

8. PALAEozoic AND MESOZOIC GASTEROPODA, LAMELLIBRANCHIATA AND SCAPHOPODA

BY

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INTRODUCTION.

Following the example of Professor K. MARTIN I have as far as possible used the subdivision given by P. FISCHER in his „Manuel de Conchyliologie et de Paléontologie Conchyliologique”.

For the stratigraphy I used the system of E. HAUG: „Traité de Géologie”. Following the general custom, however, the Rhaetian is counted to the Trias and the Berriasian as formation parting the Jurassic from the Cretaceous.

In the list with a few exceptions only those species have been included of which a description has been given by the author.

LIST OF SPECIES.

I. PALAEozoic GASTEROPODA, LAMELLIBRANCHIATA AND SCAPHOPODA.

Class GASTEROPODA.

Order PROSOBRANCHIATA.

FAM. PSEUDOMELANIIDAE.

- Loxonema sp. Fliegel. — Upper Carboniferous Sumatra, Bibl. 17, p. 119.
" " sp. Teichert. — Anthracolitic New-Guinea, Bibl. 55, p. 84.
? " sp. C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 46.

- Zygopleura angulata* C. Wanner. — Permian Timor, Bibl. 19, p. 90; Rothliegendes Timor, Bibl. 61, p. 44.
 " *crassa* C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 45.
 " *dubia* C. Wanner. — Permian Timor, Bibl. 19, p. 90; Rothliegendes Timor, Bibl. 61, p. 42.
 " *geniculata* C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 45.
 " *ignorata* Trautschold. — Rothliegendes Timor, Bibl. 61, p. 44.
 " *nitida* C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 41.
 " *simplex* C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 41.
 " *simplex* C. Wanner var. *latior* C. Wanner. — Rothliegendes Timor; Bibl. 61, p. 41.
Macrocheilus sp. Hamlet. — Permian Timor, Bibl. 19, p. 90.
 " cfr. *brancoi* Gemmellaro. — Rothliegendes Timor, Bibl. 61, p. 47.
 " cfr. *chemnithiaeformis* Gemmellaro. — Rothliegendes Timor, Bibl. 61, p. 46.
 " *intercalare* Meek et Worthen var. *pulchella* Meek. — Upper Carboniferous Sumatra, Bibl. 17, p. 117; Bibl. 51, p. 8.
 " cfr. *newberryi* Stevens. — Upper Carboniferous Sumatra, Bibl. 17, p. 118.
 " (*Polyphemopsis*) *nitidulum* Meek et Worthen. — Upper Carboniferous Sumatra Bibl. 17, p. 118; Bibl. 51, p. 8.

FAM. SOLARIIDAE.

- ? *Euomphalus* sp. Teichert. — Anthracolitic New-Guinea, Bibl. 55, p. 85.
Euomphalus cfr. *catilliformis* De Koninck. — Rothliegendes Timor, Bibl. 61, p. 28.
 " *crotalostomiformis* C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 30.
 " *nodocarinatus* C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 27.
 " (*Phymatifer*) cfr. *pernodosus* Meek. — Upper Carboniferous Sumatra, Bibl. 17, p. 112; Bibl. 51, p. 7; Middle Permian Sumatra, Bibl. 37, p. 287.
 " *pusilliformis* C. Wanner. — Permian Timor, Bibl. 19, p. 88; Rothliegendes Timor, Bibl. 61, p. 29.
 " *sinistrorsus* C. Wanner. — Zechstein Timor, Bibl. 61, p. 30.
 " (*Phymatifer*) *sumatrensis* F. Roemer. — Upper Carboniferous Sumatra, Bibl. 17, p. 112; Bibl. 51, p. 7.

FAM. CAPULIDAE.

- Capulus* sp. 1 C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 54.
 " sp. 2 C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 54.
 " sp. 3 C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 55.
 " sp. 4 C. Wanner. — Permian Timor, Bibl. 61, p. 55.
 " *abundans* C. Wanner. — Permian Timor, Bibl. 19, p. 91; Rothliegendes Timor, Bibl. 61, p. 48.
 " *angustus* C. Wanner. — Zechstein Timor, Bibl. 61, p. 53.
 " *complicatus* C. Wanner. — Zechstein Timor, Bibl. 61, p. 53.

- Capulus deformis* C. Wanner. — Permian Timor, Bibl. 19, p. 92; Rothliegendes Timor, Bibl. 61, p. 47.
 " *hanieli* C. Wanner. — Permian Timor, Bibl. 19, p. 92; Rothliegendes Timor, Bibl. 61, p. 49.
 " *humilis* C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 47.
 " *cfr. lodiensis* Meek. — Zechstein Timor, Bibl. 61, p. 52.
 " *pretiosus* C. Wanner. — Permian Timor, Bibl. 19, p. 93; Rothliegendes Timor, Bibl. 61, p. 50.
 " *pretiosus* C. Wanner var. C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 50.
 " *sundaicus* C. Wanner. — Permian Timor, Bibl. 19, p. 94; Rothliegendes Timor, Bibl. 61, p. 53.
 ? " *cfr. tenellus* J. D. Dana. — Rothliegendes Timor, Bibl. 61, p. 55.
 " *tortus* C. Wanner. — Permian Timor, Bibl. 19, p. 93; Zechstein Timor, Bibl. 61, p. 52.
 " *varians* C. Wanner. — Permian Timor, Bibl. 19, p. 92—93; Rothliegendes Timor, Bibl. 61, p. 50.
 " *wanneri* Hamlet. — Permian Timor, Bibl. 19, p. 94.
 " *welteri* C. Wanner. — Permian Timor, Bibl. 19, p. 94; Rothliegendes Timor, Bibl. 61, p. 51.
 " *welteri* C. Wanner var. C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 51.

FAM. SUBULITIDAE.

Subulites sp. Teichert. — Anthracolitic New-Guinea, Bibl. 55, p. 84.

FAM. NERITOPSIDAE.

- Naticopsis* sp. Fliegel. — Upper Carboniferous Sumatra, Bibl. 17, p. 116;
 Bibl. 51, p. 9.
 ? " *sp. 1* C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 38.
 " *elegantula* Fliegel. — Upper Carboniferous Sumatra, Bibl. 17, p. 116.
 " *cfr. mediterranea* Gemmellaro: Rothliegendes Timor, Bibl. 61, p. 38.
 " *ovalis* C. Wanner. — Permian Timor, Bibl. 19, p. 89; Rothliegendes Timor, Bibl. 61, p. 36.
 " *cfr. ovalis* C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 37.
 " *praealta* C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 35.
 " *retusa* C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 37.
 " *sumatrensis* F. Roemer. — Upper Carboniferous Sumatra, Bibl. 17, p. 115; Bibl. 51, p. 9.
 " *subovata* Meek et Worthen. — Upper Carboniferous Sumatra, Bibl. 17, p. 117; Bibl. 51, p. 9.
 " *trautscholdi* Fliegel. — Upper Carboniferous Sumatra, Bibl. 17, p. 116.

FAM. TURBINIDAE.

Turbo molengraaffi C. Wanner. — Zechstein Timor, Bibl. 61, p. 33.
Cyclonema bitauniensis C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 32.

FAM. TROCHIDAE.

♀ *Trochus anthracophilus* F. Roemer. — Upper Carboniferous Sumatra, Bibl. 17, p. 115; Bibl. 51, p. 8.

FAM. DELPHINULIDAE.

cfr. *Straparollus permianus* King. — Permian Timor, Bibl. 52, p. 86.
Turbanellina concinna C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 33.
 " *dacquéi* Hamlet. — Permian Timor, Bibl. 19, p. 89.
 " *grippi* Hamlet. — Permian Timor, Bibl. 19, p. 89.
 " *nitida* C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 34.
 " cfr. *novosselovkensis* Jakowlew. — Rothliegendes Timor, Bibl. 61, p. 35.

FAM. PLEUROTOMARIIDAE.

Murchisonia sp. 1 Teichert. — Devonian New-Guinea, Bibl. 55, p. 80.
 " sp. 2 Teichert. — Anthracolitic New-Guinea, Bibl. 55, p. 84.
 " *padangensis* Fliegel. — Upper Carboniferous Sumatra, Bibl. 17, p. 115; Bibl. 51, p. 8.
 ♀ *Pleurotomaria* sp. Fliegel. — Upper Carboniferous Sumatra, Bibl. 17, p. 115.
 " sp. 1 C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 23.
 " sp. 2 C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 23.
 ♀ " sp. 3 C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 24.
 ♀ " sp. 4 C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 25.
 ♀ " sp. 5 C. Wanner. — Zechstein Timor, Bibl. 61, p. 25.
 " (Ptychomphalus Ag.) *arcticiformis* C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 25.
 " cfr. *carinifera* (Girty) C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 24.
 " *conglobata* C. Wanner. — Permian Timor, Bibl. 19, p. 87; Rothliegendes Timor, Bibl. 61, p. 22.
 " *nikitini* Fliegel. — Upper Carboniferous Sumatra, Bibl. 17, p. 114.
 " *obliqua* Fliegel. — Upper Carboniferous Sumatra, Bibl. 17, p. 114.
 " *orientalis* F. Roemer. — Upper Carboniferous Sumatra, Bibl. 17, p. 113; Bibl. 51, p. 8.
 " cfr. *orientalis* F. Roemer. — Upper Carboniferous Sumatra, Bibl. 17, p. 114.
 " (*Worthenia*) *punctata* C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 26.
 ♀ " *sequens* Waagen. — Permian Timor, Bibl. 19, p. 88.
 " cfr. *subscalaris* Meek et Worthen. — Upper Carboniferous Sumatra, Bibl. 17, p. 114.
 " *timorensis* C. Wanner. — Permian Timor, Bibl. 19, p. 86; Bibl. 61, p. 20.
 " *wanneri* Hamlet. — Permian Timor, Bibl. 19, p. 87.

FAM. BELLEROPHONTIDAE.

- Bellerophon sp. Fliegel. — Upper Carboniferous Sumatra, Bibl. 17, p. 111; Bibl. 51, p. 10.
 " sp. Lange. — Middle Permian Sumatra, Bibl. 37, p. 287.
 " sp. 1 C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 18.
 " sp. 2 C. Wanner. — Permian Timor, Bibl. 61, p. 18.
 " asiaticus (F. Roemer) Fliegel. — Upper Carboniferous Sumatra, Bibl. 17, p. 109; Bibl. 51, p. 9.
 " convolutus L. v. Buch. — Upper Carboniferous Sumatra, Bibl. 17, p. 110; Bibl. 51, p. 9.
 " galeatus C. Wanner. — Permian Timor, Bibl. 19, p. 85; Rothliegendes Timor, Bibl. 61, p. 14.
 " galeatus C. Wanner var. expers C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 15.
 " quadratus C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 17.
 " roemeri Fliegel. — Upper Carboniferous Sumatra, Bibl. 17, p. 111; Bibl. 51, p. 9.
 " subcostatus Fliegel. — Upper Carboniferous Sumatra, Bibl. 17, p. 110; Bibl. 51, p. 9.
 " timorensis C. Wanner. — Permian Timor, Bibl. 19, p. 85; Rothliegendes Timor, Bibl. 61, p. 15.
 " timorensis C. Wanner var. gibber C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 17.
 Patellostium timorense Hamlet. — Permian Timor, Bibl. 19, p. 85.
 Bucania kattaensis Waagen. — Rothliegendes Timor, Bibl. 61, p. 19.
 " lyelli Gemmellaro. — Rothliegendes Timor, Bibl. 61, p. 18.
 ? Cyrtolites sp. Teichert. — Devonian New-Guinea, Bibl. 55, p. 80.

FAM. PATELLIDAE.

- Patella anthracophila F. Roemer. — Upper Carboniferous Sumatra, Bibl. 17, p. 109; Bibl. 51, p. 9.
 " cfr. ottomana Kittl. — Zechstein Timor, Bibl. 61, p. 39.

Class LAMELLIBRANCHIATA.

- Genus et sp. indet. 1 C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 81.
 " et sp. indet 2 C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 82.
 " et sp. indet. 3 C. Wanner. — Zechstein Timor, Bibl. 61, p. 82.
 " et sp. nov. indet I C. Wanner. — Zechstein Timor, Bibl. 61, p. 81.

Order TETRABRANCHIA.

FAM. LIMIDAE.

- Lima cfr. retifera Shumard. — Permian Timor, Bibl. 19, p. 78.
 ? Mysidioptera sp. C. Wanner. — Permian Timor, Bibl. 61, p. 70.

FAM. PECTINIDAE.

- Pecten sp. Hamlet. — Permian Timor, Bibl. 19, p. 79.
 Aviculopecten sp. Fliegel. — Upper Carboniferous Sumatra, Bibl. 17,
 p. 106.
 " sp. Hamlet. — Permian Timor, Bibl. 19, p. 76.
 " brouweri Hamlet. — Permian Timor, Bibl. 19, p. 75.
 ? " sundaensis Hamlet. — Permian Timor, Bibl. 19, p. 76.
 " verbeekii Fliegel. — Upper Carboniferous Sumatra, Bibl. 17,
 p. 105; Bibl. 51, p. 6.
 " waageni Fliegel. — Upper Carboniferous Sumatra, Bibl. 17,
 p. 105, Bibl. 51, p. 6.
 ? Crenipecten sp. Teichert. — Devonian New-Guinea, Bibl. 55, p. 79.

FAM. AVICULIDAE.

- Avicula sp. Hamlet. — Permian, Timor, Bibl. 19, p. 72.
 " lamellosa (Goldfuss) Frech. — Devonian New-Guinea, Bibl. 55,
 p. 79.
 Oxytoma atavum Waagen. — Permian Timor, Bibl. 19, p. 73.
 Atomodesma sp. C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 67.
 " exarata Beyrich. — Permian Timor, Bibl. 2, p. 71; Bibl. 52,
 p. 85; Bibl. 65, p. 446—447; Lower Trias Timor, Bibl. 61,
 p. 68.
 " multifurcata C. Wanner. — Permian Timor, Bibl. 19, p. 80;
 Bibl. 61, p. 66.
 " mytiloides Beyrich. — Permian Timor, Bibl. 2, p. 71; Bibl. 19,
 p. 79; Bibl. 52, p. 85; Bibl. 65, p. 446—447; Rothliegendes
 Timor, Bibl. 61, p. 64.
 " timorensis C. Wanner. — Permian Timor, Bibl. 61, p. 67.
 ? " undulata Rothpletz. — Permian Timor, Bibl. 52, p. 86.
 " variabilis C. Wanner. — Permian Timor, Bibl. 19, p. 80;
 Rothliegendes Timor, Bibl. 61, p. 64.
 efr. Posidonomya (Caneyella) sp. Girty. — Rothliegendes Timor, Bibl. 61,
 p. 71.
 ? " becheri Bronn. — Lower Carboniferous Soemba, Bibl. 7,
 p. 350.
 ? Gosseletia sp. Teichert. — Devonian New-Guinea, Bibl. 55, p. 79.
 Pinna sp. Hamlet. — Permian Timor, Bibl. 19, p. 77.
 " richthofeni Fliegel. — Upper Carboniferous Sumatra, Bibl. 17,
 p. 106; Bibl. 51, p. 6.

FAM. ARCIDAE.

- ? Parallelodon sp. C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 73.
 ? " subtilistriatus C. Wanner. — Permian Timor, Bibl. 19, p. 81;
 Zechstein Timor, Bibl. 61, p. 72.
 " sundaicum Hamlet. — Permian Timor, Bibl. 19, p. 82.
 ? Carbonarea inaequivalvis C. Wanner. — Rothliegendes Timor, Bibl. 61,
 p. 71.
 ? Cardiola concentrica Buch. — Upper Devonian New-Guinea, Bibl. 55,
 p. 79.

FAM. TRIGONIIDAE.

Schizodus sp. Hamlet. — Permian Timor, Bibl. 19, p. 83.
 ? „ cfr. *curtus* Meek et Worthen. — Permian Timor, Bibl. 61, p. 78.

FAM. CARDITIDAE.

Myoconcha timorensis C. Wanner. — Permian Timor, Bibl. 19, p. 80;
 Zechstein Timor, Bibl. 61, p. 74.

FAM. CRASSATELLIDAE.

Crassatellina plana Golovkinsky. — Permian Timor, Bibl. 19, p. 84;
 Zechstein Timor, Bibl. 61, p. 77.

FAM. CARDIIDAE.

Conocardium clipeoforme C. Wanner. — Rothliegendes Timor, Bibl. 61,
 p. 79.
 „ cfr. *clipecoforme* C. Wanner. — Rothliegendes Timor, Bibl.
 61, p. 80.
 „ *ornatum* Hamlet. — Permian Timor, Bibl. 19, p. 84.
 „ *sumatrense* (F. Roemer) Fliegel. — Upper Carboniferous
 Sumatra, Bibl. 17, p. 107; Bibl. 51, p. 7.
 „ *uralicum* (Verneuil) Keyzerling sp. Fliegel. — Upper Car-
 boniferous Sumatra, Bibl. 17, p. 106; Bibl. 51, p. 7.

FAM. CYPRINIDAE.

Goniophora sp. Teichert. — Middle-Upper Devonian New-Guinea, Bibl. 55,
 p. 78.

Order DIBRANCHIA.

FAM. LYONSIIDAE.

? *Edmondia* sp. Fliegel. — Upper Carboniferous Sumatra, Bibl. 17, p. 108.
 „ sp. Hamlet. — Permian Timor, Bibl. 19, p. 82.

FAM. ARCOMYIDAE.

Allorisma sp. Fliegel. — Upper Carboniferous Sumatra, Bibl. 17, p. 108.
 „ *padangense* (F. Roemer) Fliegel. — Upper Carboniferous Su-
 matra, Bibl. 17, p. 108; Bibl. 51, p. 7.

FAM. GRAMMYSIIDAE.

? *Grammysia* sp. C. Wanner. — Rothliegendes Timor, Bibl. 61, p. 80.
 ? *Cardiomorpha* sp. C. Wanner. — Zechstein Timor, Bibl. 61, p. 81.

SYSTEMATICAL UNARRANGED.

Cypricardinia mytiliformis C. Wanner. — Rothliegendes Timor, Bibl. 61,
 p. 76.
 ? *Sphenotus* sp. Teichert. — Devonian New-Guinea, Bibl. 55, p. 81.

Class SCAPHOPODA.

FAM. DENTALIIDAE.

Dentalium (s. lat.) sp. Teichert. — Devonian New-Guinea, Bibl. 55, p. 79.

**II. MESOZOIC GASTEROPODA, LAMELLIBRANCHIATA
AND SCAPHOPODA.**

Class GASTEROPODA.

Operculum genus et sp. indet. Krumbeck. — Carnian and Norian Timor,
Bibl. 31, tab. 6; Bibl. 35, p. 88 (230).
" sp. indet. Martin. — Upper Cretaceous Borneo, Bibl. 43,
p. 120, 134.

Order PULMONATA.

FAM. HELICIDAE.

Helix sp. indet. Martin. — Senonian Borneo, Bibl. 39, p. 190.

Order OPISTHOBRANCHIATA.

FAM. ACTAEONIDAE.

Actaeonina sp. indet. Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 85.
" *seranensis* Krumbeck. — Lower Norian Ceram, Bibl. 33, p. 221.

Order PROSOBRANCHIATA.

FAM. STROMBIDAE.

Strombus (Pugnillus) sp. indet. Martin. — Senonian Borneo, Bibl. 39,
p. 188.
" *martapurensis* Martin. — Senonian Borneo, Bibl. 39, p. 189.

FAM. CHENOPODIDAE.

Alaria sp. Martin. — Senonian Borneo, Bibl. 39, p. 187.
" *cfr. trifida* (Phillips) Vogel. — Upper Dogger and Malm Borneo,
Bibl. 45, p. 408; Malm Borneo, Bibl. 58, p. 84.

FAM. OERITHIIDAE.

Cerithium sp. Kruizinga. — ? Oxfordian Mangoli, Bibl. 27, p. 10—11, 22.
" sp. Vogel. — Malm Borneo, Bibl. 58, p. 84.
Exelissa septemcostata Vogel. — Upper Dogger and Malm Borneo, Bibl. 45,
p. 408; Malm Borneo, Bibl. 14, p. 162; Bibl. 57, p. 146; Bibl. 58,
p. 79, 82.
Ceritella martini (Vogel) Cossmann. — Malm Borneo, Bibl. 14, p. 163;
Bibl. 58, p. 86.
Promathildia cfr. ammoni von Wöhrmann. — Lower Norian Boeroe, Bibl.
29, p. 83.

- Promathildia pacifica* Jaworski. — Norian Misool, Bibl. 22, p. 130.
 ? " *timorensis* Krumbeck. — ? Ladinian Timor, Bibl. 35, p. 86
 (228).

FAM. NERINEIDAE.

- Nerinea* sp. Vogel. — Lower Cretaceous Borneo, Bibl. 59, p. 212.
 " *(s. str.) borneensis* Martin. — Senonian Borneo, Bibl. 39, p. 183.
 " *(s. str.) djaricanensis* Martin. — Senonian Borneo, Bibl. 39, p. 185.
 " *sp. (from the group N. etalloni Pictet et Campiche)*. — Valangian Sumatra, Bibl. 1, p. 258 (34).
 " *(s. str.) hoozei* Martin. — Senonian Borneo, Bibl. 39, p. 181.
 " *(s. str.) horneri* Martin. — Senonian Borneo, Bibl. 39, p. 186.
 " *(s. str.) martapurensis* Martin. — Senonian Borneo, Bibl. 39, p. 184.
 " *(Itieria) schwaneri* Martin. — Senonian Borneo, Bibl. 39, p. 186.
 " *(s. str.) sedetensis* Martin. — Senonian Borneo, Bibl. 39, p. 179.
 " *(s. str.) sundaica* Martin. — Senonian Borneo, Bibl. 39, p. 182.
 " *timorensis* J. Wanner emend. Krumbeck. — Lias Timor, Bibl. 63, p. 740—741; Middle Lias Timor, Bibl. 34, p. 12, 103, tab. 2.
 " *sp. (from the group N. valdensis Pictet et Campiche)*. — Valangian Sumatra Bibl. 1, p. 259 (35).

Itieria scalaris Vogel. — Lower Cretaceous Borneo, Bibl. 59, p. 210.

FAM. TURRITELLIDAE.

- Turritella (Promathildia)* sp. Krumbeck. — Norian Timor, Bibl. 31, p. 99, tab. 7; Bibl. 35, p. 87 (229).
 " *(Zaria) krooni* Dollfus. — Upper Cretaceous Celebes, Bibl. 16, p. 7.

FAM. PSEUDOMELANIIDAE.

- Pseudomelania* cfr. *abbreviata* Roemer. — Upper Dogger and Malm Borneo, Bibl. 45, p. 408; Malm Borneo, Bibl. 58, p. 81.
 ? " *(? Chemnitzia) subregularis* Krumbeck. — Carnian Timor, Bibl. 31, p. 92, tab. 6; Bibl. 35, p. 82 (224).
 ? *Loxonema* sp. indet. Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 82.
 " *sp. aff. fuscae* Koken. — Norian Timor, Bibl. 31, p. 99, tab. 7; Bibl. 35, p. 75 (217).
 " *(Heterocosmia) cfr. grandis* Koken. — Lower Norian Timor, Bibl. 31, p. 92, tab. 6; Bibl. 35, p. 79 (221).
 " *(Heterocosmia) sp. cfr. insignis* Koken. — Carnian and Norian Timor, Bibl. 31, tab. 6; Bibl. 35, p. 79 (221).
 " *(? Anoptychia) nifukokoensis* Krumbeck. — Anisian Timor, Bibl. 31, p. 79; Bibl. 35, p. 76 (218), 77 (219).
 " *(? Eustylus) aff. pagodae* Koken. — Lower Norian Timor, Bibl. 31, p. 92, tab. 6; Bibl. 35, p. 75 (217).
 " *subanthophylloides* Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 81.
 " *(Heterocosmia) subinsignis* Krumbeck. — Lower Norian Timor, Bibl. 31, p. 92, tab. 6; Bibl. 35, p. 78 (220).

- Loxonema** (? *Heterocosmia*) *timorensis* Krumbeck. — Norian Timor, Bibl. 31, p. 92, tab. 6; Bibl. 35, p. 81 (223).
 ♀ „ *variscoiformis* Krumbeck. — Carnian Timor, Bibl. 31, p. 92, tab. 6; Bibl. 35, p. 74 (216).
 ♀ „ sp. aff. *variscoiformi* Krumbeck. — Carnian and Norian Timor, Bibl. 31, tab. 6; Bibl. 35, p. 74 (216).
 „ (*Anoptychia*) sp. nov. aff. *vittatae* Koken. — Norian Timor, Bibl. 31, p. 99, tab. 7; Bibl. 35, p. 76 (218).
 ♀ *Katosira* sp. indet. Krumbeck. — Carnian Sumatra, Bibl. 30, p. 264; Upper Norian Sumatra, Bibl. 11, p. 41; Bibl. 56, p. 748—749; Bibl. 63, p. 738—739.
Anoptychia sp. Krumbeck. — Lower Norian Ceram, Bibl. 33, p. 220.
Protorcula parvula Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 85.
 ♀ „ *wichmanni* Krumbeck. — Upper Trias Timor, Bibl. 31, tab. 7; Bibl. 35, p. 83 (225).
Coelostylinia sp. indet. Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 83.
 „ sp. Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 83.
 ♀ „ ♀ sp. nov. Jaworski. — Norian Misool, Bibl. 22, p. 127.
 ♀ „ sp. aff. *biconiaeae* Kittl. — Ladinian Timor, Bibl. 31, tab. 5; Bibl. 35, p. 84 (226).
 „ *similis* (Münster) Broili. — Norian Misool, Bibl. 22, p. 125.
 „ *wanneri* Jaworski. — Norian Misool, Bibl. 22, p. 129.
 ♀ *Lissochilina* *timorensis* Krumbeck. — Upper Ladinian Timor, Bibl. 31, p. 89, tab. 5; Bibl. 35, p. 85 (227).
 „ sp. cfr. *timorensis* Krumbeck. — Ladinian Timor, Bibl. 31, tab. 5; Bibl. 35, p. 86 (228).

FAM. MELANIIDAE.

- Melania krausei* Martin. — Upper Cretaceous Borneo, Bibl. 43, p. 119, 134.
Faunus (Wingeastonina) *eastoni* Martin. — Upper Cretaceous Borneo, Bibl. 42, p. 305 (4), note; Bibl. 43, p. 110, 134, 203.
 „ „ *horsti* Martin. — Upper Cretaceous Borneo, Bibl. 43, p. 113, 134, 203.

FAM. LITTORINIDAE.

- Purpurina subcerithiformis* Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 80.
Moerkeia sp. indet. Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 79.

FAM. SOLARIIDAE.

- ♀ *Discohelix* (? *Turbo*) *molengraaffi* Krumbeck. — ♀ *Lias Rotti*, Bibl. 32, p. 162.

FAM. PALUDINIDAE.

- Paludinopsis ngeriensis* Martin. — Upper Cretaceous Borneo, Bibl. 43, p. 118, 134.
 „ *silatiensis* Martin. — Upper Cretaceous Borneo, Bibl. 43, p. 117, 134.

FAM. NARICIDAE.

- † *Narica* sp. Baumberger. — Valangian Sumatra, Bibl. 1, p. 252 (28).
 „ († Vanikoro) *serangensis* Wanner. — Norian Ceram, Bibl. 62, p. 210.
Naticella praesublineata Krumbeck. — Scytian Timor, Bibl. 31, tab. 3; Bibl. 35, p. 67 (209).
 „ *praesublineata* Krumbeck var. *altispirata* Krumbeck. — Scytian Timor, Bibl. 35, p. 68 (210).

FAM. NATICIDAE.

- Natica* (Gyrodès) sp. indet. Martin. — Senonian Borneo, Bibl. 39, p. 178.
 † „ sp. Krumbeck. — Lower Norian Ceram, Bibl. 33, p. 220.
 „ *klipsteini* (Koken) R. Hoernes. — Lower Norian Timor, Bibl. 31, p. 92, tab. 6; Bibl. 35, p. 70 (212).
 † „ *koatensis* Krumbeck. — Scytian Timor, Bibl. 31, tab. 3; Bibl. 35, p. 71 (213).
 „ (*Amauropis*) *paludinalis* Münster ? mut. *major* Krumbeck. — Norian Timor, Bibl. 31, p. 98, tab. 7; Bibl. 35, p. 71 (213).
Lunatia sambasana Vogel. — Upper Dogger and Malm Borneo, Bibl. 45, p. 408; Malm Borneo, Bibl. 58, p. 80.
Euspira borneensis (Vogel) Newton. — Upper Dogger and Malm Borneo, Bibl. 45, p. 407; Malm Borneo, Bibl. 13, p. 13; Bibl. 57, p. 149; Bibl. 58, p. 80.
 „ *sambasana* (Vogel) Cossmann. — Malm Borneo, Bibl. 13, p. 13; Bibl. 57, p. 149.

FAM. SCALARIIDAE.

- † *Scalaria* sp. indet. Krumbeck. — Upper Trias Timor, Bibl. 31, tab. 7; Bibl. 35, p. 88 (230).
 † „ sp. Soergel. — Dogger & Misool, Bibl. 54, p. 608.
 „ *molengraaffi* Krumbeck. — Carnian and Norian Timor, Bibl. 31, tab. 6; Bibl. 35, p. 73 (215).

FAM. NERITIDAE.

- † *Neritaria* sp. aff. *austriacae* R. Hoernes. — Upper Carnian and Norian Timor, Bibl. 31, p. 92, tab. 6; Bibl. 35, p. 68 (210).

FAM. NERITOPSIDAE.

- Naticopsis altispirata* Krumbeck. — Carnian Timor, Bibl. 31, p. 97, tab. 7; Bibl. 35, p. 68 (205).
 „ *klipsteini* (M. Hoernes) Koken sp. Krumbeck. — Carnian Timor, Bibl. 31, p. 92, tab. 6; Bibl. 35, p. 64 (206).
 † „ *lateaperta* Krumbeck. — Scytian Timor, Bibl. 35, p. 65 (207).
Trachydoma wanneri Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 78.
Hologyra cipitiensis Blaschke. — Lower Carnian Timor, Bibl. 31, p. 92, tab. 6; Bibl. 35, p. 65 (207).
 „ *timorensis* Krumbeck. — Upper Trias Timor, Bibl. 31, tab. 7; Bibl. 35, p. 66 (208).

Hologyra timorensis Krumbeck var. *seranensis* Krumbeck. — Lower Norian Ceram, Bibl. 33, p. 220.

FAM. TURBINIDAE.

Amberleya (*Eucyclus*) *deningeri* Hummel. — Lower Oxfordian Boeroe, Bibl. 21, p. 159; Bibl. 64, p. 100.
 „ *aff. orbignyana* Hudleston. — Dogger α Misool, Bibl. 54, p. 607.

FAM. TROCHIDAE.

Trochus (*Flemingia*) *peracutaeformis* Krumbeck. — Anisian Timor, Bibl. 31, p. 79, tab. 6; Bibl. 35, p. 59 (201).
 „ (*Tylotrochus*) sp. aff. *rotundato* Koken. — Upper Carnian Timor, Bibl. 31, p. 92, tab. 6; Bibl. 35, p. 62 (204).
 „ (*Turcicula*) *subtimorensis* Krumbeck. Carnian and Norian Timor, Bibl. 31, tab. 6; Bibl. 35, p. 61 (203).
 „ „ *timorensis* Krumbeck. — Lower Carnian Timor, Bibl. 31, p. 92, tab. 6; Bibl. 35, p. 60 (202).

FAM. DELPHINULIDAE.

Straparollus sp. Boehm. — Lower Callovian Soela-Islands, Bibl. 9, p. 134.
Brochidium *timorense* Krumbeck. — Upper Ladinian Timor, Bibl. 31, p. 89, tab. 5; Bibl. 35, p. 58 (200).

FAM. PLEUROTOMARIIDAE.

Murchisonia sp. Krumbeck. — Anisian Timor, Bibl. 31, p. 79; Bibl. 35, p. 55 (197).
 „ *subeuglypha* Krumbeck. — Carnian and ? Norian Timor, Bibl. 35, p. 56 (198).
 „ *timorensis* Krumbeck. — Carnian Timor, Bibl. 31, p. 92, tab. 6; Bibl. 35, p. 53 (195).
 „ sp. nov. aff. *timorensi* Krumbeck. — Carnian and Norian Timor, Bibl. 31, tab. 6; Bibl. 35, p. 54 (196).

? *Pseudomurchisonia* *sundaica* Krumbeck. — Ladinian Timor, Bibl. 31, tab. 5; Bibl. 35, p. 57 (199).

? *Pleurotomaria* sp. indet. Krumbeck. — Upper Trias Timor, Bibl. 31, tab. 7; Bibl. 35, p. 43 (185).
 ? „ sp. Krumbeck. — Scytian Timor, Bibl. 31, tab. 3; Bibl. 35, p. 43 (185).
 „ aff. *cincta* d'Orbigny. — Lower Oxfordian Boeroe, Bibl. 21, p. 159; Bibl. 64, p. 100.
 „ (*Worthenia*) *escheri* Stoppani var. *timorensis* Krumbeck. — Norian Timor, Bibl. 31, p. 92, 113, tab. 6; Bibl. 35, p. 43 (185).
 „ (*Sisenna*) sp. nov. aff. *euspira* Koken. — Ladinian Timor, Bibl. 31, tab. 5; Bibl. 35, p. 47 (189).
 „ (*Sagana*) *geometrica* Koken var. Krumbbeck. — Carnian Timor, Bibl. 31, p. 92, tab. 6; Bibl. 35, p. 48 (190).
 „ *koatensis* Krumbeck. — Scytian Timor, Bibl. 31, tab. 3; Bibl. 35, p. 41 (183).

- Pleurotomaria* münsteri mefaensis Hummel. — Lower Oxfordian Boeroe, Bibl. 21, p. 157; Bibl. 64, p. 100.
 " (Sagana) nifukokoensis Krumbeck. — Scyrian Timor, Bibl. 31, tab. 3; Bibl. 35, p. 50 (192).
 " praehaucis Krumbeck. — Anisian Timor, Bibl. 31, p. 79, 113; Bibl. 35, p. 42 (184).
 " subhaueri Krumbeck. — Lower Norian Timor, Bibl. 31, p. 92, 113, tab. 6; Bibl. 35, p. 38 (180).
 " subhaueri ? var. Krumbeck. — Carnian and Norian Timor, Bibl. 31, tab. 6; Bibl. 35, p. 40 (182).
 " (Sisenna) turbinata Hoernes var. timorica Krumbeck. — Scyrian Timor, Bibl. 31, p. 113, tab. 3; Bibl. 35, p. 45 (187).

Worthenia sp. indet. (cfr. münsteri Klippstein) Jaworski. — Norian Misool, Bibl. 22, p. 124.

Kokenella timorensis Krumbeck. — Carnian and Norian Timor, Bibl. 31, tab. 6; Bibl. 35, p. 51 (193).

FAM. PATELLIDAE.

- ! *Patella* sp. indet. Krumbeck. — Ladinian Timor, Bibl. 31, tab. 5; Bibl. 35, p. 70 (212).
 ! " sp. Hummel. — Lower Oxfordian Boeroe, Bibl. 21, p. 157; Bibl. 64, p. 100.
 ! " timorensis Krumbeck. — Carnian and Norian Timor, Bibl. 31, tab. 6; Bibl. 35, p. 69 (211).

Class LAMELLIBRANCHIATA.

Order TETRABRANCHIA.

FAM. OSTREIDAE.

- Ostrea* (? *Gryphaea*) sp. indet. Jaworski. — Lower Dogger Taliaboe, Bibl. 23, p. 198.
 ! " sp. indet. (1) Krumbeck. — Carnian Sumatra, Bibl. 30, p. 243; Upper Norian Sumatra, Bibl. 11, p. 45; Bibl. 56, p. 748—749; Bibl. 63, p. 738—739.
 ! " sp. indet. (2) Krumbeck. — Scyrian Timor, Bibl. 31, tab. 3; Bibl. 35, p. 208 (350).
 " sp. indet. Martin. — Senonian Borneo, Bibl. 39, p. 155.
 " sp. (1) Krumbeck. — Lower Norian Ceram, Bibl. 33, p. 207.
 " sp. (2) Krumbeck. — Scyrian Timor, Bibl. 31, tab. 3; Bibl. 35, p. 208 (350).
 " (*Exogyra*) sp. Soergel. — Dogger α Misool, Bibl. 54, p. 597.
 " (") borneensis Martin. — Senonian Borneo, Bibl. 39, p. 153.
 " cfr. *congesta* Conrad. — Senonian Misool, Bibl. 10, p. 88.
 " (*Alectryonia*) *martapurensis* Martin. — Senonian Borneo, Bibl. 39, p. 154.
 " (*Exogyra*) *ostracina* Lamark. — Senonian Borneo, Bibl. 39, p. 151.
 " *sandalina* Goldfuss. — Lower Oxfordian Boeroe, Bibl. 21, p. 164.

- Alectryonia* sp. Hummel. — Lower Oxfordian Boeroe, Bibl. 21, p. 164; Bibl. 64, p. 100.
 „ amor d'Orbigny. — Upper Dogger and Malm Borneo, Bibl. 44, p. 413.
 „ parasitica Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 47; Bibl. 64, p. 85; Lower Norian Ceram, Bibl. 33, p. 206.
 „ cfr. parasitica Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 48.
 ? *Gryphaea* sp. Broili. — Oxfordian New-Guinea, Bibl. 12, p. 11.
 „ sp. Soergel. — Dogger α Misool. — Bibl. 54, p. 597.
Exogyra sp. Vogel. — Lower Cretaceous Borneo, Bibl. 59, p. 213.
Paradoxia timorensis Krumbeck. — Middle Lias Timor, Bibl. 34, p. 24, 101, tab. 2.

FAM. ANOMIIDAE.

- ? *Placunopsis* (? *Ostrea*) sp. Krumbeck. — ? Carnian Timor, Bibl. 35, p. 207 (349).
 „ sp. (1) Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 123; Bibl. 64, p. 73.
 „ sp. (2) Krumbeck. — Lower Norian Ceram, Bibl. 33, p. 206.
 „ sp. (3) Krumbeck. — Scytian Timor, Bibl. 31, tab. 3; Bibl. 35, p. 207 (349).
 „ cfr. *fissistriata* Winkler. — Carnian Sumatra, Bibl. 30, p. 241; Upper Norian Sumatra, Bibl. 11, p. 51; Bibl. 56, p. 748—749; Bibl. 63, p. 738—739.
 „ aff. *fissistriata* Winkler. — Lower Norian Boeroe, Bibl. 29, p. 45.
 „ sp. cfr. *mortilleti* (Stoppani) Healey. — Carnian Sumatra, Bibl. 30, p. 243.
 „ sp. indet. aff. *mortilleti* Stoppani. — Lower Norian Boeroe, Bibl. 29, p. 47.
 „ cfr. *napengensis* Healey. — Carnian Sumatra, Bibl. 30, p. 242.
 „ cfr. *schafhäutli* Winkler. — Norian Misool, Bibl. 22, p. 104; Lower Norian Boeroe, Bibl. 29, p. 46.

FAM. DIMYIDAE.

- Dimya* sp. Soergel. — Dogger α Misool, Bibl. 54, p. 597.
Dimyodon cfr. *intusstriatum* Emmrich. — Lower Norian Boeroe, Bibl. 29, p. 44; Lower Norian Misool, Bibl. 29, p. 146; Upper Norian or Rhaetian Ceram, Bibl. 33, p. 243.
 „ *reichhofeni* Bittner. — Norian Misool, Bibl. 22, p. 103.
 „ *subrichhofeni* Krumbeck. — Carnian and Norian Timor, Bibl. 31, tab. 6; Bibl. 35, p. 205 (347).

FAM. SPONDYLIDAE.

- Plicatula* sp. indet. Hummel. — Lower Oxfordian Boeroe, Bibl. 21, p. 163; Bibl. 64, p. 73.
 ? „ sp. Krumbeck. — Lower Norian Ceram, Bibl. 33, p. 206.
 „ cfr. *spinosa* Sowerby. — Dogger α Misool, Bibl. 54, p. 595, 597.

- † *Spondylus* sp. indet. Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 45.
 " *seranensis* Krumbeck. — Lower Norian Ceram, Bibl. 33, p. 205.
 † *Prospondylus* (?) *Lima* sp. Krumbeck. — Ladinian Timor, Bibl. 31, tab. 5; Bibl. 35, p. 204 (346).
 " sp. nov. aff. *crasso* Broili. — Lower Carnian Timor, Bibl. 31, p. 92, tab. 6; Bibl. 35, p. 203 (345).
Terquemia sp. cfr. *cassiana* Münster. — Carnian and Norian Timor, Bibl. 31, tab. 6; Bibl. 35, p. 205 (347).
Lithiotis sp. aff. *problematicae* (Gümbel) O. Reis sp. Krumbeck. — Middle Lias Timor, Bibl. 34, p. 25, 81, tab. 2.
 " *timorensis* Krumbeck. — Middle Lias Timor, Bibl. 34, p. 24, 80, tab. 2.

FAM. LIMIDAE.

- Lima* (*Plagiostoma*) sp. indet. Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 34.
 " (*Plagiostoma*) sp. (1) Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 33.
 " (*Plagiostoma*) sp. (2) Krumbeck. — Carnian and Norian Timor, Bibl. 31, tab. 6; Bibl. 35, p. 185 (327).
 " (?) *Limea* sp. (3) Krumbeck. — Ladinian Timor, Bibl. 31, tab. 5; Bibl. 35, p. 187 (329).
 " sp. nov. Boehm. — Oxfordian Soela-Islands, Bibl. 4, p. 70.
 " (*Radula*) cfr. *acuta* Stoppani. — Rhaetian Timor, Bibl. 31, p. 105, tab. 7; Bibl. 35, p. 186 (328).
 " cfr. *alternicosta* Buvignier. — Lower Oxfordian Boeroe, Bibl. 21, p. 161.
 " (*Radula*) *baungensis* Krumbeck. — Carnian and Norian Timor, Bibl. 31, tab. 6; Bibl. 35, p. 185 (327).
 " (?) *Mantellum* *brouweri* Krumbeck. — Lower Lias Rotti, Bibl. 32, p. 131, 161.
 " (*Ctenoides*) cfr. *cometes* Dum. — Rhaetian or Lower Lias Ceram, Bibl. 15, p. 33.
 " (*Ctenoides*) sp. indet. aff. *cometi* Dum. sp. Krumbeck. — Upper Norian or Rhaetian Ceram, Bibl. 33, p. 241.
 " (?) *Mantellum* sp. from the group *L. pectinoides* Sowerby. — Lower Norian or Rhaetian Ceram, Bibl. 33, p. 241.
 " *rigida* Sowerby. — Lower Oxfordian Boeroe, Bibl. 21, p. 161; Bibl. 64, p. 100.
 " (?) *Mantellum* *rottica* Krumbeck. — Middle Lias Rotti, Bibl. 32, p. 121, 127, 159.
 " *semicircularis* Goldfuss. — Dogger α Misool, Bibl. 54, p. 592.
 " (*Plagiostoma*) sp. indet. cfr. *semicircularis* Goldfuss. — Lower Dogger, Taliaboe, Bibl. 23, p. 197.
 " (*Radula*) *subcumaunica* Krumbeck. — Norian Misool, Bibl. 22, p. 96; Lower Norian Boeroe, Bibl. 29, p. 34; Bibl. 64, p. 73, 97.
 " (*Plagiostoma*) sp. aff. *subpunctata* d'Orbigny. — Lower Norian Boeroe, Bibl. 29, p. 33.

- Lima (*Plagiostoma*) subpunctatoides Krumbeck. — Upper Ladinian Timor, Bibl. 31, p. 89; Bibl. 35, p. 183 (325).
 " (") sp. ex. aff. subpunctatoides Krumbeck. — Carnian and Norian Timor, Bibl. 31, tab. 6; Bibl. 35, p. 184 (326).
 " aff. tumida (Boehm) Roemer. — Oxfordian Boeroe Bibl. 5, p. 325; Lower Oxfordian Boeroe, Bibl. 21, p. 161; Bibl. 64, p. 100.
Plagiostoma subvaloniense Krumbeck. — Lower Norian Ceram, Bibl. 33, p. 202.
Ctenostreon cfr. terquemi Tate. — Lias New-Guinea, Bibl. 46, p. 9.
Seranaria seranensis Krumbeck. — Lower Norian Ceram, Bibl. 33, p. 218.

FAM. PECTINIDAE.

- Aequipecten subserraticosta* Krumbeck ? var. Krumbeck. — Lower Norian Ceram, Bibl. 33, p. 204.
Hinnites sp. Boehm. — Callovian New-Guinea, Bibl. 8, p. 5. — Lower Callovian Soela-Islands, Bibl. 9, p. 133.
 " sp. aff. ombonii Parona. — Upper Norian or Rhaetian Ceram, Bibl. 33, p. 243.
 " sp. (cfr. spondyloides Roemer) Hummel. — Lower Oxfordian Boeroe, Bibl. 21, p. 163; Bibl. 64, p. 100.
Amussium (*Amusium*) sp. Baumberger. — Valangian Sumatra, Bibl. 1, p. 252 (28).
Entolium cfr. quotidianus Healey. — Carnian Sumatra, Bibl. 30, p. 240.
 " sp. aff. quotidianus Healey. — Carnian Sumatra, Bibl. 30, p. 241.
 " cfr. subdemissum Diener sp. Krumbeck. — Lower Norian Ceram, Bibl. 33, p. 203.
 " sp. aff. subdepresso (Münster) Diener. — Upper Trias Timor, Bibl. 31, tab. 7; Bibl. 35, p. 193 (335).
Pecten sp. indet. Deninger. — Trias Ceram, Bibl. 15, p. 33.
 ? " sp. indet. (1) Krumbeck. — Ladinian, Carnian and Norian Timor, Bibl. 31, tab. 4; Bibl. 35, p. 192 (334).
 " sp. indet. (2) Krumbeck. — Upper Trias Timor, Bibl. 31, tab. 7; Bibl. 35, p. 193 (335).
 " (? *Entolium*) sp. indet. (3) Krumbeck. — Upper Trias Timor, Bibl. 31, tab. 7; Bibl. 35, p. 195 (337).
 " sp. indet. Martin. — Senonian Borneo, Bibl. 39, p. 155.
 " (? *Entolium*) sp. (1) Krumbeck. — Lower Lias Timor, Bibl. 34, p. 24, 79, tab. 2.
 " (*Aequipecten*) sp. (2) Krumbeck. — Carnian Sumatra, Bibl. 30, p. 239; Upper Norian Sumatra, Bibl. 11, p. 50; Bibl. 56, p. 748—749; Bibl. 63, p. 738—739.
 " sp. Schlüter. — Dogger and Malm New-Guinea, Bibl. 53, p. 60—61.
 " sp. Soergel. — Dogger a Misool, Bibl. 54, p. 592.
 " sp. nov. ? (1) Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 44.
 " sp. nov. (2) Krumbeck. — Upper Trias Timor, Bibl. 31, tab. 7; Bibl. 35, p. 190 (332).
 " (? *Chlamys*) sp. cfr. acutauritus Schafh. — Upper Norian or Rhaetian Ceram, Bibl. 33, p. 242.

- Pecten sp. nov. aff. balatonico Bittner. — Anisian Timor, Bibl. 31, p. 79; Bibl. 35, p. 198 (340).
- " (Aequipecten) buruticus Boehm emend. Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 121; Bibl. 24, p. 687.
- " sp. aff. chabrangensi Diener. — Norian Timor, Bibl. 31, p. 98, tab. 7; Bibl. 35, p. 191 (333).
- " (Aequipecten) elignetti Boehm emend. Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 36; Bibl. 64, p. 85; Lower Norian Misool, Bibl. 29, p. 145.
- " (Chlamys) coronatiformis Krumbeck. — Rhaetian Timor, Bibl. 31, p. 105, tab. 7; Bibl. 35, p. 197 (339).
- " (? Entolium) ·decoratiformis Krumbeck. — Norian Timor, Bibl. 31, p. 98, tab. 7; Bibl. 35, p. 194 (336).
- " (") demissum Phill. — Lower Dogger Taliaboe, Bibl. 23, p. 194.
- " krumbecki Jaworski. — Norian Misool, Bibl. 22, p. 100; Lower Norian Boeroe, Bibl. 29, p. 43; Lower Norian Misool, Bibl. 29, p. 145; Upper Norian Sumatra, Bibl. 63, p. 738—739; Upper Norian Misool, Bibl. 63, p. 738—739.
- " (Camptonectes) lens Sowerby. — Lower Dogger Taliaboe, Bibl. 23, p. 195.
- " (Aequipecten) microglyptus Boettger. — Carnian Sumatra, Bibl. 30, p. 237; Upper Norian Sumatra, Bibl. 11, p. 50; Bibl. 56, p. 748—749; Bibl. 63, p. 738—739.
- " misolensis (Wanner) Jaworski. — Norian Misool, Bibl. 22, p. 96; Upper Norian Misool, Bibl. 63, p. 738—739.
- " misolensis (Wanner) Jaworski var. glabra Jaworski. — Norian Misool, Bibl. 22, p. 100.
- " (? Chlamys) rothpletzi Krumbeck. — Upper Trias Timor, Bibl. 31, tab. 7; Bibl. 35, p. 189 (331).
- " (Velopecten) sarthensis Philippi. — Lower Dogger Taliaboe, Bibl. 23, p. 196.
- " (? Chlamys) sp. cfr. scutella M. (R?) Hoernes. — Lower Carnian Timor, Bibl. 31, p. 92, tab. 6; Bibl. 35, p. 199 (341).
- " (Aequipecten) seinaamensis Krumbeck. — Norian Timor, Bibl. 31, p. 98, tab. 7; Bibl. 35, p. 202 (344).
- " (Chlamys) subdextilis Krumbeck. — Carnian and Norian Timor, Bibl. 31, tab. 6; Bibl. 35, p. 196 (338).
- ? " (? Aviculopecten) subloczyi Krumbeck. — Norian Timor, Bibl. 31, p. 98, tab. 7; Bibl. 35, p. 189 (331).
- " (Aequipecten) subserraticosta Krumbeck. — Norian Timor, Bibl. 31, p. 98, tab. 7; Bibl. 35, p. 200 (342).
- " (Chlamys) cfr. textori Schlotheim. — Lower Dogger Taliaboe, Bibl. 23, p. 194.
- " aff. textori Schlotheim. — Lower Oxfordian Boeroe, Bibl. 21, p. 162; Bibl. 64, p. 73, 100.
- " sp. aff. undifero Bittner. — Upper Trias Timor, Bibl. 31, tab. 7; Bibl. 35, p. 191 (333).

- Pecten (*Aequipecten*) *verbeeki* Boettger. — Carnian Sumatra, Bibl. 30, p. 235; Upper Norian Sumatra, Bibl. 11, p. 49; Bibl. 56, p. 748—749; Bibl. 63, p. 738—739.
 cfr. *vimineus* Sowerby. — Lower Oxfordian Boeroe, Bibl. 21, p. 162.
 „ *Vola quinquecostata* Sowerby sp. Martin. — Senonian Borneo, Bibl. 39, p. 157.

FAM. AVICULIDAE.

- ? *Avicula* sp. Broili. — Oxfordian New-Guinea, Bibl. 12, p. 11.
 „ sp. Deninger. — Trias Ceram, Bibl. 15, p. 33.
 „ sp. nov. ? Krumbeck. — Ladinian Timor, Bibl. 31, tab. 5; Bibl. 35, p. 89 (231).
 „ *canaliculata* Krause. — Cenomanian Borneo, Bibl. 26, p. 183.
 „ sp. indet. cfr. *caudata* Stoppani. — Norian Timor, Bibl. 31, p. 98, tab. 7; Bibl. 35, p. 90 (232).
 „ *inaequivalvis* Sowerby. — Rhaetian or Lower Lias Ceram, Bibl. 15, p. 33.
 „ (*Oxytoma*) *inaequivalve* Sowerby var. *intermedia* Emmrich. — Upper Trias Timor, Bibl. 31, tab. 7; Bibl. 35, p. 91 (233).
 „ sp. aff. *münsteri* Goldfuss. — Lower Oxfordian Boeroe, Bibl. 21, p. 160; Bibl. 64, p. 100.
Pteroperna sp. Vogel. — Malm Borneo, Bibl. 58, p. 58.
Oxytoma cfr. *inaequivalve* Sowerby var. *intermedia* Emmrich. — Upper Norian or Rhaetian Ceram, Bibl. 33, p. 240; Rhaetian Timor, Bibl. 31, p. 105.
 „ sp. cfr. *münsteri* Br. — Dogger α Misool Bibl. 54, p. 590.
? *Pseudomonotis* sp. Broili. — Oxfordian New-Guinea, Bibl. 12, p. 10.
 „ (*Claraia*) sp. Krumbeck. — Scytian Timor, Bibl. 31, tab. 3; Bibl. 35, p. 95 (237).
 „ sp. Newton. — Upper Dogger and Malm Borneo, Bibl. 45, p. 407.
 „ *australasiatica* Krumbeck. — Scytian Timor, Bibl. 31, tab. 3; Bibl. 35, p. 99 (241).
 „ *excentrostriata* Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 31.
 „ (*Claraia*) *intermediaformis* Krumbeck. — Anisian Timor, Bibl. 31, p. 79; Bibl. 35, p. 96 (238), 97 (239).
 „ aff. *ochoticae* Keyslerling var. *densistriatae* Teller. — Upper Trias Rotti, Bibl. 48, p. 212; Bibl. 50, p. 357; Bibl. 52, p. 91; Ladinian, Carnian and Norian Timor, Bibl. 31, tab. 4; Bibl. 35, p. 102 (244); Norian Timor, Bibl. 62, p. 189; Norian Rotti, Bibl. 49, p. 39; Bibl. 62, p. 179.
 „ aff. *painkhandaiae* Bittner. — Scytian Timor, Bibl. 31, p. 75, tab. 3; Bibl. 35, p. 97 (239).
 „ (*Claraia*) *subaurita* Krumbeck. — Scytian Timor, Bibl. 31, p. 75, tab. 3; Bibl. 35, p. 92 (234).
 „ *subconvexa* Krumbeck. — Scytian Timor, Bibl. 31, tab. 3; Bibl. 35, p. 101 (243).

- Cassianella* sp. indet. Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 31.
 " sp. nov. aff. decussatae Münster. — Upper Trias Timor, Bibl. 31,
 tab. 7; Bibl. 35, p. 107 (249).
 " *katialotica* Krumbeck. — Carnian Sumatra, Bibl. 30, p. 226.
 " *cfr. subeuglypha* Krumbeck. — Norian Misool, Bibl. 22, p. 94;
 Lower Norian Misool, Bibl. 29, p. 143.
 " sp. nov. aff. *subeuglyphae* Krumbeck. — Norian Timor, Bibl.
 31, p. 98, tab. 7; Bibl. 35, p. 106 (248).
 " *verbeeki* Krumbeck. — Carnian Sumatra, Bibl. 30, p. 225.
- ? *Perna* sp. indet. Krumbeck. — Lower Norian Misool, Bibl. 29, p. 144.
- Gervilleioperna timorensis* Krumbeck. — Middle Lias Timor, Bibl. 34,
 p. 24, 76, tab. 2.
- ? *Gervilleia* sp. indet. Jaworski. — Lower Dogger Taliaboe, Bibl. 23, p. 198.
 " sp. indet. (1) Martin. — Lias Borneo, Bibl. 41, p. 256.
 " sp. indet. (2) Martin. — Cretaceous Borneo, Bibl. 40, p. 206.
 ? " sp. Krumbeck. — Scytian Timor, Bibl. 31, tab. 3; Bibl. 35,
 p. 182 (324).
 " (? *Avicula*) sp. Krumbeck. — Upper Trias Timor, Bibl. 31,
 tab. 7; Bibl. 35, p. 182 (324).
 " (*Angustella*) sp. indet. aff. *angulata* Münster. — Carnian
 Sumatra, Bibl. 30, p. 231; Upper Norian Sumatra, Bibl. 11,
 p. 32; Bibl. 56, p. 748—749; Bibl. 63, p. 738—739.
 " *borneensis* Martin. — Lias Borneo, Bibl. 41, p. 256; Cretaceous
 Borneo, Bibl. 40, p. 204.
 " (*Odontoperna*) *bouéi* von Hauer. — Carnian Sumatra, Bibl.
 30, p. 232.
 " *koatensis* Krumbeck. — Scytian Timor, Bibl. 31, tab. 3; Bibl.
 35, p. 181 (323).
 " *cfr. praecursor* Healey. — Carnian Sumatra, Bibl. 30, p. 231;
 Upper Norian Sumatra, Bibl. 11, p. 49; Bibl. 56, p. 748—749;
 Bibl. 63, p. 738—739.
 " (*Angustella*) aff. *rugosa* Healey. — Carnian Sumatra, Bibl. 30,
 p. 230.
- ? " *scythica* Krumbeck. — Scytian Timor, Bibl. 31, p. 75, tab. 3;
 Bibl. 35, p. 180 (322).
 " *subpannonica* Krumbeck. — Scytian Timor, Bibl. 31, p. 75,
 tab. 3; Bibl. 35, p. 179 (321).
- Hoernesia bipartitaeformis* Krumbeck. — Lower Norian Ceram, Bibl. 33,
 p. 201.
- ? *Inoceramus* sp. Krause. — Lias Borneo, Bibl. 25, p. 164, 157.
 " sp. Kruizinga. — ? Oxfordian Mangoli, Bibl. 27, p. 10—11,
 21.
 " sp. Schlüter. — Dogger and Malm New-Guinea, Bibl. 53,
 p. 59, 60—61.
 " *australis* Woods part. Heinz. — Lower Turonian (Upper part)
 Fafanlap, Bibl. 20, p. 102, 109.
 " *cfr. balchi* Meek. — Senonian Misool, Bibl. 10, p. 93.
 " *cfr. balticus* J. Böhm. — Senonian Misool, Bibl. 10, p. 88.

- Inoceramus* *cuvieri* Sowerby var. *haani* Böhm part. Heinz. — Lower Turonian (Upper part) Fafanlap, Bibl. 20, p. 100, 109.
 " *galoii* G. Boehm. — Dogger and Malm New-Guinea, Bibl. 53, p. 59, 60—61; Oxfordian Soela-Islands, Bibl. 4, p. 68; Bibl. 27, p. 10—11, 18; Oxfordian Taliaboe, Bibl. 6, p. 664; Oxfordian New-Guinea, Bibl. 12, p. 9.
 " *cfr. gracilis* Holdhaus. — ? Oxfordian Mangoli, Bibl. 27, p. 10—11, 21.
 " *haani* J. Böhm. — Senonian Misool, Bibl. 10, p. 93.
 " sp. *cfr. haasti* Hochstetter emend. Zittel. — Lower Oxfordian (Upper part) Timor, Bibl. 34, p. 28, 78, tab. 2; Lower Oxfordian (Upper part) Boeroe, Bibl. 64, p. 74, 87, 100.
 " *misoliensis* J. Böhm. — Senonian Misool, Bibl. 10, p. 89.
 " *cfr. monticuli* Fugger et Kastner. — Senonian Jillu III (Misool), Bibl. 20, p. 107, 109.
 " *quietus* J. Böhm. — Senonian Misool, Bibl. 10, p. 90.
 " *regularis* d'Orbigny var. *misoliensis* Böhm. — Senonian Jabatano (Misool), Bibl. 20, p. 104, 109.
 " *rumphii* J. Böhm. — Senonian Misool, Bibl. 10, p. 91.
 " *schlönbachi* Böhm var. *rumphii* Böhm. — Upper Turonian (Upper part) Jabatano (Misool), Bibl. 20, p. 103, 109.
 " *sufflatus* J. Böhm. — Senonian Misool, Bibl. 10, p. 90.
 " *sularum* G. Boehm. — Oxfordian Soela-Islands, Bibl. 4, p. 70; Oxfordian Mangoli, Bibl. 27, p. 10—11, 20.
 " *taliabuticus* G. Boehm. — Oxfordian Soela-islands, Bibl. 4, p. 69.
- Anopaea* *verbeekii* G. Boehm. — Berriasian Soela-Islands, Bibl. 3, p. 19.
 " *windhouweri* G. Boehm. — Berriasian Soela-Islands, Bibl. 3, p. 20.
- Aucella* *malayomaorica* Krumbeck var. *burutica* Krumbeck. — Lower Oxfordian (Upper part) Boeroe, Bibl. 34, p. 68; Bibl. 64, p. 87.
 " *plicata* Zittel. — Oxfordian Mangoli, Bibl. 27, p. 10—11, 17; Lower Oxfordian (Upper part) Timor, Bibl. 34, p. 28, 65, tab. 2; Lower Oxfordian (Upper part) Rotti, Bibl. 32, p. 214; Lower Oxfordian (Upper part) Boeroe, Bibl. 34, p. 28, 65, tab. 2; Bibl. 64, p. 74, 87, 89, 100; Lower Oxfordian (Upper part) Ceram, Bibl. 34, p. 28, 65, tab. 2.
- Atomodesma* *elongata* C. Wanner. — Lower Trias Timor, Bibl. 61, p. 69.
 " *exarata* Beyrich. — Permian Timor, Bibl. 2, p. 71; Bibl. 52, p. 85; Bibl. 65, p. 446—447; Lower Trias Timor, Bibl. 61, p. 68.
 " *lata* C. Wanner. — Lower Trias Timor, Bibl. 61, p. 70.
- ? *Posidonomyia* sp. (1) G. Boehm. — Callovian New-Guinea, Bibl. 8, p. 4.
 " sp. (2) G. Boehm. — Lower Callovian Soela-Islands. — Bibl. 9, p. 133.
 " sp. Broili. — Oxfordian New-Guinea, Bibl. 12, p. 11.
 " (*Posidonia*) sp. Krumbeck. — Lower Carnian Ceram, Bibl. 33, p. 201.
 " *buchi* F. A. Roemer. — Callovian Taliaboe, Bibl. 27, p. 10—11, 17; Lower Callovian Soela-Islands, Bibl. 9, p. 132.

- Posidonomyia* sp. cfr. *wengensis* Wissmann. — ? Ladinian Timor, Bibl. 31, p. 88, tab. 4; Bibl. 35, p. 178 (320).
- Monotis* (? *Amonotis*) *rothpletzi* Wanner sp. Krumbeck. — Carnian Ceram, Bibl. 33, p. 221; Norian Ceram, Bibl. 62, p. 180, 193.
- “ *salinaria* Bronn. — Upper Trias Borneo, Bibl. 59, p. 218; Norian Borneo, Bibl. 62, p. 169; Norian Timor, Bibl. 49, p. 28; Bibl. 65, p. 446; Norian Rotti, Bibl. 49, p. 28; Bibl. 50, p. 356; Norian Boeroe, Bibl. 64, p. 97; Norian Ceram, Bibl. 15, p. 30, 94; Bibl. 62, p. 168, 180, 190.
- “ *salinaria* Bronn sp. Krumbeck. — Ladinian, Carnian and Norian Timor, Bibl. 31, tab. 4; Bibl. 35, p. 108 (250); ? Upper Norian Ceram, Bibl. 33, p. 198.
- Daonella* sp. Deninger. — Trias Ceram, Bibl. 15, p. 31.
- “ sp. Wanner. — Carnian Timor, Bibl. 62, p. 205.
- “ cfr. *bulogensis* Kittl. — Middle Trias Timor, Bibl. 31, p. 84, 88, tab. 4 and 5; Bibl. 35, p. 120 (262).
- “ *cassiana* v. Mojsisovics. — Carnian Sumatra, Bibl. 47, p. 210—211; Bibl. 49, p. 33; Bibl. 60, p. 28, 36; Carnian Timor, Bibl. 36, p. 55; Carnian Rotti, Bibl. 49, p. 33.
- ? “ sp. cfr. *imperialis* Kittl. — Upper Carnian or Lower Norian Timor, Bibl. 31, p. 87, 88, tab. 4; Bibl. 35, p. 122 (264).
- “ *indica* Bittner. — Ladinian and ? Carnian Timor, Bibl. 31, p. 84, 88, tab. 4 and 5; Bibl. 35, p. 113 (255); Bibl. 62, p. 202; Carnian Timor, Bibl. 36, p. 51; Carnian Rotti, Bibl. 48, p. 212; Bibl. 52, p. 93.
- “ *lilintana* G. Boehm. — Carnian Sumatra, Bibl. 62, p. 164; ? Carnian Timor, Bibl. 35, p. 123 (265); Carnian Misool, Bibl. 15, p. 32; Bibl. 22, p. 141; Bibl. 62, p. 180, 194.
- “ *pichleri* v. Mojsisovics var. *timorensis* Krumbeck. — Ladinian Timor, Bibl. 31, p. 84, 88, tab. 4; Bibl. 35, p. 125 (267).
- “ *sumatrensis* Volz. — Carnian Sumatra, Bibl. 47, p. 211; Bibl. 60, p. 30, 36.
- “ *wiechmanni* Rothpletz sp. Wanner. — Carnian Rotti, Bibl. 50, p. 358—359; Bibl. 62, p. 178, 198.
- Halobia* sp. Wanner. — Carnian Timor. — Bibl. 62, p. 209.
- “ *austriaca* (v. Mojsisovics) Kittl. — Upper Carnian Timor, Bibl. 31, p. 86, 88, tab. 4; Bibl. 35, p. 143 (285).
- “ cfr. *austriaca* v. Mojsisovics sp. Krumbeck. — Lower Carnian Rotti, Bibl. 31, p. 88, tab. 4; Bibl. 35, p. 146 (288); Bibl. 49, p. 37.
- “ *austriaca* v. Mojsisovics ? var. Krumbeck. — Lower Carnian Timor, Bibl. 31, p. 88, tab. 4; Bibl. 35, p. 146 (288).
- “ *battakensis* Volz. — Carnian Sumatra, Bibl. 47, p. 211; Bibl. 60, p. 31, 36.
- “ *cassiana* v. Mojsisovics. — Lower Carnian Timor and Rotti, Bibl. 31, p. 85, 88, tab. 4; Bibl. 35, p. 139 (281); Norian, Timor and Rotti, Bibl. 49, p. 28; Norian Rotti, Bibl. 50, p. 356.

- Halobia charlyana* v. Mojsisovics. — Carnian Timor and Rotti, Bibl. 49, p. 28—29; Carnian Rotti, Bibl. 48, p. 212; Bibl. 50, p. 356; Bibl. 52, p. 94; Lower Carnian Timor, Bibl. 31, p. 85, 88; Bibl. 35, p. 148 (290).
- „ cfr. *charlyana* v. Mojsisovics. — Carnian Sumatra, Bibl. 47, p. 211; Bibl. 60, p. 35—36.
- „ *comata* Bittner. — Carnian Timor, Rotti and P. Samau, Bibl. 31, p. 85, 88, 92, tab. 4 and 6; Bibl. 35, p. 166 (308).
- „ sp. inter H. *comatam* Bittner et H. *fluxam* v. Mojsisovics. — Carnian Misool, Bibl. 22, p. 145; Lower Carnian Misool, Bibl. 35, p. 170 (312).
- „ *deningeri* Krumbeck. — Lower Carnian Ceram, Bibl. 33, p. 198.
- „ *distincta* (v. Mojsisovics) Kittl. — Lower Norian Timor, Bibl. 31, p. 87, 88, tab. 4; Bibl. 35, p. 160 (302).
- „ sp. cfr. *fallax* v. Mojsisovics. — Upper Carnian or Lower Norian Timor, Bibl. 31, p. 87, 88, tab. 4; Bibl. 35, p. 172 (314).
- „ aff. *fallaci* v. Mojsisovics. — Lower Norian Timor, Bibl. 31, p. 87, 88, tab. 4; Bibl. 35, p. 172 (314).
- „ cfr. *hoernesi* v. Mojsisovics. — Carnian Rotti, Bibl. 62, p. 179.
- „ sp. cfr. *insignis* Gemmellaro. — Carnian Timor, Bibl. 31, p. 88, tab. 4; Bibl. 35, p. 154 (296).
- „ *kwaluana* Volz. — Carnian Sumatra, Bibl. 30, p. 265; Bibl. 47, p. 211; Bibl. 60, p. 33, 36.
- „ cfr. *kwaluana* (Volz) Krumbeck. — Lower Carnian Cerain, Bibl. 3, p. 199.
- „ *kwaluana* Volz var. *multistriata* Volz. — Carnian Sumatra, Bibl. 60, p. 34, 36.
- „ sp. nov. aff. *kwaluanae* var. *multistriatae* (Volz) Krumbeck. — Lower Carnian Ceram, Bibl. 33, p. 200.
- „ cfr. *lepsiusi* Gemmellaro. — Lower Carnian Timor, Bibl. 31, p. 85, 88, tab. 4; Bibl. 35, p. 142 (284).
- „ *lineata* Münster. — Norian Rotti, Bibl. 49, p. 37; Bibl. 50, p. 356; Bibl. 52, p. 94.
- „ cfr. *lineata* Münster. — Lower Norian Rotti, Bibl. 31, p. 87, 88, tab. 4; Bibl. 35, p. 162 (304); Bibl. 62, p. 179.
- „ *lommeli* Wissmann. — Norian, Timor and Rotti, Bibl. 49, p. 28—29; Norian Rotti, Bibl. 50, p. 356.
- „ sp. cfr. ? *maximiliani* Kittl. — Upper Carnian or Lower Norian Timor, Bibl. 31, p. 87, 88, tab. 4; Bibl. 35, p. 174 (316).
- „ *mengalamensis* Volz. — Carnian Sumatra, Bibl. 47, p. 211; Bibl. 60, p. 33, 36.
- „ sp. ? aff. *miesenbachensi* Kittl. — Upper Carnian Timor, Bibl. 31, p. 92, tab. 6; Bibl. 35, p. 177 (319).
- „ *molukkana* J. Wanner. — Upper Trias Timor and Rotti, Bibl. 31, p. 83, 85, 88, tab. 4; Bibl. 35, p. 152 (294); Lower Carnian Timor, Bibl. 62, p. 206.
- „ *norica* v. Mojsisovics. — Norian Timor and Rotti, Bibl. 49, p. 28; Norian Rotti, Bibl. 50, p. 356; Bibl. 52, p. 95.
- „ cfr. *norica* v. Mojsisovics. — Carnian Rotti, Bibl. 62, p. 179.

- Halobia* sp. cfr. *plicosa* v. Mojsisovics. — Lower Norian Timor, Bibl. 31, p. 87, 88, tab. 4; Bibl. 35, p. 155 (297).
 „ cfr. *salinarum* v. Mojsisovics. — Lower Norian Timor and Rotti, Bibl. 31, p. 87, 88, tab. 4; Bibl. 35, p. 156 (298).
 „ *styriaca* v. Mojsisovics. — Carnian Sumatra, Bibl. 47, p. 210—211; Bibl. 60, p. 27, 36; Carnian Timor, Bibl. 36, p. 52; Bibl. 62, p. 177; Carnian Rotti, Bibl. 48, p. 212; Bibl. 49, p. 30; Bibl. 52, p. 95; Bibl. 62, p. 178—179, 196; Carnian Misool, Bibl. 22, p. 144; Lower Carnian Timor, P. Samau and P. Kambing, Bibl. 31, p. 85, 88, tab. 4; Bibl. 35, p. 132 (274).
 „ sp. cfr. *styriaca* v. Mojsisovics (= *H. areata* Kittl). — Lower Carnian Misool, Bibl. 31, p. 85, tab. 4; Bibl. 35, p. 138 (280).
 „ sp. aff. *suessi* v. Mojsisovics sp. Krumbeck. — Upper Carnian or Lower Norian Timor, Bibl. 31, p. 87, 88, tab. 4; Bibl. 35, p. 148 (290).
 „ *sumatrana* Krumbeck. — Carnian Sumatra, Bibl. 30, p. 227.
 „ *superba* v. Mojsisovics var. *timorensis* Krumbeck. — Upper Carnian and ? Lower Norian Timor, Bibl. 31, p. 88, tab. 4; Bibl. 35, p. 171 (313).
 „ cfr. *superbescens* Kittl. — Lower Norian Timor, Bibl. 31, p. 87, 88, tab. 4; Bibl. 35, p. 175 (317).
 „ *talauana* J. Wanner. — Upper Trias Timor and Rotti, Bibl. 31, p. 83, 85, 88, tab. 4; Bibl. 35, p. 153 (295); Lower Carnian Timor, Bibl. 62, p. 207.
 „ *tropitum* Kittl. var. Krumbeck. — Upper Carnian Timor, Bibl. 31, p. 86, 88, tab. 4; Bibl. 35, p. 159 (301).
 „ *verbeeki* J. Wanner. — Lower Norian Timor, Bibl. 31, p. 87, 88, 92, tab. 4 and 6; Bibl. 35, p. 163 (305); Bibl. 62, p. 208.
 „ *wichmanni* Rothpletz. — Carnian Timor and Rotti, Bibl. 49, p. 28—29; Carnian Rotti, Bibl. 48, p. 212; Bibl. 50, p. 356; Bibl. 52, p. 95.
- Pinna* sp. indet. Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 32.
 „ sp. Jaworski. — Norian Misool, Bibl. 22, p. 95.
 „ sp. 1 Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 32; Bibl. 64, p. 85.
 „ sp. cfr. *Pinna* sp. 1 Krumbeck. — Norian Timor, Bibl. 31, p. 98, tab. 7; Bibl. 35, p. 178 (320).
 „ sp. 2 Krumbeck. — Lower Norian Ceram, Bibl. 33, p. 201.
 „ *blanfordi* Boettger. — Carnian Sumatra, Bibl. 30, p. 228; Upper Norian Sumatra, Bibl. 11, p. 48; Bibl. 56, p. 748—749; Bibl. 63, p. 738—739.
- Trichites* sp. Soergel. — Dogger α Misool, Bibl. 54, p. 592.
 „ *lilintanus* G. Boehm. — Dogger α Misool, Bibl. 54, p. 591.

FAM. MYTILIDAE.

- ? *Mytilus* sp. Jaworski. — Norian Misool, Bibl. 22, p. 106.
 „ cfr. *arrialoorensis* Stoliczka. — Lower Cretaceous Borneo, Bibl. 59, p. 214.
 „ *diepenheimi* Boehm. — Berriasian Soela-Islands, Bibl. 3, p. 20.

- Mytilus* mirabilis Lepsius. — Lias Timor, Bibl. 63, p. 740—741.
 „ : mirabilis Lepsius var. timorensis Krumbeck. — Middle Lias Timor, Bibl. 34, p. 24, 82, tab. 2.
 „ sambasanus Vogel. — Malm Borneo, Bibl. 58, p. 60.
 „ seranensis Krumbeck. — Upper Norian or Rhaetian Ceram, Bibl. 33, p. 244.
Pseudopachymytilus timorensis Krumbeck. — Middle Lias Timor, Bibl. 34, p. 24, 87, tab. 2.
 Gen. (? *Pergamidia*) et sp. indet. Krumbeck. — Scytian Timor, Bibl. 31, tab. 3; Bibl. 35, p. 265 (407).
Pergamidia timorensis Krumbeck. — Carnian and Norian Timor, Bibl. 31, p. 92, 94, tab. 6; Bibl. 35, p. 210 (352).
 „ timorensis Krumbeck var. obliqua Krumbeck. — Carnian and Norian Timor, Bibl. 31, tab. 6; Bibl. 35, p. 213 (355).
 „ timorensis Krumbeck var. striata Krumbeck. — Carnian and Norian Timor, Bibl. 31, tab. 6; Bibl. 35, p. 212 (354).
? *Timoria* sp. indet. Krumbeck. — Carnian and Norian Timor, Bibl. 31, tab. 6; Bibl. 35, p. 227 (369).
 „ sp. Krumbeck. — Carnian and Norian Timor, Bibl. 31, tab. 6; Bibl. 35, p. 225 (367).
? „ brouweri Krumbeck. — Carnian and Norian Timor, Bibl. 31, tab. 6; Bibl. 35, p. 225 (367).
? „ nifukokoensis Krumbeck. — Carnian and Norian Timor, Bibl. 31, tab. 6; Bibl. 35, p. 224 (366).
 „ subtimorensis Krumbeck. — Norian Timor, Bibl. 31, p. 94, tab. 6; Bibl. 35, p. 223 (365).
? „ sundaica Krumbeck. — Anisian Timor, Bibl. 31, p. 79; Bibl. 35, p. 226 (368).
 „ timorensiformis Krumbeck. — Norian Timor, Bibl. 31, p. 94, tab. 6; Bibl. 35, p. 223 (365).
 „ timorensis Krumbeck. — Norian Timor, Bibl. 31, p. 94, tab. 6; Bibl. 35, p. 221 (363).
 „ timorensis Krumbeck ? var. major Krumbeck. — Norian Timor, Bibl. 31, p. 83, 94, tab. 4 and 6; Bibl. 35, p. 222 (364).
Modiola sp. indet. Jaworski. — Norian Misool, Bibl. 22, p. 105.
? „ sp. indet. Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 49.
? „ sp. (1) Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 49.
? „ sp. (2) Krumbeck. — Carnian Sumatra, Bibl. 30, p. 244.
 „ sp. (3) Krumbeck. — Upper Norian or Rhaetian Ceram, Bibl. 33, p. 244.
 „ sp. Vogel. — Malm Borneo, Bibl. 58, p. 62.
 „ hoozei Martin. — Senonian Borneo, Bibl. 39, p. 158.

FAM. ARCIDAE.

- Area* sp. Baumberger. — Valangian Sumatra, Bibl. 1, p. 254 (30).
 „ (? *Cucullaea*) sp. Baumberger. — Valangian Sumatra, Bibl. 1, p. 254 (30).
 „ (? *Macrodon*) sp. Baumberger. — Valangian Sumatra, Bibl. 1, p. 254 (30).

- Area* sp. Boehm. — Lower Callovian Soela-Islands. — Bibl. 9, p. 134.
 „ (an *Macrodon*?) sp. indet. II Jaworski. — Lower Dogger Taliaboe, Bibl. 23, p. 199.
 „ sp. Newton. — Upper Dogger and Malm Borneo, Bibl. 45, p. 407.
 ? „ sp. Soergel. — Dogger α Misool, Bibl. 54, p. 601.
 „ sp. (1) Vogel. — Malm Borneo, Bibl. 58, p. 63.
 „ sp. (2) Vogel. — Lower Cretaceous Borneo, Bibl. 59, p. 215.
Macrodon mediodepressum Krumbeck. — Lower Norian Boeroe. — Bibl. 29, p. 54.
 cfr. „ *mediodepressus* Krumbeck. — Trias Timor, Bibl. 35, p. 238 (380).
 „ *subesinensis* Krumbeck. — Anisian Timor, Bibl. 31, p. 79; Bibl. 35, p. 237 (379).
Cucullaea sp. Vogel. — Malm Borneo, Bibl. 58, p. 64.
 „ cfr. *aalensis* Quenstedt. — Dogger α Misool, Bibl. 54, p. 599.
 „ sp. indet. 1 cfr. *elegans* F. Roemer. — Lower Dogger Taliaboe, Bibl. 23, p. 198.
 „ *inaequivalvis* Goldfuss. — Dogger α Misool, Bibl. 54, p. 598—599.
 „ cfr. *oblonga* Sowerby. — Dogger α Misool, Bibl. 54, p. 600.

FAM. NUCULIDAE.

- Nucula* sp. 1 Baumberger. — Valangian Sumatra, Bibl. 1, p. 253 (29).
 ? „ sp. 2 Baumberger. — Valangian Sumatra, Bibl. 1, p. 253 (29).
 ? „ sp. 3 Baumberger. — Valangian Sumatra, Bibl. 1, p. 253 (29).
 „ sp. 4 Baumberger. — Valangian Sumatra, Bibl. 1, p. 254 (30).
 „ sp. 5 Baumberger. — Valangian Sumatra, Bibl. 1, p. 254 (30).
 „ sp. 6 Baumberger. — Valangian Sumatra, Bibl. 1, p. 254 (30).
 „ aff. *expansae* Wissmann. — Upper Trias Timor, Bibl. 31, tab. 7; Bibl. 35, p. 235 (377).
 „ *hammeri* Goldfuss. — Dogger α Misool, Bibl. 54, p. 598.
 ? „ *joannis wanneri* Krumbeck. — Middle Lias Timor, Bibl. 34, p. 24, 89, tab. 2.
 „ *misolensis* Jaworski. — Carnian Sumatra, Bibl. 30, p. 244; Norian Misool, Bibl. 22, p. 106; Lower Norian Boeroe, Bibl. 29, p. 53; Upper Norian Sumatra, Bibl. 11, p. 33, 39; Bibl. 56, p. 748—749; Bibl. 63, p. 738—739.
 „ *strigilata* Goldfuss var. *timorensis* Krumbeck. — Carnian and Norian Timor, Bibl. 31, tab. 6; Bibl. 35, p. 232 (374).
 „ aff. *strigilatae* Goldfuss. — Upper Ladinian Timor, Bibl. 31, p. 89, tab. 5; Bibl. 35, p. 233 (375).
 ? „ *subserradensis* Krumbeck. — Middle Lias Timor, Bibl. 34, p. 24, 90, tab. 2.
 ? „ *subserradensis* Krumbeck var. *elongata* Krumbeck. — Middle Lias Timor, Bibl. 34, p. 91.
 ? „ *subserradensis* Krumbeck var. *lelofuiensis* Krumbeck. — Middle Lias Timor, Bibl. 34, p. 91.
 „ (? *Leda*) *subzelima* Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 52.

- '*Nucula sundaica* Krumbeck. — Upper Trias Timor, Bibl. 31, tab. 7; Bibl. 35, p. 234 (376).
 " *sundaica* Krumbeck var. *seranensis* Krumbeck. — Lower Norian Ceram, Bibl. 33, p. 208.
 " *taliabutica* Boehm. — Dogger and Malm New-Guinea, Bibl. 53, p. 59, 60—61; Oxfordian Soela-Islands, Bibl. 4, p. 52, 70; Berri-Asian Soela-Islands, Bibl. 3, p. 21; Berriasian Taliaboe, Bibl. 27, p. 10—11, 22.
 ? *Palaeoneilo excentrica* Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 50.
 ? " *nifukokoensis* Krumbeck. — Carnian and Norian Timor, Bibl. 31, tab. 6; Bibl. 35, p. 231 (373).
 ? " *subtenella* Krumbeck. — Carnian and Norian Timor, Bibl. 31, tab. 6; Bibl. 35, p. 230 (372).
Leda (? *Phaenodesmia*) sp. Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 51.
 cfr. ? *Leda dubia* Münster. — Norian Misool, Bibl. 22, p. 108.
 ? *Leda timorensis* Krumbeck. — Norian Timor, Bibl. 31, p. 98, tab. 7; Bibl. 35, p. 235 (377).
Nuculana (*Leda*) sp. 1 Baumberger. — Valangian Sumatra, Bibl. 1, p. 253 (29).
 " (") sp. 2 Baumberger. — Valangian Sumatra, Bibl. 1, p. 253 (29).
 ? *Perissonota* sp. indet. Baumberger. — Valangian Sumatra, Bibl. 1, p. 257 (33).
 ? *Solenella* (*Neilo*) sp. Baumberger. — Valangian Sumatra, Bibl. 1, p. 257 (33).

FAM. TRIGONIIDAE.

- Trigonia limbata* d'Orbigny. — Senonian Borneo, Bibl. 39, p. 160.
 " *molengraaffi* Newton. — Upper Dogger and Malm Borneo, Bibl. 45, p. 405.
 " *seranensis* Krumbeck. — Lower Norian Ceram, Bibl. 33, p. 211.
 " cfr. *similis* Agassiz. — Dogger α Misool Bibl. 54, p. 601.
 " (*Prosogyrotrigonia*) *timorensis* Krumbeck. — Rhaetian Timor, Bibl. 31, p. 105, tab. 7; Bibl. 35, p. 245 (387).
Myophoria sp. indet. Krumbeck. — Carnian and Norian Timor, Bibl. 31, tab. 6; Bibl. 35, p. 240 (382).
 " sp. nov.? Krumbeck. — Carnian and Norian Timor, Bibl. 31, tab. 6; Bibl. 35, p. 242 (384).
 " sp: indet. aff. *decussatae* Münster. — Upper Trias Timor, Bibl. 31, tab. 7; Bibl. 35, p. 240 (382).
 " sp. cfr. *inaequicostata* Klipstein. — Norian Timor, Bibl. 31, p. 98, tab. 7; Bibl. 35, p. 241 (383).
 " sp. indet. cfr. *inaequicostata* Klipstein. — Norian Timor, Bibl. 31, p. 98, tab. 7; Bibl. 35, p. 241 (383).
 " *maxima* Krumbeck. — Middle Lias Timor, Bibl. 34, p. 24, 91, tab. 2.

- Myophoria** *myophoria* (Boettger) Krumbeck. — Carnian Sumatra, Bibl. 30, p. 247; Upper Norian Sumatra, Bibl. 11, p. 36, 45; Bibl. 56, p. 748—749; Bibl. 63, p. 738—739.
 ? " *cfr. napengensis* Healey. — Carnian Sumatra, Bibl. 30, p. 248.
 ? " *nifukokoensis* Krumbeck. — Anisian Timor, Bibl. 31, p. 79; Bibl. 35, p. 239 (381).
 ? " *seranensis* Krumbeck. — Lower Norian Ceram, Bibl. 33, p. 209.
 ? " *timorensis* Krumbeck. — Scytian Timor, Bibl. 31, p. 75, tab. 3; Bibl. 35, p. 238 (380).
 " *verbeeki* Boettger. — Carnian Sumatra, Bibl. 30, p. 249; Upper Norian Sumatra, Bibl. 11, p. 43, 47; Bibl. 56, p. 748—749; Bibl. 63, p. 738—739.
 " *vestita alberti* var. *subvestita* Krumbeck. — Norian Misool, Bibl. 22, p. 112; Lower Norian Boeroe, Bibl. 29, p. 58.
Myophoricardium *sublineatum* Krumbeck. — Carnian Sumatra, Bibl. 30, p. 258; Upper Norian Sumatra, Bibl. 11, p. 34; Bibl. 56, p. 748—749; Bibl. 63, p. 738—739.

FAM. CARDINIIDAE.

- ? *Trigonodus* sp. indet. Krumbeck. — Carnian Sumatra, Bibl. 30, p. 246.
Fogiella deningeri Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 57.
 " *cfr. deningeri* Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 124.
Anodontophora (*Anoplophora*) *griesbachi* Bittner. — Norian Misool, Bibl. 22, p. 109; Lower Norian Boeroe, Bibl. 29, p. 55; Lower Norian Misool, Bibl. 29, p. 147.
 " () *lutrariaeformis* Boettger. — Carnian Sumatra, Bibl. 30, p. 246; Upper Norian Sumatra, Bibl. 11, p. 44; Bibl. 56, p. 748—749; Bibl. 63, p. 738—739.

FAM. CARDITIDAE.

- Palaeocardita** *buruca* G. Boehm emend. Krumbeck. — Carnian Sumatra, Bibl. 30, p. 251; Norian Timor, Bibl. 31, p. 98, tab. 7; Bibl. 35, p. 248 (390); Norian Misool, Bibl. 22, p. 115; Lower Norian Boeroe, Bibl. 29, p. 60; Upper Norian Sumatra, Bibl. 11, p. 38, 46; Bibl. 56, p. 748—749; Bibl. 63, p. 738—739; Upper Norian Misool, Bibl. 63, p. 738—739.
Cardita sp. Baumberger. — Valangian Sumatra, Bibl. 1, p. 255 (31).
 ? " sp. Krumbeck. — Carnian Sumatra, Bibl. 30, p. 253.
 " (*Palaeocardita*) *buruca* G. Boehm emend. Krumbeck var. *seranensis* Krumbeck. — Lower Norian Ceram, Bibl. 33, p. 212.
 " (*Venericardia*) *hoozei* Martin. — Senonian Borneo, Bibl. 39, p. 162.
 " *trapezoidalis* Krumbeck. — Norian Misool, Bibl. 22, p. 117; Lower Norian Boeroe, Bibl. 29, p. 64; Lower Norian Misool, Bibl. 29, p. 147.
 ? *Pleurophorus timoricus* Krumbeck. — Scytian Timor, Bibl. 31, tab. 3, Bibl. 35, p. 228 (370).
 ? *Myoconcha* sp. Krumbeck. — Lower Norian Ceram, Bibl. 33, p. 207.

- Myoconcha joannis wanneri* Krumbeck. — Carnian and Norian Timor, Bibl. 31, tab. 6; Bibl. 35, p. 228 (370).
 „ *seranensis* Krumbeck. — Lower Norian Ceram, Bibl. 33, p. 207.

FAM. ASTARTIDAE.

- ? *Astartidae* Baumberger. — Valangian Sumatra, Bibl. 1, p. 255 (31).
Astarte sp. Baumberger. — Valangian Sumatra, Bibl. 1, p. 255 (31).
 „ sp. Hummel. — Lower Oxfordian Boeroe, Bibl. 21, p. 164; Bibl. 64, p. 100.
 ? „ sp. Krumbeck. — Upper Trias Timor, Bibl. 31, tab. 7; Bibl. 35, p. 250 (392).
 „ sp. Soergel. — Dogger α Misool, Bibl. 54, p. 606.
 „ sp. 1 Vogel. — Malm Borneo, Bibl. 58, p. 70.
 „ sp. 2 Vogel. — Lower Cretaceous Borneo, Bibl. 59, p. 215.
 ? „ sp. nov. sp. indet. Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 64.
 „ *borneensis* Vogel. — Malm Borneo, Bibl. 58, p. 66.
 „ *eastonii* Vogel. — Malm Borneo, Bibl. 58, p. 68.
 „ *elegans major* von Zieten. — Dogger α Misool, Bibl. 54, p. 604.
 ? „ *martapurensis* Martin. — Senonian Borneo, Bibl. 39, p. 162.
 „ aff. *nicklesi* Benecke. — Dogger α Misool, Bibl. 54, p. 606.
 „ *inter pisum* Koch et Dunker et *aalensis* Opp. — Dogger α Misool, Bibl. 54, p. 602, 604.
 „ (*Opisastarte*) *sumatrensis* Frech. — Dogger Sumatra, Bibl. 18, p. 226.
 „ („) *trigonalis* Sowerby. — Dogger Sumatra, Bibl. 18, p. 225
Opis leckenbyi Wright. — Dogger Sumatra, Bibl. 18, p. 227.
 „ *mefaensis* Hummel. — Lower Oxfordian Boeroe, Bibl. 21, p. 165; Bibl. 64, p. 85, 100.
Protopis timorensis Krumbeck. — Seytian Timor, Bibl. 31, tab. 3; Bibl. 35, p. 261 (403).
? *Myophoriopsis* sp. indet. (1) Krumbeck. — Upper Trias Timor, Bibl. 31, tab. 7; Bibl. 35, p. 243 (385).
? „ sp. indet (2) Krumbeck. — Upper Trias Timor Bibl. 31, tab. 7; Bibl. 35, p. 243 (385).
? „ sp. Krumbeck. — Seytian Timor, Bibl. 31, tab. 3; Bibl. 35, p. 242 (384).
? „ *latedorsata* Krumbeck. — Carnian Sumatra, Bibl. 30, p. 250.
? „ *moermani* Krumbeck. — Carnian Sumatra, Bibl. 30, p. 250.
„ *seranensis* Krumbeck. — Lower Norian Ceram, Bibl. 33, p. 210.
Coelopis (*Cryptocoelopis*) aff. *loculari* Bittner sp. Krumbeck. — Lower Norian Ceram, Bibl. 33, p. 213.
Opisoma timorensis Krumbeck. — Middle Lias Timor, Bibl. 34, p. 25, 92, tab. 2.

FAM. CRASSATELLIDAE.

- † *Crassatella borneensis* Martin. — Senonian Borneo, Bibl. 39, p. 165.
 " *macrodonta* Sowerby (?) sp. Martin. — Senonian Borneo, Bibl. 39, p. 166.
 " *proteus* Martin. — Senonian Borneo, Bibl. 39, p. 163.

FAM. CARDIIDAE.

- Cardium* sp. indet. 1 Boettger. — Upper Norian Sumatra, Bibl. 11, p. 44; Bibl. 56, p. 748—749; Bibl. 63, p. 738—739.
 " sp. indet. 2 Boettger. — Upper Norian Sumatra, Bibl. 11, p. 44; Bibl. 56, p. 748—749; Bibl. 63, p. 738—739.
 " *djaricanense* Martin. — Senonian Borneo, Bibl. 39, p. 170.
 " *martini* Boettger. — Carnian Sumatra, Bibl. 30, p. 257; Upper Norian Sumatra, Bibl. 11, p. 35; Bibl. 56, p. 748—749; Bibl. 63, p. 738—739.
 " (*Trachycardium*) cfr. *productum* Sowerby. — Upper Cretaceous Celebes, Bibl. 16, p. 9.
Protocardia aff. *contusa* Healey. — Lower Norian Boeroe, Bibl. 29, p. 67; Bibl. 64, p. 73.
 " aff. *contusa* Healey ? var. Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 69.
 " *crassicostata* Vogel. — Upper Dogger and Malm Borneo. — Bibl. 45, p. 406; Malm Borneo, Bibl. 57, p. 140.
 " *multiformis* Vogel. — Malm Borneo, Bibl. 57, p. 143; Bibl. 58, p. 70.
 " *proteus* Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 69.
 " *rhaetica* (Meyer) Jaworski. — Norian Misool, Bibl. 22, p. 122.
 " *subrhaetica* Krumbeck. — Lower Norian Ceram, Bibl. 33, p. 216.
 " *tenuicostata* Vogel. — Upper Dogger and Malm Borneo, Bibl. 45, p. 407; Malm Borneo, Bibl. 57, p. 142; Bibl. 58, p. 71.
 " (? *Isocyprina*) *timorensis* Krumbeck. — Norian Timor, Bibl. 31, p. 98, tab. 7; Bibl. 35, p. 258 (400).
 ? " (? ") *timorensis* Krumbeck var. *seranensis* Krumbeck. — Lower Norian Ceram, Bibl. 33, p. 217.

FAM. RADIOLITIDAE.

- Radiolites* sp. indet. Martin. — Cretaceous Borneo, Bibl. 38, p. 124; Senonian Borneo, Bibl. 39, p. 169.

Sphaerulites sp. Martin. — Cretaceous Borneo, Bibl. 38, p. 121.

? *Durania* sp. J. Böhm. — Senonian Misool, Bibl. 10, p. 96.

" *crispa* J. Böhm. — Senonian Misool, Bibl. 10, p. 96.

" *deningeri* J. Böhm. — Senonian Misool, Bibl. 10, p. 95.

" *wanneri* J. Böhm. — Senonian Misool, Bibl. 10, p. 94.

FAM. MEGLADONTIDAE.

- ? *Megalodon* sp. nov. Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 66.
 " (? *Megalodus*) aff. *klipsteini* Bittner. — Upper Ladinian Timor, Bibl. 31, p. 89, tab. 5; Bibl. 35, p. 250 (392).

- ♀ *Megalodon rostratiforme* Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 64.
 " (♀ *Megalodus*) *seranensis* Krumbeck. — Lower Norian Ceram, Bibl. 33, p. 213.
Pachymegalodon (♀ *Pachymegalodus*) *nimassicus* Krumbeck. — Middle Lias Timor, Bibl. 34, p. 24, 99, tab. 2.
 " () *timorensis* J. Wanner emend. Krumbeck. — Lias Timor, Bibl. 63, p. 740—741; Middle Lias Timor, Bibl. 34, p. 24, 94, tab. 2.
 ♀ *Dicerocardium* sp. indet. Krumbeck. — Carnian Sumatra, Bibl. 30, p. 253.
 " sp. cfr. *jani* Stoppani. — Norian Timor, Bibl. 31, p. 98; tab. 7; Bibl. 35, p. 251 (393).

FAM. CYPRINIDAE.

- Cyprina* (*Venilicardia*) *mordax* Martin. — Senonian Borneo, Bibl. 39, p. 171.
Roudairia gigantea Martin. — Senonian Borneo, Bibl. 39, p. 173.
Cornucardia timorensis Krumbeck. — Carnian Timor, Bibl. 31, p. 97, tab. 7; Bibl. 35, p. 252 (394).
Cypriocardia cordiformis Deshayes. — Dogger Sumatra, Bibl. 18, p. 227.

FAM. VENERIDAE.

- Cytherea assahanensis* Martin. — Senonian Borneo, Bibl. 39, p. 176.
 " *verbeekii* Dollfus. — Upper Cretaceous Celebes, Bibl. 16, p. 9.
Ptychomya indica Martin. — Senonian Borneo, Bibl. 39, p. 167.
Venus sp. indet. Martin. — Senonian Borneo, Bibl. 39, p. 175.

FAM. MYIDAE.

- Corbula* sp. indet. Martin. — Cretaceous Borneo, Bibl. 40, p. 206.
 " sp. Vogel. — Lower Cretaceous Borneo, Bibl. 59, p. 217.
 " *eastonii* Vogel. — Malm Borneo, Bibl. 58, p. 75.
 " (s. str.) *silatiensis* Martin. — Upper Cretaceous Borneo, Bibl. 43, p. 121, 134.
 " *vogeli* (Vogel) Cossmann. — Upper Dogger and Malm Borneo, Bibl. 45, p. 407; Malm Borneo, Bibl. 13, p. 12; Bibl. 57, p. 144; Bibl. 58, p. 77.

FAM. GLYCYMERIDAE.

- ♀ *Panopaea* sp. Krumbeck. — Lower Norian Ceram, Bibl. 33, p. 219.

Order DIBRANCHIA.

FAM. LUCINIDAE.

- Lucina* sp. Meyer. — Dogger Sumatra, Bibl. 18, p. 228.
 " sp. Vogel. — Lower Cretaceous Borneo, Bibl. 59, p. 216.
 " *circularis* Stoppani. — Norian Misool, Bibl. 22, p. 121; Upper Norian Misool, Bibl. 63, p. 739.
Pomarangina aff. *haydeni* Diener. — Carnian Sumatra, Bibl. 30, p. 256.

- Fimbria* sp. Vogel. — Lower Cretaceous Borneo, Bibl. 59, p. 216.
Gonodon (? *Gonodus*) sp. indet. Krumbeck. — Carnian and Norian Timor, Bibl. 31, tab. 6; Bibl. 35, p. 257 (399).
 ? „ sp. (1) Krumbeck. — Carnian Sumatra, Bibl. 30, p. 257.
 „ (? *Gonodus*) sp. (2) Krumbeck. — Carnian and Norian Timor, Bibl. 31, tab. 6; Bibl. 35, p. 257 (399).
 „ („) *giganteus* Krumbeck. — Upper Trias Timor, Bibl. 31, tab. 7; Bibl. 35, p. 254 (396).
 „ („) sp. aff. *manzavini* Bittner. — Norian Timor, Bibl. 31, p. 98, tab. 7; Bibl. 35, p. 256 (398).
 „ *mellingi* (Hauer) Koken. — Norian Misool, Bibl. 22, p. 119; Upper Norian Sumatra, Bibl. 11, p. 37; Bibl. 56, p. 748—749; Bibl. 63, p. 738—739; Upper Norian Misool, Bibl. 63, p. 738—739.
 „ (*Gonodus*) *rostratiformis* Krumbeck. — Lower Norian Ceram, Bibl. 33, p. 215.
 „ („) sp. aff. *schafhäutli* Salom. sp. Krumbeck. — Middle Lias Timor, Bibl. 34, p. 26, 100, tab. 2.
 „ *sphaeroides* (Boettger) Wanner. — Carnian Sumatra, Bibl. 30, p. 254, 256.
 „ (*Gonodus*) *subastartiformis* Krumbeck. — Lower Norian Ceram, Bibl. 33, p. 214.
 „ (? „) *timorensis* Krumbeck. — Ladinian Timor, Bibl. 31, tab. 5; Bibl. 35, p. 263 (405).

FAM. TELLINIDAE.

- Tellina* sp. Vogel. — Lower Cretaceous Borneo, Bibl. 59, p. 216.

FAM. CUSPIDARIIDAE.

- Cuspidaria sambasana* (Vogel) Cossmann. — Malm Borneo, Bibl. 14, p. 162; Bibl. 58, p. 77.

FAM. ARCOMYIDAE.

- Homomya sublariana* Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 72.
 „ *sublariana* Krumbeck var. *grandis* Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 74.
Pleuromya sulcatissima Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 71.

FAM. ANATINIDAE.

- Anatina* cfr. *praecursor* Oppenheim. — Carnian Sumatra, Bibl. 30, p. 259; Upper Norian Sumatra, Bibl. 11, p. 34; Bibl. 56, p. 748—749; Bibl. 63, p. 738—739.
 ? *Thracia* sp., Martin. — Lias Borneo, Bibl. 41, p. 256.
 „ *abendanoni* Dollfus. — Upper Cretaceous Celebes, Bibl. 16, p. 8.
 ? „ *applanata* Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 74.
Burmesia sp. nov. aff. *lirata* Healey. — Lower Norian Boeroe, Bibl. 29, p. 77.
 „ *praecursor* Krumbeck. — Lower Norian Boeroe, Bibl. 29, p. 76.

- ? *Polaria mirabilis* (Boettger) Krumbeck. — Carnian Sumatra, Bibl. 30, p. 261; Upper Norian Sumatra, Bibl. 11, p. 41; Bibl. 56, p. 748—749; Bibl. 63, p. 738—739.
 „ *V-sculptata* Krumbeck. — Carnian Sumatra, Bibl. 30, p. 260; Upper Norian Sumatra, Bibl. 11, p. 32; Bibl. 56, p. 748—749; Bibl. 63, p. 738—739.

FAM. GRAMMYSIIDAE.

- ? *Cardiomorpha bhatiensis* Krumbeck. — Carnian and Norian Timor, Bibl. 31, tab. 6; Bibl. 35, p. 261 (403).

FAM. PHOLADOMYIDAE.

- Pholadomya* cfr. *multicostata* Agassiz. — Malm Borneo, Bibl. 58, p. 72.
 „ (s. str.) *sundaica* Martin. — Senonian Borneo, Bibl. 39, p. 177.

SYSTEMATICAL UNARRANGED.

- Molukkana seranensis* Krumbeck. — Lower Norian Ceram, Bibl. 33, p. 219.
Rhaetidia timorensis Krumbeck. — Carnian and Norian Timor, Bibl. 31, tab. 6; Bibl. 35, p. 259 (401).

Class SCAPHOPODA.

FAM. DENTALIIDAE.

- Dentalium* cfr. *undulatum* Münster. — Carnian Sumatra, Bibl. 30, p. 263;
 Upper Norian Sumatra, Bibl. 11, p. 31; Bibl. 56 p. 748—749;
 Bibl. 63, p. 738—739.

STRATIGRAPHICAL REMARKS.

From the **DEVONIAN** of New-Guinea are known:

2 Gasteropoda viz.: ? *Cyrtolites* sp. TEICHERT and *Murchisonia* sp. 1 TEICHERT,

1 Scaphopode viz.: *Dentalium* (s. lat.) sp. TEICHERT and

6 Lamellibranchiata viz.: *Avicula lamellosa* (GOLDFUSS) FRECH, ? *Cardio-
la concentrica* BUCH. (known from Upper Devonian), ? *Crenipecten* sp. TEICHERT, *Goniophora* sp. TEICHERT (known from Middle and Upper Devonian), ? *Gosseletia* sp. TEICHERT and ? *Sphenotus* sp. TEICHERT.

Apart from ? *Gosseletia* sp. TEICHERT these Lamellibranchiata are guide fossils for the Devonian.

From the entire **CARBONIFEROUS** and **PERMIAN** periods of New-Guinea and Sumatra only 5 species of Gasteropoda are known, while no Scaphopoda or Lamellibranchiata has been found.

From the **LOWER CARBONIFEROUS** of Soemba only 1 Lamellibranch has been described viz.: ? *Posidonomya becheri* BRONN, but in the

UPPER CARBONIFEROUS of Sumatra 24 Gasteropoda and 9 Lamellibranchiata were found.

For the Upper Carboniferous the guide fossils are: *Bellerophon asiaticus* (F. ROEMER) FLIEGEL, *B. convolutus* BUCH., *Macrocheilus intercalare* MEEK et WORTHEN var. *pulchella* MEEK, *M. (Polypheomopsis) nitidulum* MEEK et WORTHEN, *Naticopsis subovata* MEEK et WORTHEN, *N. sumatrensis* F. ROEMER, *Pleurotomaria orientalis* F. ROEMER and *Conocardium uralicum* (VERNEUIL) KEYZERLING sp. FLIEGEL.

G. FLIEGEL took *Euomphalus (Phymatifer)* cfr. *pernodosus* MEEK for another guide fossil of the Upper Carboniferous, but afterwards E. LANGE found the same species in the Middle Permian of Sumatra.

From the **PERMIAN** of Timor 26 Gasteropoda and 21 Lamellibranchiata have been described, but of these the Lamellibranch *Atomodesma exarata* BEYRICH is also known from the Lower Trias of the same island. Guide fossils for the Permian are: *Bellerophon galeatus* C. WANNER, *B. timorensis* C. WANNER, *Crassatellina plana* GOLOWKINSKY, *Euomphalus pusilliformis* C. WANNER, *Oxytoma atavum* WAAGEN, ? *Pleurotomaria sequens* WAAGEN and *P. timorensis* C. WANNER.

From the **ROTHLIEGENDES** of Timor 41 Gasteropoda and 10 Lamellibranchiata are known. Guide fossils are: *Bucania kattaensis* WAAGEN, *B. lyelli* GEMMELLARO, *Macrocheilus* cfr. *brancoi* GEMMELLARO, *M. cfr. chemnithiaeformis* GEMMELLARO, *Naticopsis* cfr. *mediterranea* GEMMELLARO, *Pleurotomaria (Worthenia) punctata* C. WANNER, *Turbanellina nitida* C. WANNER, *T. cfr. novoselovkensis* JAKOWLEW and *Zygopleura simplex* C. WANNER.

From the **MIDDLE PERMIAN** of Sumatra only 1 Gasteropode is known viz.: *Bellerophon* sp. LANGE.

In the **ZECHSTEIN** of Timor 7 Gasteropoda and 5 Lamellibranchiata have been found, but only of these is a guide fossil viz.: ? *Parallelodon subtilistriatus* C. WANNER.

The entire **TRIASSIC** formation of Timor and Ceram have only yielded 4 Lamellibranchiata.

From the **LOWER TRIAS (SCYTHIAN)** of Timor 8 Gasteropoda and 20 Lamellibranchiata are known. As mentioned above one of these viz.: *Atomodesma exarata* BEYRICH was also found in the Permian. For the Scythian the guide fossils are: ? *Gervilleia scythica* KRUMBECK, *G. subpannonica* KRUMBECK, ? *Myophoria timorensis* KRUMBECK, *Pseudomonotis aff. painkhandanae* BITTNER, *P. (Claraia) subaurita* KRUMBECK.

From the **MIDDLE (UPPER PART, LADINIAN)** to **UPPER TRIAS** of Timor 4 Lamellibranchiata are known viz.: *Daonella indica* BITTNER (also found in the Carnian of Timor and Rotti), *Monotis salinaria* BRONN sp. KRUMBECK (also known from the Upper Norian of Ceram), ? *Pecten* sp. *indet. (1)* KRUMBECK, *Pseudomonotis aff. ochoticae* KEYS. var. *densistriatae* TELLER (also known from the Norian of Timor and Rotti).

From the **MIDDLE TRIAS** of Timor only 1 Lamellibranch has been described viz.: *Daonella* cfr. *bulogensis* KITTL.

From the **ANISIAN** of Timor the following guide fossils have been described: 4 Gasteropoda viz.: *Loxonema (? Anptychia) nifukokoensis* KRUMBECK, *Murchisonia* sp. KRUMBECK, *Pleurotomaria praebaucis* KRUMBECK, *Trochus (Flemingia) peracutaeformis* KRUMBECK and

5 Lamellibranchiata viz.: *Macrodon subesinensis* KRUMBECK, ?*Myophoria nifukokoensis* KRUMBECK, *Pecten* sp. nov. aff. *balatonico* BITTNER, *Pseudomonotis* (*Claraia*) *intermediaeformis* KRUMBECK, ?*Timoria sundaica* KRUMBECK.

From the **LADINIAN** of Timor 7 Gasteropoda and 10 Lamellibranchiata have been described, of which the following are guide fossils: *Brochidium timorense* KRUMBECK, ?*Lissochilina timorensis* KRUMBECK, *Daonella pichleri* VON MOJSISOVICS var. *timorensis* KRUMBECK, *Lima (Plagostoma) subpunctatoides* KRUMBECK, ?*Megalodus* aff. *klipsteini* BITTNER, *Nucula* aff. *strigilatae* GOLDFUSS.

From the **UPPER TRIAS** of Timor and Rotti 4 Gasteropoda and 17 Lamellibranchiata are known. *Halobia talauana* J. WANNER, known from the Carnian of Timor and from the Upper Trias of Timor and Rotti, may be looked upon as guide fossil.

From **CARNIAN TO NORIAN** of Sumatra, Timor, Rotti, Ceram, Boeroe and Misool 11 Gasteropoda, 1 Scaphopode and 48 Lamellibranchiata are known. The following species are guide fossils for this part of the Upper Trias: ?*Neritaria* sp. aff. *austriacae* R. HOERNES (known from Upper Carnian to Norian of Timor), *Dentalium* cfr. *undulatum* MÜNSTER (known from Carnian to Upper Norian of Sumatra), *Anatina* cfr. *praecursor* OPPENHEIM (known from Carnian to Upper Norian of Sumatra), *Cardium martini* BOETTGER (known from Carnian to Upper Norian of Sumatra), ?*Daonella* sp. cfr. *imperialis* KITTL (known from Upper Carnian or Lower Norian of Timor), *Gervilleia* cfr. *praecursor* HEALEY (known from Carnian to Upper Norian of Sumatra), *Halobia cassiana* VON MOJSISOVICS (known from Lower Carnian to Norian of Timor and Rotti), *H. sp.* cfr. ?*maximiliani* KITTL (known from Upper Carnian or Lower Norian of Timor), *H. sp.* aff. *suessi* VON MOJSISOVICS sp. KRUMBECK (known from Upper Carnian or Lower Norian of Timor), *H. superba* VON MOJSISOVICS var. *timorensis* KRUMBECK (known from Upper Carnian or ?Lower Norian of Timor), *Monotis* (?*Amonotis*) *rothpletzi* J. WANNER sp. KRUMBECK (known from Carnian to Norian of Ceram), *Myophoria myophoria* (BOETTGER) KRUMBECK (known from Carnian to Upper Norian of Sumatra), *Myophoricardium sublineatum* KRUMBECK (known from Carnian to Upper Norian of Sumatra), *Nucula misolensis* JAWORSKI (known from Carnian to Norian of Sumatra, Boeroe and Misool), *Palaeocardita buruca* G. BOEHM emend. KRUMBECK (known from Carnian to Norian of Sumatra, Boeroe and Misool), *Pecten (Aequipecten)* *microglyptus* BOETTGER (known from Carnian to Upper Norian of Sumatra), *Placunopsis* cfr. *fissistriata* WINKLER (known from Carnian to Upper Norian of Sumatra).

From the **CARNIAN** of Sumatra, Timor, Rotti, P. Samau, P. Kambing, Ceram and Misool 10 Gasteropoda and 54 Lamellibranchiata have been described. Guide fossils are: ?*Chemnitzia subregularis* KRUMBECK (known from Carnian of Timor), *Hologyra cipitiensis* BLASCHKE (known from Lower Carnian of Timor), ?*Loxonema variscoiformis* KRUMBECK (known from Carnian of Timor), *Murchisonia timorensis* KRUMBECK (known from Carnian of Timor), *Naticopsis altispirata* KRUMBECK (known from Carnian of Timor), *N. klipsteini* (M. HOERNES) KOKEN sp. KRUMBECK (known from Carnian of Timor), *Pleurotomaria (Sagana) geometrica*

KOKEN var. KRUMBECK (known from Carnian of Timor), *Trochus (Tylo-trochus) sp. aff. rotundato* KOKEN (known from Upper Carnian of Timor), *Cassianella katialotica* KRUMBECK (known from Carnian of Sumatra), *C. verbeeki* KRUMBECK (known from Carnian of Sumatra), *Cornucardia timorensis* KRUMBECK (known from Carnian of Timor), *Daonella cassiana* VON MOJSISOVICS (known from Carnian of Sumatra, Timor and Rotti), *D. tilin-tana* G. BOEHM (known from Carnian of Sumatra, Timor and Misool), *Entolium sp. aff. quotidianus* HEALEY (known from Carnian of Sumatra), *Gervilleia (Odontoperna) bouei* VON HAUER (known from Carnian of Sumatra), *G. (Angustella) aff. rugosa* HEALEY (known from Carnian of Sumatra), *Gonodon sphaeroides* (BOETTGER) J. WANNER (known from Carnian of Sumatra), *Halobia austriaca* (VON MOJSISOVICS) KITTL (known from Upper Carnian of Timor), *H. cfr. austriaca* VON MOJSISOVICS sp. KRUMBECK (known from Lower Carnian of Rotti), *H. austriaca* VON MOJSISOVICS ? var. KRUMBECK (known from Lower Carnian of Timor), *H. charlyana* VON MOJSISOVICS (known from Carnian of Timor and Rotti), *H. comata* BITTNER (known from Carnian of Timor, Rotti and P. Samau), *H. deningeri* KRUMBECK (known from Lower Carnian of Ceram), *H. sp. cfr. insignis* GEMMELLARO (known from Lower or Upper Carnian of Timor), *H. kualuana* VOLZ (known from Carnian of Sumatra), *H. cfr. kualuana* (VOLZ) KRUMBECK (known from Lower Carnian of Ceram), *H. sp. nov. aff. kualuanae* VOLZ var. *multistriatae* KRUMBECK (known from Lower Carnian of Ceram), *H. cfr. lepsiusi* GEMMELLARO (known from Lower Carnian of Timor), *H. sp. ? aff. miesenbachensi* KITTL (known from Upper Carnian of Timor), *H. molukkana* J. WANNER (known from Lower Carnian of Timor and Rotti), *H. styriaca* VON MOJSISOVICS (known from Carnian of Sumatra, Timor, Rotti, P. Samau, P. Kambing and Misool), *H. sp. cfr. styriaca* (VON MOJSISOVICS) KRUMBECK (known from Lower Carnian of Misool), *H. sumatrana* KRUMBECK (known from Carnian of Sumatra), *H. tropitum* KITTL var. KRUMBECK (known from Upper Carnian of Timor), *H. wickmanni* ROTHPLETZ (known from Carnian of Timor and Rotti), *Myophoriopsis latedorsata* KRUMBECK (known from Carnian of Sumatra), . . . KRUMBECK (known from Carnian of Sumatra), *Pecten (? Chlamys) sp. cfr. scutella* M. (? R.) HOERNES (known from Lower Carnian of Timor), *Placunopsis cfr. napengensis* HEALEY (known from Carnian of Sumatra), *Prospondylus sp. nov. aff. crasso* BROILI (known from Lower Carnian of Timor).

From the NORIAN of Sumatra, Borneo, Timor, Rotti, Ceram, Boeroe and Misool 31 Gasteropoda and 110 Lamellibranchiata have been recorded. Guide fossils are: *Hologyra timorensis* KRUMBECK var. *seranensis* KRUMBECK (known from Lower Norian of Ceram), *Loxonema* (? *Eustylus*) *aff. pagodae* KOKEN (known from Lower Norian of Timor), *L. (Heterocosmia) subinsignis* KRUMBECK (known from Lower Norian of Timor), *L. (? H.) timorensis* KRUMBECK (known from Norian of Timor), *L. (Anopptychia) sp. nov. aff. vittatae* KOKEN (known from Norian of Timor), *Natica klipsteini* (KOKEN) R. HOERNES (known from Lower Norian of Timor), *N. (Amauropsis) paludinaris* MÜNSTER ? mut. *major* KRUMBEC (known from Norian of Timor), *Pleurotomaria (Worthenia) escheri* STOPPANI var. *timorensis* KRUMBECK (known from Norian of Timor), *Turri-*

tella (Promathildia) sp. KRUMBECK (known from Norian of Timor), *Aequipecten subserraticosta* KRUMBECK ? var. KRUMBECK (known from Lower Norian of Ceram), *Alectryonia parasitica* KRUMBECK (known from Lower Norian of Boeroe and Ceram), *Anodontophora griesbachi* BITTNER (known from Norian of Boeroe and Misool), *Avicula sp. indet. cfr. caudata* STOPPANI (known from Norian of Timor), *Cardita (Palaeocardita) buruca* G. BOEHM emend. KRUMBECK var. *seranensis* KRUMBECK (known from Lower Norian of Ceram), *C. trapezoidalis* KRUMBECK (known from Norian of Boeroe and Misool), *Dicerocardium sp. cfr. jani* STOPPANI (known from Norian of Timor), *Fogiella deningeri* KRUMBECK (known from Lower Norian of Boeroe), *Gonodon (Gonodus) sp. aff. manzavinnii* BITTNER (known from Norian of Timor), *Halobia distincta* (VON MOJSISOVICS) KITTL (known from Lower Norian of Timor), *H. aff. fallaci* VON MOJSISOVICS (known from Lower Norian of Timor), *H. lineata* MÜNSTER (known from Norian of Rotti), *H. cfr. lineata* MÜNSTER (known from Lower Norian of Rotti), *H. lommeli* WISSMANN (known from Norian of Timor and Rotti), *H. norica* VON MOJSISOVICS (known from Norian of Timor and Rotti), *H. sp. cfr. plicosa* VON MOJSISOVICS (known from Lower Norian of Timor), *H. cfr. salinarum* VON MOJSISOVICS (known from Lower Norian of Timor and Rotti), *H. cfr. superbescens* KITTL (known from Lower Norian of Timor), *H. verbeeki* J. WANNER (known from Lower Norian of Timor), *Homomya sublariana* KRUMBECK (known from Lower Norian of Boeroe), ? *Leda timorensis* KRUMBECK (known from Norian of Timor), *Lima (Radula) subcumaunica* KRUMBECK (known from Norian of Boeroe and Misool), ? *Modiola sp. (1)* KRUMBECK (known from Lower Norian of Boeroe), *Monotis salinaria* BRONN (known from Norian of Borneo, Timor, Rotti, Boeroe and Ceram), *Myophoria sp. cfr. inaequicostata* KLIPSTEIN (known from Norian of Timor), *M. sp. indet. cfr. inaequicostata* KLIPSTEIN (known from Norian of Timor), *M. seranensis* KRUMBECK (known from Lower Norian of Ceram), *M. vestita alberti* var. *subvestita* KRUMBECK (known from Norian of Boeroe and Misool), *Nucula (? Leda) subzelima* KRUMBECK (known from Lower Norian of Boeroe), *N. sundaica* KRUMBECK var. *seranensis* KRUMBECK (known from Lower Norian of Ceram), ? *Palaeoneilo excentrica* KRUMBECK (known from Norian of Boeroe), *Pecten sp. aff. chabrangensi* DIENER (known from Norian of Timor), *Pecten (Aequipecten) clignetti* G. BOEHM emend. KRUMBECK (known from Lower Norian of Boeroe and Misool), *P. (? Entolium) decoratiformis* KRUMBECK (known from Norian of Timor), *P. krumbecki* JAWORSKI (known from Norian of Sumatra, Boeroe and Misool), *P. (Aequipecten) seinaamensis* KRUMBECK (known from Norian of Timor), *P. (A.) subserraticosta* KRUMBECK (known from Norian of Timor), *Pinna sp. cfr. Pinna sp. (1)* KRUMBECK (known from Norian of Timor), *Protocardia subrhaetica* KRUMBECK (known from Lower Norian of Ceram), *P. (? Isocyprina) timorensis* KRUMBECK (known from Norian of Timor), ? *P. (? I.) timorensis* KRUMBECK var. *seranensis* KRUMBECK (known from Lower Norian of Ceram), *Timoria subtimorensis* KRUMBECK (known from Norian of Timor), *T. timorensiformis* KRUMBECK (known from Norian of Timor), *T. timorensis* KRUMBECK (known from Norian of Timor), *T. timorensis* KRUMBECK ? var. *major* KRUMBECK (known from Norian of Timor), *Trigonia seranensis* KRUMBECK (known from Lower Norian of Ceram).

From **NORIAN (TO RHAETIAN)** of Timor, Boeroe, Ceram and Misool 8 Lamellibranchiata have been described. Guide fossils are: *Dimyodon cfr. intusstriatum* EMMRICH (known from Lower Norian of Boeroe and Misool; from Upper Norian or Rhaetian of Ceram), *Oxytoma cfr. inaequivalve* SOWERBY var. *intermedia* EMMRICH (known from Upper Norian or Rhaetian of Ceram; from Rhaetian of Timor), *Pecten* (? *Chlamys*) sp.: *cfr. acutauritus* SCHAFH. (known from Upper Norian or Rhaetian of Ceram).

In the **RHAETIAN** of Timor only 3 Lamellibranchiata have been found viz.: *Lima (Radula) cfr. acuta* STOPPANI, *Pecten (Chlamys) coronatiformis* KRUMBECK, *Prosogyrotrigonia timorensis* KRUMBECK, which all three are guide fossils for this period.

From the **RHAETIAN OR LOWER LIAS** of Ceram only 2 Lamellibranchiata are known.

In the **LIAS** of Borneo, Timor, Rotti, Misool and New-Guinea 3 Gasteropoda and 7 Lamellibranchiata have been found. Of these *Trichites litintanus* G. BOEHM is also known from the Dogger α of Misool and *Gervilleia borneensis* MARTIN also has been described from the Cretaceous of Borneo. Guide fossils for the Lias are: *Nerinea timorensis* J. WANNER emend. KRUMBECK, *Mytilus mirabilis* LEPSIUS and ? *Pachymegalodus timorensis* J. WANNER emend. KRUMBECK, all three known from the Lias of Timor.

From the **LOWER LIAS** of Timor and Rotti only 2 Lamellibranchiata are known viz.: *Lima* (? *Mantellum*) *brouweri* KRUMBECK and *Pecten* (? *Entolium*) sp. (1) KRUMBECK.

From the **MIDDLE LIAS** of Timor and Rotti 15 Lamellibranchiata have been recorded. Guide fossils are: *Lima* (? *Mantellum*) *rottica* KRUMBECK (known from the Middle Lias of Rotti), *Mytilus mirabilis* LEPSIUS var. *timorensis* KRUMBECK (known from the Middle Lias of Timor), ? *Nucula subserradensis* KRUMBECK (known from the Middle Lias of Timor), ? *N. joannis wanneri* KRUMBECK (known from the Middle Lias of Timor).

From **DOGGER TO MALM** of Borneo, Soela-Islands and New-Guinea 5 Gasteropoda and 11 Lamellibranchiata have been described of which *Nucula taliabutica* G. BOEHM is also known from the Berriasien of the Soela-Islands. Guide fossils are: *Alaria cfr. trifida* (PHILLIPS) VOGEL (known from Upper Dogger to Malm of Borneo), *Exelissa septemcostata* VOGEL (known from Upper Dogger to Malm of Borneo), *Pseudomelania cfr. abbreviata* ROEMER (known from Upper Dogger to Malm of Borneo), *Corbula vogeli* (VOGEL) COSSMANN (known from Upper Dogger to Malm of Borneo), *Inoceramus galoi* G. BOEHM (known from Dogger to Malm of the Soela-Islands and New-Guinea), *Protocardia crassicostata* VOGEL (known from Upper Dogger to Malm of Borneo), *P. tenuicostata* VOGEL (known from Upper Dogger to Malm of Borneo).

In the **DOGGER** of Sumatra 5 Lamellibranchiata have been found of which the following species are guide fossils viz.: *Astarte* (*Opisastarte*) *trigonalis* SOWERBY, *Cypriocardia cordiformis* DESHAYES and *Opis leckenbyi* WRIGHT.

From the **LOWER DOGGER** of Taliaboe 9 Lamellibranchiata are known amongst which no guide fossils are mentioned.

From the **DOGGER** α of Misool 2 Gasteropoda and 18 Lamellibranchiata have been described. Guide fossils are: *Cucullaea cfr. aalensis* QUENSTEDT, *C. inaequivalvis* GOLDFUSS, *C. cfr. oblonga* SOWERBY (with a zone of maximum development in Dogger β), *Nucula hammeri* GOLDFUSS.

From the **CALLOVIAN** of the Soela-Islands and New-Guinea 1 Gasteropode and 5 Lamellibranchiata are known of which none can be looked upon as guide fossil.

In the **OXFORDIAN** of Timor, Rotti, Soela-Islands, Boeroe, Ceram and New-Guinea 5 Gasteropoda and 24 Lamellibranchiata have been found. Guide fossils are: *Aucella malayomaorica* KRUMBECK var. *burutica* KRUMBECK (known from the uppermost part of the Lower Oxfordian of Boeroe) and *A. plicata* ZITTEL (known from the Oxfordian of Mangoli and from the uppermost part of the Lower Oxfordian of Timor, Rotti, Boeroe and Ceram).

From the **MALM** of Borneo 3 Gasteropoda and 12 Lamellibranchiata are known. Guide fossils are: *Astarte borneensis* VOGEL, *A. eastonii* VOGEL, *Pholadomya cfr. multicostata* AGASSIZ, *Protocardia multiformis* VOGEL.

From the **TRANSITION BEDS** between **JURA AND CRETACEOUS (BERRIASIAN)** of the Soela-Islands 4 Lamellibranchiata have been recorded of which *Nucula taliabutica* G. BOEHM has already been mentioned from the Dogger and Malm of New-Guinea and from the Oxfordian of the Soela-Islands.

From the **CRETACEOUS** of Borneo 5 Lamellibranchiata are known of which *Gervilleia borneensis* MARTIN has also been described from the Lias of Borneo.

In the **LOWER CRETACEOUS** of Borneo 2 Gasteropoda and 8 Lamellibranchiata have been found. Guide fossils are: *Itieria scalaris* VOGEL and *Mytilus cfr. arrialoorensis* STOLICZKA.

From the **VALANGIAN** of Sumatra 3 Gasteropoda and 17 Lamellibranchiata are known. No guide fossils were mentioned from this period.

From the **CENOMANIAN** of Borneo P. G. KRAUSE described only 1 Lamellibranch viz.: *Avicula canaliculata* (sp. nov.?) KRAUSE.

From the **TURONIAN** of Fafanlap and Jabatano (Misool-Archipelago) 3 Lamellibranchiata have been recorded viz.: *Inoceramus australis* Woods part. HEINZ, *I. cuvieri* SOWERBY var. *haani* J. BÖHM part. HEINZ and *I. schlönbachi* J. BÖHM var. *rumphii* J. BÖHM (known from the uppermost part from the Upper Turonian). All three are guide fossils.

From the **UPPER CRETACEOUS** or **SENONIAN (CRETACEOUS SENSU STRICTO)**: vide bibl. 39, p. 139) of Borneo, Celebes and Misool-Archipelago 20 Gasteropoda and 38 Lamellibranchiata are known. Guide fossils are: *Natica (Gyrodès)* sp. indet. MARTIN, *Strombus (Pugnillus)* sp. indet. MARTIN, *Crassatella macrodonta* SOWERBY ? sp. MARTIN, ? *Durania* sp. J. BÖHM, *D. crispa* J. BÖHM, *D. deningeri* J. BÖHM, *D. wanneri* J. BÖHM, *Inoceramus cfr. monticuli* FUGGER et KASTNER, *I. regularis* D'ORBIGNY var. *misoliensis* J. BÖHM, *Roudairia gigantea* MARTIN, *Ostrea (Exogyra) ostracina* LAMARK, *Ptychomia indica* MARTIN, *Trigonia limbata* D'ORBIGNY, *Vola quinquecostata* SOWERBY sp. MARTIN.

BIBLIOGRAPHY.

1. BAUMBERGER, E. Die Kreidefossilien von Dusun Pobungo, Batu-Kapur-Menkadai und Sungi Pobungo (Djambi, Sumatra). Verhand. Geol. Mijnb. Gen. Ned. Kol., geol. ser., Deel VIII, p. 241(17)—272(48), 1925.
2. BEYRICH, E. Ueber eine Kohlenkalk-Fauna von Timor. Abhand. Königl. Akad. Wiss. Berlin, Physik. Klasse, 1864, gedruckt 1865.
3. BOEHM, G. Grenzschichten zwischen Jura und Kreide. Palaeontographica, Suppl. IV, Liefg. I, Abschn. 1, 1904.
4. BOEHM, G. Der Fundpunkt am oberen Lagoi auf Taliabu. Oxford des Wai Galo. Palaeontographica, Suppl. IV, Liefg. II, Abschn. 2—3, 1907.
5. BOEHM, G. Geologische Mitteilungen aus dem Indo-Australischen Archipel, No. VI, a. Jura von Rotti, Timor, Babar und Buru. Neues Jahrb. Min., Geol., Pal., Beil. Bd. XXV, p. 295—299, 324—343, 1907.
6. BOEHM, G. und PENECKE, K. A. Liste der permischen, jurassischen und cretaceischen Versteinerungen. In Verbeek's Molukken-Verslag. Jaarb. Mijnw. N. I. 1908, Wet. ged., p. 660—665, 1908.
7. BOEHM, G. Zur Geologie des Indo-Australischen Archipels, VII: Posidonomya Becheri in Niederländisch-Indien? Centralblatt Min., Geol., Pal., p. 350—352, 1911.
8. BOEHM, G. Unteres Callovien und Coronatenschichten zwischen Mac Cluer-Golf und Geelvink-Baai. Nova Guinea, Vol. VI, geol., Abschn. 1, 1912.
9. BOEHM, G. Unteres Callovien. Palaeontographica, Suppl. IV, Liefg. III, Abschn. 4, 1912.
10. BÖHM, J. Ueber eine senone Fauna von Misol. Palaeontologie Timor, Liefg. XIV, Abb. 24, p. 83—103, 1924.
11. BOETTGER, O. Die Conchylien der Untercänenschichten von West-Sumatra (Boekiet Kandoeng und Loerah Tambang). In: Die Tertiärformation von Sumatra und ihre Thierreste, p. 29—52. Palaeontographica, Suppl. III, Liefg. VIII—XI, I Theil, 1880.
12. BROELL, F. Zur Geologie des Vogelkop (N.W. Neu-Guinea). Wetensch. Meded. Dienst Mijnb. N. I., No. 1, p. 1—15, 1924.
13. COSSMANN, M. Mollusken aus dem Jura von Borneo, von Dr. F. Vogel. Revue critique de Paléozoologie, No. 1, p. 12—13, 1900.
14. COSSMANN, M. Neue Mollusken aus dem Jura von Borneo, von Fr. Vogel. Revue critique de Paléozoologie, No. 4, p. 162—163, 1900.
15. DENINGER, K. Zur Geologie von Mittel-Seran (Ceram). Palaeontographica, Suppl. IV, Liefg. II, 1918.
16. DOLLFUS, G. F. Paléontologie du voyage à l'île Célèbes de M. E. C. Abendanon, Leyde, 1915.
17. FLIEGEL, G. Ueber obercarbonische Faunen aus Ost- und Südasien. Palaeontographica, Bd. XLVIII, Liefg. 2—3, p. 91—136, 1901.
18. FRECH, F. und MEYER, O. E. Mitteljurassische Bivalven von Sungi Temalang im Schieferbarissan (Residentschaft Djambi). Verhand. Geol. Mijnb. Gen. Ned. Kol., geol. ser., Deel V, p. 223—229, 1922.
19. HAMLET, B. Permische Brachiopoden, Lamellibranchiaten und Gastropoden von Timor. Jaarb. Mijnw. N. I. 1927, Verh. II, p. 1—115, 1928.
20. HEINZ, R. Ueber die Oberkreide-Inoceramen der Inseln Fafanlap, Jabatano und Jillu III im Misol-Archipel. Mitteil. Min. Geol. Staatsinstitut Hamburg, Heft X, p. 99—110, 1928.
21. HUMMEL, K. Die Oxford-Tuffite der Insel Buru und ihre Fauna. Palaeontographica, Suppl. IV, Liefg. IV, Abschn. 2, 1923.

22. JAWORSKI, E. Die Fauna der Ober-Triadischen Nucula-Mergel von Misol. Palaeontologie Timor, Liefg. II, Abh. 5, p. 71—174, 1915.
23. JAWORSKI, E. Ein Beitrag zur Kenntnis des Untersten Doggers von Taliabu (Sula-Inseln). Jaarb. Mijnw. N. I. 1920, Verh. II, p. 191—206, 1921.
24. KOSSMAT, F. Bemerkungen über die Ammoniten aus den Asphalt-schiefern der Bara-Bai (Buru). Neues Jahrb. Min., Geol., Pal., Beil. Bd. XXII, p. 686—691, 1906.
25. KRAUSE, P. G. Ueber Lias von Borneo. Samml. Geol. Reichs-Mus. Leiden, Ser. 1, Bd. V, p. 154—168, 1896. Jaarb. Mijnw. N. I. 1896, Wet. ged. I, p. 28—42, 1896.
26. KRAUSE, P. G. Ueber Tertiaere, Cretacäische und Aeltere Ablagerungen aus West-Borneo. Samml. Geol. Reichs-Mus. Leiden, ser. 1, Bd. V, p. 169—220, 1897.
27. KRUIZINGA, P. Ammonieten en eenige andere fossielen uit de jurassische afzettingen der Soela-eilanden. Jaarb. Mijnw. N. I. 1925, Verh. I, p. 13—85, 1926.
28. KRUMBECK, L. Bemerkungen zu K. Deninger: „Einige Bemerkungen über die Stratigraphie der Molukken“. Centralblatt Min., Geol., Pal., p. 21—23, 1911.
29. KRUMBECK, L. Obere Trias von Buru und Misol. Die Fogi-Schichten und Asphalt-schiefer West-Burus und der Athyridenkalk des Misol-Archipels. Palaeontographica, Suppl. IV, Liefg. I, Abschn. 1, 1913.
30. KRUMBECK, L. Obere Trias von Sumatra (Die Padang-Schichten von West-Sumatra nebst Anhang) nebst einer Einleitung von R. D. M. Verbeek: Die Lageungsverhältnisse der Trias-Schichten im Padangschen Hochlande. Palaeontographica, Suppl. IV, Liefg. III, Abschn. 3, 1914.
31. KRUMBECK, L. Die Brachiopoden, Lamellibranchiaten und Gastropoden der Trias von Timor. I. Stratigraphischer Teil. Palaeontologie Timor, Liefg. X, Abh. 17, p. 1—142, abgeschl. 1919, 1921.
32. KRUMBECK, L. Zur Kenntnis des Juras der Insel Rotti. Jaarb. Mijnw. N. I. 1920, Verh. III, p. 107—219, 1922.
33. KRUMBECK, L. Brachiopoden, Lamellibranchiaten und Gastropoden aus der oberen Trias der Insel Seran (Mittel-Seran). Palaeontographica, Suppl. IV, Liefg. IV, Abschn. 3, 1923.
34. KRUMBECK, L. Zur Kenntnis des Juras der Insel Timor, sowie des Aucellen-Horizontes von Seran und Buru. Palaeontologie Timor, Liefg. XII, Abh. 20, p. 1—120, 1923.
35. KRUMBECK, L. Die Brachiopoden, Lamellibranchiaten und Gastropoden der Trias von Timor. II. Palaeontologischer Teil. Palaeontologie Timor, Liefg. XIII, Abh. 22, p. 1(143)—275(417), abgeschl. 1919, 1924.
36. KUTASSY, A. Triadische Fossilien vom Portugiesischen Timor. Verhand. Geol. Mijnb. Gen. Ned. Kol., geol. ser., Deel IX, p. 49—56, 1931.
37. LANGE, E. Eine mittelpermische fauna von Guguk Bulat (Padanger Oberland, Sumatra). Verhand. Geol. Mijnb. Gen. Ned. Kol., geol. ser., Deel VII, p. 213—295, 1925.
38. MARTIN, K. Ueber das Vorkommen einer Rudisten-führenden Kreide-formation im Südöstlichen Borneo. Samml. Geol. Reichs-Mus. Leiden, Ser. 1, Bd. IV, p. 117—125, 1888. Jaarb. Mijnw. N. I. 1888, Wet. ged., p. 72—80, 1888.
39. MARTIN, K. Die Fauna der Kreideformation von Martapoera. Samml. Geol. Reichs-Mus. Leiden, Ser. 1, Bd. IV, p. 126—197, 1889. Jaarb. Mijnw. N. I. 1889, Wet. ged. II, p. 3—74, 1889.
40. MARTIN, K. Versteinerungen der sogenannten alten Schieferformation von West-Borneo. Samml. Geol. Reichs-Mus. Leiden, Ser. 1, Bd. IV, p. 198—208, 1889. Jaarb. Mijnw. N. I. 1889, Wet. ged. II, p. 75—85, 1889.
41. MARTIN, K. Notiz über den Lias von Borneo. Samml. Geol. Reichs-Mus. Leiden, Ser. 1, Bd. V, p. 253—256, 1898. Jaarb. Mijnw. N. I. 1898, Wet. ged. II, p. 33—36, 1898.

42. MARTIN, K. Brakwatervormingen van de Melawi in het binnenland van Borneo. Kon. Akad. Wetensch. Amsterdam, versl. gew. verg. Wis- en Nat. Afd., p. 302(1)—305(4), 1899.
43. MARTIN, K. und ICKE, H. Die Silatgruppe, Brack- und Süßwasser-Bildungen der Oberen Kreide von Borneo. Samml. Geol. Reichs-Mus. Leiden, Ser. 1, Bd. VIII, p. 106—144, 1906.
44. NEWTON, R. BULLEN. A Jurassic Lamellibranch from Sarawak, Borneo. Geol. Mag., new. ser., Dec. IV, Vol. IV, p. 407—415, 1897.
45. NEWTON, R. BULLEN. Notes on some Jurassic shells from Borneo, including a new species of *Trigonia*. Proceed. Malacological Soc., Vol. V, Pt. 6, p. 403—409, 1903.
46. NEWTON, R. BULLEN. Notes on some Organic Limestones, collected by the Wollaston Expedition in Dutch New Guinea. Rep. on the Coll. made by the British Ornithologists' Union Expedition and the Wollaston Expedition in Dutch New Guinea, 1910—1913; Vol. II, Rep. No. 20, 1916.
47. NOETLING, F. Trias von Sumatra und Borneo. *Lethaea geognostica*, II. Teil, Bd. 1, Abt. 2, p. 210—211, 1905.
48. RENZ, C. Trias von Timor und Rotti. *Lethaea geognostica*, II. Teil, Bd. 1, Abt. 2, p. 211—212, 1905.
49. RENZ, C. Ueber Halobien und Daonellen aus Griechenland nebst Asiatischen Vergleichsstücken. Neues Jahrb. Min., Geol., Pal., Bd. I, p. 27—40, 1906.
50. RENZ, C. Die Trias von Rotti und Timor im Ost-Indischen Archipel. Centralblatt Min., Geol., Pal., p. 355—361, 1909.
51. ROEMER, F. Ueber eine Kohlenkalkfauna der Westküste von Sumatra. *Palaeontographica*, Bd. XXVII, Liefg. 1, p. 1—11, 1880. Jaarb. Mijnw. N. I. 1881, Verh. I, p. 289—305, 1881.
52. ROTHPLETZ, A. Die Perm-, Trias- und Jura-Formation auf Timor und Rotti im Indischen Archipel. *Palaeontographica*, Bd. XXXIX, Liefg. 2—3, p. 57—106, 1892.
53. SCHLÜTER, H. Jurafossilien vom Oberen Sepik auf Neu-Guinea. *Nova Guinea*, Vol. VI, geol., Livr. 3, p. 53—62, 1928.
54. SOERGEL, W. Liias und Dogger von Jefbie und Fialpopo (Misolarchipel). Neues Jahrb., Min., Geol., Pal., Beil. Bd. XXXVI, p. 586—650, 1913.
55. TEICHERT, C. Nachweis Paläozoischer Schichten von Südwest-Neu-Guinea. *Nova Guinea*, Vol. VI, geol., Livr. 3, p. 71—92, 1928.
56. VERBEEK, R. D. M. Molukken-Verslag. Jaarb. Mijnw. N. I. 1908, Wet. ged., 1908.
57. VOGEL, FR. Mollusken aus dem Jura von Borneo. Samml. Geol. Reichs-Mus. Leiden, Ser. 1, Bd. V, p. 127—153, 1896. Jaarb. Mijnw. N. I. 1896, Wet. ged. I, p. 1—27, 1896.
58. VOGEL, FR. Neue Mollusken aus dem Jura von Borneo. Samml. Geol. Reichs-Mus. Leiden, Ser. 1, Bd. VI, p. 40—76, 1899. Jaarb. Mijnw. N. I. 1899, Wet. ged. II, p. 53—89, 1899.
59. VOGEL, FR. Beiträge zur Kenntnis der Mesozoischen Formationen in Borneo. Samml. Geol. Reichs-Mus. Leiden, Ser. 1, Bd. VII, p. 208—220, 1902.
60. VOLZ, W. Beiträge zur geologischen Kenntnis von Nord-Sumatra. Zeitschr. Deutsch. Geol. Ges., Bd. 51, p. 1—61, 1899.
61. WANNER, C. Die Gastropoden und Lamellibranchiaten der Dyas von Timor. Palaeontologie Timor, Liefg. XI, Abh. 18, p. 1—81, 1922.
62. WANNER, J. Geologische Mitteilungen aus dem Indo-Australischen Archipel, No. IV: Triasprefakte der Molukken und des Timorarchipels. Neues Jahrb., Min., Geol., Pal., Beil. Bd. XXIV, p. 161—220, 1907.
63. WANNER, J. Neues über die Perm-, Trias- und Juraformation des Indo-Australischen Archipels. Centralblatt Min., Geol., Pal., No. 22, p. 736—741, 1910.

64. WANNER, J. Beiträge zur Geologie der Insel Buru. Palaeontographica, Suppl. IV, Liefg. III, Abdruckn. I, 1922.
65. WICHMANN, A. Natuurk. Tijdschr. N.I., Deel LI (Ser. 8, Deel XII), p. 446—447, 1892.

Publications I was not able to consult:

- ITIER, J. Over versteeningen in kalkstenen van Java. Journal d'un voyage en Chine, Vol. II, p. 225. Paris, 1848.
- KETTL, E. Materialien zu einer Monographie der Halobidae und Monotidae der Trias. Resultate der Wissenschaftlichen Erforschung des Balatonsees, Bd. I, Abt. 1, Palaeontologie II, p. 107, 109, 111—112, 142—143, 169, Budapest, 1912.
- ROTHPLETZ, A. On the Permian, Triassic and Jurassic Formations in the East Indian Archipelago. The American Naturalist, p. 959, 1891.