Additional specimen of Archaeonoeggerathia gothani REMY and REMY, 1986 from the Namurian of Belgium

by Richard L. LEARY

Abstract

A specimen of Archaeonoeggerathia gothani Remy & Remy, 1986 (part and counterpart) from the Namurian of the Namur Basin is reported for the first time in Belgium. It extends the geographic distribution of the species.

Key-words: Archaeonoeggerathia gothani, noeggerathiales, sporophyll, Namurian, Belgium.

Résumé

L’auteur signale, pour la première fois, un spécimen (empreinte et contre-empreinte) d’Archaeonoeggerathia gothani Remy & Remy, 1986 dans le Namurien du bassin de Namur, en Belgique, ce qui augmente la distribution géographique de l’espèce.

Mots-clés: Archaeonoeggerathia gothani, Noeggerathiales, Sporophylle, Namurien, Belgique.

REMY and REMY (1986) described Archaeonoeggerathia gothani, a new genus and species of noeggerathialean sporophyll. That description is based upon two specimens from the Namurian A Arnberger Schichten of Sundern (Sauerland/Germany). The specimens are significant because they are the oldest known geological evidence of sporophylls of noeggerathialean nature, and they appear to fill a gap in the evolutionary line of noeggerathiales.

An additional specimen of Archaeonoeggerathia gothani REMY & REMY, 1986 is to be found in the collections of the Institut Royal des Sciences Naturelles de Belgique (part and counterpart, I.R.Sc.N.B. no. b 2060a, b). It was observed by the author while examining the Namurian-Westphalian A plant fossil collections of the Institute in 1975. The two parts, collected in an outcrop, were labeled but unidentified. The specimen is from the Namurian “Gare de Formation Saint Martin”, Marchienne-au-Pont (topographical sheet Fontaine l’Evêque, 1/10.000). However, the information is not sufficiently precise to permit clear stratigraphic assignment. According to the geological map of Belgium (Fontaine l’Evêque-Charleroi, no. 153, 1904, 1/40.000) and to the geological map of the “Massif de la Tombe” (1/23.529, BEUGNIES, 1977), the locality could belong either to the Namurian A or B.

The Belgian specimen (Fig. 1, a-c) appears to be identical to those described by Remy & Remy, 1986. The sporophylls are wedge-shaped, representing approximately one-fourth of a circle. They are marked with ribs which extend from the margin toward the base. The oval sporangial scars are arranged in a spiral. The outer margin of the sporophyll was dissected to form a fringe.

Although Archaeonoeggerathia gothani occurs as isolated sporophylls, they probably were attached to an axis to form...
a strobilus similar to Discinites and Lacoea (Leary, 1973, 1980; Leary & Pfefferkorn, 1977). The possible taxonomic relationships and evolutionary significance of A. gothani is given by Remy & Remy (1986). The specimen from the Namurian A or B of Belgium is significant because it extends the known geographic distribution of A. gothani. Future studies from these localities may provide clues to foliage and other parts of the plant which bore A. gothani as well as information about the associated flora.

References


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