

Arkarua-like fossils from the Anti-Atlas region (Morocco): A new opportunity to test the Ediacaran-Cambrian radiation

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ABSTRACT BOOK

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Arkarua-like fossils from the Anti-Atlas region (Morocco): A new opportunity to test the Ediacaran—Cambrian radiation

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The Ediacaran period represents a remarkable stage in the diversification of life on Earth. During this time, the first complex ecosystems were established in shallow and deep marine environments, and were inhabited by a wide range of macro-organisms known as the Ediacaran biota. The study of the biological aspects of the Ediacaran biota focuses mainly on classic localities (Nama, Newfoundland, Flinders Ranges...), and therefore the search for and study of new fossiliferous localities is of key importance.

This contribution describes a new fossiliferous locality in the Ougnate inlier, in the Anti-Atlas region (Morocco). The fossiliferous unit is the Izelf Formation (567-550 Ma), which belongs to the Ouarzazate Group. Sedimentological surveys indicate that the Izelf Formation consists of 200 meters of siliciclastic (sandstone, siltstone) and carbonate (stratified carbonate, carbonate stromatolites, and carbonate phosphate levels) sediments deposited in a shallow marine environment.

The fossil-bearing sediments of the Izelf Formation yielded four types of fossils: *Aspidella*, ivesheadiomorphs, *Charniodiscus*, and *Arkarua*-like forms. *Arkarua* is represented by four specimens with pentaradial symmetry. These *Arkarua*-like specimens are very similar to those found in Australia (Gehling, 1987), offering a new opportunity to test the link between the Ediacaran fauna and the Cambrian radiation of echinoderms.

References

Gehling, J.G. 1987. Earliest known echinoderm—a new Ediacaran fossil from the Pound Subgroup of South Australia. *Alcheringa*, 11(4), 337–345.

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