

7. **LECANTHUS** Weddell, Ann. Sci. Nat., Bot., sér. 4, 1: 187. 1854.

假楼梯草属 jia lou ti cao shu

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*Meniscogyne* Gagnepain.

Herbs annual or perennial, without stinging hairs. Stems succulent. Leaves opposite, petiolate; stipules deciduous, intrapetiolar, connate, membranous; leaf blade 3-veined, usually symmetric, margin serrate-dentate; cystoliths linear. Inflorescences solitary, axillary, often pedunculate, seated on a receptacle; receptacles at first broadly subcampanulate, soon expanded, of unisexual flowers (plants monoecious or dioecious); male and female inflorescences often separate or sometimes mixed in same receptacle, rarely male ones capitate or cymose without receptacle; involucre bracts in 1 or 2 whorled rows along margin of receptacle. Male flowers often obconic in bud; perianth lobes 4 or 5, slightly unequal, imbricate; stamens 4 or 5; filaments inflexed in bud; rudimentary ovary minute, inconspicuous. Female flowers: perianth lobes (3 or)4(or 5), often unequal, often corniculate below apex; staminodes small, scale-like, inflexed. Ovary straight; style absent; stigma penicillate, deciduous; ovule orthotropous. Achene straight, with crested or U-shaped appendix at apex or along dorsiventral edges, usually verrucose, invested by shorter persistent perianth. Seeds with little endosperm; cotyledons thick, elliptic.

Three species: tropics and subtropics of E Africa and E Asia; three species (one endemic) in China.

Gagnepain described the genus *Meniscogyne* on the basis of U-shaped stigmas. In fact, the stigmas are penicillate, very soon deciduous, and have an enlarged, crested or U-shaped appendix at the apex. These characters are typical for the genus *Lecanthus*. Thus, *Meniscogyne* was treated as a synonym of *Lecanthus* in FRPS 23(2) in 1995.

- 1a. Plants 25–70 cm tall; leaf blade ovate to lanceolate, apex usually acuminate, lateral veins numerous; peduncle 3–30 cm ..... 2. *L. peduncularis*
- 1b. Plants 2–20 cm tall; leaf blade ovate, apex often acute, sometimes short acuminate or obtuse, lateral veins 2–4 each side; peduncle less than 3 cm.
  - 2a. Male inflorescences with discoid or cuplike receptacle; male perianth lobes 4; leaf margin 3–8-serrate each side; stipules triangular-ovate, 1.5–3 mm ..... 3. *L. petelotii*
  - 2b. Male inflorescences capitate or cymose, without receptacle, rarely with inconspicuous receptacle; male perianth lobes 4(or 5); leaf margin 7–11-serrate each side; stipules oblong, 3–5 mm ..... 1. *L. pileoides*

1. **Lecanthus pileoides** Chien & C. J. Chen, Acta Phytotax. Sin. 21(3): 349. 1983.

冷水花假楼梯草 leng shui hua jia lou ti cao

Herbs annual, monoecious. Stems branched or simple, 5–20 cm tall, subglabrous. Stipules oblong, 3–5 mm, membranous, apex obtuse; petiole 0.5–1.5 cm, sparsely pubescent or subglabrous; leaf blade unequal in same pair, ovate, 1.8–4 × 1.2–2.3 cm, membranous, 3-veined, lateral basal pair reaching to middle and anastomosing with adjacent secondary veins before margin or to teeth, lateral veins 3 or 4 on each side, sparsely hirsute adaxially, sparsely pubescent on veins abaxially, base obliquely cuneate, rarely rounded, margin 7–11-serrate each side, apex acute or short acuminate; cystoliths linear; proximal leaves rather small, usually rhombic-orbicular, margin several serrate or entire. Male inflorescences few flowered, capitate or cymose, receptacle inconspicuous or absent, shortly pedunculate, 4–7 mm. Female inflorescences many flowered, sometimes mixed with males, on discoid receptacle; peduncle 0.6–1.5 cm; involucre bracts in 1 row. Male flowers pedicellate, in bud obconic, 1–1.5 mm; perianth lobes 4(or 5) unequal, obovate-oblong, with a few setulose hairs, corniculate below apex; stamens 4(or 5); rudimentary ovary minute, conic. Female flowers: perianth lobes 4, strongly unequal, with a few setulose hairs, long corniculate below apex; staminodes conspicuous, squamate; stigma penicillate. Achene brownish, ovoid-oblong, ca. 0.8 mm, crested at dorsal edge, botuliform-verrucose. Fl.

Jul–Aug, fr. Sep–Oct.

• Shady places of limestone mountains; ca. 2100 m. SW Guizhou, E Yunnan.

2. **Lecanthus peduncularis** (Wallich ex Royle) Weddell in Candolle, Prodr. 16(1): 164. 1869.

假楼梯草 jia lou ti cao

*Procris peduncularis* Wallich ex Royle, Ill. Bot. Himal. Mts. t. 83. 1839; *Elatostema ovatum* Wight; *Lecanthus obtusus* (Royle) Handel-Mazzetti; *L. sasakii* Hayata; *L. wallichii* Weddell; *L. wightii* Weddell; *Procris obtusa* Royle.

Herbs perennial, stoloniferous, monoecious or dioecious. Stems often branched, 25–70 cm tall, pubescent distally. Stipules oblong, 3–9 mm, membranous, apex obtuse; petiole 2–8 cm, sparsely pubescent; leaf blade unequal in same pair, ovate to lanceolate, 4–15 × 2–6.5 cm, 3-veined, lateral basal pair often unequal, 1 reaching to middle, anastomosing with adjacent secondary veins before margin, other reaching to tooth of distal margin, lateral veins numerous, sparsely hirsute adaxially, sparsely pubescent on veins abaxially, base slightly obliquely rounded, rarely broadly cuneate, margin dentate-serrate, apex usually acuminate; cystoliths linear, conspicuous on both surfaces. Male inflorescences capitate, receptacle discoid, 8–35 mm in diam.; peduncle 5–30 cm. Female inflorescences on discoid receptacles 5–10 mm in diam.; peduncle 3–12 cm; involucre bracts in 1 or 2 rows, ovate or triangular, ca. 1 mm,

membranous. Male flowers pedicellate; perianth lobes 5, unequal, obovate-oblong, corniculate below apex; stamens 5; rudimentary ovary minute, conic. Female flowers shortly pedicellate; perianth lobes (3 or)4(or 5), subequal or lobes by the margin of discoid receptacle unequal, oblong-obovate, 2 lobes corniculate below apex; staminodes conspicuous, elliptic-oblong, ca. 0.8 mm. Achene brownish gray, ellipsoid-ovoid, 0.8–1 mm, U-shaped elevated appendix along dorsi-ventral edge, verrucose. Fl. Jul–Oct, fr. Sep–Nov.

Shady, moist places in forests, along streams; 1300–2700 m. Fujian, Guangdong, Guangxi, Hunan, Jiangxi, Sichuan, Taiwan, E and S Xizang, Yunnan [Bhutan, India, Indonesia, Nepal, Pakistan, Philippines, Sri Lanka, Sikkim, Vietnam; Africa].

**3. *Lecanthus petelotii*** (Gagnepain) C. J. Chen in C. Y. Wu, Fl. Xizang. 1: 546. 1983.

越南假楼梯草 yue nan jia lou ti cao

*Meniscogyne petelotii* Gagnepain, Bull. Soc. Bot. France 75: 100. 1928.

Herbs annual, monoecious or dioecious. Stems often simple, 2–10 cm tall, sparsely pubescent or subglabrous. Leaves usually crowded at stem apex; stipules triangular-ovate, 1.5–3 mm; petiole 1–15 mm; leaf blade unequal in same pair, broadly ovate or rhombic-ovate, 0.5–9.5 × 0.3–3 cm, 3-veined, lateral basal pair reaching to distal teeth or anastomosing with adjacent secondary veins before margin, lateral veins 2 or 3 on each side, sparsely hirsute adaxially, sparsely pubescent on veins abaxially, base slightly oblique, broadly cuneate or rounded, margin 3–8-serrate, apex acute or obtuse; cystoliths linear, conspicuous on both surfaces. Male inflorescences few flowered, receptacle cuplike; peduncle 1–5 mm. Female inflorescences on discoid

receptacles, 3–6 mm in diam.; peduncle 1–2 cm. Male flowers in bud obovoid, ca. 1 mm; pedicel 1–3 mm; perianth lobes 4, unequal, sometimes corniculate below apex; stamens 4; rudimentary ovary minute, inconspicuous. Female flowers: perianth lobes 4, cymbiform, shorter than ovary, in fruit enlarged and longer than achene, long corniculate below apex; staminodes conspicuous; stigma soon deciduous, penicillate. Achene brown-gray, oblong, slightly compressed, ca. 0.6 mm, U-shaped elevated appendix along distal dorsi-ventral edge, verrucose. Fl. Jun–Aug, fr. Aug–Oct.

Shaded moist places in forests, mossy rocks, along streams; 2500–2900 m. S Xizang, Yunnan [Laos, Vietnam].

Two varieties occur in China; var. *petelotii* occurs in Laos and Vietnam.

- 1a. Leaves usually crowded at stem apex, petiole 1–3 mm; female peduncle 1–2 cm; female perianth lobes glabrous at apex ..... 3a. var. *corniculata*
- 1b. Leaves not crowded at stem apex, petiole 4–15 mm; female peduncle less than 1 cm; female perianth lobes setulose at apex ..... 3b. var. *yunnanensis*

**3a. *Lecanthus petelotii* var. *corniculata*** C. J. Chen in C. Y. Wu, Fl. Xizang. 1: 547. 1983.

角被假楼梯草 jiao bei jia lou ti cao

Leaves usually crowded at stem apex; petiole 1–3 mm. Female peduncle 1–2 cm. Female perianth lobes glabrous at apex. Achene verrucose.

• Shaded moist places in forests, mossy rocks, along streams; 2500–2900 m. S Xizang, S Yunnan.

**3b. *Lecanthus petelotii* var. *yunnanensis*** C. J. Chen, Acta Phytotax. Sin. 21(3): 349. 1983.

云南假楼梯草 yun nan jia lou ti cao

Leaves not crowded at stem apex; petiole 4–15 mm. Female peduncle less than 1 cm. Female perianth lobes setulose at apex. Achene with regular, longitudinally arranged, botuliform grooves. Fl. Jul–Aug, fr. Aug–Sep.

• Shaded moist places in forests, along streams; ca. 2700 m. NW Yunnan (Gongshan).

