



New combinations and a new name in *Smilax* for species of *Heterosmilax* in Eastern and Southeast Asian Smilacaceae (Liliales)

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Judd (1998) formally transferred the species considered to be members of *Heterosmilax* Kunth (1850: 270; Koyama 1960, 1978, 1984) including *Pseudosmilax* Kunth (1850: 270) and *Oligosmilax* Seemann (1868: 258) into *Smilax* Linnaeus (1753: 1028) as a section, since “the segregation of these two genera would result in a paraphyletic *Smilax sensu stricto* because no apomorphies are known that would unite the remaining members of the group, which are characterized by flowers with free tepals and six more or less distinct stamens” (Judd 1998, p. 156). This proposal was further supported by recent molecular phylogenetic evidence (Cameron & Fu, 2006; Li *et al.* 2011, Qi *et al.* 2012), which shows that *Heterosmilax* distributed in Eastern and Southeast Asia is monophyletic and embedded within *Smilax*. The preparation of the treatment of Smilacaceae for the *Flora of the Pan-Himalaya* necessitates transfer of all species of *Heterosmilax* to *Smilax*. Nine new combinations are made, a new name is given and three names are resurrected.

Taxonomic treatment

Smilax sect. *Heterosmilax* (Kunth) Judd (1998: 158)

Basionym: *Heterosmilax* Kunth (1850: 270). Type species: *Smilax japonica* (Kunth) P.Li & C.X.Fu *comb. nov.* [= *Heterosmilax japonica* Kunth (1850: 270)].

1. *Smilax binchuanensis* P.Li & C.X.Fu, *nom. nov.*

Replaced name: *Heterosmilax yunnanensis* Gagnepain (1934: 70). Type: CHINA. Yunnan: Binchuan, Ta-ta-ouan, 6 March 1906, Ducloux 4545 (holotype P!, isotype P!).

Etymology: The existence of the previously published *Smilax yunnanensis* Chen (1983: 111) necessitates a new name for this species. Since Binchuan, Yunnan, is the type and only known locality, we propose *binchuanensis* as the new specific epithet.

2. *Smilax chinensis* (F.T.Wang) P.Li & C.X.Fu, *comb. nov.*

Basionym: *Heterosmilax chinensis* Wang (1934: 121). Type: lectotype designated by Koyama (1984: 194). CHINA. Sichuan: Mt. Omei, Houzipo, 6 July, 1931, Wang 23223 (lectotype PE!).

3. *Smilax gaudichaudiana* Kunth (1850: 252).

Homotypic synonym: *Heterosmilax gaudichaudiana* (Kunth) Maxim (1872: 176). Type: lectotype designated by Koyama (1983: 123). CHINA. Macau: 1844, *Gaudichaud* 57 (lectotype P!, isolectotype P!).

4. *Smilax japonica* (Kunth) P.Li & C.X.Fu, *comb. nov.*

Basionym: *Heterosmilax japonica* Kunth (1850: 270). Type: JAPAN. No locality, no date, *Goering s.n.* (holotype L!).