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## A New Name in Chinese Bolbitidaceae

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**ABSTRACT.** During preparation of the account of Bolbitidaceae for the *Flora of China*, volume 3, it was noticed that one species accepted in some earlier treatments is based on an illegitimate combination, *Bolbitis bipinnatifida* (J. Smith) K. Iwatsuki, not *Bolbitis bipinnatifida* (Kuhn) Ching. The following replacement name is proposed here: *Bolbitis longiaurita* F. G. Wang & F. W. Xing.

*Key words:* Bolbitidaceae, *Bolbitis*, China.

*Bolbitis* Schott (Bolbitidaceae) is a pantropical fern genus of about 85 known species (Holtum, 1954: 461–470; Tryon & Tryon, 1982). In a revision of the Chinese species, Dong and Zhang (2005) followed Iwatsuki (1959) and Hennipman (1977) in merging *Egenolfia* Schott into *Bolbitis* based on herbarium and field observations and SEM studies of the spores. Dong and Zhang treated 22 species and three hybrids of *Bolbitis* from China.

***Bolbitis longiaurita*** F. G. Wang & F. W. Xing, nom. nov. Replaced name: *Bolbitis bipinnatifida* (J. Smith) K. Iwatsuki, Acta Phytotax. Geobot. 18: 49. 1959, as “*bipinnata*” non *Bolbitis bipinnatifida* (Kuhn) Ching in C. Christensen, Ind. Fil., Suppl. 3: 47. 1934. *Acrostichum appendiculatum* Willdenow var. *costulatum* Hooker, Sp. Fil. 5: 252. 1864, as “*costulata*.” *Egenolfia bipinnatifida* J. Smith, Hist. Fil. 132. 1875. TYPE: Burma. Tenasserim: Dawna Range near Moulmein, C. S. P. Parish 60 (holotype, K).

*Egenolfia bipinnatifida* J. Smith was a replacement name for *Acrostichum appendiculatum* Willdenow var. *costulatum* Hooker, which was described from Khasia. Ching (1931), in a monograph of the genus *Egenolfia*, recognized it as distinct from *E. intermedia* (J. Smith) Fée, *E. serrulata* (J. Smith) Fée, *E. sinensis* (Baker) Maxon, and *E. tonkinensis* C. Christensen based on its asymmetrically deltoid, large, basal pinnae that are

deeply bipinnatifid proximally. Iwatsuki (1959), in an emendation of *Bolbitis*, transferred the species to *B. bipinnatifida* (as “*bipinnata*”). Hennipman (1977) noted that the combination *B. bipinnatifida* (J. Smith) K. Iwatsuki was an illegitimate later homonym, but avoided the issue by combining the taxon under his broadly circumscribed concept of *B. sinensis* (Baker) K. Iwatsuki.

Wang (1999) remarked that *Egenolfia bipinnatifida* is distinctly different from *E. sinensis*. When *E. bipinnatifida* is transferred to *Bolbitis*, this name is illegitimate under Article 53.1 of the St. Louis Code (Greuter et al., 2000) because an earlier homonym exists: *Bolbitis bipinnatifida* (Kuhn) Ching, described from the Seychelles. Therefore, a replacement name for *B. bipinnatifida* is required.

*Bolbitis longiaurita* is similar to *B. sinensis*, described from Szemao in Yunnan Province, but differs in its unwinged rachis as well as the base of the two lowermost sterile pinnae asymmetrical, with the basispicopic 2 or 3 lobes undeveloped and the other lobes longer than the acrosopic ones. A large sample of plants of *B. sinensis* have been cultivated at the South China Botanical Garden, and all retained the character of the two lowermost pinnae symmetrical proximally. The Chinese species of *Bolbitis* related to *B. longiaurita* may be distinguished by the key below.

KEY TO THE CHINESE SPECIES OF *BOLBITIS* RELATED TO *B. LONGIAURITA*

- 1a. Apex of lobes rounded, lobes 0–1 mm apart.
  - 2a. Rachis with a narrow wing except for the lowest part; base of lowermost sterile pinnae symmetrical . . . . . 1. *B. sinensis*
  - 2b. Rachis without wing; base of lowermost sterile pinnae asymmetrical . . . . . 2. *B. longiaurita*
- 1b. Apex of lobes obtusely acute, lobes 2–3 mm apart.
  - 3a. Stipe and rachis densely scaly; lobes of sterile pinnae falcate, 1–1.5 cm long . . . 3. *B. tonkinensis*
  - 3b. Stipe and rachis subglabrous; lobes of sterile pinnae triangular, 0.5–0.6 cm long . . . 4. *B. fengiana*

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