

21. MARMORITIS Bentham, Bot. Misc. 3: 377. 1833.

扭连钱属 niu lian qian shu

Phyllophyton Kudô

Herbs perennial, villous, rhizomatous or stoloniferous. Stems erect or ascending. Leaves widely spaced, smaller or absent basally, overlapping upward, sessile or subsessile; leaf blade subcircular to reniform-ovate, papery. Verticillasters apical, obscured by upper leaves; bracts small, linear-subulate. Calyx tubular, straight or slightly curved, 15-veined, tube villous annulate inside, ± 2-lipped, upper lip 3-toothed, lower lip 2-toothed. Corolla tubular, gradually dilated at apex, exerted, usually resupinate, 2-lipped; upper lip (apparent lower lip when corolla resupinate) straight, 2-lobed; lower lip (apparent upper lip when corolla resupinate) 3-lobed, middle lobe slightly cuculate, lateral lobes oblong to oblong-ovate. Stamens 4, didynamous, anterior 2 (posterior when corolla resupinate) shorter, included, posterior 2 sometimes long exerted; anther cells 2, divergent. Ovary glabrous. Style slender, apex 2-cleft. Nutlets oblong-ovoid, smooth, base small umbonate.

About five species: China, India; all in China.

- 1a. Corolla not resupinate; plants brown lanate 1. *M. pharicus*
- 1b. Corolla resupinate; plants villous, hirsute or tomentose.
 - 2a. Calyx teeth ovate to ovate-triangular; plants white villous.
 - 3a. Calyx apex pilose; lobes of lower lip of corolla oblong 2. *M. complanatum*
 - 3b. Calyx glabrous; lobes of lower lip of corolla circular 3. *M. decolorans*
 - 2b. Calyx teeth lanceolate to triangular; plants hirsute or tomentose.
 - 4a. Corolla 2-lipped, bluish, 1.5–1.7 cm; posterior stamens exerted 4. *M. nivalis*
 - 4b. Corolla regular, white, 1.9–2.2 cm; stamens included 5. *M. rotundifolia*

1. *Marmoritis pharicus* (Prain) A. L. Budantzev, Bot. Zurn. (Moscow & Leningrad) 77(12): 125. 1992.

帕里扭连钱 pa li niu lian qian

Nepeta pharica Prain, J. Asiat. Soc. Bengal, Pt. 2, Nat. Hist. 59: 306. 1891; *Phyllophyton pharicum* (Prain) Kudô; *Pseudolophanthus pharicus* (Prain) Kuprianova.

Herbs perennial, brown lanate throughout. Rhizomes trailing. Stems erect, 4–10 cm. Upper leaves overlapping, circular, 1.5–2 cm in diam., margin crenate. Cymes axillary, sessile, few flowered, shorter than leaves; bracts small. Calyx ca. 9 mm, flaccid tomentose, tube villous inside; upper lip with 3 wide short teeth. Corolla ca. 1.6 cm; tube straight, slightly dilated at throat. Stamens included or slightly exerted. Nutlets linear-oblong, ca. 2.8 mm, smooth.

• Moraines; 5000 m. Xizang (Yadong Xian).

2. *Marmoritis complanatum* (Dunn) A. L. Budantzev, Bot. Zurn. (Moscow & Leningrad) 77(12): 125. 1992.

扭连钱 niu lian qian

Nepeta complanata Dunn, Notes Roy. Bot. Gard. Edinburgh 8: 122. 1913; *Dracocephalum rockii* Diels; *Glechoma complanata* (Dunn) Turrill; *Phyllophyton complanatum* (Dunn) Kudô; *Pseudolophanthus complanatus* (Dunn) Levin.

Rhizomes woody, brown. Stems numerous, ascending or prostrate, 13–25 cm, apex white villous, finely glandular, base purple-red, leafless, subglabrous. Leaves crowded, largest at mid stem; petiole short or obsolete; leaf blade broadly ovate-orbicular to subreniform, 1.5–2.5×2–3 cm, papery, white villous, adaxial veins glabrous, base broadly cuneate to subcordate, margin crenate, ciliate, apex obtuse to rounded. Cymes 3-flowered; peduncle 1–3 mm; bracts linear-subulate. Pedicel 1–2 mm, villous. Calyx 0.9–1.2 cm, densely white hirsute, conspicuously veined; limb oblique, 2-lipped; teeth ovate to ovate-triangular, ciliate. Corolla reddish, 1.5–2.3 cm, sparsely puberulent; tube tubular, dilated at apex; limb resupinate; middle lobe of upper lip widest, ovate-oblong,

apex sometimes emarginate; lateral lobes small, broadly ovate-oblong; lobes of lower lip oblong, straight, ca. 4 mm. Nutlets oblong to oblong-ovoid, adaxially slightly triquetrous. Fl. Jun-Jul, fr. Jul-Sep.

• Crevices of weathered rocks, stony alluvial fans; 4300–5000 m. Qinghai, Sichuan, Xizang, Yunnan.

3. *Marmoritis decolorans* (Hemsley) H. W. Li, Novon 3: 157. 1993.

褪色扭连钱 tui se niu lian qian

Nepeta decolorans Hemsley, Hooker's Icon. Pl. 25: t. 2470. 1896; *Glechoma decolorans* (Hemsley) Turrill; *Phyllophyton decolorans* (Hemsley) Kudô; *Pseudolophanthus decolorans* (Hemsley) Levin.

Rhizomes woody, brown-purple, branched. Stems ascending or subprostrate, much branched, apex white sericeous-villous, finely glandular, base purplish, puberulent. Petiole short or obsolete; blade of mid cauline leaves circular to reniform, 1.5–2×2–2.7 cm, adaxially corrugate, densely white sericeous-villous, abaxially yellowish glandular, base cuneate to broadly cuneate, margin crenate, ciliate, apex rounded to subobtuse, veins spreading white villous. Cymes 2- or 3-flowered; peduncle ca. 1.5 mm; bracteoles subulate or sub lanceolate. Pedicel ca. 1.2 mm. Calyx slightly dilated at apex, curved, 1–1.2 cm, densely white villous, puberulent, conspicuously veined; teeth ovate, ca. 1.5 mm, teeth of upper lip wider than those of lower lip. Corolla yellowish or blue, 1.1–1.4 cm, puberulent and villous near throat, tube resupinate; middle lobe of apparent upper lip wide, rhombic-flabellate, apex emarginate; lateral lobes small, circular; lobes of lower lip straight, circular, ca. 2 mm. Nutlets brown, oblong-ovoid, smooth. Fl. Jul, fr. Aug-Sep.

• Stony sandy slopes, valleys; 4800–5000 m. Xizang.

4. *Marmoritis nivalis* (Jaquemont ex Bentham) Hedge, Fl. Pakistan 192: 119. 1990.

雪地扭连钱 xue di niu lian qian

Nepeta nivalis Jaquemont ex Bentham, Labiat. Gen. Spec. 737. 1835; *Phyllophyton nivale* (Jaquemont ex Bentham) C. Y. Wu; *Pseudolophanthus nivalis* (Jaquemont ex Bentham) Levin.

Herbs perennial, hirsute and glandular throughout. Stems 10–15 cm. Leaves sessile or subsessile; leaf blade circular, or circular-ovate to subreniform, 1.5–2.2×1–2.4 cm, base rounded to subcordate, margin crenate, apex rounded. Cymes sessile upward; peduncle 2–5 mm at mid inflorescence; floral leaves shorter than to almost as long as peduncle; bracts small, linear-subulate. Calyx dilated at apex, very slightly incurved, 8–10 mm, pilose annulate inside; teeth triangular to lanceolate, narrow, 3–5 mm. Corolla bluish, resupinate, 1.5–1.7 cm; tube exerted, gradually dilated at apex; middle lobe of apparent upper lip denticulate; lateral lobes small, broadly ovate, lobes of apparent lower lip broadly ovate. Nutlets oblong-ovoid, smooth, brown.

- Stony alluvial fans; 5000–5300 m. Xizang.

5. *Marmoritis rotundifolia* Bentham, Bot. Misc. 3: 377. 1833.

圆叶扭连钱 yuan ye niu lian qian

Nepeta rotundifolia (Bentham) Bentham; *N. tibetica* Jaquemont ex Bentham; *Phyllophyton tibeticum* (Jaquemont ex Bentham) C. Y. Wu; *Pseudolophanthus tibeticum* (Jaquemont ex Bentham) Kuprianova.

Rhizomes slender. Stems ascending or prostrate, 7.5–15 cm, much branched, tomentose. Petiole 4–8.3 mm; leaf blade circular or flabellate, 1.2–2.5 cm, ± leathery, base truncate-cuneate to cuneate, margin crenate, apex rounded, corrugate, pubescent-lanate. Cymes axillary, few flowered, shorter than leaves; bracts filiform, shorter than pedicels. Calyx ca. 1.2 cm, slightly incurved, flaccid villous; teeth subequal, lanceolate to subulate, shorter than calyx tube. Corolla white, ca. 1.8 cm, erect, throat dilated, funnelform, limb small, regular. Nutlets linear-oblong, ca. 6 mm, smooth.

- Stony alluvial fans; 5300 m. Xizang [India].

