

***Amitostigma monanthum* (FINET) SCHLECHTER, 1919**

单花无柱兰

Published in *Feddes Repertorium Specierum Novarum Regni Vegetabilis, Beihefte, Band 4, Orchideologiae Sino-Japonicae Prodomus*: 94. 1919.

Based on *Peristylus monanthus* Finet, *Revue générale de Botanique* 8: 523, 1901.

A synonym is *Amitostigma nivale* Schlechter, *Acta Horti Gothoburgensis* 1: 132. 1924. The type was collected by Harry Smith in Huanglong 1922.

On the Xueshanliang, the pass leading to Huanglong, the tiny species has so far only been seen with small white flowers of about 7-8 mm diameter and with magenta spots on the lip. In other places in the Minshan the flowers are usually a little bigger and often pale pink to magenta with dark magenta spots on the lip. The plant carries a single leaf, has small tuber of 5 mm diameter and is single flowered. It grows usually in alpine meadows and in grassy patches between open shrubs at altitudes from 3100 to 3600 m. The plant is 5-10 cm tall and the flower has a diameter of 7-12 mm.

Flowering: June early July.

在通向黄龙的山梁雪山梁上，就生长着单花无柱兰这种纤小的植物。它的花为白色，直径很小只有约7-8毫米大，唇瓣上具有红紫色斑点。而在岷山的其他地方，该种的花通常会稍大一些，花色为暗粉色或红紫色，唇瓣上有暗红紫色斑点。单花无柱兰只有一片叶，地下具有小块茎，直径约为5毫米，植株顶部着生一朵花。该种通常生长在高山草甸和开阔灌木丛间的草地上，海拔在3100到3600米。植株一般高5-10厘米，花直径为7-12毫米。

花期：6月至7月初。



Amitostigma monanthum, Huanglong, alt. 3600 m, 2002.06.17





Cypripedium flavum, Huanglong, alt. 3110 m, 2004.06.13



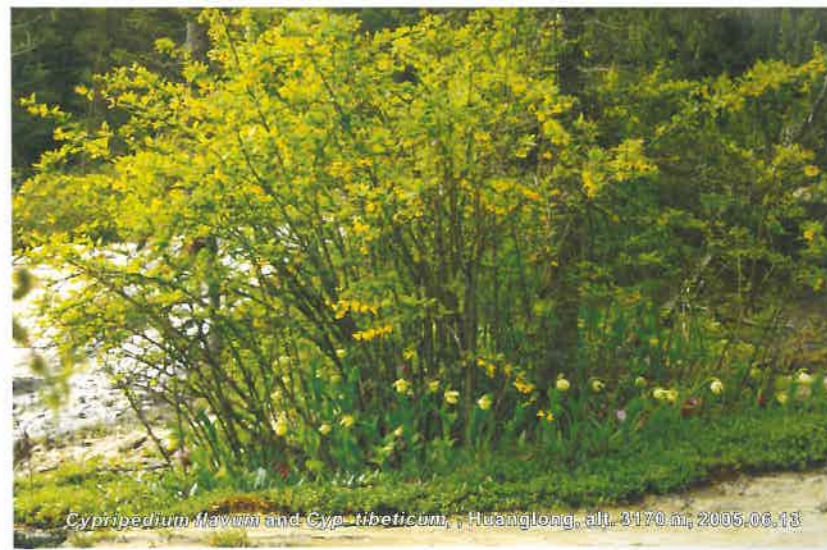
Cypripedium flavum, Huanglong, alt. 3110 m, 2004.06.13



Cypripedium flavum, Huanglong, alt. 3160 m, 2002.06.18



Cypripedium flavum and *Cypripedium tibeticum* (center), Huanglong, alt. 3190 m, 2003.06.23



Cypripedium flavum and *Cypripedium tibeticum*, Huanglong, alt. 3170 m, 2005.06.13



Cypripedium flavum, Huanglong, alt. 3160 m, 2002.06.08



Cypripedium flavum (double flower), Jiuzhaigou county, alt. 2950 m, 2002.06.16



Cypripedium flavum, Huanglong, alt. 3100 m, 2006.06.15



Cypripedium flavum, Huanglong, alt. 3160 m, 2003.06.23



Cypripedium flavum, Huanglong, alt. 3160 m, 2003.06.23



Cypripedium flavum, Huanglong, alt. 3120 m, 2005.06.13



Cypripedium flavum, Jiuzhaigou, alt. 2700 m, 2002.06.14



Cypripedium flavum (left) and *Cypripedium bardolphianum* (right), Huanglong, alt. 3190 m, 2003.06.23



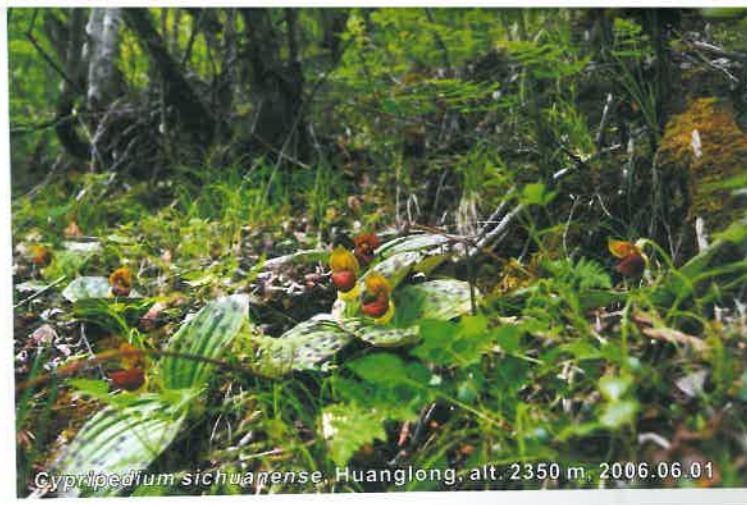
Cypripedium sichuanense, Huanglong, alt. 2350 m, 2006.06.01



Cyp. sichuanense, Huanglong, alt. 2350 m, 2006.06.01



Cypripedium sichuanense, Huanglong, alt. 2040 m, 2006.05.17



Cypripedium sichuanense, Huanglong, alt. 2350 m, 2006.06.01



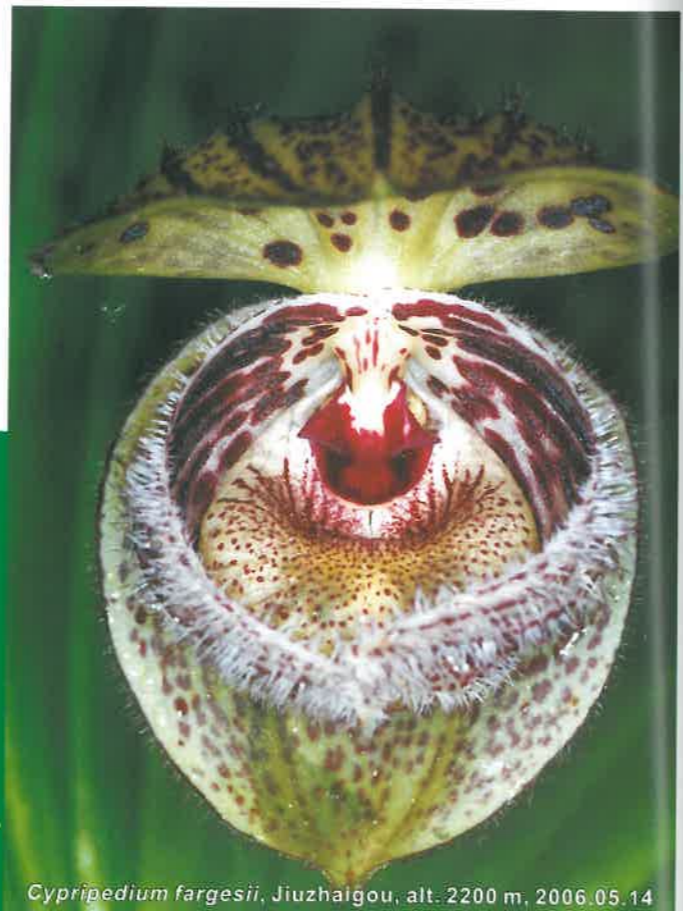
Cypripedium sichuanense, Huanglong, alt. 2400 m, 2006.06.02



Cypripedium sichuanense, Huanglong, alt. 2340 m, 2004.06.14



Cypripedium fargesii, Jiuzhaigou, alt. 2200 m, 2006.05.14



Cypripedium fargesii, Jiuzhaigou, alt. 2200 m, 2006.05.14



Cypripedium sichuanense, Huanglong, alt. 2360 m, 2005.09.01



Cypripedium sichuanense, Huanglong, alt. 2340 m, 2004.06.14



Cypripedium sichuanense, Huanglong, alt. 2040 m, 2004.05.09

***Ponerorchis schlechteri* PERNER & Y.B. LUO, nomen novum**

施氏小蝶兰

Basionym is *Orchis crenulata* Schlechter, 1924, published in Fedde, F.: *Repertorium Specierum Novarum Regni Vegetabilis*. 19: 373. 1924; not *Orchis crenulata* J.E. Gilbert, 1792, published in *Exertia Phytologia*, vol. 2, 1792.

Synonyms are *Ponerorchis crenulata* (Schlechter) Soó, 1966, published in *Acta Botanica Academiae Scientiarum Hungaricae* 12: 353. 1966; and *Chusua crenulata* (Schlechter) P.F. Hunt, 1972, published in *Kew Bulletin* 26: 171. 1972.

Plants collected 1910, under the number Forrest 5786, by George Forrest in the 'Lijiang Range', which refers to the Yulongxueshan, Lijiang, Northwest Yunnan, were used by Schlechter as type material for his *Orchis crenulata*. We have examined herbarium specimens of the original Forrest collection, No. 5786, deposited at the Herbarium, Institute of Botany, Chinese Academy of Science, Beijing, and find them identical to plants common on the Xueshanliang, i.e. the pass above Huanglong. Schlechter's *Orchis crenulata* is predated by *Orchis crenulata* Gilbert, 1792, a synonym of *Orchis morio* Linnaeus, 1753, today classified as *Anacamptis morio* (Linnaeus) R.M. Bateman, Pridgeon & M.W. Chase, 1997. No other validly published taxon for Schlechter's *O. crenulata* could be traced and therefore we have to establish a new name for the species: *Ponerorchis schlechteri* Perner & Y.B. Luo, commemorating Rudolf Schlechter, a German botanist who dedicated a considerable amount of his work to the orchids of Southwest China and has contributed lasting to the knowledge on the orchids of Huanglong. *P. schlechteri* inhabits rocky alpine meadows on the Xueshanliang at altitudes between 3800-4000 m and can in places form small colonies. The plant usually reaches a height of 2.5-3 cm above the ground cover, the total height is 5.5-6 cm. The two leaves are 2.5-3.5 cm long and the single flower dominating the entire plant has a diameter of 1.5-2.5 cm.

Flowering: June.

施氏小蝶兰的标本是乔治·富雷斯特定于1910年在丽江地区采集的，标本号为5786。丽江地区指的就是现在云南西北部的丽江玉龙雪山。当时鲁道夫·施勒希特将这一标本作为齿缘红门兰*Orchis Linnaeus*的模式标本。我们对存放在中国科学院植物研究所标本馆中乔治·富雷斯特定5786号标本进行研究，发现该标本上的植株与生长在进入黄龙通道的雪山梁一带的兰花很相似，这种兰花在这一带十分普遍。鲁道夫·施勒希特在1924年命名的齿缘红门兰比吉尔伯特在1792年用同样名字命名的一种兰花要晚。吉尔伯特命名的齿缘红门兰*Orchis crenulata* Gilbert, 1792是欧洲产的一种红门兰属植物*Orchis morio* Linnaeus, 1753的异名，而这种红门兰现在的分类名字应该是*Anacamptis morio* (Linnaeus) R.M. Bateman, Pridgeon & M.W. Chase, 1997（注：红门兰属*Orchis* Linnaeus, 1753和*Anacamptis* Richard, 1818两个属均产于欧洲，我国没有分布）。这样一来，鲁道夫·施勒希特发表的齿缘红门兰这个名称就没有任何一个有效的名称与其对应，因此我们就建立一个新名称来与鲁道夫·施勒希特的齿缘红门兰相对应。这就是施氏小蝶兰。鲁道夫·施勒希特是一位德国植物学家，在他的一生中，他十分关注中国西南地区的兰科植物，特别是黄龙的兰科植物。为了纪念鲁道夫·施勒希特作出的杰出贡献，在本书中我们将生长在黄龙雪山梁的这种兰科植物命名为施氏小蝶兰*Ponerorchis schlechteri* Perner & Y.B. Luo。在雪山梁，施氏小蝶兰生长在海拔3800-4000米的多石高山草甸中，通常会形成小群落。植株距地面高2.5-3厘米，整个植株高为5.5-6厘米。叶片两枚，长2.5-3.5厘米，花序顶生，具一朵花，花直径1.5-2.5厘米。

花期：6月。



Rudolf Schlechter in the herbarium of the Botanical Museum, Berlin, 1909. Photo courtesy Botanical Garden and Botanical Museum, Berlin/Dahlem, Free University Berlin



Ponerorchis schlechteri, Huanglong, alt. 3900 m, 2002.06.17



Ponerorchis schlechteri, Huanglong, alt. 3890 m, 2005.06.14