



***Heterophyton*, a new substitute name for *Allophyton* X.W. Wu (Pteridopsida)**

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The filicopsid pteridophyta genus *Allophyton* X.W. Wu (1982) was established for *A. denggenensis* X.W. Wu collected in Badasongduo, Dingqing County of Xizang Province, China. It was listed in Index of generic names founded on Mesozoic-cenozoic specimens from China (Wu 1993: 498) and its taxonomic position is unsettled. *Rhizomopteris* Schimp. (1869: 699) differs from it in its fine and furcate stem, and bundle scar in leaf scar hippocrepiform, *Caulopteris* Lindl. & Hutton (1832: xlix) differs from it in its leaf scar regular spread, and bundle scar in leaf scar hippocrepiform. The materials of *Allophyton* were collected in Mesozoic Coal Series strata, coal-bearing strata that were regarded as Jurassic by Li (1955) and from late Triassic to early-middle Jurassic by Si & Zhou (1962).

However, up until now it generally has not been realized that the generic name *Allophyton* X.W. Wu is not legitimate (but see Schultze-Motel et al. 2003: 6), being a later homonym of *Allophyton* Brandege (1914: 62), a synonym now applicable to the conserved genus *Tetranema* (Bentham 1843: 52), a genus of five species in Plantaginaceae Juss. (Christenhusz 2010: 56) distributed in eastern and southeastern Mexico, Guatemala and Honduras (Pennell 1925; Méndez-Larios & Villaseñor 1995). It differs from *Penstemon* Mitch. in its short stems that are densely crowded with long and obovate leaves, and flowers occur in close clusters borne on long peduncles resulting in loculicidally dehiscent capsules.

A change of the filicopsida generic name is necessary according to the requirements of the *International Code of Nomenclature* (McNeill et al. 2012), although, as noted above, *Allophyton* Brandege is now considered to be a synonym of *Tetranema* (e.g., Williams 1972; Standley & Williams 1973), and the necessary replacement of Wu's *Allophyton* is proposed below.

Taxonomy

Heterophyton F.G. Wang, *nom. nov.* Replaced name: *Allophyton* X.W. Wu (1982: 53), *nom. illeg.*, non *Allophyton* Brandege (1914: 62). Type:—*Heterophyton denggenensis* (X.W. Wu) F.G. Wang.

Etymology: Named from Greek *heteros*, “different,” and *phyton*, “plant”. The words *heteros* and *allos* essentially have the same meaning in botanical Latin.

One species in Xizang, China:

1. ***Heterophyton denggenensis*** (X.W. Wu) F.G. Wang, *comb. nov.* Basionym: *Allophyton denggenensis* X.W. Wu (1982: 53, pl. VI, fig. 1; pl. VII, figs. 1-2). Type:—CHINA. Xizang, Dingqing County: Badasongduo, Mesozoic Coal Series, PB7263 (holotype, NIGPAS, Nanjing Institute of Geology and Palaeontology, Chinese Academy of Sciences).

Distribution: China, Xizang, Dingqing County, Badasongduo.

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