## Nomenclatural Notes on the Fern Genus *Elaphoglossum* (Elaphoglossaceae) from China

Wang Faguo

South China Botanical Garden, Chinese Academy of Sciences, Wushan, Guangzhou, Guangdong 510650, People's Republic of China

Zhou Jinsong

College of Chinese Medicine, Guangzhou University of Chinese Medicine, Guangzhou, Guangdong 510006, People's Republic of China

## Xing Fuwu

South China Botanical Garden, Chinese Academy of Sciences, Wushan, Guangzhou, Guangdong 510650, People's Republic of China. Author for correspondence: xinfw@scib.ac.cn

ABSTRACT. During preparation of the taxonomic treatment of Elaphoglossaceae for the *Flora of China*, Volume 3, it was noticed that the following nomenclatural actions were necessary for the forthcoming account of *Elaphoglossum* Schott ex J. Smith: the new combination *E. luzonicum* Copeland var. *mcclurei* (Ching) F. G. Wang & F. W. Xing is made, and *E. spongophyllum* P. R. Bell ex Holttum is newly synonymized to it. In addition, *E. luzonicum* var. *mcclurei* is lectotypified, and *E. sinii* C. Christensen ex Wu is epitypified.

Key words: China, Elaphoglossaceae, Elaphoglossum.

*Elaphoglossum* Schott ex J. Smith (Elaphoglossaceae) comprises more than 600 species distributed throughout wetter parts of the tropics and subtropics, with the greatest diversity in the Neotropics (Holttum, 1954, 1978; Mickel & Atehortúa, 1980; Wu, 1999; Mickel, 2002; Lorence & Rouhan, 2004). The following actions are required for the forthcoming treatment of *Elaphoglossum* in the *Flora of China*, Volume 3.

- Elaphoglossum luzonicum Copeland in Elmer, Leafl. Philipp. Bot. 1: 235. 1907. TYPE: Philippines. Island of Negros, Apr. 1908, A. D. E. Elmer 9036 (holotype, MICH not seen; isotypes, BO not seen, K, L not seen, MO, P not seen, US not seen).
- 1a. Elaphoglossum luzonicum var. luzonicum
- 1b. Elaphoglossum luzonicum var. mcclurei (Ching) F. G. Wang & F. W. Xing, comb. et stat. nov. Basionym: *Elaphoglossum mcclurei* Ching, Sinensia 1: 55. 1930. TYPE: China.

Hainan: Hung Mo shan, 22–27 Aug. 1929, F. A. *McClure 18257* (lectotype, designated here, SYS).

Elaphoglossum spongophyllum P. R. Bell ex Holttum, Blumea 14(2): 325. 1966. Syn. nov. TYPE: Indonesia. N Borneo: Mt. Kinabalu, Upper Kinataki R., *Clements 31869* (holotype, BO not seen).

Habitat and distribution. Creeping on mossy tree trunks in Hainan and Guangdong, China.

Discussion. Elaphoglossum luzonicum var. mcclurei is closely allied to E. yoshinagae (Yatabe) Makino, a common fern in South China, but E. luzonicum var. mcclurei differs by almost glabrous, much smaller fronds of rigidly coriaceous texture and by fertile fronds overtopping the sterile and much less scaly petioles (Ching, 1930). Furthermore, E. luzonicum var. mcclurei differs from E. yoshinagae by its rounded blade apices. Elaphoglossum luzonicum var. mcclurei is morphologically similar to E. luzonicum var. luzonicum but differs in its lamina margin with sparser or no spreading scales and in the frond base narrowly cuneate rather than cuneate or broadly cuneate in variety luzonicum (Wu, 1999). Because of these morphological similarities, E. mcclurei is better considered a variety of E. luzonicum, rather than as a separate species.

From specimens, field observations, and protologues, *Elaphoglossum spongophyllum* and *E. luzonicum* var. *mcclurei* share general characteristics such as the short-creeping rhizomes, rhizome scales acuminate with a few marginal hairs, similar leaf blade shape and size, and stellate scales on both surfaces of sterile laminae (Ching, 1930; Holttum, 1966). A Hainan specimen (*McClure 20066*, PE) was determined as *E*.

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*mcclurei* by R. C. Ching in 1932, but Holttum (1966) considered that *McClure 20066* belonged to *E. spongophyllum* and noted that this specimen has acuminate fronds that are much more decurrent at the base (Holttum, 1978). In agreement with Holttum's taxonomic opinion, as the two species cannot be clearly distinguished from each other, we reduce *E. spongophyllum* here as a synonym of *E. luzonicum* var. *mcclurei*.

In the protologue of *Elaphoglossum mcclurei* by Ching (1930: 55), one collection from Hainan without illustration was cited "Hung Mo Tung, 1830 m, *F. A. McClure 18257*, Aug. 22, 1929." However, the type status and the herbarium of deposit for this specimen were not designated by Ching. A specimen, without the word "type" but noted as "duplicate" was found in SYS, and is here designated as lectotype according to Art. 9.2 of the *International Code of Botanical Nomenclature* (McNeill et al., 2006).

Representative specimens examined. CHINA. Guangdong: Ruyuan, Wuzhi Mtn., Xiaohuang Mtn., Y. H. Yan 2495 (IBSC). Hainan: Lingshui, F. A. McClure 20066 (PE); Wanning, Xinglong, F. W. Xing 6191 (IBSC); Baoting, Mao'an village, Hainan Veg. Exped. 00807 (IBSC); Dungka to Wiu Fash, N. K. Chun 43729 (IBSC); Changjiang, Bawangling, S. Y. Dong, X. C. Zhang & Z. C. Chen 116 (IBSC, PE).

 Elaphoglossum sinii C. Christensen ex Wu, Bull. Dept. Biol. Sun Yatsen Univ. 3: 346, pl. 164. 1932. TYPE: China. Guangxi: Yao-shan, Sheng-Tang-Ting, 29 July 1928, S. S. Sin 611 (holotype, IBSC). EPITYPE: China. Guangxi: Yao-shan, Xinchun, 27 July 1936, C. Wang 39632 (epitype, designated here, IBSC; duplicates, IBK, PE).

Habitat and distribution. Creeping on mossy rocks or tree trunks in Fujian, Guangxi, and Yunnan, China.

Discussion. Elaphoglossum sinii is unique in the genus by its long-creeping rhizomes and rounded, ovate, or elliptic fronds. In the protologue of *Elaphoglossum sinii* by Wu et al. (1932), only one collection was cited; this collection was noted as from Guangxi but the herbarium was not specified. We located *Sin 611* in IBSC, but the specimen does not have a fertile frond. The collection *C. Wang 39632* is chosen as an epitype because it comprises sterile and fertile fronds, and shares characteristics and close location with the original type specimen.

Representative specimens examined. CHINA. Fujian: Chong'an Xian, Huanggang Mtn., Z. P. Jian & Q. Q. Zhang 400936 (PE) [new record for Fujian]. Yunnan: Mar-Li-Po, Hwang-gin-Yin, C. W. Wang 86370 (PE).

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