

**THE LECTOTYPIFICATION OF
ACROSTICHUM ACUMINATUM WILLD. AND THE REINSTATEMENT
OF THE NAME PHOTINOPTERIS SPECIOSA (BL.) PRESL**

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The name *Acrostichum acuminatum* Willdenow (1810) was designated by Morton (1967) as the basionym of *Photinopteris acuminata* (Willd.) Morton. As a consequence the generally accepted name *Photinopteris speciosa* (Bl.) Presl (bas.: *Lomaria speciosa* Blume, 1828) was sunk by him into synonymy.

The diagnosis and the description of *Acrostichum acuminatum* in the original publication include details of both sterile and fertile leaves. The material that Willdenow had at hand was a specimen of *Photinopteris speciosa* collected by the Malaspina expedition, labeled 'Peru', but obviously originating from the Philippines (Herb. Willdenow no. 19539, B*). The material is sterile; see also Presl (1851: 192). The description of the fertile elements was based completely on 'Lingua cervina, scandens, Citrei foliis, major' (Plumier, 1705), a fern from Martinique which is now attributed to *Bolbitis nicotianifolia* (Sw.) Alston.

When enumerating *Acrostichum acuminatum* Willd., Sprengel (1827) cited the locality Martinique only. Fée, in his monograph of the acrostichoids (1845), supplied an ample description of *Gymnopteris acuminata* (Willd.) Fée, based on material now referred to as *Bolbitis nicotianifolia*; this author did not study the Willdenow herbarium. Presl (1851) reported explicitly on the discordancy between the elements upon which Willdenow based his *Acrostichum acuminatum*. The references Presl (1851: 188) added to *Anapausia acuminata* (Willd.) Presl include Plumier (1705) and '*Acrostichum acuminatum* Willd. spec. V. 116 (nec herbarii et excl. patria Peruvia)'. At the same time Presl (1851: 192) newly described *Photinopteris humboldtii* Presl which he based upon the sterile material of *Acrostichum acuminatum* present in Willdenow's herbarium, and a duplicate specimen of the Malaspina material in his own herbarium, referring to '*Acrostichum acuminatum* Willd. herb. (nec. spec.)'. Presl erroneously thought his new species to inhabit Peru.

Morton (1967) stated 'The actual specimen studied and described by Willdenow should be given precedence as the type over the citation of a pre-Linnean plate, just as most Swartz species of ferns were based on actual specimens, some of which were identified with plates by Plumier. The specimen in the Willdenow Herbarium is clearly *Photinopteris speciosa*.' In accordance herewith he renamed the latter species *Photinopteris acuminata* (Willd.) Morton.

This is as well in contrast with the earlier segregation by Sprengel and especially Presl as with current usage, and hence with the present Code, according to which (Guide for the determination of Types, point 4c) the non-segregated element (Plumier's description and plate) should be designated as the lectotype.

* The visit to the Berlin herbarium was made possible through a grant of the Netherlands Organization for the Advancement of Pure Research (Z.W.O., 1968).

The synonymy of *Acrostichum acuminatum* as far as based on Plumier's plate runs:

Acrostichum acuminatum Willdenow (1810, January) 116, p.p., non Jussieu ex Poiret in Lamarck (1810, September) 120. — *Gymnopteris acuminata* Presl (1836) 244; Fée (1845) 85, p.p., pl. 46: fig. II. — *Anapausia acuminata* Presl (1851) 188. — *Chrysodium acuminatum* Mettenius (1856) 22. — Lectotype (Presl, 1851): Plumier (1705) 100, pl. 115 (drawn from Plumier s.n., Lesser Antilles, Martinique, St. Maria, P-JU).

The synonymy of *Acrostichum acuminatum* as far as based on the Malaspina material runs:

Acrostichum acuminatum Willdenow (1810, January) 116, p.p. — *Photinopteris humboldtii* Presl (1851) 192. — *Photinopteris acuminata* Morton (1967) 31, nom. illeg. (Art. 67). — Lectotype (Presl, 1851): the Malaspina material (B, herb. Willdenow no. 19539; iso in PR or PRC, n.v.). As the correct name for this the well-known *Photinopteris speciosa* (Bl.) Presl is reinstated.

It is further remarked that the suggestion of Morton that Swartz and Willdenow showed the same policy as to the enumeration of species is improbable in the light of Christensen's (1910) statement: 'Swartz hat gewiss in seiner *Synopsis Filicum* neue Arten auf die Bilder älterer Verfasser gar nicht aufgestellt, wie Linné und später Willdenow und andere in ausgedehntem Grade es taten.'

The present case which is abundantly clear is not unique. In two rather similar cases, De Joncheere (1967, 1969, 1974) showed that Morton's lectotypifications of two of Swartz' species are also illegitimate for the same or comparable reasons. This leads to the conclusion that Morton generally based his lectotypifications automatically on his preference of herbarium material over publications.

The above criticism on Morton's ideas on lectotypification detracts nothing from the author's appreciation for Morton's interest in typification in general and especially as to the taking and distribution of photographs of type specimens of ferns.

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