



New combinations and a key to the species of *Pelekium* (Thuidiaceae) in sub-Saharan Africa and the East African Islands

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Abstract

Two taxa currently recognised in *Thuidium* are transferred to *Pelekium* to complete the relocation of monoicous species from *Thuidium* subg. *Microthuidium* to *Pelekium*. The new combinations are: *Pelekium thomeanum* (Broth.) Phephu *stat. et comb. nov.* (basionym *Thuidium involvens* (Hedw.) Mitt. var. *thomeanum* Broth.), now recognised as a species distinct from *P. involvens* (Hedw.) A. Touw, and *P. pseudoinvolvens* (Müll. Hal.) Phephu *comb. nov.* A full taxonomic treatment, including descriptions and notes on the distribution and ecology of these two species is presented, followed by a key to the African species of *Pelekium*.

Key words: Africa, classification, nomenclature, *Thuidium*, taxonomy

Introduction

While revising the African members of Thuidiaceae, two African endemics currently recognised in the genus *Thuidium* Bruch & Schimp., *T. involvens* (Hedw.) Mitt. subsp. *thomeanum* Touw and *T. pseudoinvolvens* (Müll. Hal.) A. Jaeger, were found to display characters typical of the genus *Pelekium*. When Touw (2001) transferred almost all monoicous species previously treated in *Thuidium* subg. *Microthuidium* to the genus *Pelekium* Mitt., he did not transfer these two taxa, as well as a number of other (mainly South American) species, either because he had not yet examined type specimens or because he was not convinced that they were 'good' taxa (Touw, pers comm., 2010). We have now examined the African taxa in detail and decided to move them to *Pelekium* as well.

Pelekium is distinguished from the other two genera of Thuidiaceae in Africa, *Thuidium* and *Thuidiopsis*, by its small size, simple or weakly branched paraphyllia, plane or weakly plicate stem leaves, occasionally ornamented seta and monoicous sexual state. This is the largest and the most morphologically and ecologically diverse genus of African Thuidiaceae. A key to the 12 species of *Pelekium* recognized in Africa, now including *P. thomeanum* and *P. pseudoinvolvens*, is given below.

Taxonomic treatment

Pelekium thomeanum (Broth.) Phephu *stat. et comb. nov.*

Basionym:—*Thuidium involvens* (Hedw.) Mitt. var. *thomeanum* Broth. (1890: 183).

Other combinations:—*Thuidium involvens* subsp. *thomeanum* (Broth.) A. Touw (1976: 168).