

Devonian history of diversity of the rugosan Cyathaxonia fauna

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Literature data indicate above average diversity of the Cyathaxonia fauna in the Devonian period, both in absolute numbers of (sub)families and genera per age and also with respect to taxonomic diversities as calculated per Ma (106 years). The Emsian and Famennian faunas, although represented by most numerous (sub)families and genera, have less than average diversities, due to their more than average durations, whereas the shorter intervals of the Pragian and Givetian have the highest values for diversity per Ma, and Frasnian faunas the lowest diversities, for both (sub)families and genera. The post-Givetian crisis may have been responsible for the Frasnian minimum, although limited temporal resolution of the analysis does not allow for a more precise description of the Givetian/Frasnian transition. However, silent taxal are extremely numerous in the Frasnian, i.e., taxa which are present both prior to and after the Frasnian, but missing from the Frasnian record itself indicating that the Famennian Cyathaxonia fauna contains significant numbers of Lazarus and/or Elvis taxa.

Key words: Cyathaxonia fauna, Devonian, Givetian-Frasnian crisis, "silent taxa".

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