

19. OPITHANDRA B. L. Burtt, *Baileya* 4: 162. 1956.

后蕊苣苔属 *hou rui ju tai shu*

Schistolobos W. T. Wang.

Herbs, perennial, epipetric or terrestrial, rhizomatous, stemless. Leaves few to many, basal; leaf blade puberulent to woolly or velutinous, base cuneate to cordate. Inflorescences often umbel-like, lax, axillary, 1- to many-flowered cymes; bracts 2, opposite. Calyx actinomorphic, 5-sect from base to deeply 5-lobed; segments equal. Corolla pink to purple, zygomorphic, inside glabrous to sparsely puberulent or glandular puberulent; tube tubular to funnelliform, rarely nearly salverform or cylindric, not swollen, sometimes slightly gibbous abaxially, 1.5–4 × longer than limb, 3.5–17 mm in diam.; limb distinctly or indistinctly 2-lipped; adaxial lip 2-lobed, usually distinctly shorter than, rarely nearly as long as abaxial lip; abaxial lip 3-lobed, lobes equal or subequal, apex rounded to acute. Stamens 2, adnate to adaxial side of corolla tube near middle, rarely near corolla base, included; anthers basifixed, free or coherent at apex, thecae parallel, not confluent, dehiscing longitudinally from straight or arcuate slits; connective not projecting; staminodes (1–)3 or absent, adnate to adaxial, lower, or adaxial and abaxial sides of corolla tube. Disc ringlike or cupular. Ovary linear, 1-loculed; placentas 2, parietal, projecting inward, 2-cleft. Stigmas 2, equal, oblate, undivided, or 1, terminal, capitate, undivided or 2-lipped. Capsule straight in relation to pedicel, linear, much longer than calyx, dehiscing loculicidally to base; valves 2, straight, not twisted. Seeds unappendaged.

Ten species: China, Japan; nine species in China.

- 1a. Corolla lobes lobed 9. *O. pumila*
- 1b. Corolla lobes entire.
 - 2a. Anthers oblong or oblong ovoid with straight slits; corolla mouth 3–3.5 mm in diam.
 - 3a. Corolla tube nearly cylindric, puberulent outside, adaxial lip ca. 1 cm; leaf blade thick leathery, strongly bullate; pistil ca. 5.5 mm, stigma 1 4. *O. fargesii*
 - 3b. Corolla tube tubular or nearly so, glabrous outside, adaxial lip 1–6 mm; leaf blade papery, nearly flat; pistil 6.5–14 mm; stigmas 1 or 2.
 - 4a. Calyx segments ca. 2 mm; corolla to 1 cm, adaxial lip ca. 1 mm, abaxial lip ca. 2.8 mm; anthers coherent at apex; pistil exerted; stigma 1; lateral veins 4 or 5 on each side of midrib; bracts subulate 3. *O. acaulis*
 - 4b. Calyx segments 3.5–5 mm; corolla at least 1.6 cm, adaxial lip 4–6 mm, abaxial lip 5–9 mm; anthers free; pistil included; stigmas 2; lateral veins 6–13 on each side of midrib; bracts linear.
 - 5a. Leaf blade abaxially densely woolly on entire surface, 7.5–13 cm, base cuneate; lateral veins 8–13 on each side of midrib; peduncle 8.5–13 cm 1. *O. sinohenryi*
 - 5b. Leaf blade abaxially appressed puberulent, woolly only along veins, 2.5–8 cm, base rounded to cordate; lateral veins 6–8 on each side of midrib; peduncle 2–6 cm 2. *O. burttii*
 - 2b. Anthers globose-ovoid to reniform with arcuate slits; corolla mouth 5–17 mm in diam.
 - 6a. Leaf blade margin nearly entire to indistinctly repand; calyx segment apex caudate-acuminate, tip somewhat obtuse; corolla outside glabrous 6. *O. dinghushanensis*
 - 6b. Leaf blade margin denticulate to serrulate to crenate or double crenate; calyx segment apex acute to obtuse; corolla outside sparsely puberulent to strigose at least adaxially.
 - 7a. Leaf blade 3–19 cm, base cordate to broadly cuneate; lateral veins 7–9 on each side of midrib; peduncle 4.5–7.5 cm; corolla mouth 1.5–1.7 cm in diam.; stamens adnate to corolla near base, ca. 2 cm; pistil densely glandular puberulent to puberulent 5. *O. dalzielii*
 - 7b. Leaf blade to 9.5 cm, base cuneate to broadly so; lateral veins 4–6 on each side of midrib; peduncle 5.5–14 cm; corolla mouth 5–9 mm in diam.; stamens adnate to corolla tube slightly below middle, 5–7.5 mm; pistil glabrous.
 - 8a. Petiole 1.3–7.5 cm, with dense, white to brownish shorter appressed hairs and brown longer spreading ones; leaf blade 4–9.5 cm; corolla ca. 3.2 cm, mouth ca. 9 mm in diam.; staminodes 3 7. *O. obtusidentata*

8b. Petiole 0.3–1.7 cm, densely grayish strigose; leaf blade 1.5–3.5 cm; corolla 1.5–2 cm, mouth 5–6 mm in diam.; staminodes 2 8. *O. cinerea*

1. *Opithandra sinohenryi* (W. Y. Chun) B. L. Burt, Notes Roy. Bot. Gard. Edinburgh 22: 303. 1958.

毡毛后蕊苣苔 zhan mao hou rui ju tai

Didymocarpus sinohenryi W. Y. Chun, Sunyatsenia 6: 290. 1946.

Petiole 2.5–4.5 cm, brown woolly; leaf blade oblong to narrowly obovate, 7.5–13 × 2.7–7.2 cm, papery, nearly flat, adaxially densely puberulent to velutinous, abaxially brown woolly, base cuneate, margin indistinctly denticulate, apex obtuse to rounded; lateral veins 8–13 on each side of midrib. Peduncle 8.5–13 cm, woolly, glabrescent; bracts linear. Calyx 5-sect from base; segments narrowly lanceolate, 4–5 × ca. 1 mm, apex acute. Corolla pink, ca. 2 cm, outside puberulent, inside sparsely puberulent; tube tubular, not swollen, ca. 1.2 cm × 3.5 mm; adaxial lip ca. 6 mm; abaxial lip ca. 9 mm, all lobes entire. Stamens adnate to corolla tube above middle, ca. 5 mm; filaments glabrous; anthers free, oblong, dehiscing from straight slits; staminode 1, adaxial, ca. 0.4 mm. Pistil included, ca. 1.1 cm, glabrous. Style ca. 2.5 mm; stigmas 2. Capsule ca. 2.5 cm. Fl. Jul–Aug, fr. Aug.

• Streamside rocks in forests; 500–600 m. S Guangxi (Shiwandashan, Dongxing Xian, Shangsi Xian).

2. *Opithandra burtii* W. T. Wang in A. L. Weitzman et al., Novon 7: 430. 1998.

龙南后蕊苣苔 long nan hou rui ju tai

Petiole 0.5–7.5 cm, brown sericeous-woolly; leaf blade elliptic to oblong, 2.5–8 × 1.7–5.4 cm, papery, nearly flat, adaxially white puberulent, abaxially appressed puberulent, brown sericeous-woolly along veins, base rounded to cordate, margin crenulate, apex obtuse to rounded; lateral veins 6–8 on each side of midrib. Peduncle 2–6 cm, puberulent; bracts linear. Calyx 5-sect from base; segments linear, 3.5–3.8 × ca. 1 mm, apex acute to obtuse. Corolla purple, 1.6–2.2 cm, outside sparsely puberulent, inside glabrous; tube tubular, not swollen, 1–1.4 cm × ca. 3.5 mm; adaxial lip 4–6 mm; abaxial lip 5–7 mm, all lobes entire. Stamens adnate to corolla tube 5–7 mm above base, 5.5–7 mm; filaments glabrous; anthers free, oblong, dehiscing from straight slits; staminodes absent. Pistil included, ca. 6.5 mm, glabrous. Style ca. 1 mm; stigmas 2. Fruit unknown. Fl. Oct.

• Steep, stony slopes in forests. S Jiangxi (Longnan Xian).

Burt (Notes Roy. Bot. Gard. Edinburgh 22: 303. 1958) recognized this species as new but did not describe it.

3. *Opithandra acaulis* (Merrill) B. L. Burt, Notes Roy. Bot. Gard. Edinburgh 22: 303. 1958.

小花后蕊苣苔 xiao hua hou rui ju tai

Chirita acaulis Merrill, Lingnan Sci. J. 13: 47. 1934.

Petiole 1–3 cm, densely brownish villous; leaf blade ovate to narrowly ovate, 1.7–7 × 1.1–3 cm, papery,

nearly flat, adaxially densely brownish puberulent, abaxially sparsely puberulent, base broadly cuneate to rounded, margin denticulate, apex acute to obtuse; lateral veins 4 or 5 on each side of midrib. Peduncle ca. 9 cm, brownish pubescent; bracts subulate. Calyx 5-sect from base; segments narrowly triangular, ca. 2 × 0.9 mm, apex acute to obtuse. Corolla pink, 7–10 mm, outside sparsely puberulent, inside glabrous; tube nearly tubular, not swollen, 6–8 × ca. 3 mm; adaxial lip ca. 1 mm; abaxial lip ca. 2.8 mm, all lobes entire.

Stamens adnate to corolla ca. 2 mm above base, ca. 3.7 mm; filaments sparsely puberulent; anthers coherent at apex, oblong ovoid, dehiscing from straight slits; staminodes 3, adaxial 1 ca. 2 mm, abaxial 2 ca. 3.2 mm. Pistil exserted, ca. 1.4 cm; ovary puberulent. Style ca. 7 mm, glabrous; stigma 1. Fruit unknown. Fl. Apr.

• Shaded areas in montane regions. Guangdong (Zengcheng Xian).

4. *Opithandra fargesii* (Franchet) B. L. Burt, Notes Roy. Bot. Gard. Edinburgh 22: 303. 1958.

皱叶后蕊苣苔 zhou ye hou rui ju tai

Roettlera fargesii Franchet, Bull. Mus. Hist. Nat. (Paris) 5: 251. 1899.

Petiole to 2.5 cm, densely brown pubescent; leaf blade oblong to obovate-oblong, 2–6.5 × 1.2–2.5 cm, thick leathery, strongly bullate, adaxially sparsely villous, abaxially brown villous, base cuneate, margin denticulate, apex obtuse to rounded; lateral veins 5–7 on each side of midrib. Peduncle ca. 4.5 cm, brown pubescent, glandular puberulent apically; bracts linear. Calyx 5-sect from base; segments narrowly triangular, 4–5 × ca. 0.4 mm, apex acute. Corolla purplish, ca. 2.8 cm, outside glabrous, inside sparsely puberulent near mouth; tube cylindrical, not swollen, ca. 1.5 cm × 3.5 mm; adaxial lip ca. 1 cm; abaxial lip ca. 1.3 cm, all lobes entire. Stamens adnate to corolla tube near middle, ca. 3 mm; filaments glabrous; anthers free, oblong, dehiscing from straight slits; staminodes absent. Pistil included, ca. 5.5 mm, glabrous. Style ca. 1 mm; stigma 1. Fruit unknown. Fl. Aug.

• E Sichuan.

5. *Opithandra dalzielii* (W. W. Smith) B. L. Burt, Notes Roy. Bot. Gard. Edinburgh 22: 303. 1958.

汕头后蕊苣苔 shan tou hou rui ju tai

Chirita dalzielii W. W. Smith, Notes Roy. Bot. Gard. Edinburgh 10: 171. 1918.

Petiole 0.6–9 cm, densely spreading brown villous; leaf blade elliptic to ovate or obovate, 3–19 × 1.1–9 cm, herbaceous to papery, nearly flat, adaxially white puberulent and sparsely brown villous, abaxially appressed puberulent, base oblique, cordate to broadly cuneate, margin denticulate to serrulate or double crenate, apex acute to rounded; lateral veins 7–9 on

each side of midrib. Peduncle 4.5–7.5 cm, spreading brown villous; bracts narrowly triangular to linear. Calyx 5-sect from base; segments narrowly triangular to linear, 4–7(–10) × 0.8–1.1 mm, apex acute. Corolla pink, 3–3.6 cm, outside sparsely puberulent adaxially, inside glabrous; tube funnellform, slightly gibbous abaxially, 2.3–2.6 × 1.5–1.7 cm; adaxial lip 5–7 mm; abaxial lip ca. 9 mm, all lobes entire. Stamens adnate to corolla ca. 2 mm above base, ca. 2 cm; filaments glabrous; anthers coherent at apex, globose-ovoid, dehiscent from arcuate slits; staminodes 3, adaxial 1 ca. 3 mm, abaxial 2 1–1.5 mm. Pistil included, ca. 1.7 cm; ovary densely glandular puberulent. Style ca. 5 mm, sparsely puberulent; stigmas 2. Capsule ca. 4.2 cm. Fl. Sep–Oct.

• Valley forests; 600–700 m. S Fujian (Nanjing Xian), Guangdong (Shantou Xian, Xinfeng Xian).

6. *Opithandra dinghushanensis* W. T. Wang, Bull. Bot. Res., Harbin 7(2): 10. 1987.

鼎湖后蕊苣苔 *ding hu hou rui ju tai*

Petiole 0.7–2.7 cm, densely grayish strigose; leaf blade narrowly elliptic to elliptic-ovate, 3.5–8 × 2–3.5 cm, herbaceous, nearly flat, short strigose, base slightly oblique, broadly cuneate, margin nearly entire to indistinctly repand, apex acute; lateral veins ca. 6 on each side of midrib. Peduncle ca. 5 cm, short strigose; bracts linear. Calyx 5-sect from base; segments lanceolate, 3.5–4 × ca. 0.8 mm, apex caudate-acuminate, tip somewhat obtuse. Corolla pale purplish, ca. 2.8 cm, glabrous, margin sparsely ciliate; tube funnellform, not swollen, ca. 2 × 1.1 cm; adaxial lip ca. 5 mm; abaxial lip ca. 8.5 mm, all lobes entire. Stamens adnate to corolla tube near middle, ca. 1.2 cm; filaments sparsely puberulent; anthers coherent at apex, globose-ovoid, dehiscent from arcuate slits; staminodes 2, abaxial, ca. 1.5 mm. Pistil included, ca. 1.5 cm; ovary puberulent. Style ca. 4.5 mm, glandular puberulent; stigmas 2. Fruit unknown. Fl. Oct.

• Rocks in valley forests. Guangdong (Dinghushan, Gaoyao Xian).

7. *Opithandra obtusidentata* W. T. Wang, Bull. Bot. Res., Harbin 2(4): 38. 1982.

钝齿后蕊苣苔 *dun chi hou rui ju tai*

Petiole 1.3–7.5 cm, with dense, white to brownish shorter appressed hairs and brown longer spreading ones; leaf blade narrowly elliptic to rhombic-elliptic, 4–9.5 × 2–5 cm, papery to herbaceous, nearly flat, appressed puberulent, abaxially brown villous along veins, base cuneate to broadly cuneate, margin single or double crenate to crenate-dentate, apex obtuse to acute; lateral veins 4–6 on each side of midrib. Peduncle 6.5–14 cm, spreading brown pubescent; bracts lanceolate-linear. Calyx 5-sect from base; segments lanceolate, ca. 5 × 1.5 mm, apex acute to obtuse. Corolla red-purple, ca. 3.2 cm, outside sparsely pubescent, inside sparsely glandular below abaxial lip; tube funnellform-tubular, slightly gibbous abaxially, ca. 2.3 × 0.9 cm; adaxial lip

ca. 5 mm; abaxial lip ca. 9 mm, all lobes entire. Stamens adnate to corolla tube ca. 7 mm above base, ca. 7.5 mm; filaments sparsely puberulent; anthers coherent at apex, reniform, dehiscent from arcuate slits; staminodes 3, adaxial 1 ca. 1.2 mm, abaxial 2 ca. 2 mm. Pistil included, ca. 2.1 cm, glabrous. Style ca. 6.5 mm; stigmas 2. Fruit unknown. Fl. May.

• Streamsides in valleys. W Hunan (Qianyang Xian).

8. *Opithandra cinerea* W. T. Wang, Bull. Bot. Res., Harbin 2(4): 39. 1982.

灰叶后蕊苣苔 *hui ye hou rui ju tai*

Petiole 0.3–1.7 cm, densely grayish strigose; leaf blade narrowly elliptic to elliptic, 1.5–3.5 × 0.7–1.8 cm, papery, nearly flat, densely short strigose, base cuneate, margin denticulate, apex acute; lateral veins ca. 4 on each side of midrib. Peduncle 5.5–11 cm, short brown hispid; bracts lanceolate-linear. Calyx ca. 3.5 mm, deeply 5-lobed; lobes triangular, ca. 2.7 × 1 mm, apex acute to obtuse. Corolla 1.5–2 cm, outside strigose, inside glandular puberulent below adaxial lip; tube narrowly funnellform, not swollen, 1.2–1.5 cm × 5–6 mm; adaxial lip 2.8–3.2 mm; abaxial lip ca. 4.5 mm, all lobes entire. Stamens adnate to corolla tube slightly below middle, 5–7.5 mm; filaments sparsely puberulent; anthers coherent at apex, reniform-ovoid, dehiscent from arcuate slits; staminodes 2, abaxial, 2–2.5 mm. Pistil included, ca. 5 mm, glabrous. Style ca. 1 mm; stigmas 2. Fruit unknown. Fl. May.

• E Guizhou (Jianhe Xian).

9. *Opithandra pumila* (W. T. Wang) W. T. Wang, Guihaia 12: 293. 1992.

裂檐苣苔 *lie yan ju tai*

Schistolobos pumilus W. T. Wang, Bot. Res. Academia Sinica 1: 16. 1983.

Petiole 0.8–2.5 cm, rust-brown villous; leaf blade elliptic-ovate to elliptic, 1.8–4 × 1.1–2.2 cm, papery, nearly flat, pubescent and villous, base slightly oblique, broadly cuneate to rounded, margin single or double denticulate to serrulate, apex acute to rounded; lateral veins 4–6 on each side of midrib. Peduncle ca. 4 cm, rust-brown villous; bracts linear. Calyx 5-sect from base; segments linear to elliptic, 2.5–3.5 × 0.8–1 mm, apex acute to obtuse. Corolla purplish, ca. 1.5 cm, outside sparsely puberulent, inside glabrous; tube tubular, not swollen, ca. 1.2 cm × 3 mm; adaxial lip ca. 2.5 mm, lobes 3-lobed; abaxial lip ca. 3 mm, lobes 7–9-lobed. Stamens adnate to corolla tube ca. 4 mm above base, ca. 4.6 mm; filaments glabrous; anthers coherent face to face, nearly reniform, dehiscent from somewhat arcuate slits; staminodes 2, abaxial, ca. 3 mm. Pistil included, ca. 1 cm, glabrous. Style ca. 4 mm; stigma 1. Fruit unknown. Fl. Apr–May.

• Rocks in valley forests; 700–900 m. SW Guangxi (Daxin Xian).

