

## 中国兰科植物四个新记录种\*

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**摘要:** 报道了中国兰科植物四个新记录种, 反瓣叉柱兰 (*Cheirostylis thailandica*), 短茎对叶兰 (*Listera brevicaulis*), 凹唇石仙桃 (*Pholidota recurva*), 绿花大苞兰 (*Sunipia annamensis*)。短茎对叶兰 (*Listera brevicaulis*) 二枚叶贴地着生, 唇瓣先端二裂, 裂片下翻并靠合; 凹唇石仙桃 (*Pholidota recurva*) 的假鳞茎圆柱形, 首尾相连, 花偏向一侧, 花序在中部向下弯, 唇瓣前端略凹陷; 绿花大苞兰 (*Sunipia annamensis*) 的花序长于叶, 唇瓣心形, 肉质, 边缘向上翻卷。

**关键词:** 反瓣叉柱兰; 短茎对叶兰; 凹唇石仙桃; 绿花大苞兰; 兰科; 新记录种; 中国

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## Four Newly Recorded Species of Orchidaceae from Yunnan, China

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**Abstract:** *Cheirostylis thailandica*, *Listera brevicaulis*, *Pholidota recurva* and *Sunipia annamensis* are recorded for the first time in China. *Cheirostylis thailandica* is characterized by its petals with recurved tips and non-adnate to dorsal sepal, two green spots at the base of epichile, non-fringed lobules and stylids slightly longer than rostellum arms. *Listera brevicaulis* differs from all its allies by having very short stem with its leaves prostrate on the ground, bilobed lip with its lobelets recurved and meeting underneath. *Pholidota recurva* is characterized by its cylindrical and superposed internodes, secund flowers and emarginated-tipped lip. *Sunipia annamensis* is easily distinguished from its relatives by its inflorescence much longer than leaves and fleshy, broadly cordate lip with upcurved edges.

**Key words:** *Cheirostylis thailandica*; *Listera brevicaulis*; *Pholidota recurva*; *Sunipia annamensis*; Orchidaceae; New records; China

During our botanical trips to Yunnan in 2004 and 2006, many new species and little known species were found. Here we report four newly recorded orchids in China.

***Cheirostylis thailandica*** Seidenf. in Dansk Bot. Arkiv bd. 32. Nr. 2: 74-75, Fig. 44. 1978. Type: Thailand. Song Thaw, Kanburi, DB 9517 (C) (反瓣叉柱兰)

**Terrestrial:** Plant about 12-25 cm tall. Rhizome swollen, 1-2 cm long, 1 cm in diam. Stem 1-3 cm long. Leaves 3-4 of very thin texture, broad lanceolate, 2-6 cm long, 1.5-2 cm wide, more or less withered at anthesis, pedicel widening to an enveloping sheathing base. Peduncle 10-20 cm long, hairy,

with 2-3 bracts; rachis short with 2-4 flowers; floral bracts lanceolate, pubescent, shorter than pedicel with ovary; Ovary and pedicel about 0.5 cm long; sepals greenish brown, about 8 cm long, hairy, connate about two thirds forming a tube, lobes triangular; petals white, slightly oblique, somewhat oblong, one veined, not adnate to dorsal sepal, tips recurved, 9 cm long, 2-2.5 mm wide, at base with a few scattered hairs; lip about 12 cm long; hypochile sac-shaped, ach half with 3-6 papillae inside; mesochile long and nearly forming a tube; epichile with two green spots at the base, bifid; lobelets flabellate, very irregularly lacinate to wavy; Column 4 mm long; stylids two, about 2.0 mm long. Rostellum arms two, about 1.5 mm long.

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**China. Yunnan (云南):** Xishuangbanna (西双版纳), alt. 1 200 m, terrestrial in the sparse forest, 2005-02-25 (flowering), X. H. Jin 6751 (KUN).

*Cheirostylis thailandica* was firstly discovered in Thailand and thought as an endemic species of Thailand (Seidenfaden, 1978). The specimens from Yunnan represented the first record of this species in China. *Cheirostylis thailandica* is a distinct species and easy distinguished from its relatives by having the petals being not adnate to dorsal sepal and recurved tips, two green spots at the base of epichile, stylids slightly longer than rostellum arms and the non-fringed lobules. During our fieldwork, we found that it was sympatric with *C. yunnanensis*. Seidenfaden (1978) stated that stylids and rostellum arms of *C. thailandica* were of same length. However, stylids were obvious longer than rostellum arm in the figure (figure 44. c and g) presented by Seidenfaden, which was also confirmed by our observation on materials from Yunnan.

**Listera brevicaulis** King & Pantling in J. Asiat. Soc. Bengal 65 (2): 126. 1896. Type: Sikkim. Lachen Valley, Pantling 394. (holotype CAL; Isotypes AMES, B, K, L, W). (短茎对叶兰)

**Terrestrial:** Plant 20–30 cm tall. Stem very short, with 1–2 tubular sheaths. Leaves 2, opposite, almost prostrate on the ground, cordate or rotund, acute, 0.5–1.5 cm long, 0.5–1.5 cm wide. Inflorescence 6–15 cm long, 3- to 8-flowered, second; peduncle 6–8 cm long, with 1–2 sheaths, pubescent; rachis pubescent, fertile bracts rhomboid; flowers uniformly green; ovary and pedicel 4–8 mm long; dorsal sepal elliptic, 4 mm long, 1 mm wide; lateral sepals oblique, ovate, acuminate, 4 mm long, 1.2 mm wide; petals narrow elliptic 3.5 mm long, 1 mm wide; lip cuneate, 6 mm long, 4 mm wide, with 2 triangular teeth on both basal sides, apex deeply bilobed; lobelets 2 mm long, 1.3 mm wide, recurved and meeting underneath; column 1.5 mm long.

**Distribution:** China, Sikkim.

**China. Yunnan (云南):** Gongshan (贡山), Bingzhongluo (丙中洛), east slope of Gaoligong Mts., alt. 3 300 m, in grassland or under dense bamboo forest, August 14, 2006, X. H. Jin 8357 (PE).

Although most of species of *Listera* from China are somewhat apically bilobed (Chen, 1999), it is easy to distinguish *Listera brevicaulis* from them by its lobelets recurved and meeting underneath.

**Pholidota recurva** Lindl. in Gen. & Sp. Orch. Pl.: 37. 1830. Type: Nepal. Wallich s.n. (K). (凹唇石仙桃)

**Epiphytic:** Pseudobulbs cylindrical, 4-ribbed, fleshy, superposed, 3–5.5 cm long, 0.6 cm in diam., with 2 terminal leaves. Leaves 2, full developed at anthesis, obovate to oblong, 4–7 cm long, 1–2 cm wide; petiole 0.5 cm long. Inflorescence synanthous, 20–30-flowered, peduncle 2 cm long, rachis down curved; floral bracts distichous, brown, 4–6 mm long, 6–8 mm

wide; flowers secund, whitish; ovary and pedicel 0.5 cm long; dorsal sepal oblong, 3 mm long, 1 mm wide; lateral sepals elliptic, 3 mm long, 1 mm wide; petals narrow elliptic, 2 mm long, 0.5 mm wide; lip 3.5–4 mm long; hypochile concave, base with 5 swollen keels, 3 mm long, 3 mm wide; epichile emarginated apically, 0.7–1 mm long, 2–2.5 mm wide; column clavate, hooded, 2 mm long.

**Distribution:** Nepal, Sikkim, Myanmar, Thailand, Vietnam and China.

**China. Yunnan (云南):** Mengla (勐腊), Yaoqu (瑶区), on tree in evergreen forest, 1 500 m, November 2, 2006, X. H. Jin 8692 (PE).

*Pholidota recurva* belongs to sect. *Articulate* by having swollen internodes superposed. *P. recurva* is related to *Pholidota articulata* Lindl. but differs from the latter by its persistent bracts, secund flowers, curve inflorescence, and emarginated-tipped lip.

**Sunnipia annamensis** (Rindl.) P. F. Hunt. in Kew Bulletin. 26 (1): 183, 1971. — *Ione annamensis* Rindl., J. Nat. Hist. Siam. Soc. 4 (3): 115, 1931. Type: Vietnam. Langbian, Boden Kloss s.n. (BM). (绿花大苞兰)

**Epiphytic:** Rhizome creeping, 2 mm in diam. Roots white, branched, arising from nodes. Pseudobulbs about 1.5 cm apart, short conical, 1.3 cm in diam, 1.7 cm long, with a terminal leaf. Leaf lanceolate, leathery, 8 cm long, 2 cm wide, obtuse and unequally bilobed. Inflorescence erect, stout, 15 cm long, 4- to 6-flowered; floral bracts oblong, 1 cm long; flowers green. Pedicel and ovary 1 cm long; dorsal sepal ovate, 1 cm long, 0.6 cm wide; lateral sepals connate along most of their margins, veins pale purple, oblique, oblong, 1.4 cm long, 0.5 cm wide; petals oblique, triangular, 0.6 cm long, 0.6 cm wide; lip broad cordate, with upcurved edges and thickened tip, veins pale purple, 0.9 cm long, 1 cm wide; column green, 0.5 cm long; pollinia 4, in two pairs, yellow, each with one stipe and viscidium.

**Distribution:** China, Thailand, Vietnam.

**China. Yunnan (云南):** Lychun (绿春), Huanglian Mts. (黄连山), epiphytic on tree trunk, 2 400 m, October 12, 2006, X. H. Jin 8545 (PE).

*Sunnipia annamensis* is a distinct species and can be easily distinguished from its relatives by its inflorescence much longer than leaves, fleshy, broadly cordate lip with upcurved edges.

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