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Chloranthus henryi Hemsl. (Chloranthaceae), a New Record to the Flora of Taiwan

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ABSTRACT: *Chloranthus*, a genus of the Chloranthaceae, comprises about 18 species in the world. In addition to the previously recorded *C. oldhami* in Taiwan, *C. henryi* is a new addition to the flora. It is easy to distinguish *C. oldhami* from *C. henryi* by the shape of stamen apices, and the existence or absence of styles. In the present work, a key to distinguish the genus *Chloranthus* in Taiwan, a line drawing, photographs, and distribution of *C. henryi* are provided.

KEY WORDS: Chloranthaceae, *Chloranthus henryi*, New record, Taiwan, Taxonomy.

INTRODUCTION

Chloranthus Swartz, a genus of the Chloranthaceae comprising about 18 species in the world, is distributed in the subtropical and tropical Asia (Todzia, 1993; Mabberley, 1997). Previously, there is only one species, i.e., *C. oldhami* Solms., recorded in Taiwan (Liu, 1976, 1996). In the course of our botanical inventory, *C. henryi* Hemsl. was found as a new record. In contrast to the widespread *C. oldhami*, *C. henryi* is restrictedly distributed in the eastern part of the island. The newly recorded species can be easily distinguished from *C. oldhami* by the acute stamen apices and the absence of styles. On the contrary, conspicuous styles and obtuse stamen apices characterize *C. henryi*. Moreover, all of the four sporangia lie closely in *C. henryi*, while two pairs sporangia are slightly separated in *C. oldhami*. This study provides a key to distinguish the genus *Chloranthus* in Taiwan.

Key to the species of *Chloranthus* in Taiwan

1. Style conspicuous; stamen apex obtuse ……..… *C. oldhami*
1. Style absent; stamen apex acute …… *C. henryi*

Chloranthus henryi Hemsl., J. Linn. Soc. Bot. **26**: 367. 1891; Wu, Fl. Reip. Pop. Sin. **20(1)**: 92. *pl. 28: 9-13*. 1982. 寬葉金粟蘭 Figs. 1-3

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Fig. 1. *Chloranthus henryi* Hemsley. A: Habit. B: Branch. C: Infructescence.

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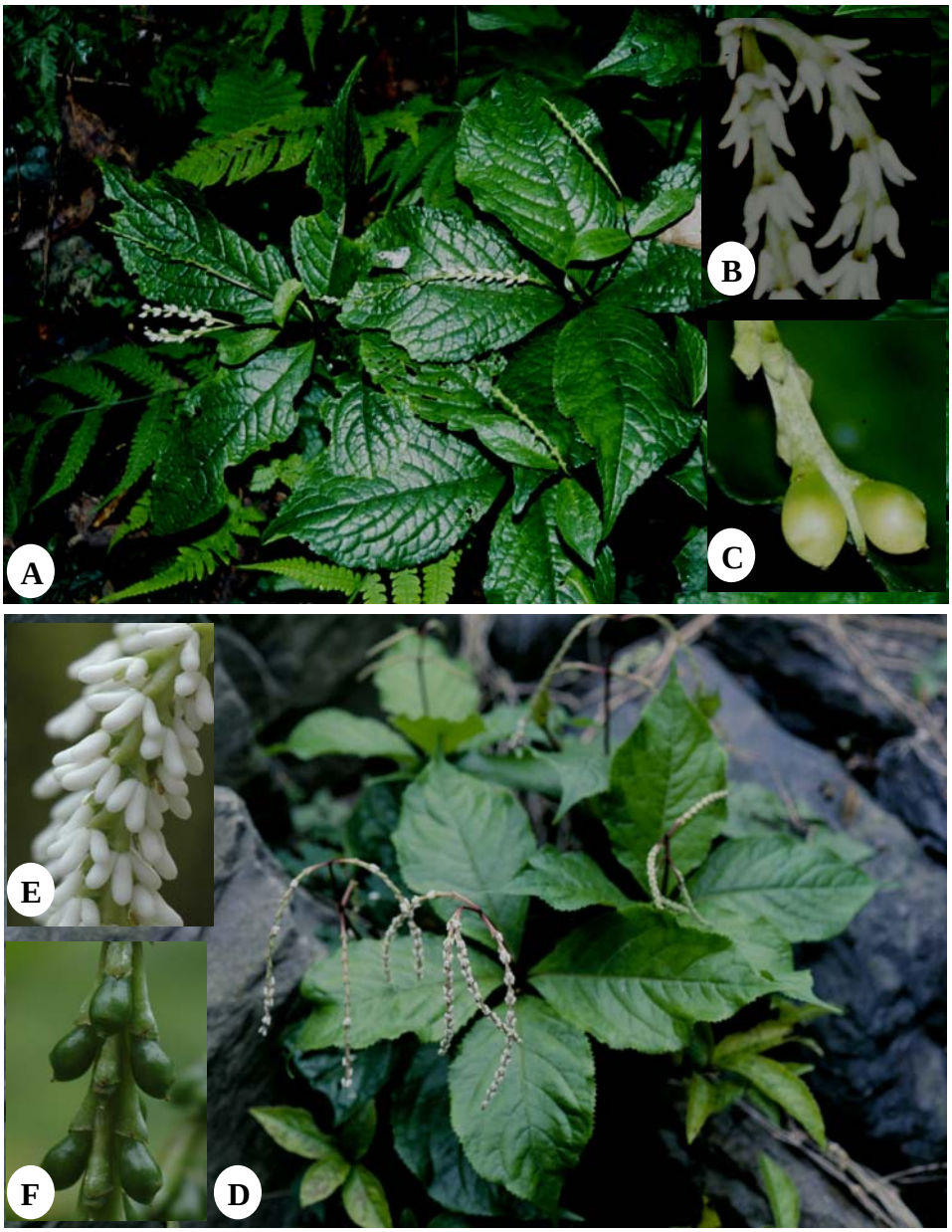


Fig. 2. *Chloranthus henryi* Hemsley (A-C). A: Habit. B: Part of infructescence. C: Fruits. *Chloranthus oldhami* Solms. (D-F) D: Habit. E: Part of inflorescence. F: Fruits.

Lectotype: Hupeh: Ichang, *A. Henry 3447* (K!).
Syntypes: Hupeh: Nanto and mountains to the northward, *A. Henry 3920* (K!), Patung, *A. Henry 5402* (K!), Ichang, *A. Henry 4072* (K!); Szechuen: South Wushan, *A. Henry 7719* (K!), *5402B* (K!)

Herbs, about 40 cm in height, glabrous. Leaves opposite, usually 4 on apical part of stem; petiole 1-2 cm; leaf blade broadly obovate, 12-15 cm long, 6-8 cm wide, base acute, apex acuminate, margin serrate; lateral veins 6-9 pair terminal, usually dichotomously or racemosely branched;s. Spikes peduncle 2.5-4.0 cm; bract 1. Flowers white; stamens 3, base nearly free, central connective 2.0-2.5 mm, with a 2-loculed anther, lateral connective slightly shorter, each with a 1-loculed anther, apex acute, thecae at base of connectives. Ovary ovoid, style absent, stigma capitate.

Specimens examined: Hualien: Hsiulin Hsiang, Taroko National Park, on the way from Kokou to Tali, *Chen et al. 1664* (HAST); Mt. Chingshuishan, *Ou et al. s. n.*, 9 May 1988 (TNM), *Yang et al. 13213* (TNM), *13193* (TNM); Lanshan, *Sun* 232 (TESRI).

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Fig. 3. Syntype of *Chloranthus henryi* Hemsl. (RBG, Kew).

Distribution and taxonomic notes: Morphologically, *C. henryi* and *C. oldhami* are well differentiated. Conspicuous styles and obtuse-apex stamens in *C. oldhami* are distinct from the acute-apex stamens and hardly differentiated style in *C. henryi*. In addition, individual lobes of the androecium in *C. henryi* and *C. oldhami* are completely free from one another and each lobe, whereas differing in genera outline in the two species. In *C. henryi* all the four sporangia lie closely together, while in *C. oldhami* the two pairs are slightly separated (Swamy, 1953). Verdcourt (1986) described a wide distribution of *C. henryi*, with a range in China and the Philippines. In contrast, as questioning the disjunct distribution pattern, Kong (2000) treated *C. henryi* as a species endemic to China, with a distribution widely in the

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central region (Provinces Shaanxi and Gansu), east coasts (Provs. Anhui, and Zhejiang) and the south region (Provs. Jiangxi, Hunan, Hubei, Sichuan, Guizhou, Guangdong, Guangxi, Hainan and Yunnan), while identified the Philippine species as *C. oldhami* Solms. The populations of eastern Taiwan therefore represent the eastern limited distribution of *C. henryi*.

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臺灣金粟蘭科新紀錄植物－寬葉金粟蘭

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摘　　要

金粟蘭屬約有 18 種，為金粟蘭科的第二大屬，根據第二版臺灣植物誌之記載，臺灣產之金粟蘭屬植物僅有一種－臺灣及己 (*Chloranthus oldhami* Solms.)，泛分布於全島中海拔。本文報導在臺灣本島首次發現之本屬新紀錄種－寬葉金粟蘭 (*C. henryi* Hemsl.)，並提供描述、檢索表、照片及繪圖。

關鍵詞：金粟蘭科、寬葉金粟蘭、新紀錄、臺灣、分類。

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