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Lagerstroemia densa (Lythraceae), a new species from Daqing Mountain, Guangxi Zhuang Autonomic Region, China

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Abstract

The new species *Lagerstroemia densa* from Daqing Mountain, Chongzuo City, Guangxi Zhuang Autonomic Region (China) is described and illustrated. The morphological characteristics of the new species and two morphologically similar species are compared. The new species resembles *L. subcostata* in leaf shape but differs mainly in petal color, floral tube morphology and indumentum, and the shape of the capsule, and is similar to *L. excelsa* in the shape of the floral tube lobes and inflorescences, from which it differs by its glabrous, acute leaves, racemiform inflorescences, and glabrous calyx lobes.

Introduction

The genus *Lagerstroemia* Linnaeus (1759: 1068) contains about 55 species, mainly distributed in tropical and subtropical Asia, including southern China, Japan, and in northeast Australia. In China Lythraceae includes 10 genera and approximately 43 species (Qin and Graham 2007). There are about 18 native and 4 introduced species of *Lagerstroemia* in China spreading widely from north to southeast and mostly occurring in Yunnan, Hubei, Hunan and Guangxi provinces. Fifty *Lagerstroemia* specimens were collected in the summer of 2013 whilst the authors were doing a botanical survey in Daqing Mountain, Chongzuo City, the Guangxi Zhuang Autonomic Region, China. We discovered a single population of *Lagerstroemia* possessing inflorescences with flowers in dense grouping. Among these collections there were approximately15 individuals from a single population that did not key to any known species of *Lagerstroemia*. The specimens were collected in a secondary monsoon evergreen broad leaf forest at 800 m elev. Based on the examination of taxonomic publications (Koehne 1883, Furtado & Montien 1969, Fang & Zhang 1983, Zhou *et al.* 2004, Qin & Graham 2007), we concluded that the morphological features of this population require recognition as a new species, which is described below. Daqing Mountain is an area rich in biodiversity, from which 3,000 known vascular plant species have been recorded. It is situated in the southeast of Guangxi Zhuang Autonomic Region (21°57′47″–22°19′27″N, 106°39′50″–106°59′30″E) at the southeastern edge of the subtropical monsoon climate area, adjacent to the northern tropical zone. The region has a south subtropical humid monsoon climate with a mean annual temperature of 21.5 °C and annual precipitation of 1,309 mm, most of which occurs between June and August. Soils tend to be stony and deep, classified as lateritic red soils.

Results

Lagerstroemia densa C. H. Gu & D. D. Ma, *sp. nov.*

Type:—CHINA. Guangxi: Daqing Mountain, in dense forest, 22°19′27″N, 106°59′30″E, 635 m elev., 14 July 2013, C.H. Gu & D.D. Ma (holotype ZJFC 1307141!, isotypes ZMNH!, HBGH!). Figures 1, 2.

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