

14. RHOMBODA Lindley, J. Proc. Linn. Soc., Bot. 1: 181. 1857.

菱兰属 *ling lan shu*

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

Herbs, terrestrial or rarely epiphytic. Rhizome creeping, several noded, fleshy; roots fibrous, villous, arising from rhizome nodes. Stem erect, glabrous, with a few tubular sheaths at base, leafy. Leaves usually crowded at stem apex, green-red, midvein often white, lanceolate, ovate, or elliptic, oblique, apex acute, with a petiole-like base dilating into tubular amplexicaul sheath. Inflorescence erect, terminal, racemose, pubescent; peduncle with a few scattered sheathing bracts; rachis laxly to subdensely few to many flowered; floral bracts sparsely pubescent. Flowers not opening widely, obliquely resupinate or not resupinate; ovary and pedicel not twisted, glabrous to sparsely pubescent. Sepals free, similar, ovate-elliptic, outer surface glabrous to sparsely pubescent. Petals connivent with dorsal sepal and forming a hood, often broadly dilated, membranous; lip adnate to ventral margin of column, 2-partite or with a short mesochile and 3-partite; hypochile saccate, with a low, longitudinal carina along midvein forming a large, raised bicarinate callus toward apex of hypochile, and with 1 fleshy, undivided callus on either side near base; exterior of hypochile with fleshy flanges; mesochile (when present) short, margin involute; epichile linear, quadrate or transversely dilated, simple or 2-lobed. Column short, abruptly dilated apically, with 2 large, parallel wings; anther ovoid, 2-locular; pollinia 2, clavate, attached to a solitary, small, ovate viscidium; rostellum deltoid, short, broad, remnant shortly bifid; stigma lobes 2, separate, placed laterally at column apex, convex. Capsule erect.

About 25 species: from the Himalayas and NE India, across S and SE China to S Japan, and throughout SE Asia to New Guinea and the SW Pacific islands; four species (one endemic) in China.

The genus *Rhomboda* was recently reinstated by Ormerod (Orchadian 11: 323–339. 1995), having been neglected (with its constituent taxa being variously referred to *Hetaeria*, *Zeuxine*, or *Odontochilus*) for over a century. Species belonging to *Rhomboda* can be distinguished by the medial bicarinate callus within the hypochile of the lip (in addition to the two large, often stalked, basal calli) in combination with the flanges on the exterior surfaces of the hypochile and the presence of two large wings on the column. Most of the Chinese species remain poorly known.

- 1a. Lip oblong-ovate or broadly ovate, 3–3.5 mm; mesochile lacking or to 0.5 mm and often indistinct; epichile small, broadly elliptic, subquadrate, or obtriangular, 0.4–0.8 mm wide, narrower than hypochile.
- 2a. Epichile broadly elliptic to subquadrate, tapering, apex obtuse 1. *R. tokioi*
- 2b. Epichile obtriangular, apex truncate with acute corners and sometimes a small apiculate extension at center 2. *R. abbreviata*
- 1b. Lip T-shaped, 6–7 mm, distinctly 3-partite; mesochile 1–1.8 mm; epichile transversely dilated, ca. 6 mm wide, wider than hypochile.
- 3a. Hypochile 3–3.5 × 3.2–4 mm; epichile lobes obovate, apex irregularly denticulate 3. *R. moulmeinensis*
- 3b. Hypochile ca. 5 × 4.6 mm; epichile lobes subquadrate, apex rounded 4. *R. fanjingensis*

1. *Rhomboda tokioi* (Fukuyama) Ormerod, Austral. Orchid. Rev. 63(4): 11. 1998.

白肋菱兰 *bai lei ling lan*

Hetaeria tokioi Fukuyama, Bot. Mag. (Tokyo) 48: 434. 1934; *Goodyera pogonorrhyncha* Handel-Mazzetti; *H. cristata* Blume var. *minor* Rendle; *H. cristata* var. *tokioi* (Fukuyama) S. S. Ying; *Rhomboda pogonorrhyncha* (Handel-Mazzetti) Ormerod.

Plants 15–28 cm tall. Stem dark reddish brown, 5–9 cm, 4–6-leaved. Leaves abaxially pale green, adaxially sometimes with a white stripe along midvein, ovate to ovate-lanceolate, 3–9 × 1.5–4 cm; petiole-like base and tubular sheath 1–3 cm. Peduncle 5–15 cm, with 1–4 sterile bracts; rachis 3–6 cm, laxly 3–15-flowered; floral bracts brownish red, ovate-lanceolate, 5–8 × 2.5–3 mm, lower ones exceeding ovary, margin ciliate, apex acuminate. Flowers half opening, not resupinate, small; ovary and pedicel 7–10 mm, glabrous to sparsely pubescent. Sepals reddish brown, glabrous to sparsely pubescent, 1-veined; dorsal sepal broadly ovate, 2.8–3 × 1.5–2 mm, apex acute; lateral se-

pals ovate, oblique, 3.2–4 × 2–2.3 mm, apex acute. Petals white, ovate, oblique, sides extremely unequal, 2.8–3 × ca. 2 mm, glabrous, 1-veined, apex acute; lip white, oblong-ovate, cymbiform, 3–3.5 mm, 2-partite; hypochile concave-saccate, 2–2.5 × 1.8–2 mm, containing 2 large hornlike calli near base; carina low, forming a fleshy bicarinate callus toward apex of hypochile; epichile broadly elliptic to subquadrate, tapering, ca. 1 × 0.4–0.8 mm, margin involute, apex obtuse; disk irregularly papillose. Column ca. 1.5 mm. Fl. Sep–Oct. *2n* = 42.

Forests; below 1500 m. Guangdong, C and N Taiwan [Japan, Vietnam].

Plants of this species from Taiwan were misidentified in Fl. Taiwan (5: 1033. 1978; ed. 2, 5: 926. 2000) and FRPS (17: 183–185. 1999) as *Hetaeria cristata* Blume (*Rhomboda cristata* (Blume) Ormerod). True *Rhomboda cristata* is known only from Indonesia (Java).

2. *Rhomboda abbreviata* (Lindley) Ormerod, *Orchadian* 11: 329. 1995.

小片菱兰 xiao pian ling lan

Hetaeria abbreviata Lindley, *Gen. Sp. Orchid. Pl.* 481. 1840; *Anoectochilus abbreviatus* (Lindley) Seidenfaden; *Hetaeria abbreviata* (Lindley) J. J. Smith; *Odontochilus abbreviatus* (Lindley) Tang & F. T. Wang; *Zeuxine abbreviata* (Lindley) J. D. Hooker.

Plants 15–30 cm tall. Stem dark green, 4–5 cm, 3–5-leaved. Leaves abaxially pale green, sometimes tinged with red, adaxially dark green, ovate-lanceolate, 4–8 × 2–3 cm, apex acute to acuminate; petiole-like base and tubular sheath 1–2 cm. Peduncle 8–10 cm, with 2 or 3 sterile bracts; rachis 3–7 cm, laxly 8–12-flowered; floral bracts pinkish red, ovate, 7–10 × ca. 2.5 mm, shorter than to equal to ovary, margin ciliate, apex acuminate. Flowers half opening, obliquely resupinate, small; ovary and pedicel 9–11 mm, glabrous. Sepals greenish white, glabrous to sparsely pubescent, 1-veined; dorsal sepal broadly ovate, 2.5–3.5 × 1.5–2 mm, apex acute; lateral sepals spreading, ovate, slightly oblique, ca. 4 × 2.2 mm, apex acute. Petals white, ovate-lanceolate, oblique, sides unequal, 2.5–3.5 × 1.2–1.4 mm, glabrous, 1-veined, apex abruptly narrowed into a short apiculus; lip white, broadly ovate, cymbiform, 3–3.5 mm, obscurely 3-partite; hypochile concave-saccate, ca. 2.5 × 2–2.2 mm, containing 2 oblong-ellipsoid calli near base; carina low, forming a 2-laminate callus toward apex of hypochile; mesochile short and often indistinct, ca. 0.5 mm, margin involute; epichile obtriangular, ca. 1.2 × 0.8 mm, margin involute, apex truncate with acute corners and sometimes a small apiculate extension at center. Column ca. 2 mm. Fl. Aug–Sep.

Forests, valleys; 600–1200 m. Guangdong, Guangxi, Guizhou, Hainan [NE India, Myanmar, Nepal, Thailand].

Plants of this species from Hong Kong were misidentified in *Gen. Orchidaceae Hong Kong* (49. 1977) and FRPS (17: 183–185. 1999) as *Hetaeria cristata* Blume (*Rhomboda cristata* (Blume) Ormerod). See also the comment under *R. tokioi* above.

3. *Rhomboda moulmeinensis* (E. C. Parish & H. G. Reichenbach) Ormerod, *Orchadian* 11: 325. 1995.

艳丽菱兰 yan li ling lan

Hetaeria moulmeinensis E. C. Parish & H. G. Reichenbach, *Trans. Linn. Soc. London* 30: 142. 1874; *Anoectochilus moulmeinensis* (E. C. Parish & H. G. Reichenbach) Seidenfaden; *A. multiflorus* Rolfe ex Downie; *Odontochilus moulmeinensis* (E. C. Parish & H. G. Reichenbach) Tang & F. T. Wang; *O. multiflorus* (Rolfe ex Downie) Tang & F. T. Wang; *Zeuxine moulmeinensis* (E. C. Parish & H. G. Reichenbach) J. D. Hooker.

Plants 16–35 cm tall. Stem dark reddish brown, 4–11 cm, 5–7-leaved. Leaves abaxially grayish green, adaxially green with a broad white stripe along midvein, ovate-elliptic to ovate-lanceolate, 3–11 × 1.5–3.5 cm, apex acute or acuminate; petiole-like base and tubular sheath 1.5–4 cm. Peduncle 10–22 cm, with 1–3 pale red sterile bracts, sometimes densely villous; rachis 2–6 cm, laxly 5–16-flowered; floral bracts pale red, ovate to ovate-lanceolate, 5–10 × ca. 2.5 mm, shorter than to equal to ovary, margin ciliate, apex acuminate. Flowers spreading, obliquely resupinate, medium-sized; ovary and pedicel 8–11 mm, purplish green, glabrous to sparsely pubescent. Sepals pale red, glabrous, 1-veined; dorsal sepal erect, broadly ovate, cymbiform, 5.5–7 × 2.5–3.2 mm, apex acute to acuminate; lateral sepals spreading, broadly ovate, slightly oblique, 5.8–7.5 × 3–4

mm, apex acuminate. Petals white suffused with pink, broadly subovate, sides extremely unequal, $5.5\text{--}7 \times 3.5\text{--}4$ mm, apex apiculate; lip white, T-shaped, 6–7 mm, 3-partite; hypochile saccate, $3\text{--}3.5 \times 3.2\text{--}4$ mm, apex truncate or emarginate, containing 2 subglobose calli near base; basal calli shortly stalked, crenulate at apex; carina undulate, forming a fleshy bicarinate callus midway along hypochile; mesochile linear, 1–1.8 mm, slender; epichile transversely dilated, ca. 6 mm wide, 2-lobed; lobes diverging \pm at right angles to lip axis, obovate, $2\text{--}3 \times 1.2\text{--}1.8$ mm, apex irregularly denticulate; disk irregularly papillose. Column 2.5–3.5 mm. Fl. Aug–Oct.

Damp forests, valleys; 400–2200 m. Guangxi, Guizhou, Sichuan, SE Xizang, Yunnan [Myanmar, Thailand].

4. *Rhomboda fanjingensis* Ormerod, *Orchadian* 11: 327. 1995.

贵州菱兰 *gui zhou ling lan*

Plants ca. 28 cm tall. Stem dark reddish brown, ca. 6.5 cm, 5-leaved. Leaves adaxially green with a narrow white stripe along midvein, ovate-elliptic, $6\text{--}8 \times 3\text{--}4$ cm, apex acute; petiole-like base and tubular sheath 2–3 cm. Peduncle ca. 10 cm, with 3 or 4 sterile bracts; rachis ca. 10 cm, laxly 17-flowered; floral bracts pale red, ovate-lanceolate, ca. 9×4 mm, shorter than to equal to ovary, margin ciliate, apex acuminate. Flowers half opening, obliquely resupinate, medium-sized; ovary and pedicel ca. 9 mm, glabrous. Sepals pink-red, glabrous, 1-veined; dorsal sepal narrowly ovate-elliptic, ca. 7×3.3 mm, apex acuminate; lateral sepals reflexed, ovate-elliptic, oblique, ca. $7 \times 2.5\text{--}3$ mm, apex acute. Petals white suffused with pink, narrowly ovate-oblong, sides extremely unequal, ca. $7 \times 2\text{--}3$ mm, shortly clawed at base, apex acuminate; lip white, irregularly T-shaped, ca. 7 mm, 3-partite; hypochile saccate, ca. 5×4.6 mm, apex truncate or emarginate, containing 2 transversely elliptic calli near base; apical lobes rounded, projecting forward beyond base of mesochile; basal calli minutely denticulate; carina low, abruptly arising toward apex of hypochile and forming a laminate, bicarinate callus; mesochile linear, ca. 1 mm, slender; epichile transversely dilated, ca. 6 mm wide, 2-lobed, apiculate; lobes diverging \pm at right angles to lip axis, subquadrate, ca. $2.3 \times 1.8\text{--}2$ mm, apex rounded. Column 4–5.5 mm. Fl. Oct–Nov.

- Forests; ca. 500 m. NE Guizhou.

