



Taxonomic novelties in the fern genus *Tectaria* (Tectariaceae)

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Abstract

The misapplication of the name *Tectaria griffithii* is corrected, which results in the revival of *T. multicaudata* and the proposal of a new combination (*T. multicaudata* var. *amplissima*) and two new synonyms (*T. yunnanensis* and *T. multicaudata* var. *singaporeana*). For the reduction of *Psomiocarpa* and *Tectaridium* (previously monotypic genera) into *Tectaria*, *T. macleanii* (new combination) and *T. psomiocarpa* (new name) are proposed as new combinations. In addition, the new name *Tectaria subvariolosa* is put forward to replace a later homonym (*T. stenosemioides*).

Key words: nomenclature, *Psomiocarpa*, taxonomy, *Tectaridium*

Introduction

Tectaria Cavanilles (1799) (Tectariaceae) is a fern genus frequent in tropical regions, with most species growing terrestrially in rain forests. This group is remarkable for its extremely diverse morphology, and the estimated number of species ranges from 150 (Tryon & Tryon 1982; Kramer 1990) to 210 (Holttum 1991a). Holttum (1991a) recognized 105 species in *Tectaria* from Malesia and presumed that SE Asia is its center of origin. In SE Asia outside Malesia, the exact number of species in *Tectaria* remains unknown due to lack of a modern treatment since the first revision for the area (Ching 1931). Though several regional revisions were carried out in last decades (e.g., Tagawa & Iwatsuki 1988, Wang 1999, Chandra 2000), the delimitation of *Tectaria*, especially the species concept, is different from author to author.

During an attempt to revise the taxonomy of *Tectaria* in mainland Asia and to explore the phylogenetic concept of *Tectaria*, we have made some studies of herbarium material and simultaneously conducted phylogenetic analyses based on cpDNA sequences in recent years. Before presenting our molecular results, we thought it necessary to clarify some confusion on species identities.

Taxonomic treatment

Tectaria griffithii (Baker) C.Christensen (1934: 180).

Basionym:—*Nephrodium griffithii* Baker in Hooker & Baker (1867: 300). Type:—MYANMAR. Without locality, without date, *Griffith s.n.* (holotype K!).

= *Nephrodium yunnanense* Baker (1906: 11); *Tectaria yunnanensis* (Baker) Ching (1931: 24), *syn. nov.* Type:—CHINA. Yunnan: Mengtze, Red river mountains, without date, *Hancock 193* (holotype K!).

Note:—*Tectaria griffithii* has long been confused with *T. multicaudata* (Clarke 1880: 540) Ching (1931: 20). Both Ching (1931) and Holttum (1991a, b) considered the two species as conspecific, albeit Ching (1931)