

中国爵床科一新组合——尾叶爵床

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摘要: 尾叶纤穗爵床(*Leptostachya caudatiflora* H. S. Lo & D. Fang)的花药下方一室基部具距, 应为爵床属植物, 提出1个新组合——尾叶爵床(*Justicia caudatifolia* (H. S. Lo & D. Fang) Z. P. Hao, Y. F. Deng & T. Daniel), 而纤穗爵床属仍为单种属。

关键词: 爵床科; 中国; 爵床属; 纤穗爵床属

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Justicia caudatifolia, A New Combination in Chinese Acanthaceae

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Abstract: While preparing a treatment of Acanthaceae for the forthcoming *Flora of China*, *Leptostachya caudatifolia* H. S. Lo & D. Fang was found to show more similarities to *Justicia* L. than to *Leptostachya* Nees (e.g., its lower anther-theca spurred at a base and biaperturate pollen). A new combination, *Justicia caudatifolia* (H. S. Lo & D. Fang) Z. P. Hao, Y. F. Deng & T. F. Daniel, is proposed herein, while *Leptostachya wallichii* Nees remains in the monospecific genus *Leptostachya*.

Key words: Acanthaceae; China; *Justicia*; *Leptostachya*

Taxonomy and nomenclature of *Leptostachya* Nees was discussed by Hansen^[1] and Deng & Xia^[2]. *Leptostachya* was established by Nees^[3] based on two quite different species, i.e. *L. wallichii* Nees and *L. virgata* Nees. The latter is now transferred to the genus *Justicia* L. due to its spurred anther thecae and stylar furrow (rugula) in the upper lip of the corolla. The choice of lectotype for *Leptostachya* affects its taxonomic status. Bremekamp^[4] designated *L. virgata* as lectotype for the first time, and effectively reducing the name to the synonymy of *Justicia*^[5-6]. Hansen^[1]

rejected Bremekamp's lectotypification and designed *L. wallichii* as the lectotype of *Leptostachya*. Hansen's lectotypification has been accepted by some authors^[7]. To clarify the nomenclature and typification of *Leptostachya*, one of the present authors put forward a proposal to conserve the name *Leptostachya* with a conserved type, *L. wallichii*^[2]. The proposal has been accepted by the nomenclature committee for vascular plants of the ICBN^[8]. *Leptostachya* is morphologically similar to *Justicia*, but differs from it by having parallel anther thecae

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without basal appendages, and the upper lip of the corolla lacking stylar furrow (rugula)^[1,7]. Whether the monospecific genus *Leptostachya* deserves recognition or not is currently being studied by using molecular techniques. Irrespective of whether *Leptostachya* is recognized as a distinct genus, a species recently described in that genus from China does not conform to its diagnostic characters.

Leptostachya caudatifolia was described by Lo & Fang^[9] based on collections from Guangxi, China. The protologue of this species indicates that its anther thecae lack basal appendages. It differs from *L. wallichii* by its inflorescence being spicate (vs. paniculate), axillary (vs. terminal), and ca. 1 ~ 3 cm long (vs. 5 ~ 15 (~20) cm long); its spike rachis and calyx pilose (vs. glandular-pubescent); its bracts linear-triangular (vs. narrowly ovate) and 3 ~ 4 mm long (vs. ca. 1 cm long); its corolla 5.5 ~ 8.5 mm long (vs. ca. 1.1 cm long); and its anther thecae inserted at different height (vs. at same height)^[7,9]. After careful examination of the type material, we found that its lower anther thecae have very small basal spurs. Based on macromorphology, it would be better to place *Leptostachya caudatifolia* in the genus *Justicia*.

Sculpturing of pollen grains also supports placement of *L. caudatifolia* in *Justicia* Hansen (1985) noted that pollen of *Leptostachya wallichii* has two forms. Generally, pollen grains are 3 (~4)-colporate with a pseudocolpus on each side of the apertures,

but in some populations from northern Indochina and adjacent area of China, they are spheroid, 4 (~5)-colporate with a pseudocolpus on each side of the apertures. Pollen of *Leptostachya caudatifolia* (Fig. 1) is prolate ($P = 29 \sim 35$, $E = 19 \sim 23$; $P/E = 1.47$), 2-colporate, and ellipsoidal in polar view; the trema area is microreticulate and traversed by 2 rows of 5 ~ 7 indistinct insulae; and the interapertural exine sculpturing is reticulate. It is different from pollen of *Leptostachya wallichii* but is similar to that of *Justicia s.l.* (Graham, 1988).

Therefore, a new combination, *J. caudatifolia* (H. S. Lo & D. Fang) Z. P. Hao, Y. F. Deng & T. Daniel, is proposed herein for the forthcoming Volume 19 of *Flora of China*. As a result, *Leptostachya*, if recognized as distinct from *Justicia*, is once again a monospecific genus with *L. wallichii* occurring in tropical Asia from India to the Philippines.

Justicia caudatifolia (H. S. Lo & D. Fang) Z. P. Hao, Y. F. Deng & T. Daniel, comb. nov. Basionym: *Leptostachya caudatifolia* H. S. Lo & D. Fang, *Guihaia* 17: 45. 1997. TYPE: China. Guangxi: Lingyun, Xiajia, Oct. 12, 1977, Li Jingxi 3-26100 (holotype, GXMI).

Distribution and habitat. The species is known only from type locality, Lingyun County, Guangxi Zhuang Autonomous Region, China. It grows in forest on the rock of limestone hills.

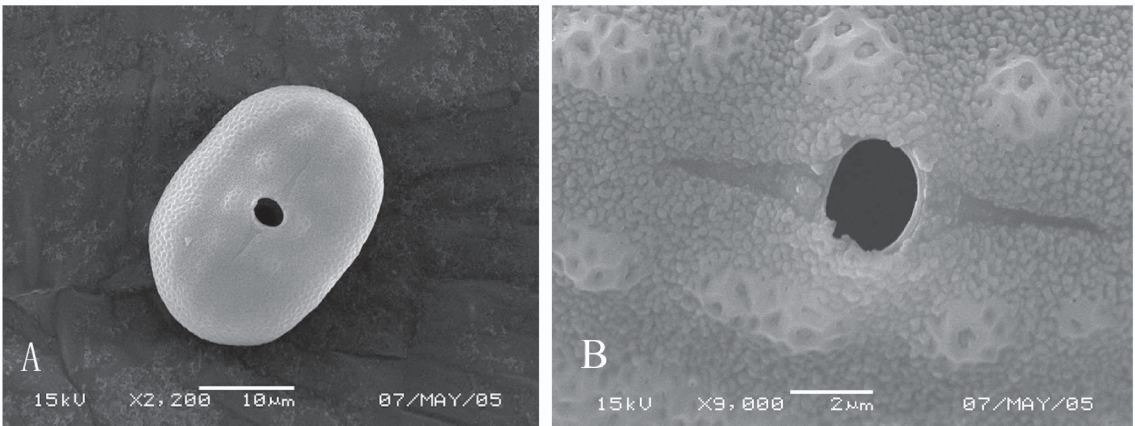


Fig. 1 Pollen grain of *Justicia caudatifolia* (H. S. Lo & D. Fang) Z. P. Hao, Y. F. Deng & T. Daniel from Li Jingxi 3-26100 (GXMI)
A. Pollen grain; B. Aperture and exine ornamentation

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