Coelogyne weixiensis (Orchidaceae), a new species from Yunnan, China

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Coelogyne weixiensis X.H. Jin sp. nova (Orchidaceae) is described and illustrated. It is morphologically reminiscent of *C. gongshanensis*, from which it differs in having aristate lateral sepals, petals much narrower than the sepals, and toothed lateral labellum lobes.

Key words: Coelogyne, new species, Orchidaceae, taxonomy

The subtropical mountains in NW Yunnan, SW Sichuan and SE Xizang Zhang Autonomous Area (Tibet) is one of the hotspots of biodiversity in the world (Myers et al. 2000) and the diversity center of many orchid genera, such as Amitostigma (Lang 1999b), Herminium (Lang 1999a), and Pleione (Cribb & Butterfield 1999). During our fieldwork in this area from 2001 to 2004, we discovered about 15 species of Coelogyne, including C. barbata, C. fimbriata, C. ovalis, C. occultata, C. nitida, C. punctulata, C. leucantha, C. schultesii, C. prolifera, C. corymbosa, C. sanderae, C. flaccida, and the new species described here.

Coelogyne weixiensis X.H. Jin, *sp. nova* (Fig. 1)

Habitu C. gongshanensi subsimilis, sed petalis sepalis angustoribus, lobis lateralibus labelli erosis, sepalis lateralibus aristatis differt. Type: China. Yunnan, Weixi, Bilou Snow Mountains, 18.V.2004 *X.H. Jin 6502* (holotype KUN; isotypes KUN!, PE!).

Epiphytic, rarely terrestrial. Rhizomes short, 2 mm in diam. Pseudobulbs closely together, less than 1.5 cm apart along the rhizomes, conical to cylindrical, when young covered by sheaths, 3-5 cm long, 1-1.5 cm in diam. Leaves two on each pseudobulb, terminal, convolute, oblanceolate, $20-30 \times 2.5-3$ cm, coriaceous. Raceme erect from young pseudobulbs, proteranthous, about 15 cm long, 2- to 3-flowered, shorter than leaves. Bracts linear, 2 cm long, caducous. Flowers in one inflorescence opening simultaneously, spreading, creamy-yellow, giving off thin chocolate-like smell; pedicel with ovary 2 cm long; dorsal sepal elliptic, acute, 3.5 × 1.7 cm, containing 7 veins tinged with deep yellow; lateral sepals oblique at base, lanceolate, acuminate, aristate, 3.5×1.2 cm, containing 7 veins tinged with deep yellow; petals linear, acuminate, $3.5 \times$ 0.6 cm, 5-veined; lip firmly attached to column,

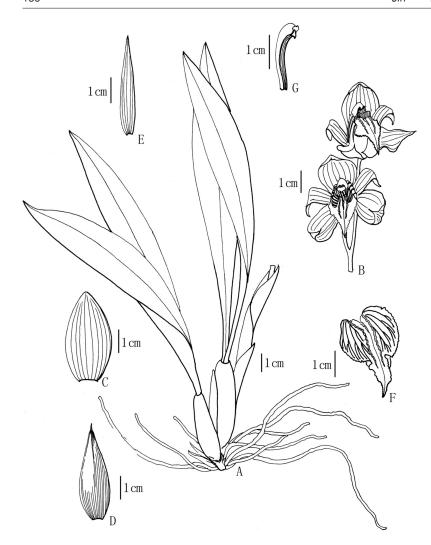


Fig. 1. Coelogyne weixiensis (from holotype, drawn by Wang Ling). — A: Plant. — B: Front view of flowers. — C: Dorsal sepal. — D: Lateral sepal. — E: Petal. — F: Lip. — G. Lateral view of column.

three-lobed; lateral lobes semi-orbicular, erect, toothed, veins brown; mid-lobe triangular, 1.5 × 1.2 cm, veins brown, sometimes with two eye-like blots at base; blade provided with three white, crested ridges, running from base of labellum to middle of mid-lobe (lateral ones) or to far below middle of labellum (middle one). Column 2 cm long, with 2 yellow wings. Pollinia four, semi-orbicular. Capsule not seen.

Coelogyne weixiensis belongs to sect. Erectae and is similar to C. gongshanensis, but it is not difficult to distinguish them. The former is characterized by creamy-yellow flowers, a concave dorsal sepal, aristate lateral sepals, linear petals and erose lateral labellum lobes. It grows epiphytically on tree trunks in subtropical evergreen forest, and flowers in May and June. Coe-

logyne weixiensis is known from several sites on the eastern slopes (2600–3000 m) of Bilou Snow Mountains along the Lancuanjiang River (Mekong). The habitat is greatly affected and threatened by agriculture.

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