
胡卢巴属 hu lu ba shu

Annual or perennial herbs. Stem erect, spreading or prostrate, much branched. Leaves pinnately 3-foliolate; stipules adnate to petiole, conspicuously veined; terminal leaflet usually larger, margin ± serrulate or incised, lateral veins running out into teeth. Inflorescence axillary, shortly racemose, capitulate, subumbellate, or flower solitary; peduncles elongate in fruit. Pedicels short, often less than 5 mm, thickened after flowering; bracts minute; bracteoles absent. Calyx teeth ± equal. Petals yellow, blue, purple, or white, free from staminal tube; standard obovate or oblong, broad at base, sometimes broadly clawed; wings elliptical; keel obtuse, shorter than wings. Stamens diadelphous or nearly monadelphous; filaments not dilated; anthers uniform. Legume straight, falcate, or arcuate, compressed or terete, tapering at both ends, with reticulate coat. Seeds 1 to many, scabrous, warty or pitted.

About 55 species: mostly in Africa, Asia, Europe, Mediterranean region, and Oceania; eight species (two introduced) in China.

1a. Perennial herbs; legume linear-oblong.
   2a. Wings shorter than keel.
      3a. Corolla 10–12 mm; branches erect, arising from subshrubby base ......................................................  3. T. cachemiriana
      3b. Corolla 7–9(–10) mm; branches prostrate to ascending, arising from large woody base ..................................  4. T. pamirica
   2b. Wings longer than keel.
      4a. Legume covered with oblique veins; standard suborbicular, equal to wings; leaflet margin sparsely serrate ....  1. T. emodi
      4b. Legume covered with crosswise veins; standard long obovate, reflexed, slightly longer than wings; leaflet margin densely biserate .................................................................  2. T. fimbriata

1b. Annual herbs; legume conical or ovoid.
   5a. Legume conical or ovoid, more than 2.5 mm wide; plants over 30 cm.
      6a. Legume ovoid, 2.5–5 mm; inflorescence long pedunculate, capitulate, with 10–25 flowers; petiole 10–40 mm ..........................................................  7. T. caerulea
      6b. Legume conical, 70–120 mm; inflorescence subsessile, flowers solitary or in pairs; petiole 6–15 mm .................................................................  8. T. foenum-graecum
   5b. Legume linear-cylindric, less than 2 mm wide; plants under 30 cm.
      7a. Peduncles as long as leaves or longer, usually over 15 mm ...........................................................................  5. T. cancellata
      7b. Peduncles shorter than leaves, usually under 10 mm ......................................................................................  6. T. arcuata


喜马拉雅胡卢巴 xi ma la ya hu lu ba

Perennial herbs, 20–60(–80) cm. Stem erect or ascending, terete, branching at base, yellow pubescent when young. Leaves 3-foliolate; stipules broadly lanceolate, incised; leaflets broadly obovate, (7–)10–25 × (4–)7–15 mm, sparsely pilose abaxially, glabrous adaxially, base cuneate, margin irregularly biserate, apex obtuse or truncate, apiculate. Flowers 5–8(–10) in short racemes; peduncle slender and axillary, 1–2 cm, after flowering prolonged to 2–3 cm, straight; bracts minute; pedicels 1.5–2.5 mm. Calyx 3–4 mm; teeth lanceolate, shorter than tube. Corolla yellow, 6–9 mm; standard suborbicular, equal to wings; keel ca. 1/2 length of wings. Ovary as long as style; ovules 8–10. Legume oblong, 14–20 × 4–5 mm, glabrous, veins prominent, oblique, base rounded, apex acute, with persistent style. Seeds 4–6, brown, ellipsoidal, ca. 2.5 × 1.5 mm, smooth. Fl. and fr. Jun–Sep.

Ravine shores or meadows by woodlands of the Himalayan valleys; 2700–3800 m. Xizang [India, Kashmir, Nepal].


重齿胡卢巴 chong chi hu lu ba

Perennial herbs, 25–30 cm. Stem erect, spreading branching, subquadrangular, sparsely pilose. Leaves 3-foliolate; stipules ovate-lanceolate, incised, 4–6 mm, pilose; petiole 3–5 mm; leaflets broadly obovate, 6–10(–12) × 3–6(–8) mm, pilose at least on midrib abaxially, glabrous adaxially, base cuneate, margin irregularly biserate. Flowers (3–)6–8(–12) in subumbellate heads; peduncle 20–40 mm, pilose, straight; pedicels ca. 2 mm. Calyx ca. 3.5 mm; teeth subulate-lanceolate. Corolla yellow, (5–)6–7 mm. Ovary linear, sparsely pilose; ovules 7–9. Legume elliptic-oblong, 8–10 × ca. 4 mm, veins crosswise, thin and conspicuous, both ends rounded. Seeds 2–4. Fl. and fr. Jul–Aug.

Ravine shores or meadows by woodlands of the Himalayan valleys; 3800–4300 m. Xizang [India, Kashmir, Nepal].


克什米尔胡卢巴 ke shi mi er hu lu ba

Perennial herbs, 20–40 cm. Stems erect, terete, branching from base, leafy. Leaves 3-foliolate; stipules of lower part triangular-lanceolate, 3–5 mm; leaflets obovate, (5–)7–12 × (4–)6–8 mm, base broadly cuneate, margin serrulate. Flowers (5–)8–10, in subumbellate heads; peduncle slender, 20–35 mm, straight after flowering; pedicels 1.2–2.5 mm. Calyx 3–4 mm; teeth triangular. Corolla yellow, 10–12 mm; standard suborbicular, equal to keel; wings short and narrow. Ovary linear; ovules 10. Legume oblong, (10–)12–15(–18) × ca. 4 mm, veins prominent,

Sandy ravines, grasslands in valleys; 2400–3800 m. Xinjiang, Xizang [Afghanistan, India, Kashmir, Pakistan; SW Asia (Iran)].


**帕米尔胡卢巴**  pa mi er hu lu ba

*Melilotoides pamirica* (Borissova) Sojak; *Melisitus pamiricus* (Borissova) Goloskokov.

Perennial herbs, (15–)30–40(–50) cm, from a woody caudex. Stem procumbent or ascending, terete, branching at base. Leaves 3-foliolate; leaflets obovate, 9–18 × 5–9 mm, glabrate to sparsely pubescent, base cuneate, margin sharply few toothed, apex truncate to broadly rounded, sometimes retuse or apiculate. Flowers (2–)5–8(–10) in umbels; peduncle axillary, longer than subtending leaf; pedicels ca. 2 mm, recurving after anthesis. Calyx 4–5(–7) mm; teeth linear-lanceolate, as long as tube. Corolla yellow, 7–9(–10) mm; standard oblong to oblong-ovate, 7–10 × 4–5 mm, longer than keel. Ovary linear; ovules 3–5. Legume oblong-elliptic, (10–)11–16(–16) × (3–)4.5 mm, straight or slightly curved, flattened laterally, glabrous or rarely pubescent, veins prominent, oblique, base broadly cuneate, apex acute, with persistent style. Seeds 3 or 4, smooth. Fr. and fr. May–Sep.

Dry slopes and stony wastelands, middle and upper montane regions; below 4500 m. Xinjiang [C Asia, SW Asia (Iran)].

5. **Trigonella cancellata** Desfontaines, Tabl. École Bot. 3: 218. 1829.

**网脉胡卢巴** wang mai hu lu ba

Annual herbs, 10–20(–40) cm. Stems prostrate or ascending, puberulent. Leaves 3-foliolate; stipules linear-lanceolate, dentate at base; leaflets oblongangular or obovate-triangular, (4–)7–10 × 4–7 mm, appressed pubescent abaxially, glabrous adaxially, lateral veins 5–8 pairs, base cuneate, margin dentate in upper 1/2, apex truncate. Flowers 4–7 in umbellate heads; peduncle axillary, 10–18 mm. Calyx 3–4 mm, veins 5, prominent. Corolla yellow, ca. 5 mm; standard obvate-oblung, longer than wings and keel. Ovary linear; ovules numerous. Legume cylindric, 15–20 × ca. 1.5 mm, 4 or 5 in umbel, curved to semi-circular, white pubescent, veins reticulate, beak hooked. Seeds 6–8, brown, oblong, ca. 2.5 × 1 mm, papilllose; papillae deep brown. Fl. May–Aug, fr. Jun–Sep.

Alkaline soils on sandy slopes or ravin edges. Xinjiang [Russia (W Siberia); C and SW Asia].


**弯果胡卢巴** wan guo hu lu ba

Annual herbs, 10–25 cm. Stems prostrate or ascending, terete, branching at base, scattered villous. Leaves 3-foliolate; stipules lanceolate, base subhastate; leaflets oblongangular or obovate, 5–10 × 3–7 mm, scattered villous abaxially, scabrous and glabrous adaxially, lateral veins 5–7 pairs, running out into teeth, parallel, base broadly cuneate, margin dentate above midlle, apex truncate. Flowers 4–6(–8) in umbellate heads; peduncle less than 5 mm, thick, densely villous. Corolla yellow, 4–5 mm. Ovary linear villous; ovules numerous. Legume cylindric, 15–20 × 1.25–1.5 mm, or 5 in umbel, falcate, scattered villous, veins crosswise reticulate, beak pointed. Seeds 7 or 8, oblong, ca. 2.5 mm, brown warty. Fl. Mar–Jun, fr. May–Jul.

Alkaline soil on ravines or hillsides. Xinjiang [C and SW Asia].


**蓝胡卢巴** lan hu lu ba


Annual herbs, 30–60(–80) cm. Stems straight, thick, terete, glabrescent, branched. Leaves pinnately 3-foliolate; stipules subulate-lanceolate; petioles 1–4 cm; leaflets ovate to broadly elliptic, 15–35 × 4–15 mm, sparsely pubescent on midrib abaxially, glabrous adaxially, lateral veins 8–10 pairs, base cuneate or rounded, margin serrate, apex obtuse or acute. Racemes capitlate or ovoid, 10–25-flowered; peduncles axillary, ca. 6 cm, straight, glabrous; bracts bristlelike, 1.5 cm; pedicel ca. 1 mm. Calyx ca. 3 mm, membranous, veins 5. Corolla blue, 5–6 mm; standard longest petal, keel shortest. Ovary ovate, glabrous; ovules 5–7. Legume ovoid, 2.5–5 × ca. 2.5 mm, apex tapering and beaked, longer than body. Seeds 1 or 2, brown, broadly ovoid, ca. 2 mm, tuberculate. Fl. Jun–Aug, fr. Jul–Sep.

Cultivated or escaped on wastelands. Gansu, Hebei, Heilongjiang, Liaoning, Nei Mongol, Shaanxi [widely cultivated in Asia and Europe; of cultivated origin].

Trigonella caerulea is apparently nowhere indigenous and was probably derived from *T. procumbens* (Besser) Reichenbach (Ivimey-Cook in Tutin et al., Fl. Eur. 2: 152. 1968).


**胡卢巴** hu lu ba

Annual herbs, 30–80 cm. Taproot to 80 cm, fibrous roots lateral. Stem erect, terete, branched. Leaves 3-foliolate; stipules entire, membranous, base adnate to petiole, apex acute; petiole spreading, 5–15 mm; leaflets narrowly obovate, ovate, to oblong-elliptic, terminal equal to laterals, 15–40 × 4–15 mm, sparsely pubescent or glabrescent abaxially, glabrous adaxially, lateral veins 5 or 6 pairs, base cuneate, margin dentate in upper 1/2. Flowers sessile, axillary, solitary or in pairs. Calyx 7–8 mm, villous. Corolla creamy or pale yellow, base violet, 13–18 mm. Ovary puberulent; ovules numerous. Legume long conical, 7–12 × 0.4–0.5 cm, straight or slightly curved, glabrescent, veins longitudinally reticulate, apex with long beak to 2 cm, distal suture thickened. Seeds 10–20, brown, oblong-ovoid, 3–5 × 2–3 mm, surface uneven. Fl. Apr–Jul, fr. Jul–Sep.

Cultivated throughout China, escaped in fields as a semi-wild weed in Gansu, Hebei, Heilongjiang, Liaoning, Nei Mongol, Ningxia, Qinghai, Shaanxi, Shanxi, Sichuan, Xinjiang, Xizang [Himalayan region; SW Asia].

The seeds are used medicinally. The tender leaves and stems are used as vegetables; and the dried stems, leaves, and seeds are used as flavoring for foods and in baking. The dried plant also is used as insect repellent.