

The identity of *Bauhinia claviflora* and of *B. dioscoreifolia* (Leguminosae)

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Abstract The taxonomic status of two long recognized endemic Chinese species of the genus *Bauhinia* is clarified as part of our endeavor to prepare the manuscript of Caesalpinioideae for *Flora of China*. *Bauhinia claviflora* L. Chen and *B. dioscoreifolia* L. Chen are reduced to synonymy of *B. nervosa* (Wall. ex Benth.) Baker and *B. khasiana* Baker respectively.

Key words *Bauhinia*, *Bauhinia claviflora*, *Bauhinia dioscoreifolia*, new synonymy, nomenclature.

In *Flora Reipublicae Popularis Sinicae*, Chen (1988) recognized 42 species of *Bauhinia* L. in China. Subsequently, several new species have been described (Zhang, 1993; Zhang & Chen, 1998; Larsen, 1999). In revising the genus for *Flora of China*, we found that two *Bauhinia* species long recognized as endemic to China, *B. claviflora* L. Chen and *B. dioscoreifolia* L. Chen, are in fact conspecific with *B. nervosa* (Wall. ex Benth.) Baker and *B. khasiana* Baker respectively, two species widespread in tropical Asia. Thus a formal reduction of these names is proposed.

1. *Bauhinia nervosa* (Wall. ex Benth.) Baker in Hook. f., Fl. Brit. India 2: 283. 1878; D. X. Zhang in Nordic J. Bot. 13: 402. 1993.—*Phanera nervosa* Wall. ex Benth. in Miq., Pl. Jungh. 262. 1852. Type: Bangladesh. Sylhet: Without precise locality, Wallich 5777 (holotype, K!).

Bauhinia claviflora L. Chen in J. Arn. Arb. 20: 437. 1939, syn. nov. Type: China. Yunnan (云南): Xishuangbanna (西双版纳), Jinghong (景洪), Damenglong (大勐龙), Mengsong (勐宋), alt. 1800 m, 1936-09, C. W. Wang (王启无) 78485 (holotype, A?; isotype, PE!).

Chen (1939) described *B. claviflora* based on a collection, C. W. Wang 78485, from Mengsong, Damenglong, Jinghong County, Xishuangbanna, Yunnan Province. Although the holotype was presumably deposited in Harvard University (A) where most of Luetta Chen's types were found, we have not been able to locate it while visiting the Harvard herbaria.

Wu (1984) accepted both *B. claviflora* and *B. griffithiana* (Benth.) Prain on the basis of the same collection (C. W. Wang 78485, PE), resulting in the acceptance of both names by local botanists (i.e., *A Checklist of the Species in Xishuangbanna*). And very often, the local botanists refer the specimens of *B. glauca* (Benth.) Benth. ssp. *tenuiflora* (Watt. ex C. B. Clarke) K. Larsen & S. S. Larsen to *B. claviflora* in the herbarium HITBC.

Recently, an unidentified flowering specimen collected in 1978 from the type locality of *B. claviflora* (G. D. Tao 19843) caught the attention of the senior author and was subsequently identified as *B. nervosa* (Wall. ex Benth.) Baker, a species widely distributed from India, Myanmar and Thailand (Larsen & Larsen, 1984) to China (Zhang, 1993).

Examination of the isotype of *B. claviflora* and the specimens from its type locality, and the field study of the habit and habitat of the plant have confirmed our previous suspicion that they are all conspecific with *B. nervosa*. Therefore, we reduce *B. claviflora* to synonymy of

B. nervosa.

Additional specimens examined:

China. Yunnan (云南): Xishuangbanna (西双版纳), Jinghong (景洪), Damenglong (大勐龙), Mengsong (勐宋), alt. 1580 m, G. D. Tao et al. (陶国达等) 19843 (HITBC); the same locality, 21°29'49.4" N, 100°32'49.3" E, alt. 1600 m, D. X. Zhang (张奠湘) 1038 (IBSC).

2. *Bauhinia khasiana* Baker in Hook. f., Fl. Brit. India 2: 281. 1878; Chen in Fl. Reip. Pop. Sin. 39: 184. 1988. Type: India. Mt. Khasia: *Hooker & Thomson s.n.* (holotype, K!; isotype, U!).

Bauhinia dioscoreifolia L. Chen in J. Arn. Arb. 20: 438. 1939; Chen in Fl. Reip. Pop. Sin. 39: 203. 1988, syn. nov. Type: China. Hainan (海南): Kumyun (东方(感恩)), *S. K. Lau* (刘心祈) 27852 (mistakenly 27552 in protologue, 27552 is not a legume specimen) (holotype, A!; isotype, IBSC!).

Chen (1939) in her protologue claimed that *B. dioscoreifolia* was somewhat similar to *B. erythropoda* Hayata, although she cautioned that if the flower of *B. dioscoreifolia* was available, it might prove to be not at all closely related.

Subsequently, botanists (Chun, 1965; Chen, 1988; Wu, 1994) all recognized *B. dioscoreifolia* as an endemic species to Hainan, although no additional collection was made.

Upon our field observations on the habit and habitat, and from our observation by cultivating *B. khasiana*, we found that the bifoliate leaves with conspicuous veins, characters thought to be unique to *B. dioscoreifolia*, are typical of leaves on juvenile branches of *B. khasiana*, a species common to the region. After a careful study of the type specimens, we think that the specimens were a combination of sterile juvenile branches and artificially attached pods, although both of *B. khasiana* (not clear!). *Bauhinia dioscoreifolia* is thus reduced to synonymy of *B. khasiana*. Several names had already been reduced to synonymy of this species previously (Larsen & Larsen, 1980, 1984; Chen, 1988).

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棒花羊蹄甲和薯叶藤的学名订正

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摘要 分布于云南西双版纳的棒花羊蹄甲*Bauhinia claviflora* L. Chen和海南的薯叶藤*B. dioscoreifolia* L. Chen长期被认为是国产特有种植物,实际上分别是广泛分布的缅甸羊蹄甲*B. nervosa* (Wall. ex Benth.) Baker和牛蹄麻*B. khasiana* Baker。作者依命名法予以归并。

关键词 羊蹄甲属; 棒花羊蹄甲; 薯叶藤; 新异名; 命名法