

Abnormal trilobites from the Silurian and Devonian of Europe

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Acta Palaeontologica Polonica 70 (2), 2025: 205-212 doi:10.4202/app.01229.2024

Malformed trilobites have been documented in deposits ranging from the Cambrian to the Permian. Continued examination of novel malformed specimens provides insight into how trilobites recovered from injuries, experienced genetic abnormalities, and adapted to pathological conditions. This study focuses on trilobites from the Silurian and Devonian of Europe, presenting new records of: (i) a moulting-related injury in *Lioharpes venulosus*; (ii) genetic malformations in *Calymene blumenbachii* and *Treveropyge* sp.; and (iii) a moulting injury or genetic anomaly in *Scutellum (Scutellum) pardalios*. Additionally, we record evidence of bryozoan growth on a *C. blumenbachii* specimen. Our findings provide important data for contextualizing the paleobiology of early and middle Paleozoic trilobites, especially related to responses to ecological pressures.

Key words: Trilobita, *Calymene*, *Treveropyge*, *Lioharpes*, *Scutellum*, evolution, injuries, malformations, teratologies.

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