



Notes on the fern flora of Fiji: Synonymization of *Ctenitis minima* and *Dryopteris waiwaiensis* with *Tectaria dissecta* (Tectariaceae) and *Deparia boryana* (Athuriaceae), respectively

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Ctenitis C. Christensen (1938: 544) is a fern genus in Dryopteridaceae (Smith *et al.* 2006, Zhang *et al.* 2013), containing about 150 species distributed in the New and Old World wet tropics (Mickel & Smith, 2004). While working on a monograph of *Ctenitis* of the Old World, we found two new synonyms for the fern flora of Fiji which do not belong to *Ctenitis* and have never been correctly treated before: *Ctenitis minima* Brownlie (1977: 303), a heterotypic synonym of *Tectaria dissecta* (G. Forst.) Lellinger (1968: 156) (Tectariaceae), and *Ctenitis waiwaiensis* (C. Chr.) Brownlie (1977: 303) [basionym: *Dryopteris waiwaiensis* Christensen (1905: 300)], a heterotypic synonym of *Deparia boryana* (Willdenow) M. Kato (1977: 36) (Athuriaceae).

Taxonomic Treatment

Tectaria dissecta (G. Forst.) Lellinger (1968: 156).

Basionym:—*Polypodium dissectum* Forster (1786: 81).

Type:—Pacific Islands, *G. Foster s.n.* (holotype BM-001048435!, isotypes BM-001048415!, K-000636101!).

Heterotypic synonym:—*Ctenitis minima* Brownlie (1977: 303). Type:—FIJI. Viti Levu Tailevu: Hills east of Wainimbuka River, in vicinity of Wailotua, 100–150 m, 27 April 1953, *A.C. Smith 7240* (holotype US-00135265!, isotypes K-000636084!, MICH-1190186!).

Taxonomic notes:—The generic assignment of *Ctenitis minima* Brownlie has been unclear for a long time since its publication (NMNS 2008, Brownsey & Perrie 2011), although Holttum (1985) suggested that it might belong to *Tectaria*. Holttum (1985) did not transfer it to *Tectaria*, partly because there was an earlier homonym *T. minima* Underwood (1906: 199). After examining the type material and additional specimens of related names, we found that *C. minima* is a heterotypic synonym of *T. dissecta* (G. Forst.) Lellinger. The latter is widely distributed in China (Taiwan), India, SE Asia to Polynesia, and Fiji (Xing *et al.* 2013).

As noted by Holttum (1988), the type material of *Polypodium dissectum* Forster (1786: 81) is deposited at BM and K. Here the sheet BM-001048435 is recognized as the holotype, on which “441 *Polypodium dissectum*” (“441” is the species number of this name in the protologue) and “G. Forster’s Herbarium” can be seen.

Additional specimens examined:—COOK ISLANDS. Maungatea Mt., 9 June 1929, *H. E. Parks & S. T. Parks 22230* (NY). SAMOA. Ofu: on rocky cliff, slope back of Ofu village, 30 m, 25 November 1939, *T. G. Yuncker 9478* (NY). Tau: Luma, 25 ft., 13 July 1938, *W. Harris 347* (NY). Tau: 700 ft., 27 July 1938, *W. Harris 383* (NY). Tau: on mist bank along Luma-Faleasa trail, 45–50 m, 30 September 1979, *T. G. Yuncker 9137* (NY). NIUE ISLAND. On rotten log in forest, 6 mile east of Alofi, 65 m, 20 January 1940, *T. G. Yuncker 9765* (BISH, NY).