

## Nomenclatural notes on the name *Asarum longerhizomatosum* (Aristolochiaceae)

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*Asarum longerhizomatosum* C.F. Liang & C.S. Yang (Aristolochiaceae) in Liang (1975: 21) was originally described from Guangxi, China. It was widely adopted in Chinese floras (Liang 1991; Cheng & Yang 1988; Yang & Zhou 2000; Huang *et al.* 2003; Yang & Yang 2006). However, the name was not validly published in 1975 because two gatherings (*C.L. Zhang 001* in CMMI and *C.L. Zhang 002* in IBK) were designated as types contrary to the requirements of Article 40.1 & 40.2 of *International Code of Nomenclature for Algae, Fungi and Plants* (McNeil *et al.* 2012) for the names published on or after 1 January 1958. Huang *et al.* (2003) presumed the two elements represented duplicates of a single collection and treated the name as validly published. However, searching for type material in herbaria showed that *C.L. Zhang 001* and *C.L. Zhang 002* were two different gatherings. Three duplicates of *C.L. Zhang 002* are found at IBK. Although no duplicate of *C.L. Zhang 001* was traced by us, the previous literatures indicated that at least two duplicates exist, one in CMMI (Liang 1975) and another in PTM (Cheng & Yang 1983). It is noted that “PTM” was the acronym of “Beijing Chinese Traditional Medicine College” whose acronym is BCMM now in *Index Herbariorum Sinicorum* (Fu *et al.* 1993) and *Index Herbariorum* (Thiers, [continuously updated]).

Jiang *et al.* (2011) correctly treated *C.L. Zhang 001* and *C.L. Zhang 002* as different gatherings and consequently designated *C.L. Zhang 002* (IBK) as the holotype because they failed to find *C.L. Zhang 001* at CMMI. Unfortunately, they failed to realize that the name had been validly published previously by Cheng & Yang (1983: 591) through referencing the earlier effective published diagnosis in Latin by Liang (1975) and by declaring *C.L. Zhang 001* as the type thereby meeting the requirement of Article 40. In their protologue, however, Cheng & Yang (1983) declared *C.L. Zhang 001* (PTM) as an “isotype”. Obviously, the single specimen at PTM is the holotype, and therefore the term “isotype” was incorrectly used for “holotype” and it is to be treated as a correctable error in accordance with Article 9.9. According to Article 52.1, Jiang *et al.* (2011) published a later superfluous homonym, *Asarum longirhizomatosum* C.F. Liang & C.S. Yang, because *C.L. Zhang 001*, the type of *Asarum longerhizomatosum* C.F. Liang & C.S. Yang in Cheng & Yang (1983: 591), was included. Like the example of the names *Acidosasa* C.D. Chu & C.S. Chao in Keng (1982: 165) and *Acidosasa* Yang (1981: 54) discussed by Deng & Xia (2014), the name *Asarum longirhizomatosum* C.F. Liang & C.S. Yang in Jiang *et al.* (2011: 190) is not an isonym of *Asarum longerhizomatosum* C.F. Liang & C.S. Yang in Cheng & Yang (1983: 591) as defined in Note 2 of Article 6.3 because different type were designated.

Jiang *et al.* (2011) changed the spelling of specific epithet to “*longirhizomatosum*” to agree with Article 60.8 and Code's Recommendation 60G. In fact, the specific epithet “*longerhizomatosum*” is a compound of adjective “*rhizomatosum*” with adverb prefix “*longe*” (Stern 1992: 280; Greenough *et al.* 1888: 162) and is not to be corrected as “*longirhizomatosum*”. Accordingly, “*longirhizomatosum*” is treated as an orthographic variant of *longerhizomatosum*. The place and date of valid publication of *A. longerhizomatosum* is corrected as follow.

*Asarum longerhizomatosum* C.F. Liang & S.C. Yang in Cheng & Yang (1983: 591). Type:—China. Guangxi: Damingshan, in 1972, *Zhang Chaoliang* (“*C. L. Chang*”) 001 (holotype: BCMM, not seen).

Synonym: *Asarum longerhizomatosum* C.F. Liang & S.C. Yang in Jiang *et al.* (2011: 190), “*longirhizomatosum*”, *nom. illeg.* (Article 52.1, 52.2 & 53.1). Type:—China. Guangxi: Damingshan, in 1972, *Zhang Chaoliang* (“*Zhang Chaolian*”) 002 (holotype: IBK 00190377!; isotype:IBK!).

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