

A new fish fauna from the Middle Triassic (Upper Muschelkalk) of Moersdorf (Grand Duchy of Luxembourg) by Dominique Delsate & Christopher J. Duffin

Abstract:

A new fish fauna is described from the Upper Muschelkalk (Middle Triassic) of Moersdorf in the eastern part of the Grand Duchy of Luxembourg. It contains the chondrichthyans *Hybodus plicafilis* Agassiz 1843, the morphotypes of *Acrodus gaillardoti* Agassiz 1837 and *Acrodus lateralis* Agassiz 1839, *Acrodus* cfr *substriatus* (Schmid), *Acrodus mutteri* sp. nov., *Palaeobates angustissimus* (Agassiz, 1838), *Polyacrodus* spp., *Lissodus cristatus* sp. nov. and *Lissodus* sp.; a preliminary list of actinopterygians in terms of tooth morphotypes is introduced, mostly indicating the Perleidiformes.

Résumé:

On décrit ici la faune de poissons du Trias moyen, Muschelkalk supérieur, de Moersdorf à l'Est du Grand Duché de Luxembourg. Les chondrichthyens sont représentés par *Hybodus plicatilis* Agassiz, 1843, les morphotypes de *Acrodus gaillardoti* Agassiz 1837 et *Acrodus lateralis* Agassiz 1839, *Acrodus* cfr *substriatus* (Schmid), *Acrodus mutteri* sp. nov., *Palaeobates angustissimus* (Agassiz, 1838), *Polyacrodus* spp., *Lissodus cristatus* sp. nov. et *Lissodus* sp. Les morphotypes dentaires des Actinoptérygiens sont présentés; ils évoquent principalement les Perléidiformes.

Reptiles terrestres (Lepidosauromorpha et Traversodontidae) du Trias supérieur de Medernach (G.-D. de Luxembourg) par Dominique Delsate

Abstract:

Further sediment sortings from the Medernach (Larochette) bone-bed provided new continental vertebrates remains. The sphenodontid *Clevosaurus* is represented by a dentary with 2 preserved typical teeth, several teeth are tentatively attributed to non sphenodontid Lepidosauromorpha. Traversodontid mammals are represented by 2 different morphotypes, a very eroded upper postcanine and a lower postcanine.

***Haasichthys micheisi*, nov. gen., nov. sp., un nouveau Pachycormiforme (Osteichthyes, Actinopterygii) du Toarcien inférieur (Jurassique) luxembourgeois par Dominique Delsate**

Summary:

The Luxembourg Lower Toarcian yielded a new Pachycormiform, *Haasichthys micheisi*, gen. et sp. nov.. It is characterised by the association of the following features: a very low (Body Height / Standard Length) ratio of 10.1 %, the pectoral fin inserted in advance of the cleithrum posterior border, the dorsal fin slightly in advance of the anal fin, calcified ring chordacentra on the whole axis, a supplementary marginal row of minute teeth on the dentary, an antero-posteriorly elongated low trapezoidal opercular. Its geographic extension is precised, as it is also present in the Holzmaden area.

Key-words: Luxembourg Toarcian - New Actinopterygians - Pachycormiform.

Un Pholidophoridae nouveau (Osteichthyes, Actinopterygii) du Toarcien (Jurassique inférieur) luxembourgeois par Dominique Delsate

Abstract:

The Luxembourg Lower Toarcian yielded a new species of Pholidophoridae: *Pholidophorus friedeni* differs from known Pholidophoridae by the association of these characters: the total length is about 80 mm, the preopercular has a special shape without any large expansion of the anterior nor posterior borders of its ventral portion, but only a slight convexity of its anterior border, due to a wider ventral portion. The sensory canal is situated at an equal distance between the anterior and posterior borders, bearing at least 9 right and short canaliculi. There are 2 supraorbitals. The cheek plates are rather long; there are 5 infraorbitals, with a large infraorbital 3, and short infraorbitals 4 & 5, and the possibility of sumumerary suborbitals (1 or 2 main suborbitals, small vertically placed posterior suborbitals (?3), 1 dorsal small suborbital). The axial skeleton is formed by monospondylous ring chordacentra. Each fin has a similar axial length of about 10 mm. The scales are covered with ganoine, many of them are posteriorly denticulated by one to seven pectinations. Its geographic extension is precised, as it is also present in the Hoizmaden area.

Key-words: Luxembourg Toarcian - New Actinopterygians - Pholidophoridae.

Résumé:

Une nouvelle espèce de Pholidophoridae, *Pholidophorus friedeni* a été isolée lors de l'étude des poissons toarciens du Luxembourg (Delsate, 1997, 1999), elle est nettement caractérisable malgré le désordre au sein des Pholidophoriformes, et la nature manifestement hétérogène du genre *Pholidophorus*, résultant de l'usage abusif de cette identification. L'extension géographique de cette espèce nouvelle est précisée par la même occasion, vu sa présence également en zone de Holzmaden.

Die Belemniten der Minette-Formation (ob. Toarcium-ob. Aalenium) Luxemburgs von Robi Weis

Abstract:

The author describes the belemnite fauna recorded in the Luxembourgish part of the Lorraine Ironstone Formation (Toarcian/Aalenian), a fauna which has not been catalogued since 1945. 19 species are recognized, 7 of them being for the first time mentioned in the area. Based on an extensive material, the ontogeny and variability of some species (*Mesoteuthis rhenana* Opeel, *Brevibelus breviformis* Voltz) are precised. Furthermore, the denomination *Arcobelus lucilinburhucensis* nom. nov. is erected as a replacement name for the invalid *Belemnites meta* Bl. var. *compressa* Benecke, and a new species, *Acrocoelites (Odontobelus) subvulgaris* n.sp., is described.

Key words: Belemnites, Luxembourg, Toarcian, Aalenian.