

Abstract:

Biostratigraphic fossil research in the Koblenz-area (Lower Devonian, Lower Emsian, Rhenish Schiefergebirge) summarizes rich Bivalvia faunas mainly from the upper part of the Vallendar substage. The „Nellenköpfchenschichten“ present tidal environment with changing sedimentary conditions. Muddy sediments occasionally contain numerous Bivalvia, homalonotid trilobites and burrows of homalonotids. The fossil record of the massive sandstones is dominated by shell-beds (induced by hurricanes) containing mainly broken valves of non-autochthonous Bivalvia and brachiopods. Well preserved *Palaeoneilo maureri* (Bivalvia) possibly show nearly allochthonous living conditions. In contrast to the tidal embedding of the Nellenköpfchen locality the increment of normal marine sedimentation with brachiopod dominated shell-beds (Chonetinae) can be observed between Koblenz-Moselweiß and Koblenz-Lay.

Die Fauna der Rittersturz-Schichten:**Trilobita**

- Burmeisterella armata* (BURMEISTER) 82, 95, 97, 98 (Scutum rostrale)
- Digonus ornatus ornatus* (KOCH), Pygidium, 95
- Digonus ornatus* (KOCH) 82
- Digonus* sp. 43
- Scabrella* sp. 38
- Homalonotinae indet. 43, 82
- Phacops* sp. 43
- Treveropyge* (*Treveropyge*) *prorotundifrons* (R. & E. RICHTER) 43, 79
- Treveropyge* (*Dunopyge*) *drevermanni* (R. RICHTER), Pygidium 38
- Treveropyge* sp. 79, 95

Tentaculitida

- Tentaculites schlotheimi* KOKEN 43, 82, 94, 95
- Tentaculites* aff. *schlotheimi* KOKEN 6

Crinoidea

- Ctenocrinus acicularis* FOLLMANN, nach W. E. SCHMIDT (1941) 5
- Diamenocrinus gonatodes* J. MÜLLER, nach W. E. SCHMIDT (1941) 5, 6
- Diamenocrinus* sp. 5
- Dictenocrinus arthriticus* W. E. SCHMIDT, nach W. E. SCHMIDT (1941) 5
- Crinoidea indet. 38, 43, 49, 60, 93, 94, 103, 104

Gastropoda

- Bembexia daleidensis* (F. ROEMER) 82
- Bembexia* sp. 79
- Bucanella bipartita* (SANDBERGER) 82
- Bucanella tumida* (SANDBERGER) 82, 93
- Bucanella acuta* (SANDBERGER) 82
- Phragmostoma rhenanum* (DREVERMANN) 82
- Platyceras cassideum* D'ARCHIAC & DE VERNEUIL 82
- Salpingostoma hians* (DREVERMANN) 82, 94
- Gastropoda indet. 43

Bivalvia

- Palaeoneilo maureri maureri* (BEUSHAUSEN) 82
- Palaeoneilo maureri dunensis* (BEUSHAUSEN) 82
- Palaeoneilo maureri varicosa* BEUSHAUSEN 96
- Palaeoneilo maureri contrastans* (BEUSHAUSEN) 82
- Palaeoneilo kayseri* (BEUSHAUSEN) 82
- Palaeoneilo unioniformis* (SANDBERGER) 82
- Palaeoneilo beushauseni* (KEGEL) 82
- Ctenodonta* sp. 49
- Nuculana frechi* BEUSHAUSEN 82
- Nuculites truncatus* (STEININGER) 82
- Nuculites beushauseni* Beushauseni A. FUCHS 82
- Nuculites solenoides* GOLDFUSS 82

Nuculites ellipticus expansus MAUZ 82
Nuculites ellipticus ellipticus (MAURER) 82
Modiola lodanensis BEUSHAUSEN 82
Stappersella rhenocarina (MAUZ) 43, 79
Stappersella carinata (GOLDFUSS) 43
Stappersella sp., Slg. EICHELE 38
Actinodesma annae FRECH 33
Cornellites dauniensis (FRECH) 43, 49, 94
Leptodesma (Leiopteria) excitata A. FUCHS 43
Leptodesma (Leiopteria) pseudolaewis (OEHLERT), Slg. EICHELE 38, 79
Leptodesma (Leiopteria) sp. 43, 93
Limoptera (Limoptera) semiradiata (FRECH) 94
Limoptera (Limoptera) sp. 49
Goniophora rhenana BEUSHAUSEN 79, 94
Goniophora stürzti BEUSHAUSEN 79
Goniophora schwerdi BEUSHAUSEN 43
Myophoria sp. 49
Grammysia ovata SANDBERGER 82
Grammysia sp. 49
Carydium sociale BEUSHAUSEN 82
Conocardium rhenanum BEUSHAUSEN 82
? *Rhenanomya* sp. 43

Brachiopoda

Platyorthis circularis (SOWERBY), Slg. EICHELE 38, 79, 93
Platyorthis transversaria (A. FUCHS) 79
Platyorthis bicallosa (A. FUCHS) 6, 43
Platyorthis nocheri (A. FUCHS) Slg. EICHELE 38, **93**
Schizophoria provulvaria (MAURER) 43
Schizophoria sp., Slg. EICHELE 38
Chonetes (Chonetes) sarcinulatus (SCHLOTHEIM) 5, Slg. EICHELE 38, 43, 49, 60, 61, 79, 82, 94, 104
Chonetes (Plebejochonetes) semiradiatus (SOWERBY.) 6, 93, 97
Chonetes (Plebejochonetes) plebejus (SCHNUR) **37, 49**, 79, 82, 93, **94**, 95, 96, 103
Chonetes (Plebejochonetes) sp. 49, 61, 60
Loreleiella dilatata (F. ROEMER) 43
Loreleiella sp. 49
Iridistrophia hipponyx hipponyx (SCHNUR) 43, 49
Mesoleptostrophia explanata (SOWERBY), Slg. EICHELE 38, 43, 49, 60, 79, 82, 95
Mesoleptostrophia sp. 43, 94
Pseudoleptostrophia dahmeri (RÖSLER) 93, 103
Crinistrophia elegans (DREVERMANN) 43, 49
Douvillina sp. 49
Plicostropheodonta murchisoni (D'ARCHIAC & DE VERNEUIL) 5, 6
Plicostropheodonta sp. 43
? *Tastaria* sp. 43
Fascistropheodonta fascigera (DREVERMANN) 49
Fascistropheodonta sedgwicki (D'ARCHIAC & DE VERNEUIL) 5, 6
Leptaena rhomboidalis WAHLENBERG 49
Oligoptycherhynchus daleidensis (ROEMER) 37, Slg. EICHELE 38, 43, 49, **79**, 82, 93, 94, 95
Straelenia dunensis (DREVERMANN) 79
Anoplotheca venusta (SCHNUR) Slg. EICHELE 38, **49**, 79, 93
Athyris caeresana STEININGER, Slg. EICHELE 38
Athyris sp. 43
Cyrtina sp., Slg. EICHELE 38
Arduspirifer arduennensis latestriatus (DREVERMANN) 5, 6, 37, **43, 49**, 60, 61, 94, 103, 104
Arduspirifer sp., 6, Slg. EICHELE 38
Euryspirifer dunensis (KAYSER) 5, Slg. EICHELE 38, 43, Slg. EICHELE 49, 79, 60, 95, 103, 104
Euryspirifer cf. *dunensis* (KAYSER) 79, Slg. EICHELE 38
Brachyspirifer crassicosta crassicosta (SCUPIN) 43, 49, 93, 94
Brachyspirifer crassicosta stenus SOLLE 43, 79
Brachyspirifer der *crassicosta*-Gruppe 43
Brachyspirifer sp. 43, Slg. EICHELE 38
Subcuspidella incerta (A. FUCHS) 60, 43

Subcuspidella subcuspidata (SCHNUR) 61, 79

Subcuspidella humilis (SCUPIN) 43, 60

Subcuspidella sp. 5, Slg. EICHELE 38, 43

Spiriferida indet. 5

Tropidoleptus rhenanus FRECH 5, 6, 37, Slg. EICHELE 38, 43, 49, 60, 61, 93, 94, 95

Meganteris archiaci SUESS 43, 49, 60

Meganteris ovata ovata (MAURER) 5, 6

Bryozoa

Fenestella sp. 5, 6, 43, 49

Anthozoa

Pleurodictyum problematicum GOLDFUSS 5, 43, Slg. EICHELE 49, 61

Pleurodictyum selcanum GIEBEL 95

Vermes

Caulostrepsis taeniola CLARKE, Slg. EICHELE 38

Ichnofossilia

Cruziana dispar LINNARSSON 93