

47. ANDROCORYS Schlechter, Repert. Spec. Nov. Regni Veg. Beih. 4: 52. 1919.

兜蕊兰属 *dou rui lan shu*

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

Herbs, terrestrial, small. Tuber globose to ovoid, fleshy, pubescent. Stem erect, slender, glabrous, with 1 basal leaf. Leaf ovate to narrowly elliptic, base attenuate into amplexicaul sheath. Inflorescence erect, terminal, with several to more than 10 flowers arranged in a short, ± dense raceme; floral bracts very small, scalelike. Flowers resupinate, usually yellowish to green, small; ovary twisted, fusiform. Sepals free; dorsal sepal erect, often broad, concave, forming a hood with petals; lateral sepals longer and narrower than dorsal sepal. Petals concave; lip reflexed, ligulate or linear, small, base often dilated, spurless, entire. Column short, with 2 lateral appendages; anther erect, with 2 divergent, hooded locules and broad connective; pollinia 2, clavate, granular-farinoaceous, sectile, each attached to a small viscidium; rostellum triangular; stigma 2-gibbous, attached to base of rostellum.

Six species: from the Himalayas through S China to Japan; five species (three endemic) in China.

- 1a. Lateral sepals pendulous and parallel to lip, lower margins connivent with each other 1. *A. ophioglossoides*
- 1b. Lateral sepals spreading, not parallel to lip, lower margins not connivent with each other.
 - 2a. Sepal margins entire; petals shorter than or ca. as long as dorsal sepal.
 - 3a. Floral bracts broadly ovate, not spirally twisted; dorsal sepal 1–1.2 mm wide, apex obtuse 2. *A. pugioniformis*
 - 3b. Floral bracts linear, spirally twisted; dorsal sepal 1.3–1.8 mm wide, apex apiculate 3. *A. spiralis*
 - 2b. Sepal margins denticulate; petals longer than dorsal sepal.
 - 4a. Floral bracts ovate, ca. 1.5 mm; petals elliptic or obliquely orbicular, ca. as broad as dorsal sepal 4. *A. pusillus*
 - 4b. Floral bracts broadly ovate, ca. 0.8 mm; petals obliquely oblong-lanceolate, narrower than dorsal sepal 5. *A. oxysepalus*

1. *Androcorys ophioglossoides* Schlechter, Repert. Spec. Nov. Regni Veg. Beih. 4: 53. 1919.

兜蕊兰 *dou rui lan*

Plants 8–21 cm tall. Tuber globose, 5–8 mm in diam. Stem erect, slender, with 2 tubular sheaths and 1 leaf at base. Leaf narrowly elliptic to oblong-spatulate, 3–9 × 0.8–2 cm, apex obtuse. Rachis 2.5–9 cm, 6–20-flowered; floral bracts ca. 1 mm, apex subtruncate. Flowers yellowish green or green; ovary and pedicel 4–4.5 mm. Dorsal sepal erect, broadly ovate, concave, 1–1.2 × 0.9–1.1 mm, 1-veined, entire, apex obtuse or subacute; lateral sepals parallel to lip, pendulous, obliquely elliptic, ca. 2 × 1 mm, entire, lower margins connivent with each other, 1-veined, apex obtuse. Petals erect, oblique, broadly ovate, unequally sided, concave, large, ca. 1.5 × 1.3 mm, apex obtuse; lip linear-ligulate, small, 1.2–1.8 mm, base slightly dilated and ca. 0.7 mm wide, apex obtuse; connective ca. 1 mm wide. Fl. Jul–Aug, fr. Sep.

• Alpine forests, damp alpine grasslands; 1600–3900 m. Gansu, Guizhou, Qinghai, Shaanxi.

2. *Androcorys pugioniformis* (Lindley ex J. D. Hooker) K. Y. Lang, Guihaia 16: 105. 1996.

剑唇兜蕊兰 *jian chun dou rui lan*

Herminium pugioniforme Lindley ex J. D. Hooker, Fl. Brit. India 6: 130. 1890; *H. nivale* Schlechter; *Monorchis pugioniformis* (Lindley ex J. D. Hooker) O. Schwarz.

Plants 5.5–18 cm tall. Tuber globose, 6–10 mm in diam. Stem erect or ascending, slender to relatively stout, with 1 or 2 tubular sheaths and 1 leaf at base. Leaf oblanceolate, oblong, narrowly elliptic, or elliptic, 2–4 × 0.4–1.2 cm, apex obtuse or acute. Rachis 0.8–2.5 cm, 3–10-flowered; floral bracts broadly ovate, much shorter than ovary, apex acute. Flowers green;

ovary and pedicel 4–5 mm. Dorsal sepal erect, ovate or ovate-orbicular, concave, ca. 1.5 × 1–1.2 mm, 1-veined, entire, apex obtuse; lateral sepals spreading, obliquely obovate to elliptic, 1.7–2.2 × 1–1.2 mm, entire, 1-veined, apex obtuse. Petals obliquely obovate, concave, 1.3–1.5 × 0.5–0.8 mm, 1-veined, entire, apex obtuse or subacute; lip linear-oblong, 1.7–2.5 mm, fleshy, base conspicuously dilated and 0.5–1 mm wide, apex obtuse; connective ca. 0.6 mm wide; viscidia ellipsoid. Fl. Aug–Sep, fr. Sep.

Abies forests, alpine thickets and meadows; 2700–5200 m. E and S Qinghai, NW Sichuan, Xizang, NW Yunnan [Bhutan, India, Kashmir, Nepal].

3. *Androcorys spiralis* Tang & F. T. Wang, Bull. Fan Mem. Inst. Biol. Bot. 10: 38. 1940.

西藏兜蕊兰 *shu zang dou rui lan*

Plants 5–12 cm tall. Tuber globose, 5–8 mm in diam. Stem erect or ascending, slender, with 2 tubular sheaths and 1 leaf at base. Leaf oblong, 2–2.5 × 0.8–1 cm, apex obtuse. Rachis 2–2.5 cm, 3–8-flowered; floral bracts spirally twisted, linear, shorter than ovary, apex acuminate. Flowers green; ovary and pedicel 3–7 mm. Dorsal sepal erect, broadly ovate, concave, 1.5–2 × 1.3–1.8 mm, 1-veined, entire, apex apiculate; lateral sepals spreading, oblong, 2–2.75 × 1–1.2 mm, 1-veined, entire, apex obtuse. Petals obliquely oblong, concave, 1.3–2 × 0.5–0.7 mm, 1-veined, margin incurved, apex obtuse or acuminate; lip linear-ligulate, 1.8–2.1 mm, fleshy, base dilated and ca. 0.8 mm wide, apex obtuse; connective very broad. Fl. Sep.

• Forests; 2800–3500 m. SW Sichuan, SE Xizang, NW Yunnan.

4. *Androcorys pusillus* (Ohwi & Fukuyama) Masamune, Hokuriku J. Bot. 12: 88. 1963.

小兜蕊兰 *xiao dou rui lan*

Herminium pusillum Ohwi & Fukuyama, Bot. Mag. (Tokyo) 48: 430. 1934; *Androcorys japonensis* F. Maekawa.

Plants 10–22 cm tall. Tuber ovoid or globose, 5–7 mm in diam. Stem erect, slender, with 1–3 tubular sheaths and 1 leaf at base. Leaf ovate to oblong, 2–4.5 × 1–2.2 cm, apex obtuse. Rachis ca. 2.5 cm, 8–13-flowered; floral bracts ovate, ca. 1.5 mm, shorter than ovary. Flowers green; ovary and pedicel 3–4 mm. Dorsal sepal erect, triangular-ovate, orbicular, or broadly ligulate, concave, 1–1.2 × ca. 1 mm, 1-veined, margin irregularly denticulate, apex obtuse; lateral sepals spreading, narrowly oblong, 2–3 × 0.7–1 mm, 1-veined, margin slightly denticulate, apex obtuse or subacute. Petals elliptic to obliquely orbicular, concave, 1.2–1.5 × ca. 1 mm, 1-veined, base cuneate, margin entire or slightly denticulate, apex rounded; lip ligulate, 2–2.2 × ca. 0.7 mm, fleshy, base dilated, apex obtuse; connective broad. Fl. Jul.

Forests, alpine meadows; 2500–3500 m. C Taiwan [Japan].

5. *Androcorys oxysepalus* K. Y. Lang, Guihaia 16: 106. 1996.

尖萼兜蕊兰 *jian e dou rui lan*

Plants 6–7 cm tall. Tuber globose, ca. 5 mm in diam. Stem erect or ascending, slender, with 2 tubular sheaths and 1 leaf at base. Leaf elliptic to oblong, 1.5–1.7 × 0.8–0.9 cm, apex obtuse. Rachis 1.8–2 cm, 6- or 7-flowered; floral bracts broadly

ovate, ca. 0.8 mm, much shorter than ovary, apex acute. Flowers green, small; ovary and pedicel ca. 3 mm. Dorsal sepal erect, broadly ovate, concave, ca. 1.6 × 1.2 mm, 1-veined, margin denticulate, apex acuminate; lateral sepals spreading, narrowly oblong-lanceolate, ca. 3 × 1 mm, 1-veined, margin denticulate, apex acuminate and thickened. Petals erect, obliquely oblong-lanceolate, concave, ca. 2 × 0.8 mm, 1-veined, entire, apex obtuse; lip pendulous, linear-lanceolate, ca. 1.5 mm, fleshy, base dilated and ca. 0.6 mm wide, apex obtuse; connective broad. Fl. Aug.

• *Abies* forests; ca. 3900 m. NW Yunnan.

