

12. MYRMECHIS (Lindley) Blume, Coll. Orchid. 76. 1859.

全唇兰属 *quan chun lan shu*

Chen Xinqi (陈心启 Chen Sing-chi); Stephan W. Gale, Phillip J. Cribb

Anoetochilus sect. *Myrmechis* Lindley, Gen. Sp. Orchid. Pl. 500. 1840; *Tubilabium* J. J. Smith.

Herbs, terrestrial or rarely epiphytic, small. Rhizome elongate, creeping or decumbent, several noded, fleshy; roots hairlike, arranged in irregular clumps or ridges along rhizome internodes. Stem ascending, terete, glabrous, with few to many scattered leaves. Leaves green, ovate or orbicular, small, usually less than 2 cm, slightly fleshy, base shortly petiolate and dilating into tubular amplexicaul sheath. Inflorescence abbreviate or occasionally elongate, glabrous to pubescent, with a few sheathing bracts proximally and 1 to few flowers in a short terminal raceme. Flowers not opening fully, resupinate, small; ovary erect, twisted, glabrous to pubescent. Sepals similar, glabrous to pubescent on outer surface, free or basally connate; dorsal sepal often concave at base; lateral sepals oblique, concave, enclosing base of lip. Petals oblong to elliptic, margin oblique to subequal, connivent with dorsal sepal and forming a hood though apex usually free; lip basally adnate to column margin, 3-partite; hypochile saccate, containing a single, fleshy, entire or divided callus on either side of midvein at base; mesochile elongate, margin involute, subtubular, glabrous or pubescent; epichile transversely dilated or distinctly 2-lobed. Column very short, ventrally with 2 ligulate to longitudinally transverse, low wings; anther ovoid, 2-locular; clinandrium shallow; pollinia 2, 2-partite, granular-farinaceous, sectile, basally attenuate and attached to a solitary, elliptic viscidium; rostellum erect, short, 2-lobed; stigma lobes partly free at apical corners of column, protruding from lateral margin of rostellum.

About 15 species: NE India and the E Himalayas to S Japan, the Philippines, SE Asia, and New Guinea; five species (three endemic) in China.

- 1a. Lip T-shaped, epichile transversely dilated but not divided; petals with equal margins and an obtuse apex (neither oblique nor apiculate at apex).
 - 2a. Lip ca. 7 mm; hypochile calli oblong; epichile transversely oblong to obtriangular, 3–3.5 mm wide, entire 1. *M. japonica*
 - 2b. Lip ca. 5 mm; hypochile calli subquadrate; epichile transversely obcordate-obovate, 1–1.5 mm wide, occasionally slightly emarginate 2. *M. chinensis*
- 1b. Lip Y-shaped, epichile divergently 2-lobed; petals distinctly oblique and obtuse at apex, or with equal margins and an apiculate apex.
 - 3a. Petals broadly urceolate, with equal margins, apex abruptly narrowed into an apiculate, oblong tip ca. 1 mm, ca. 3.5 mm wide 4. *M. urceolata*
 - 3b. Petals narrowly ovate or oblanceolate, oblique, apex obtuse, less than 3 mm wide.
 - 4a. Lip 10–12 mm; mesochile minutely papillose, margin entire 3. *M. drymoglossifolia*
 - 4b. Lip 7–8 mm; mesochile glabrous, margin minutely crenulate 5. *M. pumila*

1. *Myrmechis japonica* (H. G. Reichenbach) Rolfe, J. Linn. Soc., Bot. 36: 44. 1903.

日本全唇兰 *ri ben quan chun lan*

Rhamphidia japonica H. G. Reichenbach, Bot. Zeitung (Berlin) 36: 75. 1878.

Plants 8–15 cm tall. Rhizome creeping. Stem somewhat stout, with several leaves. Leaves widely spaced along stem, orbicular to ovate, 5–8 × 5–7 mm, base obtuse-rounded, apex obtuse or acute; petiole-like base and sheath 4–5 mm. Inflorescence 1.5–3 cm, sparsely villous; rachis 1–3-flowered; floral bracts oblong to ovate-lanceolate, shorter than ovary, abaxially sparsely villous, margin ciliate, apex acute or acuminate. Flowers not opening widely, white; ovary and pedicel cylindric, 8–9 mm, sparsely villous. Sepals white, often tinged with pink on outer surface, ovate-lanceolate, ca. 6 mm, outer surface sparsely villous, 1-veined, connate at base, apex subacute; dorsal sepal cymbiform, ca. 2.3 mm; lateral sepals slightly oblique, ca. 2.3 mm wide. Petals connivent with dorsal sepal and forming a hood though apical 1/3 free and recurved, white, ovate-oblong, not oblique (margins equal), ca. 6 × 2.3 mm, 1-veined, apex obtuse; lip T-shaped, ca. 7 mm, 3-partite; hypochile concave-saccate; calli oblong, entire, apex obtuse; mesochile oblong; epi-

chile dilated, transversely oblong to nearly obtriangular, 3–3.5 mm wide. Fl. Jul–Aug. $2n = 56$.

Shaded places and mossy rocks in forests; 800–2600 m. N Fujian, W Sichuan, SE Xizang, NW Yunnan [Japan, Korea].

2. *Myrmechis chinensis* Rolfe, J. Linn. Soc., Bot. 36: 44. 1903.

全唇兰 *quan chun lan*

Plants 5–10 cm tall. Rhizome creeping. Stem slender, with several leaves. Leaves widely spaced along stem, orbicular or ovate, 4–6 × 4–5 mm, base obtuse-rounded, apex obtuse or acute; petiole-like base and sheath 3–5 mm. Inflorescence 1.5–2.5 cm, minutely villous; rachis 1–3-flowered; floral bracts oblong-lanceolate, shorter than ovary, abaxially sparsely villous, margin ciliate, apex acute. Flowers not opening widely, white; ovary and pedicel cylindric, 6–7 mm, sparsely villous. Sepals ovate-lanceolate, 5–6 mm, glabrous, 1-veined, connate at base, apex subacute; dorsal sepal cymbiform, 2–2.2 mm wide; lateral sepals slightly oblique, 2.3–2.5 mm wide. Petals connivent with dorsal sepal and forming a hood though apical 1/3 free and recurved, ovate, not oblique (margins equal), 5–6 × ca. 2.5 mm, 1-veined, apex obtuse; lip white, T-shaped, ca. 5 mm, 3-partite; hypochile concave-saccate; calli subquadrate, entire, apex obtuse; mesochile oblong, minutely papillose; epichile slightly

transversely dilated, obcordate-obovate, 1–1.5 mm wide, occasionally slightly emarginate. Fl. Jul.

• Damp places in forests, valleys; 2000–2200 m. N Fujian, W Hubei, NE and W Sichuan.

3. *Myrmechis drymoglossifolia* Hayata, Icon. Pl. Formosan. 6: 90. 1916.

阿里山全唇兰 a li shan quan chun lan

Myrmechis gracilis (Blume) Blume var. *sasakii* (Yamamoto) S. S. Ying; *M. japonica* (H. G. Reichenbach) Rolfe var. *sasakii* (Yamamoto) S. S. Ying; *M. sasakii* Yamamoto.

Plants 5–7 cm tall. Rhizome slender, branched. Stem white, tinged with red, 2–6 cm, with several leaves. Leaves abaxially grayish green, adaxially green, ovate or orbicular-ovate, 7–15 × 5–10 mm, with 3 main veins, base obtuse, margin slightly undulate, apex acute; petiole-like base and sheath 2–7 mm. Inflorescence to 3 cm, slender, pubescent; rachis 1–3-flowered; floral bracts lanceolate, shorter than ovary, glabrous, margin slightly ciliate. Flowers not fully opening, white; ovary and pedicel cylindrical-fusiform, ca. 10 mm, glabrous. Sepals lanceolate, cymbiform, 6–8 × 2.5–3.5 mm, glabrous, 1-veined, connate at base; dorsal sepal recurved at apex; lateral sepals dilated at base. Petals connivent with dorsal sepal for almost entire length and forming a hood, narrowly ovate, oblique, 6–8 × ca. 2.8 mm, 1-veined, apex obtuse and recurved; lip Y-shaped, 10–12 mm, 3-partite; hypochile concave-saccate; calli suboblong, bidentate; mesochile canaliculate, minutely papillose; epichile distinctly 2-lobed; lobes widely divergent, oblong, 1.5–2 × 1–1.5 mm, apex obtuse. Fl. May–Aug.

• Damp places in forests; 1000–3000 m. Taiwan.

Reports of *Myrmechis gracilis* (in S. S. Ying, Mem. Coll. Agric. Nat. Taiwan Univ. 29(1): 74. 1989) and *M. japonica* (in T. S. Liu & H. J. Su, Fl. Taiwan 5: 1064. 1978) from Taiwan are considered misidentifications of *M. drymoglossifolia*.

4. *Myrmechis urceolata* Tang & K. Y. Lang, Acta Phytotax. Sin. 34: 638. 1996.

宽瓣全唇兰 kuan ban quan chun lan

Plants 5–9 cm tall. Rhizome creeping. Stem stout, subfleshy, 5–7-leaved. Leaves widely spaced along stem, abaxially pale green, tinged with reddish purple, adaxially green, ovate, 7–12 × 6–8 mm, base obtuse-rounded, apex acute; petiole-like base and sheath 2–5 mm. Inflorescence ca. 1 cm, pubescent; rachis 1–3-flowered; floral bracts ovate-triangular, 4–5 × 3–4 mm, abaxially pubescent, margin ciliate, apex acute. Flowers not fully opening, white or pink; ovary and pedicel slightly arching, cylindrical-fusiform, sparsely pubescent, 6–7 mm. Sepals free, oblong-ovate, outer surface sparsely pubescent, 1-veined; dorsal sepal cymbiform, 5–6 × ca. 3 mm, apex narrowly attenuate, obtuse; lateral sepals 6–7 × 3.5–4 mm, apex narrowly attenuate, obtuse. Petals connivent with dorsal sepal and forming a hood though apiculate apex free, broadly urceolate, not oblique (margins equal), 5–6 × ca. 3.5 mm, 1-veined, apex abruptly narrowed into an apiculate, oblong tip ca. 1 mm; lip Y-shaped, cymbiform, 7–8 mm, 3-partite; hypochile slightly dilated, concave-saccate; calli transversely elliptic, entire, apex

obtuse; mesochile short, conduplicate, glabrous; epichile distinctly 2-lobed; lobes divergent, oblong, ca. 2 × 1 mm. Fl. May–Jul.

• Shaded humid places in forests; 500–600 m. N and W Guangdong, C and S Hainan, SE Yunnan.

5. *Myrmechis pumila* (J. D. Hooker) Tang & F. T. Wang, Acta Phytotax. Sin. 1: 69. 1951.

矮全唇兰 ai quan chun lan

Odontochilus pumilus J. D. Hooker, Fl. Brit. India 6: 99. 1890; *Anoectochilus pumilus* (J. D. Hooker) Seidenfaden & Smitinand; *Cheirostylis franchetiana* King & Pantling; *Cystopus pumilus* (J. D. Hooker) Kuntze; *Myrmechis franchetiana* (King & Pantling) Schlechter; *Zeuxine franchetiana* (King & Pantling) King & Pantling; *Z. pumila* (J. D. Hooker) King & Pantling.

Plants 5–12 cm tall. Rhizome creeping. Stem stout, with several leaves. Leaves ovate to long ovate, 7–14 × 5–8 mm, somewhat fleshy, base obtuse, margin somewhat undulate, apex acute; petiole-like base and sheath 5–8 mm. Inflorescence 2–3 cm, pubescent, proximally with 1 lanceolate sterile bract; rachis 1–4-flowered; floral bracts ovate-lanceolate, 4–5 mm, shorter than ovary, abaxially pubescent, margin ciliate. Flowers barely opening, pale white or grayish white; ovary and pedicel cylindrical, 7–8 mm, slightly pubescent. Sepals ovate, 1-veined, connate at base; dorsal sepal cymbiform, 5–6 mm, apex obtuse and recurved; lateral sepals 6–7 mm, oblique, apex obtuse-acute. Petals connivent with dorsal sepal for almost entire length and forming a hood, oblanceolate, oblique, 5–6 × ca. 2 mm, 1-veined, base slightly contracted, apex obtuse; lip Y-shaped, 7–8 × ca. 3 mm, 3-partite; hypochile dilated, concave-saccate, ca. 3 × 3 mm; calli oblong, truncate, entire to slightly emarginate; mesochile ca. 2 × 1 mm, glabrous, margin involute, minutely crenulate; epichile distinctly 2-lobed; lobes diverging widely, oblong, 2–3 × 1–1.5 mm. Fl. Jul–Aug.

Damp places in forests; 2800–3800 m. W Yunnan [Bhutan, India, Myanmar, Nepal, Thailand, S Vietnam].

