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http://dx.doi.org/10.11646/phytotaxa.172.1.9

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, [continousely unpdated]).

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. 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 "longirhizmatosum". Accordingly, "longirhizomatosum" is treated as an orthographic variant of longerhizomatosum. The place and date of valid publication of A. longerhizmatosum 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!).

Acknowledgements

We are grateful to Dr. John McNeil for his discussion on clarifying some nomenclatural problems.

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