61. DIPLANDRORCHIS S. C. Chen, Acta Phytotax. Sin. 17(1): 2. 1979.

双蕊兰属 shuang rui lan shu

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

Herbs, small, heteromycotrophic, with stout, short rhizomes and tufted fleshy roots, without green leaves. Inflorescence erect, terminal, racemose; peduncle with several sheaths; sheaths tubular in lower half of peduncle, becoming bractlike above; rachis densely many flowered; floral bracts membranous. Flowers erect, not resupinate, actinomorphic; pedicel rather long, slender, not twisted; ovary ellipsoid, not twisted. Perianth composed of 3 similar sepals and 3 similar petals, without a modified lip. Column erect, cylindric, with 2 fertile stamens at apex; stamens similar, erect, borne opposite dorsal sepal and central petal (lip) respectively; anthers 2-locular, each with an extremely short filament; pollinia 2, granular-farinaceous, without caudicle; stigma terminal, oblate; rostellum absent.

• One species: China.

For a detailed discussion on this genus and the allied *Holopogon*, see Chen and Tsi (Acta Phytotax. Sin. 25: 329–339. 1987).

Two of us (Cribb and Gale) consider *Diplandrorchis* to be a peloric form of *Neottia*. Our understanding of the genetic control of organ development in orchids can be used to explain how zygomorphic flowers may become "regular" (i.e., actinomorphic) and how floral organs can take on different forms, as when the lip becomes petaloid or a staminode develops as an anther. For further discussion on the occurrence of actinomorphy in the Orchidaceae and other monocot groups with zygomorphic flowers, see Rudall and Bateman (New Phytol. 162: 25–44. 2004).

1. Diplandrorchis sinica S. C. Chen, Acta Phytotax. Sin. 17(1): 2. 1979.

双蕊兰 shuang rui lan

Plants 17–24 cm tall. Rhizome slightly curved, ca. 2.5 mm in diam. Inflorescence slender, ca. 2 mm in diam., with 5–7 membranous sheaths; lower sheaths tubular, 2–3 cm; upper sheaths ovate-lanceolate, 1–1.5 cm; rachis 6–8 cm, densely 13–17-flowered; floral bracts lanceolate, 7–8 mm, apex acuminate.

Flowers pale green or greenish white, not opening widely; pedicel 4–6 mm, papillose-pubescent; ovary ellipsoid, ca. 4×2.5 mm, papillose-pubescent. Sepals oblong-lanceolate, ca. 3.5×1.5 mm, outer surfaces papillose-pubescent; lateral sepals slightly oblique. Petals and lip similar, suboblong, slightly shorter and narrower than sepals. Column ca. 2.5 mm including anthers; anthers broadly ovoid-oblong, ca. 0.6 mm. Fl. Aug.

• Humus-rich soils in *Tilia* forests, shaded places; 700–800 m. E Liaoning.