

## 56. POGONIA Jussieu, Gen. Pl. 65. 1789.

朱兰属 *zhu lan shu*

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

Herbs, terrestrial. Rhizome ascending, cylindric, slender; roots fascicled, elongate, fibrous, slightly fleshy. Stem erect, slender, 1-leaved. Leaf elliptic to oblong-lanceolate, herbaceous to slightly fleshy, sheathing at base. Inflorescence terminal, slender, usually with a solitary flower, rarely 2- or 3-flowered; floral bract persistent, foliaceous. Flower resupinate, showy. Sepals free, similar, spreading. Petals free, usually deflexed over column, slightly wider and shorter than sepals; lip oblong-obovate, entire to shallowly 3-lobed above middle, not spurred, margin fimbriate; disk densely papillose. Column slender, dilated at apex; clinandrium erose at margin; anther terminal, incumbent; pollinia 2, granular-farinaceous, without caudicles or viscidia; stigma surface large; rostellum short, broad, protruding above stigma. Capsule erect.

Four species: three species in E Asia and one in North America; three species (one endemic) in China.

- 1a. Leaf elliptic, 1–3(–4.5) cm; floral bract positioned up to 2.5 cm above leaf, 5–17 mm; flower suberect ..... 3. *P. yunnanensis*
- 1b. Leaf oblong or oblong-lanceolate, 3–6 cm; floral bract positioned 3–8 cm above leaf, 15–30 mm;  
flower spreading.
- 2a. Flowers pale pinkish purple to purple; sepals 15–22 mm ..... 1. *P. japonica*
- 2b. Flowers white; sepals 12–13(–15) mm ..... 2. *P. minor*

**1. *Pogonia japonica*** H. G. Reichenbach, *Linnaea* 25: 228. 1852.

朱兰 *zhu lan*

*Pogonia kungii* Tang & F. T. Wang; *P. ophioglossoides* (Linnaeus) Ker Gawler var. *japonica* (H. G. Reichenbach) Finet; *P. parvula* Schlechter; *P. similis* Blume.

Plants 10–20(–25) cm tall. Rhizome 10–20 × ca. 2 mm, with several, slender, elongate, slightly fleshy roots. Leaf oblong to oblong-lanceolate, 3.5–6(–9) × 0.7–1.7 cm, slightly fleshy, base contracted and amplexicaul, apex acute or obtuse. Floral bract positioned 4–8 cm above leaf, narrowly oblong, linear-lanceolate, or lanceolate, 15–25(–40) × 3–7 mm. Flower solitary, terminal, erect, not opening widely, pale pinkish purple to purple; pedicel and ovary 10–18 mm. Sepals narrowly oblong-obovate, 15–22 × 2.5–3.5 mm, apex obtuse or acuminate. Petals similar to sepals, 14–22 × 3.5–5 mm, apex acuminate; lip narrowly oblong, 14–20 × 3–4 mm, slightly contracted toward base, obscurely 3-lobed above middle; lateral lobes triangular, ca. 0.8 mm, apical margin irregularly incised or fimbriate; mid-lobe ligulate to obovate, 6–13 × 3–4 mm, with 2 or 3 fimbriate-hairy crests, margin fimbriate-incised; disk with 2 or 3 longitudinal lamellae or ridges extending from base of lip and becoming continuous with hairy crests on mid-lobe. Column erect, 7–10 mm, slender. Capsule oblong, 20–25 × 5–6 mm. Fl. May–Jul, fr. Jul–Oct.  $2n = 18, 20$ .

Grasslands on hilltops, forests along valleys, wet places in thickets, open wet places; 1100–2300 m. Anhui, N Fujian, N Guangxi, Guizhou, Heilongjiang, Hubei, Hunan, Jiangxi, Jilin, Nei Mongol, Shandong, Sichuan, NE Yunnan, Zhejiang [Japan, Korea].

**2. *Pogonia minor*** (Makino) Makino, *Bot. Mag. (Tokyo)* 23: 137. 1909.

小朱兰 *xiao zhu lan*

*Pogonia japonica* H. G. Reichenbach var. *minor* Makino, *Bot. Mag. (Tokyo)* 12: 103. 1898.

Plants 13–16 cm tall. Rhizome 2–7 × ca. 2 mm, with several, elongate, slender roots. Stem with a sheath below leaf; sheath 7–12 mm. Leaf oblong-lanceolate, 3–7 × 0.4–1.2 cm,

slightly fleshy, base amplexicaul, apex acute or obtuse. Floral bract positioned 3–6 cm above leaf, narrowly lanceolate, 20–30 × 3–4 mm. Flower solitary, terminal, erect, not opening widely, white; pedicel and ovary 10–20 mm. Sepals narrowly oblanceolate, 12–13(–15) × 2–3 mm, apex acute. Petals similar to sepals, narrowly ovate-elliptic, 12–13(–15) × 2.5–4 mm, apex acute; lip oblanceolate, ca. 11 × 2 mm, 3-lobed above middle; lateral lobes triangular, ca. 1 mm, apex acute; mid-lobe oblong, ca. 5 × 2 mm, with 3 crests of fleshy hairs, margin irregularly denticulate; disk with 3 longitudinal ridges extending from base of lip to base of mid-lobe and becoming continuous with hairy crests on mid-lobe. Column erect, nearly straight, white, ca. 7 mm. Capsule oblong-cylindric, ca. 20 mm. Fl. May–Jun.  $2n = 18$ .

Grasslands; 2200–2400 m. S Taiwan [Japan].

**3. *Pogonia yunnanensis*** Finet, Bull. Soc. Bot. France 44: 419. 1898.

云南朱兰 yun nan zhu lan

Plants (2–)5–9(–12) cm tall. Rhizome ca. 5 × 1 mm, with several slender roots. Leaf elliptic, 1–3(–4.5) × (0.4–)0.7–1.5(–2) cm, slightly fleshy, base contracted and amplexicaul, apex acute. Floral bract positioned up to 2.5 cm above leaf, narrowly elliptic, narrowly ovate, or narrowly ovate-lanceolate, 5–17(–20) mm. Flower solitary, terminal, suberect, not opening widely, rose-pink with a red-purple lip; pedicel and ovary 5–8(–15) mm. Sepals narrowly oblong, 14–17 × ca. 3 mm, apex acute. Petals narrowly obovate-oblong, 12–16 × 3.5–4 mm, apex obtuse; lip narrowly oblong, 13–15 × ca. 3 mm, usually slightly shorter than sepals, slightly contracted toward base, 3-lobed above middle; lateral lobes narrowly triangular-ovate, 1–2 mm, apex acute; mid-lobe linear-oblong, 5–6 × ca. 2.5 mm, densely papillose-hairy, margin irregularly denticulate; disk with 2 longitudinal ridges extending from base of lip to base of mid-lobe and becoming papillose-hairy toward apex. Column suberect, slightly curved, 6–8 mm. Capsule erect, obovate-elliptic, 10–12 × 3–6 mm. Fl. Jun–Jul, fr. Oct.

• Alpine grasslands, *Abies* forests; 2300–3300 m. SW and W Sichuan, SE Xizang, NW Yunnan.

