

45. LEPTOMISCHUS Drake, Bull. Mus. Hist. Nat. (Paris) 1: 117. 1895.

报春茜属 bao chun qian shu

Chen Tao (陈涛); Charlotte M. Taylor

Indopolysolenia Bennet; *Polysolen* Rauschert, nom. illeg. superfl.; *Polysolenia* J. D. Hooker (1873), not Ehrenberg ex Kützing (1849) [Fungi].

Perennial herbs or subshrubs, unarmed, presumably rather succulent. Raphides present. Leaves opposite, sometimes crowded or rosulate, perhaps without domatia, with margins sometimes crisped and/or reportedly serrulate; stipules persistent to deciduous, interpetiolar or shortly united around stem, triangular to suborbicular (*Leptomischus funingensis*), often well developed and veined, entire or 2- or 3-lobed (*L. wallichii*), glabrous or glabrescent adaxially. Inflorescences terminal and apparently sometimes pseudoaxillary, capitate to congested-cymose or umbelliform, several to many flowered, subsessile to pedunculate, bracteate with bracts often well developed to involucre. Flowers sessile to pedicellate, bisexual, distylous and sometimes markedly dimorphic. Calyx limb 5-lobed. Corolla white or yellow, funnelform, salverform, or sometimes inflated, inside pubescent in upper part or most of tube; lobes 5, valvate in bud. Stamens 5, inserted below middle of corolla tube in long-styled flowers, inserted in corolla throat in short-styled flowers, included or partially exerted; filaments usually short; anthers basifixed or perhaps dorsifixed near base. Ovary 2-celled, ovules numerous in each cell borne on stipitate placentas apparently near base of septum; stigma 2-lobed, included or exerted. Fruit capsular, subglobose, dehiscent through apical portion or operculum inside calyx limb, perhaps papery, with septum reportedly mostly disintegrating leaving 1 incomplete cell; seeds numerous, small, reticulate or areolate.

Seven species: S China, NE India, Myanmar, Vietnam; five species (three endemic) in China.

Leptomischus seems to be similar to *Keenania* and *Mouretia*; all of these genera are rather poorly known. Several authors (e.g., Deb & Rout, Kew Bull. 45(2): 339–341. 1990; H. S. Lo in FRPS 71(1): 184–189. 1999) have reported marked floral dimorphism in species of *Leptomischus*.

- 1a. Leaf blade shallowly cordate or subtruncate at base; stems well developed with leaves distributed along them; calyx with multicellular long trichomes 3. *L. guangxiensis*
- 1b. Leaf blade obtuse to acute at base; stems short to well developed with leaves distributed along them or congested at ends; calyx glabrous or with unicellular or multicellular trichomes.
 - 2a. Flowers smaller, corolla 6–6.5 mm; calyx and corolla glabrous outside 4. *L. parviflorus*
 - 2b. Flowers larger, corolla longer than 10 mm; calyx and corolla glabrous to variously pubescent outside.
 - 3a. Stems short, with leaves crowded and rosulate; calyx and corolla unicellular pilosulous outside 5. *L. primuloides*
 - 3b. Stems developed, with leaves distributed along them; calyx and corolla densely multicellular villous, -tomentose, or -pilosulous outside.
 - 4a. Stipules ovate to lanceolate, 8–9 mm 1. *L. erianthus*
 - 4b. Stipules suborbicular, 4–5 mm 2. *L. funingensis*

1. *Leptomischus erianthus* H. S. Lo, Bull. Bot. Res., Harbin 18: 277. 1998.

毛花报春茜 mao hua bao chun qian

Herbs, weak to erect, 1–2 m tall; stems quadrangular, densely hirtellous. Leaves opposite, distributed along stems; petiole usually 0.5–1.5 cm, densely hirtellous; blade drying papery, black adaxially, dark brown abaxially, narrowly elliptic to lanceolate-elliptic, 4–12 × 1.5–4 cm, adaxially sparsely strigose to glabrescent, abaxially glabrescent except multicellular villous along principal veins, base cuneate, margins densely multicellular-ciliate, apex acuminate or caudate-cuspidate; secondary veins 9–12 pairs; stipules persistent, ovate or lanceolate, 8–9 mm, densely striate veined. Inflorescences terminal, subcapitate, densely multicellular villous with trichomes drying brown; peduncle shorter than 1 cm. Flowers subsessile. Calyx multicellular villous; hypanthium portion obconic, ca. 1.5 mm; limb lobed for ca. 1/2; lobes narrowly triangular, ca. 4 mm, acute. Corolla white, tubular, densely multicellular tomentose or -pilosulous outside with trichomes drying brown; tube 15–16 cm, inside upper part white villous; lobes triangular-lanceolate, 4–5 mm, acute. Capsules obconic, 5–6 mm, with persistent calyx

lobes to 3 mm. Fl. May, fr. Jul.

- Dense forests in moist valleys; 1500–1700 m. Yunnan.

2. *Leptomischus funingensis* H. S. Lo, Bull. Bot. Res., Harbin 18: 278. 1998.

富宁报春茜 fu ning bao chun qian

Herbs, unbranched; stems terete to quadrangular, pilosulous. Leaves opposite, distributed along stems; petiole 1–3 cm; blade drying black-brown, ovate, narrowly elliptic, or rarely obovate, 8–15 × 2.5–4.5 cm, adaxially glabrescent to pilose, abaxially villous, base cuneate, margins entire or serrulate-ciliate, apex acuminate; secondary veins 5–7(or 8) pairs; stipules suborbicular, 4–5 mm, usually reflexed, villous abaxially and marginally. Inflorescences terminal, cymose, densely many flowered; peduncles shorter than 1 cm; pedicels 3–3.5 mm. Flowers pedicellate. Calyx densely multicellular villous; hypanthium portion obconic, 3.5–4 mm; limb deeply lobed; lobes subtriangular, ca. 1.5 mm, obtuse. Corolla white or bright yellow, tubular-salverform, densely multicellular villous outside; tube 14–16 mm, white villous inside; lobes subelliptic, 4–6 mm, obtuse. Capsules obconic or subglobose, pilose, weakly

shiny. Fl. summer.

- Streamsides in dense forests; ca. 1000 m. Yunnan (Funing).

3. *Leptomischus guangxiensis* H. S. Lo, Bull. Bot. Res., Harbin 18: 278. 1998.

心叶报春茜 xin ye bao chun qian

Herbs; stems densely multicellular tomentose with trichomes drying grayish brown. Leaves opposite, distributed along stems; petiole 2.5–3.5 cm, densely pilosulous; blade drying papery and brownish gray adaxially, ovate or oblong-ovate, 5–8.5 × 2.5–4.5 cm, sparsely strigose adaxially, pilosulous except multicellular tomentose along midrib abaxially, base shallowly cordate to subtruncate, margins entire, apex acute to obtuse; secondary veins 5–7 pairs; stipules subovate, 7–9 mm, villous. Inflorescences terminal, cymose, densely multicellular tomentose; peduncle ca. 1 cm. Flowers not seen. Capsules obconic, multicellular villous, together with persistent calyx lobes 9–10 mm. Fl. May, fr. Apr, Jan.

- Shady grasslands near water. Guangxi.

4. *Leptomischus parviflorus* H. S. Lo, Bull. Bot. Res., Harbin 6(4): 49. 1986.

小花报春茜 xiao hua bao chun qian

Herbs, 10–30 m tall; stems terete to 4-angled, densely villosulous. Leaves opposite, distributed along stems or in clusters near stem apices; petiole 4–10(–20) mm, puberulent to villosulous; blade drying papery, dark green adaxially, greenish yellow abaxially, elliptic, narrowly elliptic, or oblanceolate, 4–14 × 1–4 cm, glabrous adaxially, glabrous on lamina and densely puberulent to villosulous on veins abaxially, base acute to obtuse, margins entire, apex obtuse to shortly acuminate; secondary veins 12–16 pairs; stipules persistent, rather leaflike, ovate to ligulate, 4–14 mm, veined, glabrescent, acute to obtuse. Inflorescences terminal, capitate, several flowered, puberulent to glabrous; peduncle 0.4–5 cm; bracts obovate to oblong-oblanceolate or narrowly oblanceolate, 3–10 mm, entire or sparsely ciliate. Flowers sessile. Calyx glabrous; hypanthium portion obovoid, smooth to 5-ribbed, ca. 1.5 mm; limb lobed for ca. 1/2; lobes ovate to ligulate, 1–1.2 mm, obtuse. Corolla white, funnelform, 6–6.5 mm, glabrous outside; tube densely white villous in throat; lobes subtriangular, margins thickened, apex rostrate. Capsules subglobose, 2.5–3.5 × 3–4.5 mm, glabrous; seeds 0.2–0.4 mm. Fl. Jul–Aug, fr. Aug.

Dense forests. Hainan (Sanya), Yunnan (Hekou) [N Vietnam].

5. *Leptomischus primuloides* Drake, Bull. Mus. Hist. Nat. (Paris) 1: 117. 1895.

报春茜 bao chun qian

Indopolysolenia burmanica Deb & Rout.

Perennial herbs or subshrubs, 10–30 cm tall; stems stout, subterete to quadrangular, pilosulous. Leaves opposite, crowded and rosulate; petiole 0.4–4 cm, pilose; blade drying papery, obovate, broadly obovate, or elliptic, (7–)15–25 × (2–)5–10 cm, adaxially glabrous, abaxially glabrescent except puberulent along principal veins, base cuneate to acute, margins entire,

apex acute or obtuse; secondary veins 14–19 pairs; stipules deciduous, elliptic, lanceolate, or ovate, 6–18 mm, pilosulous, acute or acuminate. Inflorescences terminal and/or pseudoaxillary in uppermost axils, capitate to subcapitate, several flowered, glabrescent; peduncle 2.5–12 cm; heads 2–5 cm wide; bracts ovate, 6–14 mm, pilose, acuminate or acute. Flowers sessile. Calyx unicellular pilosulous; hypanthium portion ellipsoid-obovoid, 1–1.5 mm; limb lobed for ca. 1/2; lobes lanceolate, (1–)2.5(–4) mm, ciliate, acute or acuminate. Corolla funnelform or tubular to inflated, outside pilosulous; tube 16–18(–25) mm, villous in throat; lobes triangular, ca. 2 mm, acute or obtuse. Capsules obovoid, ca. 3 × 4 mm. Fl. early winter.

Forests; [ca. 200 m in Myanmar]. Yunnan (Hekou) [Myanmar, Vietnam].

The measurements above include some from the protologue of *Indopolysolenia burmanica*, which was placed by Lo (Acta Phytotax. Sin. 31: 275. 1993) in synonymy with *Leptomischus primuloides*.

Fl. China 19: 211–212. 2011.