Report of the Committee for Fossil Plants: 1
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PROPOSALS TO CONSERVE OR REJECT

Edited by Dan H. Nicolson

Report of the Committee for Fossil Plants: 1

Alfred Traverse

Summary


The Committee recommends acceptance of two of three proposals to conserve generic names of fossil plants. It also comments on proposals to amend the *Code* that affect the nomenclature of fossil plants.

There were relatively few conservation proposals concerning names of fossil plants since the Berlin (1987) Congress. However, the inter-Congress period has not been uneventful for our Committee. For example, the subject of NCU (Names in Current Use) lists as they affect nomenclature of fossil plants has been debated with animation.

Recommendations on conservation proposals


The situation is complex, and a decision that *Nilssoniopteris* needs conservation does not necessarily mean that this proposal should be accepted. S. R. Ash wrote an opinion for our Committee, of which the following is an excerpt:

"I do not support this proposal to conserve *Nilssoniopteris* against *Taeniozamites* because of the confusion over the types of both *Nilssoniopteris* and *Taeniopteris*. I cannot support a conservation proposal that does not attend to that matter. Certainly *Nilssoniopteris* has been generally accepted by paleobotanists since Florin reintroduced the name for certain taeniopterid leaves that Harris had previously named *Taeniozamites*. However, most have acknowledged that its status is unclear. This comes from the fact that *Taeniopteris vitatta* has been used as the type of both *Taeniopteris* and *Nilssoniopteris*, as well as of *Taeniozamites*.

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“Nicolson, in an editorial note published with the proposal, suggested that the problem might be solved by conserving Taeniopteris with one of the other two species of Taeniopteris described by Brongniart along with T. vitatta, but this poses other problems. Therefore, I recommend that the Committee for Fossil Plants reject the present proposal, in the hope that a further effort be made later to resolve the situation.”


A commentary on this proposal was prepared for the Committee by H. Kerp, of which the following is an excerpt:

“The generic name Lycopodites, established by Brongniart in 1822, has never found general acceptance among palaeobotanists. However, the generic name Lycopodites Lindl. & Hutton is very widely used, although it is a later homonym. It includes species of lycopodiaceous affinity.

“The problems with regard to the generic name Lycopodites have been noticed long ago, but the generic name Lycopodites Lindl. & Hutton has never been conserved. Brongniart originally attributed three species to Lycopodites Brongn., viz. L. taxiformis, L. bucklandii and L. squamatus; the first being the type of Lycopodites. The real nature of L. taxiformis is debatable, and the species has never been cited in the palaeobotanical literature. According to Brongniart it could be of lepidodendraceous or coniferous affinity. From Brongniart’s illustration the latter seems more likely, although this cannot be verified because the holotype is apparently lost. The specimen shows the characteristic pinnate branching pattern of Late Palaeozoic conifers; lycophytes usually have dichotomously branching axes.

“Apart from the three species mentioned above, Brongniart later accommodated eleven other species in Lycopodites. However, most of them either bear nomina nuda or have subsequently proven to be conifers. Lycopodites is now used extensively for lycopodiaceous fossils. These are known from the Devonian through the Cretaceous, and the genus has been recorded from all over the world, from Spitzbergen to New Zealand. In the Traité de paléobotanique, a standard palaeobotanical reference work, twenty well-defined lycopodiaceous species are assigned to Lycopodites Lindl. & Hutton non Brongn. In all modern palaeobotanical textbooks Lycopodites is cited as a genus for lycopodiaceous fossils.

“In the interest of stability, I strongly support Prop. 967 to retain Lycopodites Lindl. & Hutton as a genus for lycopodiaceous fossils and conserve it with the type L. falcatus Lindl. & Hutton against Lycopodites Brongn. Rejection of this proposal would require the creation of a large number of new names.”


J. E. Skog, a paleopteridologist and member of the Committee, wrote an opinion of which the following is an extract: “The proposal is correct in its assessment of the situation. Odontopteris (Brongn.) Sternb. has been used as a generic designation in paleobotany for more than 170 years, for an established taxon of pteridosperm fo-
liage, since Stur’s 1884 publication excluding it from the ferns appeared. Should the name be unavailable for use by paleobotanists confusion would result.”

*Odontopteris* Bernh. is a synonym of *Lygodium* Sw. and pertains to an extent genus. Bernhardi’s name has never been taken up, and it is unlikely that it would ever be used, since no one favours splitting of the genus *Lygodium*.

**Comments on amendment proposals**


These proposals have to do with the possibility of conservation of names at any rank, not just of families, genera, and “species of major economic importance” (no fossil species, not even of *Lepidodendron*, would presumably qualify!). There are other proposals dealing with conservation and rejection of names, but our vote on these two is sufficient to indicate our position.

This vote is very significant as a bellwether of changing opinions in paleobotanical nomenclature. The Committee for Fossil Plants has been for decades almost rigid in opposition to most conservation. There are only a handful of conserved fossil plant names.


At the suggestion of W, Greuter, Committee members were polled on their opinion on the principle of granting nomenclatural protection to NCU lists. The question was stated, “Do you support the concept of ‘NCU lists’ of fossil plant names which would be protected, for example, against later replacement by discovery of competing synonyms?”

Comments of Committee members included: (1) “Mainly opposed because of work load – those of us in university positions receive little reward for creating lists...” (2) “NCU lists seem to me to be a static frozen situation.” (3) “An in depth study of implications of this proposal needs to be undertaken to avoid possible chaos...”

A group under the direction of M. C. Boulter in London produced in late 1991 a very thick stack of sheets (4 cm!), which comprises a draft list of generic names for fossil plants. It is clearly a fine first step and very useful piece of work. However, no part of this list is ready for adoption at Tokyo, should the proposals for NCU introduction be approved. The list has too many omissions and other errors that resulted from the time constraints under which it was produced. If the concept is adopted, the Boulter & al. list should be subdivided among those of us interested in such matters, with the aim of producing accurate, professionally acceptable sub-lists, over a period of time (perhaps 10 years).


The Committee likewise was polled on the principle of registration. The question was stated: “Do you support the concept of required registration of new names?”
Significant comments of Committee members included: (1) “I hope the mechanisms for establishing an official registering centre will be clear and widely accepted.” (2) “A very important step ... 100% support.” (3) “Proposals are unrealistic: who gives money for maintaining such lists when so much taxonomy remains undone?” (4) “One hopes the approved centers will be established with wisdom and fairness, not exclusivity.”


This proposal would amend Art. 36 to permit English instead of only Latin in publication of a description or diagnosis for a new taxon. At present the Code permits publication of descriptions/diagnoses in any language for fossil plants. So, while the main purpose of the proposal is to relieve non-paleobotanists of the increasingly difficult task of producing Latin prose, a secondary result would be that in paleobotany an English description/diagnosis would be required. (Latin would also be acceptable, but it is unlikely that it would be used very often.) Inasmuch as most non-anglophone paleobotanical authors already provide some English in their papers, this does not seem too onerous, and it would greatly aid understanding, especially of papers published in non-alphabetic languages.

The single “no” vote was from a multilingual person from a South American country. Supporters include both francophone members and the members from India and China. Virtually the same Committee registered 4 against and 2 abstaining on the McNeill & al. proposal in 1987, even though the Secretary was pleading for acceptance, so the present vote represents a significant swing in opinion. Notable comments of Committee members: (1) “As co-author of a general work on living and fossil dinoflagellates, one of the most difficult tasks of the entire 10-year project was to find someone who would translate family diagnoses into Latin... I considered first erecting them under ICZN, then bringing them over!” (2) [from a francophone paleobotanist] “The use of English in publication of diagnoses for a new taxon must gain support. Enough of the problems arising from ... different translations of descriptions in Chinese or Russian!” (3) [from the one member who voted “no”] “I would accept English and a Latin-derivative language (that would mean French, Spanish, Italian, Portuguese...)”