Peliosanthes pachystachya, a new species of the Liliaceae from Yunnan, China

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Abstract Peliosanthes pachystachya W. H. Chen & Y. M. Shui, a new species of Liliaceae from Lüchun County, SE Yunnan, is described and illustrated. The new species is similar to P. sinica Wang & Tang in the stolon with internodes ca. 18 cm long, but different by leaves 9-13-nerved, pedicels 9-10 mm long, not bracteolate and perianths ovate-triangular. The new species is also similar to P. ophiopogonoides Wang & Tang in the ovate-triangular perianths and lanceolate bracts, but different from it in having long stolons, leaves 9-13-nerved, pedicels 9-10 mm long, scape and inflorescence shorter.

Key words Peliosanthes Andr., P. pachystachya W. H. Chen & Y. M. Shui, new species, Yunnan, China.

In the course of identifying the specimens collected by Yunnan Forestry School during a botanical expedition made during 5-9 January in 2000 to Lüchun County, SE Yunnan, a specimen of the genus *Peliosanthes* Andr., Liliaceae, Lüchun Group of Yunnan Forestry School 2025, drew our attention. At the first glance this specimen is similar to P. *sinica* Wang & Tang in having stolons with internodes ca. 18 cm long, but differs in several other characters, such as the number of the foliar nerves, the length of pedicels, the absence of bracteoles on the pedicels as well as the length of the scape and the inflorescence. A detailed examination of the specimen has shown that it represents a hitherto undescribed species.

Peliosanthes pachystachya W. H. Chen & Y. M. Shui, sp. nov. Fig. 1

粗穗球子草

Species P. sinicae Wang & Tang similis, sed foliis 9 - 13-nervatis, pedicellis 9 - 10 mm longis, ebracteolatis, perianthiis ovato-triangulatis valde differt.

Herba perennis; stolones circ. 30 cm longi, nodis conspicuis, internodiis 17 – 18 cm longis, vaginis 4 – 5 dissitis tubulosis membranaceis. Folia 2 – 3 caespitosa in quoque nodo, chartacea, oblonga vel elliptico-lanceolata, margine integra, 15 – 19 cm longa, 3.5 – 4.6 cm lata, apice longe acuminata, basi in petiolum cuneatum angustata, utrinque glabra; nervi plicati 9 – 13 prominuli, nervulis transversis conspicuis; petioli 14 – 16 cm longi, basi plerumque vaginis membranaceis anguste oblongis 1.4 – 2.5 cm longis, 0.4 – 0.8 cm latis instructi. Scapus circ. 5.5 cm longus. Racemus circ. 4.5 cm longus, petiolo multo brevior. Flores solitarii in axillis bracteae; bracteae submembranaceae, 1.5 – 1.6 cm longae, 1 – 2 mm latae; bracteola solitaria 1.8 – 2.1 mm longa plerumque ex axilla bracteae oriens; pedicelli 0.9 – 1 cm longi, superne articulati, bracteis breviores vel eis subaequilongi; perianthii purpurei, parte dimidia inferiore in tubum connati, superiore parte liberi, lobis 6, 2-verticillatis, ovato-triangulatis, 1.9 – 2.1 mm longis; stamina 6, antheris circ. 0.4 mm longis, oblongis, basifixis, introrsum dehiscentibus, filamentis in annulum carnosum

Received: 30 August 2002 Accepted: 6 March 2003

Supported by the Natural Science Foundation of Yunnan Province, China (2001C22Q).

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circ. 2 mm altus connatis; ovarium semi-inferum, 3-loculare; stylus circ. 0.6 mm longus, stigmate 3-lobato terminalis. Fructus ignoti. Fl. Jan.

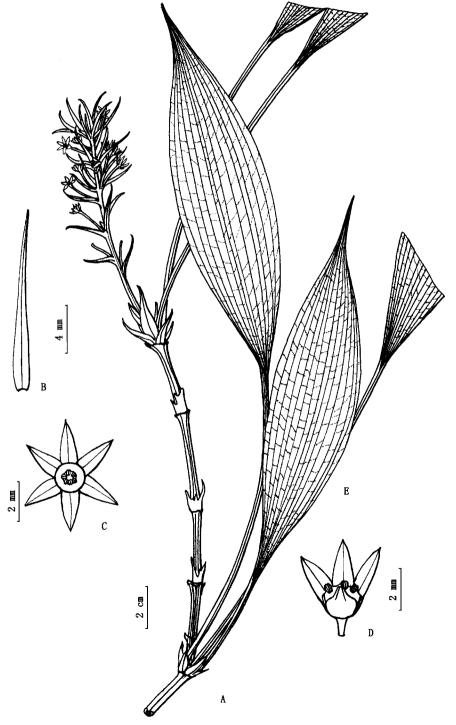


Fig. 1. Peliosanthes pachystachya W. H. Chen & Y. M. Shui. A, habit; B, bract; C, flower from top view; D, flower from lateral view; E, leaf lobe. Drawn by L. WANG from the type gathering, Lüchun Group of Yunnan Forestry School 2025.

China. Yunnan (云南): Lüchun (绿春), Qimaba(骑马坝), Mayuqiao bridge (玛玉桥), riverside, 2001-01-08, flowers purple, Lüchun Group of Yunnan Forestry School (云南省林业学校绿春班) 2025 (holotype, here designated, KUN; isotype, YFS).

Herbs perennial; stolons ca. 30 cm long, nodes conspicuous, internodes 17-18 cm long with 4-5 distant tubular membranous sheaths. Leaves 2-3 caespitose at each node, chartaceous, oblong or elliptic-lanceolate, margin entire, 15-19 cm long, 3.5-4.6 cm wide, apex long acuminate, base decurrent into cuneate petiole, glabrous on both surfaces; nerves prominent on both surfaces, transverse veins obvious. Petiole 14-16 cm long, base sheathed; sheaths narrowly oblong, 1.4-2.5 cm long, 0.4-0.8 cm wide. Inflorescence together with scape ca. 10 cm long, much shorter than petiole; scape ca. 5.5 cm long. Flowers solitary in each bract. Bracts membranous and narrowly-lanceolate, 1.5-1.6 cm long, 1-2 mm wide, bractlet 1 inside each bract, 1.8-2.1 mm long. Pedicel 0.9-1 cm long, articulate in the upper part, shorter than or as long as bracts. Perianths purple, connate into a tube at the lower part, free at the upper part; lobes 6, 2-whorled, ovate-triangular, 1.9-2.1 mm long. Stamens 6; anthers oblong, ca. 0.4 mm long, basifixed, inwardly dehiscent; filaments carnose forming a ring 2 mm high; ovary partly free from tube of perianths, semi-inferior, 3-lobed. Fruits unknown. Fl. Jan.

The new species is only known in type locality, e.g. Lüchun County, Yunnan Province. It grows at riverside along the deep valley with many large rocks from 850 to 1000 m alt. The vegetation belongs to limestone seasonal rainy forests with the dominant species (*Dipterocarpus retusus Bl.* and *Crypteronia paniculata Bl.*) and the companion species (*Homalium ceylanicum* var. *laotica* and *Madhuca pasquieri* (Dubard) Lam).

The new species is similar to P. sinica Wang & Tang in having stolons with internodes ca. 18 cm long, but different from it in having leaves 9-13-nerved, pedicels 9-10 mm long, not bracteolate and perianths ovate-triangular. In the latter species, the leaves are 7-nerved, the pedicles 3 mm long, the bractlets lacking, and the perianths ovate. The new species is also similar to P. ophiopogonoides Wang & Tang in the ovate-triangular perianths and lanceolate bracts, but different from it in having long stolons, leaves 9-13-nerved, pedicels 9-10 mm long, internodes 17-18 cm long, scape and inflorescence shorter. In the latter species, the stem is short, the leaves are 5-nerved, the pedicles 2-3 mm long, internodes 2-3 cm long, the cymas 7-15 mm long and scapes 15-30 mm long.

Acknowledgements We are very thankful to Ms. SHENG Jia-Shu, Mr. LI Jian-Dian and Mr. LIANG Tun, Yunnan Forestry School, for their help in the field work. We thank Ms. WANG Ling for her drawing.

云南百合科球子草属一新种——粗穗球子草

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摘要 对中国云南百合科—新种——粗穗球子草 Peliosanthes pachystachya W. H. Chen & Y. M. Shui 进行了描述和绘图。该新种的匍匐茎具长约 18 cm 的节间,与匍匐球子草 P. sinica Wang & Tang 接近,但因叶具 9 – 13 条叶脉,花梗长 9 – 10 mm,无小苞片,花被片卵状三角形而明显不同。该新种因花被片卵状三角形,苞片披针形,也近似于长苞球子草 P. ophiopogonoides Wang & Tang,但匍匐茎长,叶具 9 – 13 条叶脉,花梗长 9 – 10 mm,花葶和花序均较短而不同。

关键词 球子草属;粗穗球子草;新种;云南;中国