

7. PSILOTRICHUM Blume, Bijdr. Fl. Ned. Ind. 544. 1826.

林地菟属 lin di xian shu

Herbs or shrubs. Stem pubescent, lanose, or glabrous. Leaves opposite, petiolate. Flowers perfect, arranged in terminal or axillary heads or spikes, flower solitary in axil of a bract, subtended by 2 bracteoles. Tepals 5, erect, membranous, becoming rigid or not after anthesis. Stamens 5; filaments unequal, united to a short cup at base, pseudostaminodes absent or very small; anthers 2-loculed. Ovary ellipsoid or globose; ovule 1, pendulous; style slender; stigma capitate or 2-lobed. Utricles enclosed in perianth, ellipsoid, indehiscent. Seed erect, lenticular, smooth.

About 14 species: Africa, SE Asia; three species (one endemic) in China.

- 1a. Subshrubs, 70–100 cm tall 3. *P. yunnanense*
- 1b. Herbs, to 60 cm tall.
 - 2a. Leaves lanceolate, elliptic, or obovate 1. *P. ferrugineum*
 - 2b. Leaves linear 2. *P. erythrostachyum*

1. Psilotrichum ferrugineum (Roxburgh) Moquin-Tandon in Candolle, Prodr. 13(2): 279. 1849.

林地菟 lin di xian

Herbs annual, 5–60 cm tall. Stem branched from base, often tinged purple, with long internode, in leaf axils and young nodes often hairy. Petiole 3–12 mm; leaf blade lanceolate, elliptic, or obovate, 1.5–7.5 × 0.5–1.5 cm, glabrous, base acuminate, apex acute. Spikes terminal or axillary, often solitary, rarely paired; sessile or with thin rachis, 1–3 cm. Bracts ovate-lanceolate, ca. 1.5 mm; bracteoles ovate-triangular, ca. 0.5 mm, falling off with tepals and fruit. Flowers ca. 1 mm in diam. Tepals lanceolate, 2–2.5 mm, glabrous, with 3–5 strong veins abaxially, becoming rigid or not after anthesis. Stamens 0.5–0.75 mm. Styles persistent, ca. 0.5 mm. Utricles ellipsoid, 1–1.5 mm, compressed, transparent below. Seed black or blackish brown, shiny, ca. 1 mm. Fl. and fr. Jun–Aug.

Humid places, hillsides; 1000–2000 m. Hainan, Yunnan [Cambodia, India, Laos, Malaysia, Myanmar, Nepal, Philippines, Thailand, Vietnam; ?Africa].

Psilotrichum ferrugineum var. *hainanense* H. S. Kiu (Guihaia 13: 107. 1993) was described from Hainan, but we have seen no specimens and are therefore unable to treat it in this account. Further revisionary study is necessary.

- 1a. Leaves glabrous; petiole without wings; utricles ellipsoid 1a. var. *ferrugineum*
- 1b. Leaves pubescent on both surfaces; petiole narrowly winged and pubescent; utricles ovoid 1b. var. *ximengense*

1a. Psilotrichum ferrugineum var. **ferrugineum**

林地菟(原变种) lin di xian (yuan bian zhong)

Achyranthes ferruginea Roxburgh, Fl. Ind. 2: 502. 1824; *Psilotrichum trichotomum* Blume.

Petiole 3–12 mm, without wings; leaf blade lanceolate, elliptic, or obovate, glabrous. Utricles ellipsoid, compressed. Fl. and fr. Jun–Aug.

Humid places; 1000–2000 m. Hainan [Cambodia, India, Laos, Malaysia, Myanmar, Nepal, Philippines, Thailand, Vietnam; ?Africa].

1b. Psilotrichum ferrugineum var. **ximengense** Y. Y. Qian, Bull. Bot. Res., Harbin 8(3): 147. 1988.

西盟林地菟 xi meng lin di xian

Petiole narrowly winged, pubescent; leaf blade membranous, both surfaces pubescent and ciliate. Utricles ovoid.

- Hillsides; ca. 1200 m. Yunnan (Ximeng).

One of us (Clemants) questions whether this is the same as *Psilotrichum yunnanense*. Wu Zhengyi (editor's note) concurs.

2. Psilotrichum erythrostachyum Gagnepain, Bull. Soc. Bot. France 82: 476. 1935.

菟叶林地菟 xian ye lin di xian

Herbs annual, 15–30 cm tall. Stems branched; branches slender, glabrous. Leaves linear, 1–6 cm × 1–2 mm, with conspicuous midvein, glabrous. Inflorescences spicate, ca. 4 cm; peduncle long, ca. 10 cm. Bracts ovate, 1.5–2 mm, glabrous, apex acuminate; bracteoles ovate, ca. 0.8 mm, scarious. Tepals linear, 3–3.5 mm, glabrous, 5-veined. Styles persistent, 1.5–2 mm. Utricles ovoid, ca. 1.2 mm, irregularly circumscissile.

Hillsides. Hainan [Cambodia, Thailand, Vietnam].

3. Psilotrichum yunnanense D. D. Tao, Acta Phytotax. Sin. 35: 86. 1997.

云南林地菟 yun nan lin di xian

Subshrubs 70–100 cm high. Stems terete, usually densely pubescent or glabrous. Petiole 3–6 mm; leaf blade ovate-oblong or ovate-lanceolate, 3–5 × 1.5–2 cm, subleathery when dry, base cuneate, apex acute or subrounded. Inflorescence axillary or terminal spikes, 6–16 mm; peduncle minutely puberulent; bracts lanceolate. Tepals 4, yellowish green, lanceolate, puberulent, margin ciliate, apex acute. Stamens 5 or 6, ca. 2.5 mm. Style glabrous. Utricle compressed lenticulate, ca. 1 × 0.8 mm. Seeds purple, orbicular, reniform. Fl. Jul.

- Near streams, in forests; 900–2200 m. Yunnan.

