

ZAMIACEAE

TYPIFICATION OF *ENCEPHALARTOS*

In 1926 Pilger lectotypified *Encephalartos* with *E. caffer* ('Typische Art: *E. caffer* (Thunb.) Lehm.'). This was accepted in the paper edition of Farr, Leussink & Stafleu (1979) as well as its updated electronic version (2002). The syntype material of *E. caffer* is extant as two sheets of leaves and parts of male and female cone material, in the Thunberg Herbarium in UPS (Dyer 1966: 33).

In 1992 Stevenson again lectotypified *Encephalartos*, but with *E. friderici-guilielmi*, claiming that Pilger's lectotypification was invalid because it was published 'before and without a type concept'.

I dispute Stevenson's interpretation, and submit that Pilger's lectotypification is perfectly in order and should be upheld.

Stevenson's (1992) claim that no type concept existed in 1926, is unfounded. At the very first International Botanical Congress (De Candolle 1867) it was defined in article 54 of the Laws of Botanical Nomenclature: 'If a genus contains a section or some other division which, judging by its name or by its species, is the type or origin of the group, the name is reserved for that part of it'. It would appear that it was not generally applied in so many words, but it would certainly seem that numerous

practising taxonomists accepted the principle. Thus at a meeting of the American Association for the Advancement of Science held in Rochester, New York, in 1892, a set of nomenclatural rules which included application of the type method, was presented and discussed. These were further refined at a meeting at Philadelphia in 1904 (Anon. 1904). It appears that the failure of the International Botanical Congresses in Vienna (1905), Brussels (1910), London (1924), and Ithaca (1926) to adopt the type concept stemmed not so much from aversion to the method as from anti-American sentiment. The type method was widely applied, but its application was not compulsory according to the International Rules of Botanical Nomenclature. Between 1919 and 1926 Sprague in the UK and Hitchcock in the USA, published a series of articles on typification (Hitchcock 1919, 1925, 1926, 1929; Sprague 1920, 1921, 1923, 1924, 1926), and this led to the acceptance of the type principle at the International Botanical Congress in Cambridge in 1930; and its inclusion in the third edition of the International Rules of Botanical Nomenclature (Briquet & Rendle 1935). The history of the adoption of the type method into the International Code of Botanical Nomenclature is admirably related by Lawrence (1951).

Furthermore, the type concept is retroactive, and is today applied to species described at the very starting point of botanical nomenclature.

Its mention in the Laws accepted at the very first International Botanical Congress in 1867 (De Candolle 1867) proves that European taxonomists were familiar with the type method, and at the time of Pilger's publication, the publications cited above prove that taxonomists were beginning to accept the concept of type-based taxa. Nevertheless Pilger's acceptance or otherwise of the type concept is irrelevant, as the current edition of the International Code of Botanical Nomenclature (Greuter *et al.* 2000) clearly states (Art. 7.11) 'designation of a type is achieved ... if the type is definitely accepted as such by the typifying author [and] if the type element is clearly indicated by direct citation including the term 'Type' ... or an equivalent'. Pilger's citation of a 'typische Art' can only be read as complying with these requirements. Art. 9.17 then states 'The author who first designates a lectotype or neotype must be followed', and no limiting starting date is stipulated. Stevenson's argument about the lack of a type concept at the time is irrelevant in terms of the Code. Pilger's action is in line with the requirements of the Code, and must be followed. The only permissible reason for rejecting Pilger's action would be if it were in 'serious conflict' with the protocol, which Stevenson hasn't proved.

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