

RELLIMIA THOMSONII, A NEW NAME FOR MILLERIA
(PROTOPTERIDIUM) THOMSONII LANG 1926 EMEND.
LECLERCQ AND BONAMO 1971

Suzanne Leclercq* and Patricia M. Bonamo**

In a study of new material of *Milleria* (*Protopteridium*) *thomsonii* Lang 1926 from the Middle Devonian of Belgium (Leclercq & Bonamo, 1971) we reinstated the name *Milleria* Lang 1926 for the invalid name, *Protopteridium* Krejci 1880. This name is a nomen nudum because Krejci designated it in his publication of 1880 as a provisional name ("provisorische Benennungen"). His description was not accompanied by a specific, generic or combined generic-specific description, nor was the plant figured. We also rejected as inappropriate for our taxon, the generic names *Ptilophyton* (Dawson, 1878; see also Kräusel & Weyland, 1930), *Hostinella* (Stur, 1881) and *Spiropteris* (Potonié & Bernard, 1904) because all three were based on previously existing specimens unlike our material. We adopted the name *Milleria* because Lang assigned it for the first time (1926) with careful descriptions accompanied by photographs, generic and specific diagnoses and complete typification. See Leclercq and Bonamo, 1971 for a detailed discussion of this choice.

However it has been brought to our attention that *Milleria* Lang 1926 is a later homonym of *Milleria* Linnaeus 1753 (Sp. Pl. 919), a genus of extant Compositae. Thus the generic name *Milleria* is illegitimate for the fossil taxon and it too must be rejected. We are grateful to Mrs. Judith Skog of Cornell University (now of George Mason University) for this pertinent observation.

At this point in the taxonomic problem the rules of nomenclature (I.C.B.N., Stafleu et al. 1972) recommend the adoption of the next validly published name. Ensuing important studies were by Kräusel & Weyland in 1932, 1933 and 1938 in which the authors recognized the identity of Lang's *Milleria* with Krejci's *Protopteridium*. They did not question the validity of the name *Protopteridium*. They adopted it merely because it was older than *Milleria*, and they gave neither generic diagnosis nor typification. Thus the name *Protopteridium* was never validated.

Studies subsequent to Kräusel and Weyland (see Historical Survey or Synonymy, Leclercq & Bonamo, 1971) are merely descriptions of new individual specimens or groups of specimens. None of these studies validate the genus name *Protopteridium*. Without a generic diagnosis or an indication of acceptance of a previous generic diagnosis, the taxon lacks a validly published name. Now it is necessary for us either to validate the name *Protopteridium* or to select a new name. We elect to assign a new name for the following reasons.

* Laboratoire de Paléontologie Végétale, Université de Liège, Liège, Belgium.

** Department of Biological Sciences, State University of New York, Binghamton, New York, U.S.A. — Manuscript prepared while supported by NSF grant GB 13098.

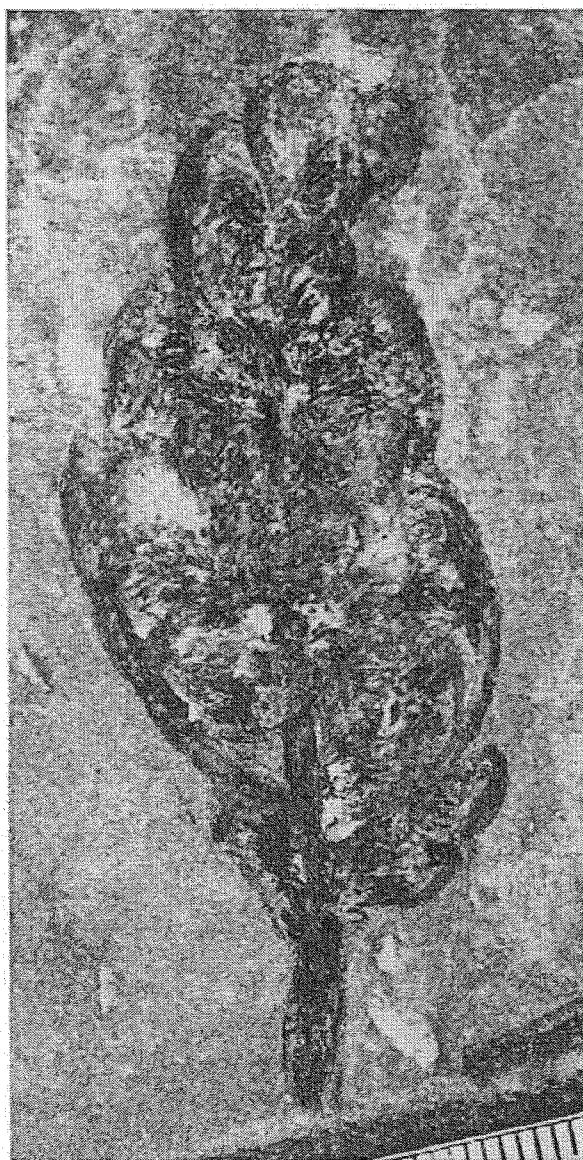


FIG. 1. Holotype of *Rellimia thomsonii* (#3268, Redpath Museum, McGill University, Montreal, Canada). The spiral arrangement of the sporangial branches is apparent; see Leclercq & Bonamo, 1971, p. 104 for detailed morphological description of the counterpart. $\times 2$

The name *Protopteridium* has long been associated with pinnately branched, dorsi-ventral, primitive fern fronds. This name implies filicinean affinity. We demonstrated in 1971 that the supposed fronds are truly sporangial branches, spirally arranged. The interpretation of the morphology supports progymnosperm affinity.

We propose the genus name *Rellimia* which is an anagram of *Milleria*.

The holotype, previously illustrated in Dawson, 1878 by a line drawing is reproduced photographically here in figure 1. This specimen was made available to us for study through the courtesy of Mrs. D. Alison and the Redpath Museum of McGill University, Montreal, Canada.

Rellimia Leclercq & Bonamo nom. nov.

Milleria Lang emend. Leclercq & Bonamo 1971. *Palaeontographica* 136B: 83-114. non Linnaeus 1753

Generic Diagnosis as in Leclercq & Bonamo 1971. *Palaeontographica* 136B, p. 105, figs. 1-33, 42, 43, 46-51.

Type species: *R. thomsonii*.

Rellimia thomsonii (Dawson) Leclercq & Bonamo tr. nov.

Basionym *Ptilophyton thomsonii* Dawson 1878. *Canadian Nat. & Quart. J. Sci.* 8: p. 384, 385, pl. IVa ("*thomsoni*")

Specific diagnosis as in Leclercq & Bonamo 1971. *Palaeontographica* 136B, p. 106.

Holotype: Figure 1, 3268 McGill University, Montreal, Canada, (see also Dawson 1878, *Canadian Nat. & Quart. J. Sci.* 8: 379-389, pl. IVa) and the counterpart; No. V.9425 British Museum of Natural History, London, England; figured in Leclercq & Bonamo 1971, *Palaeontographica* 136B, fig. 47.

Synonymy as in Leclercq & Bonamo 1971. *Palaeontographica* 136B, p. 93, 94.

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