

DOI:10.11931/guihaia.gxzw201403056

王发松 温铁龙 牛苗 等. 中国隔距兰属(兰科)一新记录[J]. 广西植物 2015 35(2):282–284

Wang FS, Wen TL, Niu M *et al.* A new record of *Cleisostoma* (Orchidaceae) from China[J]. *Guihaia* 2015 35(2):282–284

## A new record of *Cleisostoma* (Orchidaceae) from China

WANG Fa-Song<sup>1,2</sup>, WEN Tie-Long<sup>3</sup>, NIU Miao<sup>3,4</sup>, LI Lin<sup>3\*</sup>

(1. Key Laboratory of Biologic Resources Protection and Utilization of Hubei Province, Enshi 445000, China; 2. College of Chemistry and Environmental Engineering, Hubei University for Nationalities, Enshi 445000, China;

3. South China Botanical Garden, Chinese Academy of Sciences, Guangzhou 510650, China;

4. University of Chinese Academy of Sciences, Beijing 100049, China)

**Abstract:** *Cleisostoma* Bl. is an orchid genus with approximately 100 accepted species widely distributed in tropical and subtropical areas. There are about 16 species in China (4 endemic) before. *Cleisostoma aspersum* (Rchb. f.) Garay, so far known only from Yunnan, is reported from China. A detailed description and photos are provided. This species is easily distinguished from its relatives by bilobulate leaves, fat and obtuse midlobe of the lip, conical rostellum with an oblique apex, and beaked operculum. It is similar to *Cleisostoma discolor* Lindl. in floral morphology, but the latter differs by having a lip with thin spatulate truncate midlobe, with erose front edge.

**Key words:** *Cleisostoma*; *Cleisostoma aspersum*; Orchidaceae; new record; China

**CLC number:** Q949.71 **Document code:** A **Article ID:** 1000-3142(2015)02-0282-03

## 中国隔距兰属(兰科)一新记录

王发松<sup>1,2</sup>, 温铁龙<sup>3</sup>, 牛苗<sup>3,4</sup>, 李琳<sup>3\*</sup>

(1. 生物资源保护与利用湖北省重点实验室, 湖北恩施 445000; 2. 湖北民族学院 化学与环境工程学院, 湖北恩施 445000; 3. 中国科学院华南植物园, 广州 510650; 4. 中国科学院大学, 北京 100049)

**摘要:** 隔距兰属(*Cleisostoma* Bl.)是兰科植物中较大的一个属, 约有100种, 广泛分布于热带、亚热带地区。中国约有16种, 其中4种为特有。该文报道了该属—中国新记录——二齿叶隔距兰 [*Cleisostoma aspersum* (Rchb. f.) Garay] 并提供描述和照片, 目前该种仅见于云南。与近缘种类相比, 本种具有以下鉴别特征: 叶齿状二裂; 唇瓣中裂片肥厚, 前缘钝; 蕊喙圆锥状, 先端歪斜; 药帽喙状等。在花部形态上, 该种与 *Cleisostoma discolor* Lindl. 相似, 然而后者的唇瓣中裂片明显较薄, 匙状方形, 并且具有啮齿状边缘, 易于区别。

**关键词:** 隔距兰属; 二齿叶隔距兰; 兰科; 新记录; 中国

*Cleisostoma* Bl. was established by Blume (1825). This is a large genus with about 100 species and also a highly variable and heterogeneous group after clarification of much synonymy and after moving many species to some new and old genera, where fur-

ther separations may be expected (Seidenfaden, 1992; Seidenfaden *et al.*, 1992). It is widespread from Sri Lanka, India, SE Asia, Malaysia, Indonesia, Philippines, New Guinea, and Pacific Islands to Australia (Pearce *et al.*, 2002). There were about 16 species in

收稿日期: 2014-04-25 修回日期: 2014-07-18

基金项目: 国家自然科学基金 (31100149)

作者简介: 王发松 (1969-) 男, 湖北巴东人, 博士, 主要研究方向为药用植物资源与化学, (E-mail) zsuwangfasong@aliyun.com。

\* 通讯作者: 李琳, 博士, 副研究员, 主要从事植物分类学、园林植物与观赏园艺方向的研究, (E-mail) lilin@scib.ac.cn。

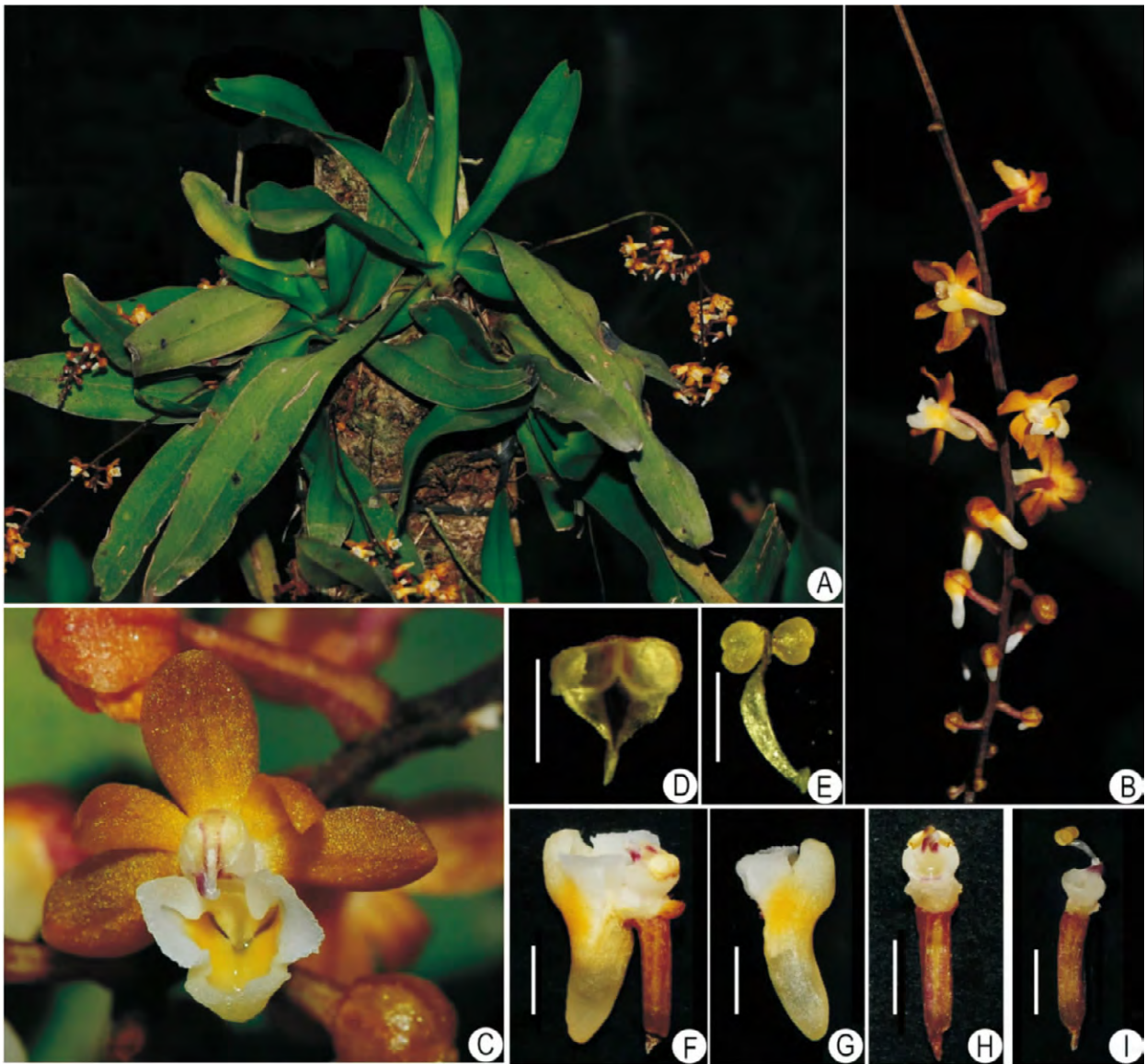


Fig. 1 *Cleisostoma aspersum* (Rchb. f.) Garay A. Habitat; B. Inflorescence; C. Front view of a single flower; D. Operculum; E. Pollinarium; F. Lateral view of column and lip; G. Lateral view of lip; H. Front view of column with anther in situ; I. Lateral view of column with anther ex situ. (D-E. Bar = 1 mm; F-I. Bar = 2 mm).

China (4 endemic) and 12 in Yunnan, China (Su, 2000; Chen *et al.*, 2009) before.

During a field tour in Yunnan Province in 2012, an orchid species was collected and introduced in the nursery of South China Botanical Garden, Chinese Academy of Sciences. In August, 2013, the species bloomed. After extensive morphological comparison, it was identified as *Cleisostoma aspersum* (Rchb. f.) Garay. Subsequently, the identity was confirmed in consultation with relevant literatures (Reichenbach, 1865; Hooker, 1890; King *et al.*, 1898; Garay, 1972; Seidenfaden, 1975; Seidenfaden, 1992; Pearce *et al.*, 2002;

Lucksom 2007) and type materials. A thorough scrutiny of literature revealed that this species was a new record to the Chinese orchid flora (Chen *et al.*, 1998; Su 2000; Chen *et al.*, 2009) and here reported.

*Cleisostoma aspersum* (Rchb. f.) Garay in Bot. Mus. Leaflet 23 (4): 164. 1972. — *Sarcanthus aspersus* Rchb. f., *Hamburger Garten-Blumenzeitung* 21: 297. 1865. Type: Myanmar, Moulmein, Veitch 39 (W, photo!).

— *Cleisostoma bicuspidatum* Hook. f., *Fl. Brit. India* 6 (1): 75. 1890. — *Stereochillus bicuspidatum* (Hook. f.) King & Pantl. in *Ann. Roy. Bot. Gard.*

Calcutta 8: 236. t. 314. 1898. Type: India, Khasia Hills *Mann* 56 (K photo!).

*Cleisostoma aspersum* (Rchb. f) Garay (Fig. 1)

A miniature to small sized epiphytic plant, 10–20 cm tall. Stem short, 1–5 cm long, branched with numerous roots at base, covered by leaf sheaths; sheaths overlapping. Leaves 7–9, coriaceous, linear-oblong, sharply and obliquely bi-lobed at apex, 6–15 cm long, 0.8–1.5 cm wide, the lobules often erose, pale-green to dark green, sheathing at base. Inflorescence 2–3, axillary, from base of leaf sheaths, 10–20 cm long, shortly branched, peduncle slender, glabrous, dark-purple, 5–12 cm long; floral bracts ovate-lanceolate, subacute, 1–1.5 mm long, distantly placed; rachis 3–10 cm long; pedicel and ovary glabrous, ribbed, 3.5–5 mm long. Flowers 6.5–8 mm across, spreading or reflexed; Sepals and petals brownish, with rose markings along midribs; dorsal sepal ovate, 3.5–4 mm long, 2–2.5 mm wide, obtuse; lateral sepals broadly elliptic, 3.8–4 mm long, 2–2.5 mm wide, recurved. Petals oblong-obovate, oblique, 3.8–3.9 mm long, 1.6–1.8 mm wide, obtuse. Lip adnate to the column, 3-lobed, ca. 3 mm long, produced to a prominent spur at base, infundibulate, fleshy, white, speckled or flushed with rose and yellow; spur ca. 4 mm long, cylindrical, parallel to the ovary; lateral lobes truncate, erose at edges; mid-lobe broadly ovate, concave, curving upwards, acute, base with 2 cushion-like calli occluding the entrance to the spur. Column short, ca. 1.5 mm long, white; rostellum large, decurved and slightly hooked at apex. Operculum cordate, depressed and beaked at apex, 1.5–1.8 mm long. Pollinia 4, orbicular, compressed, attached by pairs; stipes ca. 1.5 mm long, thickened at the middle and tapered at apex and also at base; gland small, oval. Flowering in July–August.

Distribution: Sikkim Himalayas, NE India, Bhutan, Nepal, Myanmar, Thailand and Vietnam. New re-

cord to China.

China: Yunnan), Wenshan Zhuang and Miao Autonomous Prefecture, Epiphytic on the trunk in humid sparse woods, tropical rain forest, alt. 1 020 m. 12 Feb. 2012. *L. Li* 158 (IBSC).

It is similar to *Cleisostoma discolor* Lindl., but differs by having a lip with fat midlobe directed upwards, without erose front edge.

**Acknowledgments** We thank Dr. Cao Ming (Guangxi Institute of Botany, CAS) for his help in the review of the manuscript.

### References:

- Blume CL. 1825. Bijdragen tot de Flora van Nederlandsch Indie [M]. Batavia: Ter Lands Drukkerij: 6
- Chen SC, Tsi ZH. 1998. The Orchids of China [M]. Beijing: China Forestry Publishing House: 61–62
- Chen SC, Wood JJ. 2009. Orchidaceae [M] // Wu ZY, Peter HR, Hong DY (eds). Flora of China. Beijing: Science Press; St. Louis: Missouri Botanical Garden Press 25: 458–463
- Garay LA. 1972. On the systematics of the monopodial orchids I [J]. *Bot Mus Leaf Harv Univ* 23(4): 149–212
- Hooker JD. 1890. The Flora of British India (Orchideae) [M]. London: L. Reeve & Co., The Oast House, Brook, Ashford, Kent 6: 75
- King G, Pantling R. 1898. The orchids of the Sikkim-Himalaya [J]. *Ann Roy Bot Gard (Calcutta)* 8: 236–314
- Luckson S Z. 2007. The Orchids of Sikkim and North East Himalaya [M]. Siliguri: Luckson: 812–816
- Pearce N, Cribb PJ. 2002. The orchids of Bhutan in Flora of Bhutan Vol. 3 part 3 [M]. Edinburgh: Royal Botanic Garden, Edinburgh and Royal Government of Bhutan: 507–514
- Reichenbach HG. 1865. Ueber einigen Garten-Orchideen [J]. *Hamburger Garten-und Blumenzeitung* 21: 293–301
- Seidenfaden G. 1975. Orchid genera in Thailand II: *Cleisostoma* Bl. [J]. *Dansk Bot Ark* 29(3): 1–80
- Seidenfaden G. 1992. The orchids of Indochina [J]. *Opera Botanica* 114: 385–395
- Seidenfaden G, Wood JJ. 1992. The Orchids of Peninsular Malaysia and Singapore [M]. Denmark: Olsen & Olsen: 619–631
- Su HJ, Huang TC. 2000. Flora of Taiwan (2nd edition) [M]. Taipei: Editorial Committee of the Flora of Taiwan 5: 806–808
- Tsi ZH. 1999. *Zeuxine* Lindl [M] // Lang KY, Chen SC, Luo YB (eds). Flora Republica Popularis Sinicae. Beijing: Science Press, 19: 311–330