

Two genera and four species of the Orchidaceae newly recorded in China

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Abstract Two genera, *Biermannia* King & Pantl. and *Cleisostomopsis* Seidenf., together with four species, *Biermannia calcarata* Averyanov, *Cleisostomopsis eberhardtii* (Finet) Seidenf. & Smitinand, *Liparis perpusilla* Hook. f., and *Schoenorchis fragrans* (Par. & Rehb. f.) Seidenf., are reported as new records to China.

Key words Orchidaceae, new records, China.

During conducting the program on "Biodiversity, Status, Trade and Conservation of Native Orchid Species in the Limestone Regions of Yunnan, Guizhou and Guangxi", which is financially supported by Kadoorie Farm and Botanic Garden, two genera and four species are found as new records to the Chinese orchid flora, and here reported.

1 *Biermannia* King & Pantl. in Journ. As. Soc. Bengal 66: 591. 1897. Type: *Biermannia quinquecallosa* King & Pantl.

胼胝兰属

Small epiphytic plants. Stem short, with few and mostly fleshy leaves. Inflorescence lateral, shorter than leaves, more or less pendent. Flower small, developing in succession. Petals usually rather narrow, shorter than sepals. Lip more or less movable, attached to a short but distinct column foot, somewhat parallel with column, usually concave to spurred at base, 3-lobed; side-lobes embracing or parallel with the column. Pollinia 2, notched, on a linear-obovate stipe.

Tang and Wang (1951) transferred *Aerides decumbens* Griff. and *A. taeniale* Lindl. to *Biermannia*, making the combinations *B. decumbens* (Griff.) Tang & Wang and *B. taeniale* (Lindl.) Tang & Wang, but the former was treated by Sweet (1970) as the synonym of *Kingidium deliciosum* (Rehb. f.) Sweet, and the latter was transferred to *Kingidium* by Hunt (1970). Therefore there were no records of plants of *Biermannia* in China. *Biermannia* and *Kingidium* are two distinct genera. Pollinia of *Biermannia* are porate, while those of *Kingidium* are half cleft; the mid-lobe of *Biermannia* is fleshy, somewhat parallel with the column, and not appendaged, while that of *Kingidium* is neither fleshy nor parallel with the column but with a bifurcate appendage.

2 *Biermannia calcarata* Averyanov, Bot. J. (Leningr.) 73(3): 429, fig. 8. 1988; Seidenfaden in Opera Bot. 114: 433, fig. 297. 1992; Averyanov, Iden. Guide Vietnam. Orch. 357, fig. 19. 1994. Type: Vietnam. Cat Hai, Cat Ba Haipong, LX-VN 3331 (holotype, LE; isotype, HN).

拟距胼胝兰

Stem about 5 mm long. Roots fleshy, thick. Leaves 4-5, broadly lanceolate, 3-5 cm long, 1 cm wide, notched-tipped. Inflorescences 5-12 mm long, 3-6-flowered. Peduncle flattened. Bracts 1-3 mm long. Pedicel with ovary 3-5 mm long. Flowers pale-yellow. Sepals broadly

lanceolate, ca. 9 mm long, 3 mm wide, long acuminate, dorsally keeled. Petals similar to sepals, but slightly shorter. Lip 3-lobed; lateral lobes small and cuneate, rounded-tipped, ca. 1 mm long, 0.5 mm wide; mid-lobe almost obconical, fleshy, white, 6 mm long, 2 mm wide, with a subglobose-cylindrical, slightly 3-lobed-tipped spur at base. Column 2 mm long. Pollinia 2, porate; stipe ca. 0.5 mm long. Flowering from July to September.

China. Guangxi (广西): Longzhou (龙州), Longgang (弄岗), alt. 800 m, 2001-05-25, on tree, in forest, HK Kadoorie PT (香港嘉道理项目队) 705 (PE).

Distribution: China (Guangxi) and Vietnam.

3 Cleisostomopsis Seidenf. in Opera Bot. 113 : 370. 1992. Type: *Cleisostomopsis eberhardtii* (Finet) Seidenf.

拟隔距兰属

Epiphytic plants. Leaves terete, fleshy. Inflorescence lateral, unbranched, sparsely many-flowered. Flowers rather small. Petals similar to sepals but smaller. Lip spurred, 3-lobed. Spur cylindrical, not septate, with a Y-shaped callus on the back wall. Column with a short column-foot. Pollinia 2, each completely divided into more or less unequal semi-globular halves.

This monotypic genus is related to *Cleisostoma* Bl. and *Schoenorchis* Reinw., from the former it differs by the absence of septum in the spur, and from the latter by the terete leaves, the auriculated lip, and a Y-shaped callus on the back wall of the spur.

4 Cleisostomopsis eberhardtii (Finet) Seidenf. in Opera Bot. 113 : 372. 1992. — *Saccolabium eberhardtii* Finet in Not. Syst. 1 : 258. fig. 17. 1910; *Sarcanthus eberhardtii* (Finet) Tang & Wang in Act. Phytotax. 1 (1) : 97. 1951; *Schoenorchis eberhardtii* (Finet) Averyanov in Bot. J. (Leningr.) 73 (1) : 107. 1988. Type: Vietnam. Langbian, Eberhardt 210 (holotype, P).

拟隔距兰

Stem arching, with persistent sheaths. Leaves articulate, terete, fleshy, up to 15 cm long, 2 mm wide. Inflorescence lateral, 5–10 cm long, unbranched, sparsely many-flowered. Bracts 2 mm long, triangular. Flowers small, white except the lilac mid-lobe of the lip. Petals similar to sepals but smaller, ovate, 2 mm long, 1 mm wide. Lip 3-lobed; mid-lobe fleshy; lateral lobes ear-shaped. Spur cylindrical, not septate, with a Y-shaped callus on the back wall. Column 2 mm long, with a short column-foot.

China. Guangxi (广西): Jingxi (靖西), Longbang (龙邦), alt. 600 m, 2001-06-04, epiphytic, in forests, HK Kadoorie PT (香港嘉道理项目队) 759 (PE).

Distribution: China (Guangxi); Vietnam.

5 Schoenorchis fragrans (Par. & Rchb. f.) Seidenf. & Smitinand in Opera Bot. 95 : 68. 1988. — *Saccolabium fragrans* Par. & Rchb. f. in J. Bot. 12 : 197. 1894. Type: Myanmar. Moulmein, Herbarium Reichenbach 19062 (holotype, W).

芳香唇兰

Small plant, 1–2 cm tall, epiphytic. Stem enclosed by dense sheaths. Leaves 5–7, oblong, fleshy, 10–20 mm long, 6–9 mm wide, obtuse. Inflorescence 10–20 cm long, pendent, with many small red-purple flowers. Sepals and petals not very spreading, keeled dorsally; sepals 2 mm long, 1 mm wide; petals 2 mm long, 0.8 mm wide. The spurred lip joint to the footless column, very fleshy, 3-lobed, 3 mm long, 1.4 mm wide. Lateral lobes vertical, fleshy, 0.9 mm long, 0.8 mm wide; mid-lobe with a large semi-globular callus. Spur at a right angle to mid-lobe, 1.5 mm long. Pollinia 4, unequal.

China. Yunnan (云南): Simao (思茅), alt. 1400 m, epiphytic, in forests, 2001-05-15, HK Kadoorie PT (香港嘉道理项目队) 659 (PE).

Distribution: China (Yunnan); India; Myanmar.

The species is similar to *S. tixieri* (Guill.) Seidenf., but differs by having callosities on the lip and the entire frontal edge of the operculum.

6 *Liparis perpusilla* Hook. f. in Hook. Ic. Pl., t. 1856B. 1889, et Fl. Brit. Ind. 5: 706. 1890; King & Pantl. in Ann. Bot. Gard. Calcutta 8: 33. 1898; Seidenfaden in Dansk Bot. Ark. 31: 91, fig. 61. 1976. Type: Sikkim. Sinchal near Darjeering, Gamble 9421 (syntype, K); Choongtang and Lachong Valley, Pantling 380 (syntype, K); Darjeeling, Clarke 26872 (syntype, K).

细瓣羊耳蒜

Pseudobulbs tufted, 2–3 mm long, 1–2 mm thick at the widest place, ovoid or oblong. Leaves 4–5, 10–15 mm long, 1–2 mm wide, linear, acute. Raceme erect, 2–4 cm long, with 5–10 yellow flowers; bracts ovate-lanceolate. Sepals elliptic-oblong, obtuse, 1-nerved, 1.1 mm long, 0.5 mm wide; petals linear, 1-nerved, 1 mm long, 0.2 mm wide; lip suborbicular, 1.1 mm long, 0.9 mm wide; disc with a U-shaped callus enclosing a nectar, and two small slightly diverging calli in front of the nectar, column short, with broad front-sided wing.

China. Yunnan (云南): Weixi (维西), alt. 2800 m, epiphytic, in forests, 2001-07-17, HK Kadoorie PT (香港嘉道理项目队) 1149 (PE).

Distribution: China (Yunnan); Nepal; Sikkim.

The species is similar in habit to *L. fissipetala* Finet, but differs by having petals not 2-lobed, and disc with a U-shaped callus enclosing the nectar.

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中国兰科二新记录属和四新记录种

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摘要 报道了中国兰科植物二新记录属和四个新记录种 胼胝体兰属 (*Biermannia* King & Pantl.) 拟隔距兰属 (*Cleisostomopsis* Seidenf.) 胼胝体兰 (*Biermannia calcarata* Averyanov) 拟隔距兰 (*Cleisostomopsis eberhardtii* (Finet) Seidenf. & Smitinand) 细瓣羊耳蒜 (*Liparis perpusilla* Hook. f.) 和芳香匙唇兰 (*Schoenorchis fragrans* (Par. & Rehb. f.) Seidenf.)

关键词 兰科; 新记录; 中国