

36. GYROCHEILOS W. T. Wang, Bull. Bot. Res., Harbin 1(3): 28. 1981.

圆唇苣苔属 *yuan chun ju tai shu*

Herbs, perennial, epipetric or terrestrial, rhizomatous, stemless. Leaves few, basal; leaf blade puberulent to pubescent, base cordate. Inflorescences lax, axillary, 5- to many-flowered cymes; bracts 2, opposite. Calyx actinomorphic or slightly zygomorphic, 5-sect from base, 2–5-lobed, or 2-lipped; segments equal to unequal. Corolla purple to reddish, zygomorphic, inside glabrous; tube broadly tubular, not swollen, nearly equalling limb, 3.5–4 mm in diam.; limb 2-lipped; adaxial lip undivided; ca. 1/2 × length of abaxial lip; abaxial lip 3-lobed, lobes equal, apex rounded, rarely obtuse. Stamens 2, adnate to abaxial side of corolla tube near base or rarely above middle, included; anthers dorsifixed, coherent by adaxial surfaces, thecae divaricate, confluent at apex, dehiscing longitudinally; connective not projecting; staminodes 2, adnate to adaxial side of corolla tube. Disc ringlike. Ovary linear, 1-loculed; placentas 2, parietal, projecting inward, 2-cleft. Stigma 1, terminal, capitate, undivided. Capsule straight in relation to pedicel, linear, much surpassing calyx, dehiscing loculicidally to base; valves 2, straight, not twisted. Seeds unappendaged.

• Four species: endemic to China.

- 1a. Petiole and peduncle with antrorsely appressed hairs 0.2–0.6 mm; adaxial leaf blade surface with uniform hairs 0.1–0.2 mm 3. *G. microtrichus*
- 1b. Petiole and peduncle with spreading or retrorse hairs 0.2–2(–3.2) mm; adaxial leaf blade surface with hairs of 2 lengths, 0.2–0.5(–1.2) and 0.8–3 mm.
 - 2a. Peduncle 4–7 cm; calyx sparsely pubescent outside from base to apex; pedicel spreading pubescent; adaxial corolla lip deltoid; filaments ca. 1.5 mm 2. *G. lasiocalyx*
 - 2b. Peduncle 7–34 cm; calyx glabrous or sparsely pubescent outside near apex; pedicel glabrous; adaxial corolla lip semi-orbicular; filaments ca. 3 mm.
 - 3a. Leaf blade 3–9.5 × 3–10 cm, apex rounded; petiole 3–8 cm; stamens and staminodes adnate to corolla 2–2.5 mm above base 1. *G. chorisepalus*
 - 3b. Leaf blade 7–15.5 × 5.5–15.5 cm, apex acute to obtuse; petiole to 18 cm; stamens and staminodes adnate to corolla 4–5 mm above base 4. *G. retrotrichus*

1. *Gyrocheilos chorisepalus* W. T. Wang, Bull. Bot. Res., Harbin 1(3): 31. 1981.

圆唇苣苔 *yuan chun ju tai*

Petiole 3–8 cm, spreading pubescent, hairs 0.7–1.5 mm; leaf blade nearly orbicular to reniform, 3–9.5 × 3–10 cm, adaxially with mixed hairs 0.2–0.3 mm and 0.8–2.5 mm, abaxially sparsely pubescent, margin double dentate to deeply crenate, apex rounded. Peduncle 7–23 cm, pubescent, hairs 0.5–1.2 mm; bracts 4–6 × 3–4 mm, margin entire. Pedicel glabrous. Calyx 3–4 mm, 5-sect or 2–4-lobed; tube absent or 1–2 mm; segments equal to unequal, lanceolate-linear to obovate-oblong, 1–3 mm wide, outside sparsely pubescent near apex. Corolla reddish, ca. 1.2 cm; tube ca. 6 mm; adaxial lip semi-orbicular, ca. 2.8 mm; abaxial lip ca. 6 mm. Stamens adnate to corolla ca. 2 mm above base; filaments ca. 3 mm; anthers ca. 2.5 mm; staminodes adnate to corolla ca. 2.5 mm above base, 0.8–0.9 mm. Pistil ca. 1.1 cm, glabrous; ovary ca. 5 mm. Capsule 2–3 cm. Fl. Apr–May, fr. Jul.

• Rocky streamsides, rocky hills, shaded cliffs in valleys; 700–900 m. W Guangdong, E and S Guangxi (Beiliu Xian, Shanglin Xian, Wuming Xian).

- 1a. Calyx 5-sect, segments equal, ca. 1 mm wide; leaf blade margin double dentate 1a. var. *chorisepalus*
- 1b. Calyx 2–4-lobed, lobes unequal, largest 2- or 3-lobed, 1–3 mm wide; leaf blade margin double dentate to deeply crenate 1b. var. *synsepalus*

1a. *Gyrocheilos chorisepalus* var. *chorisepalus*

圆唇苣苔(原变种) *yuan chun ju tai* (*yuan bian zhong*)
Leaf blade margin double dentate. Calyx 5-sect; tube absent; segments equal, ca. 1 mm wide.

• Rocky streamsides, shaded cliffs in valleys. S Guangxi (Shanglin Xian, Wuming Xian).

1b. *Gyrocheilos chorisepalus* var. *synsepalus* W. T. Wang in W. T. Wang & K. Y. Pan, Bull. Bot. Res., Harbin 2(2): 135. 1982.

北流圆唇苣苔 *bei liu yuan chun ju tai*

Leaf blade margin double dentate to deeply crenate. Calyx 2–4-lobed; tube 1–2 mm; lobes unequal, largest 2- or 3-lobed, 1–3 mm wide.

• Rocky hills; 700–900 m. W Guangdong, E Guangxi (Beiliu Xian).

2. *Gyrocheilos lasiocalyx* W. T. Wang in W. T. Wang & K. Y. Pan, Bull. Bot. Res., Harbin 2(2): 135. 1982.

毛萼圆唇苣苔 *mao e yuan chun ju tai*

Petiole 1.5–8.5 cm, spreading villous, hairs 1–3.2 mm; leaf blade broadly ovate to orbicular, 3–6.7 × 2.5–7.5 cm, adaxially with mixed hairs 0.2–0.4 mm and 1.2–3 mm, abaxially puberulent along veins, margin double dentate, apex acute to rounded. Peduncle 4–7 cm, spreading villous, hairs 1–3.2 mm; bracts 3–5 × 0.8–2 mm, margin denticulate to crenate. Pedicel spreading pubescent. Calyx ca. 4 mm, 5-sect from base or near base; segments equal, linear-lanceolate to narrowly triangular, 0.9–1 mm wide, outside sparsely pubescent. Corolla red, ca. 1 cm; tube ca. 5 mm; adaxial lip deltoid, ca. 2.8 mm; abaxial lip ca. 5 mm. Stamens adnate to corolla ca. 2.1 mm above base; filaments ca. 1.5 mm; anthers ca. 2.3 mm; staminodes adnate to 1.5–2 mm above corolla base, ca. 1 mm. Pistil ca. 9.5 mm; ovary ca. 2.8 mm, sparsely glandular. Style base sparsely glandular. Capsule 1.5–1.8 cm. Fl. Apr–May, fr. Jul.

• Shaded rocks in montane regions; ca. 1300 m. E Guangxi (Guiping Xian, Xiangzhou Xian).

3. *Gyrocheilos microtrichus* W. T. Wang, Bull. Bot. Res., Harbin 1(3): 32. 1981.

微毛圆唇苣苔 *wei mao yuan chun ju tai*

Petiole (6–)9–24 cm, hairs antrorsely appressed, hairs 0.2–0.6 mm; leaf blade broadly ovate to reniform, (3–)7.5–12 × (4.4–)8–12 cm, adaxially with sparse, appressed hairs 0.1–0.2 mm, abaxially glabrescent, puberulent along veins, margin double dentate, apex acute. Peduncle 8–23 cm, antrorsely appressed puberulent, hairs 0.2–0.6 mm; bracts 5–7.5 × 2–5 mm, margin entire to crenate. Pedicel glabrous. Calyx 3–5 mm, 5-sect from base or near base; segments equal, lanceolate-linear to narrowly ovate or oblong, 1–1.2 mm wide, outside glabrous or some segments with 1–3 short hairs near apex. Corolla rose-pink, ca. 1.1 cm; tube ca. 6.5 mm; adaxial lip semi-orbicular, ca. 2 mm; abaxial lip ca. 5 mm. Stamens adnate to corolla ca. 2.5 mm above base; filaments ca. 2.5 mm; anthers ca. 2 mm; staminodes adnate to 3–3.5 mm above corolla base, ca. 1 mm. Pistil ca. 10 cm, glabrous; ovary ca. 5.5 mm. Fl. Apr.

• Rocky stream-sides in valleys; ca. 1600 m. SW Guangdong (Xinyi Xian).

4. *Gyrocheilos retrotrichus* W. T. Wang, Bull. Bot. Res., Harbin 1(3): 34. 1981.

折毛圆唇苣苔 *zhe mao yuan chun ju tai*

Petiole to 18 cm, densely spreading or retrorsely pubescent, hairs 0.8–2 mm; leaf blade broadly ovate to reniform, 7–15.5 × 5.5–15.5 cm, adaxially with mixed hairs 0.2–1.2 and 1–2 mm, abaxially puberulent with longer hairs along veins, margin double dentate, apex acute to obtuse. Peduncle 8.5–34 cm, spreading pubescent, hairs 0.2–2 mm; bracts 6–8 × 2–3.5 mm,

margin entire to crenate. Pedicel glabrous. Calyx 3–4 mm, 2-lipped or 4- or 5-lobed; tube 1–2 mm; lobes equal to unequal, narrowly ovate to obovate, 1–3 mm wide, outside glabrous or some lobes with 1–3 short hairs near apex. Corolla rose-pink, ca. 1.3 cm; tube ca. 7.5 mm; adaxial lip semi-orbicular, ca. 3 mm; abaxial lip ca. 5.5 mm. Stamens adnate to corolla ca. 4 mm above base; filaments ca. 3 mm; anthers ca. 2.5 mm; staminodes adnate to corolla ca. 5 mm above base, 0.5–1.5 mm. Pistil ca. 1.4 cm, glabrous; ovary ca. 6 mm. Capsule 2.5–3 cm. Fl. Mar–Jul, fr. May–Sep.

• Valley forests, shaded rocks in valleys; 400–1000 m. Guangdong, N Guangxi, SE Guizhou.

1a. Leaf blade adaxially with mixed hairs, 0.3–1.2 and 1.8–2 mm; calyx 5-lobed, lobes equal, 1–1.5 mm wide; staminodes clavate, ca. 1.5 mm; cymes many flowered, peduncle 9–34 cm, hairs

0.5–2 mm 4a. var. *retrotrichus*

1b. Leaf blade adaxially with mixed hairs, 0.2–0.5 and 1–2 mm; calyx 4-lobed or 2-lipped, lobes unequal, 1–3 mm wide; staminodes linear, ca. 0.5 mm; cymes 5- to many flowered, peduncle 8.5–19 cm, hairs 0.2–1.2 mm 4b. var. *oligolobus*

4a. *Gyrocheilos retrotrichus* var. *retrotrichus*

折毛圆唇苣苔(原变种) *zhe mao yuan chun ju tai*
(yuan bian zhong)

Leaf blade adaxially with mixed hairs 0.3–1.2 mm and 1.8–2 mm. Cymes many flowered; peduncle 9–34 cm, hairs 0.5–2 mm. Calyx 5-lobed; lobes equal, 1–1.5 mm wide, apex obtuse. Stamines clavate, ca. 1.5 mm. Fl. Mar.

• Valley forests. W Guangdong (Xinyi Xian, Yunfu Xian).

4b. *Gyrocheilos retrotrichus* var. *oligolobus* W. T. Wang, Bull. Bot. Res., Harbin 1(3): 35. 1981.

稀裂圆唇苣苔 *xi lie yuan chun ju tai*

Leaf blade adaxially with mixed hairs 0.2–0.5 mm and 1–2 mm. Cymes 5- to many flowered; peduncle 8.5–19 cm, hairs 0.2–1.2 mm. Calyx 4-lobed or 2-lipped; lobes unequal, 1–3 mm wide, apex obtuse to rounded. Stamines linear, ca. 0.5 mm. Fl. Apr–Jul, fr. May–Sep.

• Forests, on shaded rocks in valleys; 400–1000 m. SW Guangdong, N Guangxi, SE Guizhou.

