

中国柿树科植物一新记录种——长柱柿

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摘要: 报道中国柿科(Ebenaceae)柿属植物一新记录种——长柱柿(*Diospyros brandisiana* Kurz), 并描述了该新记录种的形态特征和生境分布。该种为该属中国分布的唯一具老茎生花的种类。凭证标本存放于中国科学院昆明植物研究所标本馆(KUN)。

关键词: 中国; 长柱柿; 柿树科; 新记录

doi: 10.3969/j.issn.1005-3395.2014.01.005

Diospyros brandisiana Kurz (Ebenaceae), A Newly Recorded Species from China

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Abstract: *Diospyros brandisiana* Kurz (Ebenaceae) is reported as newly recorded species to China. Its diagnostic characters, habitat and distribution are discussed. Its cauliflory habit is unique among the species of the genus *Diospyros* in China. The voucher specimens are deposited in Herbarium of Kunming Institute of Botany, Chinese Academy of Sciences (KUN).

Key words: China; *Diospyros brandisiana*; Ebenaceae; Newly recorded species

Diospyros L. is the largest genus of about 450 – 500 species of evergreen and deciduous trees in Ebenaceae, mainly distributed in pantropical and temperate regions^[1-4]. In China, there are 57 – 60 species (six varieties, one form, one cultivated species). Several species are known only from limited localities of SE and SW China^[1]. In the genus, some of the species are important as economic plants in China^[5-6].

During some surveys on the seed plants in the Yuanyang and Jinping Counties of southeastern Yunnan, we collected some specimens of *Diospyros*

with cauliflory habit, alternate and distichous leaves, bisexual flowers, long simple crass style and persistent calyx. The combination of features indicated that it is a new member of *Diospyros*, which had not been recorded to China^[1]. By consulting some publications, we confirmed that it is *Diospyros brandisiana* Kurz, which is common in Southeastern Asia^[1-4].

Diospyros brandisiana Kurz, J. Asiat. Soc. Bengal, Pt. 2, Nat. Hist. 40(2): 72 (1871). 长柱柿(新拟)
Evergreen tree, 8 – 12 m tall; bark smooth and

Received: 2013-07-03 Accepted: 2013-10-18

This study was supported by the National Natural Science Foundation of China (30870165); the Natural Science Foundation of Yunnan (312008CD161); and the National Geographic Society Grant of USA (NGS8288-07).

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black, cauliflorous; branches pubescent when young, glabrescent when mature. Leaves alternate; petioles puberulous, 0.5 – 1.7 cm; blades chartaceous, oblong to lanceolate, 12 – 24 cm × 4.5 – 7.8 cm, apex acuminate, base attenuate, margin entire, glabrous on both sides, appressed pubescent along the veins, midrib flat above, secondary veins 13 – 17 pairs. Cyme born on trunks, 1-many-flowered. Flowers white and smooth inside, greenish and sparsely black tomentose outside, pentamerous or occasionally tetramerous. Pedicels 1.7 – 5.8 mm, tomentose. Bracts lanceolate, 0.6 – 1.4 mm long, tomentose. Calyx commonly 5-lobed, lobes 2.1 – 3.4 mm, brown tomentose. Corolla campanulate, 7 – 9 mm, tube ca. 12 mm, brown villous, commonly

5-lobed, lobes oblong, 5 – 7 mm × 3 – 4 mm, apex obtuse. Ovary pubescent, 10-locular, style simple and robust, 0.6 – 1.2 mm long, stigmas 5 – 6 papillose. Berries somewhat leathery, global, black pubescent, xyloid and 3 – 4 cm diam. When mature, persistent style 1.8 – 2.5 mm long.

Phenology: Flowering from February to April, fruiting from May to August.

Habitat: It is found in tropical seasonal forest at the elevation of 700 – 900 m.

Distribution: *Diospyros brandisiana* Kurz is distributed to China, India, Myanmar, Laos, Thailand, Vietnam and Malaysia. It is newly recorded to China occurring in southeastern Yunnan.



Fig. 1 *Diospyros brandisiana* Kurz. A: Flowers born on the old trunk; B: Leaves and branches; C: Flowers; D: Fruits. [A, B and C vouchered by Y. M. Shui et al. 70247, D by Y. M. Shui et al. 91304. (Photos: A, B, C by SHUI Yu-min, D by YU Zhi-yong)].

Specimens examined: China. Yunnan: Yuanyang, Huangmaoling Xiang, hillsides of sparse forestland, 103°01'1" E, 23°00'1" N, alt. 900 m, in flowers, Mar. 8, 2006, Y. M. Shui et al. 70247 (KUN); in the same locality, in fruits, May 14, 2010, Y. M. Shui et al. 83826 (KUN); Jinping, Mengla Zhen, Wengdang Village, montane rain forest, 102°55'70" E, 22°42'50" N, alt. 877 m, in fruits, July 20, 2011, Y. M. Shui et al. 91304 (KUN).

D. brandisiana differs from all Chinese species by long simple crass style and persistent stigma (Fig. 1: D), cauliflory (Fig. 1: A, C) and puberulous petioles (Fig. 1: B). So far, *D. brandisiana* is the only species of Ebenaceae in China with cauliflory (Fig. 1: A). Sutee Duangjai *et al.* used six regions plastid DNA sequences data (2006) and eight regions plastid DNA sequences data (2009) to infer the phylogeny of *Diospyros*, and investigated that *D. brandisiana* and *D. curranii* are sister relationship species^[7-8].

Acknowledgements We would like to thank Mr. MO Ming-zhong of Honghe Hani and Yi Nationalities Prefecture Forestry Bureaus, Mr. MAO Long-hua, Mr. WANG He-qing, Mr. ZHAO Zhi-hua, Mr. YAO Wen-qing, Mr. LI Bing and the other colleagues of the Jinping Management Bureaus, Fenshuiling National Nature Reserve, the members of Yuanyang Forestry Bureau, and Dr. HE Wen-jun, Mr. LI Guo-feng of Kunming Institute of Botany, Chinese Academy of Sciences, for their

help in field surveys, and Mr. ZHANG Yu, Ms. CHEN Ya-ping and Dr. HU Guo-xiong of Kunming Institute of Botany, Chinese Academy of Sciences, for providing informations about this paper.

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