

## Early Frasnian ostracods from the Arche quarry (Dinant Synclinorium, Belgium) and the *Palmatolepis punctata* Isotopic Event

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Ostracods from the Arche quarry at Frasnes are analysed. Twenty-seven species are recognised in the Chalon Member and in the very base of the Arche Member of the Moulin Liénaux Formation. Three new species: *Scrobicula gracilis*, *Microcheilinella archensis*, and *Bairdia* (*Rectobairdia*) *chalonensis*, and one subspecies *Plagionephrodes laqueus praelaqueus*, are proposed. The fauna is in the *Favulella lecomptei* Zone based on metacopid ostracods and belongs to the Eifelian Mega-Assemblage. Ostracods are indicative of a regressive trend from a moderately deep poorly oxygenated marine environment below fair weather wave base to very shallow well oxygenated and agitated environments. Comparison of the ostracod fauna present in the Arche quarry with faunas described from the Frasnes railway section and from the Lion quarry shows that ostracods did not suffer a crisis during the *Palmatolepis punctata* Conodont Zone and close to the Early-Middle Frasnian boundary.

**Key words:** Ostracoda, *Palmatolepis punctata* Event, systematic, palaeoecology, Dinant Synclinorium, Frasnian, Belgium.

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