.

Roadsides, forest margins, marshes, sometimes weed in fields; 0–4000 m. Anhui, Fujian, Gansu, Guizhou, Henan, Hubei, Hunan, Jiangsu, Qinghai, Shaanxi, Sichuan, Xinjiang, Xizang, Yun-nan, Zhejiang [Japan, Kazakhstan, Kyrgyzstan, Russia, Tajikistan, Turkmenistan, Uzbekistan; SW Asia, Europe].

Used medicinally for traumatic injury.

#### 2. *Lamium album* Linnaeus, Sp. Pl. 2: 579. 1753.

短柄野芝麻 duan bing ye zhi ma

*Lamium petiolatum* Royle ex Benth.

Herbs perennial. Stems 30–60 cm, bristly to subglabrous. Basal leaves smaller; petiole of upper leaves 1–6 cm; upper leaf blade ovate to ovate-lanceolate, 2.5–6×1.5–4 cm, adaxially sparsely appressed, minutely hispid, especially near margin, base cordate, margin dentate-serrate, apex acute to cuspidate-acuminate. Verticillasters 8- or 9-flowered; floral

leaves similar to stem leaves but subsessile; bracts linear, ca. 1/6 as long as calyx. Calyx campanulate, 9–13×2–3 mm, base sometimes purple red, sparsely bristly, minutely hispid; teeth lanceolate, as long as tube, awned, margin ciliate. Corolla yellowish or dirty white, 2–2.5 cm; tube at least as long as calyx, 2–2.5 mm in diam., pubescent, hairy annulate inside, throat dilated; upper lip obovate, 7–10×6 mm, obtuse; lower lip 1–1.2 cm, middle lobe 4–6×3–4 mm, obreniform, margin ciliate; lateral lobes circular, ca. 2 mm, with a subulate tooth ca. 1 mm. Anthers black-purple, villous. Nutlets dark gray, narrowly ovoid, triquetrous, 3–3.5×1.5–1.7 mm, glabrous, tuberculate. Fl. Jul–Sep, fr. Aug–Oct.

*Larix* forest margins, wet areas in cleared *Picea* forest regions, semishady grassy hillsides; 1400–2400 m. Gansu, Nei Mongol, Shanxi, Xinjiang [India, Japan, Kazakhstan, Kyrgyzstan, Mongolia, Russia, Tajikistan, Turkmenistan, Uzbekistan; SW Asia, Europe, North America].

The young leaves are edible, and the flowers are used medicinally. It is also used as a honey plant.

#### 3. *Lamium barbatum* Siebold & Zuccarini, Abh. Math.-Phys. Cl. Königl. Bayer. Akad. Wiss. 4: 158. 1846.

野芝麻 ye zhi ma

*Lamium album* Linnaeus var. *barbatum* (Siebold & Zuccarini) Franchet & Savatier; *L. barbatum* var. *glabrescens* C. Y. Wu & Hsuan; *L. barbatum* var. *hirsutum* C. Y. Wu & Hsuan; *L. barbatum* var. *rigidum* C. Y. Wu & Hsuan.

Herbs perennial. Stems to 1 m, unbranched, erect, subglabrous or appressed hirtellous to hirsute. Petiole of basal leaf to 7 cm, apex shorter; basal leaf blade ovate to cordate, 4.5–8.5×3.5–5 cm, base cordate, apex caudate-acuminate; upper stem leaves ovate-lanceolate, herbaceous, margin incurved dentate-serrate, hirtellous. Verticillasters 4–14-flowered, in upper axils; bracts linear or filiform, 2–3 mm, ciliate. Calyx campanulate, 11–15×4–6 mm, subglabrous to sparsely strigose; teeth lanceolate-subulate, 7–10 mm, ciliate. Corolla white or yellowish, ca. 2 cm; tube ca. 2 mm wide near base, saccate, throat to 8 mm wide, partly hairy, hairy annulate near base inside; upper lip obovate or oblong, ca. 1.2 cm, margin ciliate, villous, apex rounded to emarginate; lower

lip ca. 6 mm, middle lobe obreniform, 2-lobulate, base abruptly constricted; lateral lobes semicircular, ca. 0.5 mm, each with a needlelike marginal tooth. Anthers dark purple. Nutlets brownish, obovoid, apex truncate, base attenuate, ca.  $3 \times 1.8$  mm. Fl. Apr-Jun, fr. Jul-Aug.

Roadsides, fields, waste areas on hillsides, streamsides; 800–2600 m. Anhui, Gansu, Guizhou, Hebei, Heilongjiang, Henan, Hubei, Hunan, Jiangsu, Jilin, Liaoning, Nei Mongol, Shaanxi, Shandong, Shanxi, Sichuan, Zhejiang [Japan, Korea, Russia].

*Lamium barbatum* is often included in *L. album*, and their separation needs more detailed investigation.

Fl. USSR states that the corolla can be pinkish; this does not seem to have been recorded for Chinese material.

**4. *Lamium maculatum*** Linnaeus, Sp. Pl., ed. 2, 2: 809. 1763.

紫花野芝麻 zi hua ye zhi ma

*Lamium maculatum* var. *kansuense* C. Y. Wu & Hsuan.

Herbs perennial. Stems 30–50 cm tall, sparsely white pubescent, hollow. Petiole slender, 1.5–3 cm; stem leaf blades ovate,  $2.5\text{--}5 \times 1.5\text{--}3$  cm, herbaceous, appressed hirtellous, abaxially glandular punctate, base subtruncate to broadly cuneate, margin coarsely incurved serrate, apex caudate-acuminate. Verticillasters 8–12-flowered; bracts linear, 2–3 mm, ciliate. Calyx campanulate, ca.  $1 \text{ cm} \times 3.5$  mm, 5-ribbed, glabrous except for hirsute veins; teeth subequal, straight or spreading, linear-lanceolate, 5–6 mm, margin ciliate, apex long aristate. Corolla purple, 1.8–2.5 cm; tube ca. 2 mm wide at base, pilose outside, densely so on upper lip, hairy annulate and puberulent inside; upper lip straight, oblong, ca. 7 mm, narrowed and slightly curved at base, margin undulate; lateral lobes of lower lip shallowly semicircular, each with a marginal tooth 1–1.5 mm. Anthers dark purple. Ovary lobes glabrous, with a membranous margin at apex. Fl. Jul-Aug.

Hill tops, valleys; 2400–2700 m. Gansu, Xinjiang [Russia; SW Asia, Europe, North America].

