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Two replacement names in Asian *Rubus* (Rosaceae)

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Rubus Linnaeus (1753: 492) is one of the largest genera in the Rosaceae and species of *Rubus* occur on all continents except Antarctica (Lu & Boufford 2003, Wang & al. 2013). *Rubus* is a taxonomically notoriously complex genus. Its species circumscription is complicated by hybridization, polyploidy, agamospermy, and lack of a universal species concept (Weber 1996), which has resulted in broad disagreement about the number of species with estimates ranging from 250 (Mabberley 1997) to several thousand (Jennings 1988). In the latest revision, published nearly a century ago by Focke (1910, 1911, 1914), *Rubus* was divided into 12 subgenera. Most of the species were classified in subgenera *Rubus*, *Idaeobatus* (Focke) Focke (1910: 128), and *Malachobatus* (Focke) Focke (1910: 41).

While working on a synopsis of the Asian species of *Rubus*, the author found that two of the names in current usage are later homonyms and therefore illegitimate. Herein, avowed substitutes (replacement names) for these later homonyms are proposed.

Rubus austrosinensis Huan C.Wang, *nom. nov.*

Replaced name: *Rubus crassifolius* T.T.Yu & L.T.Lu (1982: 460), *nom. illeg.*, non Genevier (1868: 236).

Type:—CHINA. Guangxi: Xing'an county, Mao'er Shan, June 1953, *Guangxi Exped.* 4235 (holotype PE-00020733!, isotype PE-01833205!).

Etymology:—The new specific epithet, *austrosinensis*, referring to the geographical range of the newly named species, derives from the Latin *austro-*, meaning “south”, *Sina*, meaning “China”, and Latin suffix *-ensis*, meaning “of” or “belonging to”.

Distribution:—Endemic to south China.

Notes:—In 1982, Yu & Lu (1982: 460) proposed the name *Rubus crassifolius* for a species endemic to southern China and placed it in their *R.* subsect. *Stipulosi* T.T.Yu & L.T.Lu (1982: 460). However, the name *R. crassifolius* had been previously used by Genevier (1868: 236) for a European species, thus Yu & Lu’s name is a later homonym of *R. crassifolius* Genevier and is therefore illegitimate. Yu & Lu’s species belongs to *R.* subg. *Malachobatus* and is distinctive amongst members of this group in its flowers solitary, rarely 2-3, the inflorescences, calyces and abaxial surfaces of leaves densely yellowish-brown sericeous-villous, and the stipules suborbicular or broadly ovate, 1.5-2 cm long. There seems to be no available synonym for this Chinese species, therefore a replacement name (*nomen novum*) is required and the new name, *R. austrosinensis* Huan C.Wang, is proposed here.

Additional specimens examined:—CHINA. Jiangxi: Anfu county, Wugong Shan, Baihefeng, 1750 m, 30 April 1954, *Jiangxi Exped.* 162 (PE-00169142); ibid., 1750 m, 30 April 1954, Y. G. Xiong 8005 (LBG-00021189). Hunan: Yizhang county, Mang Shan, Yanzishi, 1680 m, 24 August 1958, J. G. Xiao 4172 (PE-00169143); ibid., Mengkengshi, 1700 m, 5 August 1964, M. X. Huang 111859 (ISBC-0323683); ibid., 21 July 1957, L. H. Liu 1378 (PE-01833208, IBSC-0323682); Xingning county, Shuiwo village, Jingziling, 1750 m, 8 July 1995, L.B. Luo 875 (PE-01833212); Hengyang county, Dayun Shan, 1920 m, 29 July 1986, Y. B. Luo 2753 (PE-01833207). Guangdong: Ruyuan county, Wuzhi Shan, Shikengyu, 1900 m, 4 June 1973, *Guangdong Exped.* 563 (PE-01833211). Guangxi: Xing'an county, 27 May 1953, *Guangxi Exped.* 891 (PE-01833209); Xing'an county, Mao'er Shan, 1950 m, 23 July 1958, Z.Z. Chen 51270 (PE-00169144, IBK-00065210, IBSC-0323678); ibid., Mao'er Shan, 2130 m, 15 August 1997, G.Z. Li 14997 (PE-01829981); ibid., Mao'er Shan, Longtangjiang, 2120 m, 26 July 1997, G. Z. Li 15427 (PE-01833206); Xing'an county, Mao'er Shan, 18 October 1984, R. R. Yang 84447 (PE-01833210); Ziyuan county, Z. Z. Chen 52073 (PE, IBK-00065213, IBSC-0323676); ibid. Yandong village, 1600 m, 22 July 2005, H. Zhang 1350 (PE-01833209); Quanzhou county, Longshui, Daxian village, 18 June 1959, D.A. Huang 60621 (IBK-00065211, IBSC-0323677).

***Rubus nguyenii* Huan C.Wang, *nom. nov.* (Figure 1)**

Replaced name: *Rubus caudatisepalus* T. H. Nguyêñ & Yakovlev (1982: 108), *nom. illeg.*, non Calderón (1973: 57).

Type:—VIETNAM. ?Hoang Lien Son: ?Sa pa, collection date unknown, *sine coll.* 75 (holotype HN, not seen, probably lost.)

Paratype:—VIETNAM. Bac Thai: Dai Tu, 1967, *Be Kim khe s.n.* (HN!).

Etymology:—The new specific epithet is dedicated to Nguyêñ Tien Hiep, one of the authors of *Rubus caudatisepalus* T. H. Nguyêñ & Yakovlev.

Additional specimens examined:—CHINA. Yunnan: Jingping county, Yongping village, Hetou Zhai, Laoling, 2200m, 9 May 1956, *Sino-Russ. Exped. 1128* (IBSC-0323388, KUN- 689454, PE-00168928); Pingbian county, Jianshe village, Laojian Shan, 2140m, 19 March 1954, *P. Y. Mao 03504* (IBSC-0323378, KUN-689452, KUN-689453, PE-00168937, WUK-196043).

Notes:—Based on two collections from northern Vietnam, Nguyêñ & Yakovlev (1982: 108) published the name *Rubus caudatisepalus* T. H. Nguyêñ & Yakovlev, which they placed it in sect. *Corchorifoliae* Focke (1911: 129). The name *R. caudatisepalus*, however, had been previously used by Calderón (1973: 57) for a different Mexican species. Thus Nguyêñ & Yakovlev's name is a later homonym of *R. caudatisepalus* Calderón and illegitimate. A replacement name (*nomen novum*), *R. nguyenii* Huan C. Wang, is proposed here.

Rubus nguyenii Huan C. Wang is very similar to *R. corchorifolius* Linn. f., a species widespread in East Asia, but differs from the latter by its stems nearly glabrous, leaves long acuminate at apex, lateral veins of leaves 9–11 pairs, sepals caudate at apex, styles pilose at base, and fruits nearly glabrous. This species has so far been reported only from northern Vietnam (Nguyêñ & Yakovlev 1982, Averyanov & Nguyêñ 1996), here two gatherings (*Sino-Russ Exped. 1128* and *P. Y. Mao 03504*) from southeastern Yunnan, China, are first reported for the flora of China.

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