广西植物 Guihaia May 2016, 36(5):629-631
http://journal.gxzw.gxib.cn
http://www.guihaia-journal.com

DOI: 10.11931/guihaia.gxzw201406018
杨正斌,余东莉,李剑武,等. 中国兰科异型兰属一新记录种——白花异型兰[J]. 广西植物,2016,36(5):629-631
YANG ZB, YU DL, LI JW, et al. *Chiloschista exuperei*, a new orchid addition to China from Yunnan[J]. Guihaia, 2016, 36(5):629-631

Chiloschista exuperei, a new orchid addition to China from Yunnan

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Abstract: *Chiloschista exuperei* is reported from China for the first time. This species was easy identified by its white and tongue shaped mid-lobe from other species.

Key words: *Chiloschista exuperei*, Orchidaceae, new record, China

CLC number: Q948.2 **Document code**: A **Article ID**: 1000-3142(2016)05-0629-03

中国兰科异型兰属一新记录种——白花异型兰

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摘 要: 报道了中国兰科一新记录种,白花异型兰 *Chiloschista exuperei* (Guillaumin) Garay。该种由于其花的颜色为白色、唇瓣中裂片基部具球状、密被毛的胼胝体而明显不同于该属内其它种。

关键词: 白花异型兰, 兰科, 新记录, 中国

Chiloschista Lindley (Orchidaceae, Aeridinae) is a genus of epiphytes and known as "plants without leaves", well presented from the Indian subcontinent through SE Asia to Australia. This genus including about 10 species and 3 species had been so far found in China (Chen & Wood, 2009). The following described species is a new record of *Chiloschista* for China.

Chiloschista exuperei (Guillaumin) Garay. in Bot. Mus. Leafl. 23: 166. 1972.——*Taeniophyllum exuperei* Guillaumin. in Bull. Mus. Hist. Nat. Paris, sér. 2, 29: 346. 1957. 白花异型兰(新拟)(Fig. 1)

Stem inconspicuous, with long flattened roots, leafless. Inflorescences 1-3, pendulous, densely pubescent, racemose, (7-10) cm, laxly 4-8 flowered; peduncle and rachis densely pubescent; floral bracts 2.8 mm, ovate-lanceolate, glabrous, membranous, acute. Flowers white, with brownish red stripes between the two lateral lobes; pedicle and ovary 4.5 mm, pubescent. Dorsal sepal nearly broadly elliptic, 5.4 mm × 3.3 mm, sparsely pubescent abaxially, subobtuse; lateral sepals slightly oblique, broadly ovate or elliptic, 5.1 mm × 3.1 mm, sparsely pubescent near abaxial base; petals

收稿日期: 2014-06-13 **修回日期**: 2014-07-31
基金项目: 国家自然科学基金(Y2GJBZ1B01);云南省自然科学基金(2013FB080)[Supported by the National Natural Science Foundation of China (Y2GJBZ1B01); Natural Science Foundation of Yunnan (2013FB080)]。
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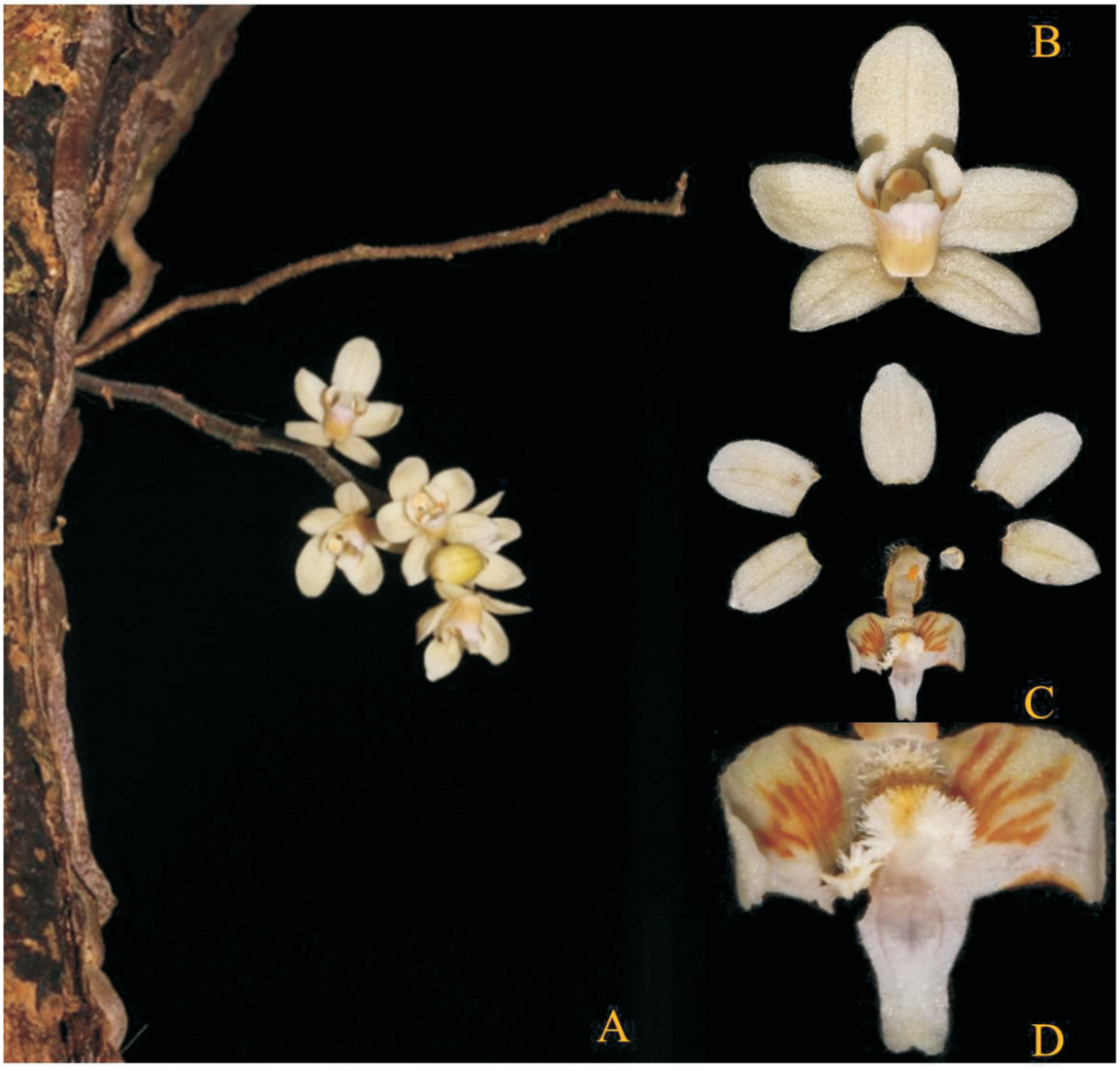

Fig. 1 *Chiloschista exuperei* (Guillaumin) Garay identification key of *Chiloschista* **A.** Plant; **B.** Flower; **C.** Flower of anatomy; **D.** Lip.

suboblong, 5.4 mm × 3.1 mm, obtuse; lip 3-lobed, lateral lobes erect, falcate-oblong, rounded, 4.4 mm × 2.3 mm; mid-lobe tongue shaped, 2.3 mm × 0.9 mm, base with a globular callus, densely pubescent. Column ca. 2.0 mm, foot ca. 2 mm, anther cap with 2 filiform appendages on both sides. Flowering time: May.

Distribution: Thailand, Vietnam, Cambodia, Laos, China.

China. Yunnan: Menghai, epiphytic on trunks in monsoon evergreen broad leaved forest, 1 200 m, 2014-05-16, LIU Qiang 158 (HITBC).

1a. Flower color white and tongue shaped mid-lobe ····· *C. exuperei*

1b. Flowercolor yellow or white green, mid-lob not tongue shaped

2a. Sepals and petals densely pubescent abaxially; inflorescences to 26 cm ····· *C. yunnanensis*

2b. Sepals and petals nearly glabrous or only sparsely pubescent abaxially; inflorescences (1.5–15) cm.

3a. Mid-lobe of lip conspicuous, much longer than lateral lobes ····· *C. guangdongensis*

3b. Mid-lobe of lip very small, much shorter than

lateral lobes ····· *C. segawae*

Chiloschista exuperei was first named by Guillaumin in 1957, and was categorized into the *Taeniophyllum* genus. Until the 1972, Garay believed that it should belong to *Chiloschista* genus (Seidenfaden, 1992). This species was easy identified by its white color and tongue shaped mid-lobe from other species. We only found it in the serious-fragmented forest (Holly Hill of Dai people) and roadside. Along with fast expansion of rubber and tea plantations in the recent years, the habitat of this species was gradually encroached, and its survival was under severe threat.

Reference:

CHEN SC, WOOD JJ, 2009. *Chiloschista* Lindley[M]//WU ZY, RAVEN PH, HONG DY (eds). Flora of China. Beijing: Science Press; St. Louis: Missouri Botanical Garden Press, 25: 470-471.

SEIDENFADEN G,1992. The orchids of Indochina[J]. Opera Bot, 114:502.

(上接第 614 页 Continue from page 614)

其干预措施研究[D]. 北京:北京中医药大学:19-26.]

WU ZW, WANG MD, LIU XY, et al, 2009. Phenolc compounds accumulation in continuously cropped *Rehmannia glutinosa* soil and their effects on *R. glutinosa* growth [J]. Chin J Ecol, 28 (4):660-664. [吴宗伟,王明道,刘新育,等,2009. 重茬地黄土壤酚酸的动态积累及其对地黄生长的影响 [J]. 生态学杂志,28(4):660-664.]

XUAN XL, CHEN MY, MA SM, 2012. Effects of ABA on biochemical parameters of normal and irregular leaves of *Bougainvillea spectabilis* [J]. Guihaia, 32(6):806-809. [玄晓丽,陈梦怡,马三梅,2012. ABA 对叶子花正常叶和变态叶部分生理生化指标的影响 [J]. 广西植物,32(6):806-809.]

YAN JA, BI HH, LIU YZ, et al, 2010. Phenolic compounds from *Merremia umbellata* subsp. *orientalis* and their allelopathic effects on *Arabidopsis* seed germination [J]. Molecules, 15(11):8 241-8 250.

YOU PJ, WANG WQ, ZHANG Y, et al, 2009a. Allelopathic effects of extracts from root-zone soil of *Panax notoginseng* on notoginseng's seedlings [J]. SW Chin J Agric Sci, 22(2):308-310. [游佩进,王文全,张媛,等,2009a. 三七根区土壤提取物对三七幼苗的化感作用 [J]. 西南农业学报,22(2):308-310.]

YOU PJ, WANG WQ, ZHANG Y, et al, 2009b. Allelopathic effects of continuous cropping soil of *Panax notoginseng* on notoginseng and Lettuce [J]. Acta Agric Boreal-Occidental Sin, 18(1):139-142. [游佩进,王文全,张媛,等,2009b. 三七连作土壤对三七、莴苣的化感作用 [J]. 西北农业学报,18(1):139-142.]

YOU PJ, ZHANG Y, WANG WQ, et al, 2009c. Allelopathic effects of continuous cropping soil of *Panax notoginseng* on seed and seedling of some vegetables [J]. Mod Chin Med, 11(5):12-13. [游佩进,张媛,王文全,等,2009c. 三七连作土壤对几种蔬菜种子及幼苗的化感作用 [J]. 中国现代中药,11(5):12-13.]

ZHAN JH, LAN ZH, 2011. Effects of flooding on some physiological indexes of *Panicum repens* [J]. Guihaia, 31(6):823-826. [詹嘉红,蓝宗辉,2011. 水淹对铺地黍部分生理指标的影响 [J]. 广西植物,31(6):823-826.]

ZHANG XW, LIU YX, LIU WX, et al, 2007. Allelochemicals and its releasing modes [J]. Chin Agric Sci Bull, 23(7):295-297. [张学文,刘亦学,刘万学,等,2007. 植物化感物质及其释放途径 [J]. 中国农学通报,23(7):295-297.]

ZHANG YJ, 2009. The progress of pharmacological research of *Panax notoginseng* total saponin [J]. Guangxi Med J Apr, 31(4): 589-591. [张玉军,2009. 三七总皂苷的药理研究进展 [J]. 广西医学,31(4):589-591.]

ZHANG ZL, HOU JL, WANG WQ, et al, 2014. Allelopathic effects of aqueous extracts from *Panax notoginseng* on three maize varieties (Zea mays) [J]. Chin J Chin Mat Med, (4):594-596. [张子龙,侯俊玲,王文全,等,2014. 三七水浸液对不同玉米品种的化感作用 [J]. 中国中药杂志,(4):594-596.]

ZHANG ZL, WANG WQ, YANG JZ, et al, 2010. Effects of continuous *Panax notoginseng* cropping soil on *P. notoginseng* seed germination and seedling growth [J]. Soils, 42(6):1 009-1 013. [张子龙,王文全,杨建忠,等,2010. 三七连作土壤对其种子萌发及幼苗生长的影响 [J]. 土壤,42(6):1 009-1 013.]

ZHANG ZY, LIN WX, 2009. Continuous cropping obstacle and allelopathic autotoxicity of medicinal plants [J]. Chin J Eco-Agric, 17 (1):189-196. [张重义,林文雄,2009. 药用植物的化感自毒作用与连作障碍 [J]. 中国生态农业学报,17(1):189-196.]

ZHOU JM, ZHANG WB, YANG JZ, et al, 2012. Preliminary isolation and identification of allelopathy from the rhizosphere soil of *Panax notoginseng* (Buck) F. H. Chen [J]. Chin Med J Res Prac, 26(1):14-16. [周家明,张文斌,杨建忠,等,2012. 三七根际土壤化感物质的初步分离鉴定 [J]. 现代中药研究与实践,26(1):14-16.]

ZHU L, MA N, CUI XM, et al, 2014. Analysis of volatile components in planting soil and crop residues of *Panax notoginseng* [J]. Chin Med J Res Prac, 28(1):3-5. [朱琳,马妮,崔秀明,等,2014. 种植三七土壤及植株残体挥发性成分分析 [J]. 现代中药研究与实践,28(1):3-5.]