

Appendix A. List of taxa with synonyms.

This list does not represent a revision of Ostracoda- and Foraminifera species of the region investigated and is therefore neither complete nor entirely in a current status. Only those species found in the Wetterau region (Gebhardt, 2003) or those well known by the author were synonymized. Because genus names of original papers were largely retained, allocations to genera are partially outdated. The listed species occur within the stratigraphic horizons Lower Chattian (Cyrenen-Mergel), Upper Chattian (Cerithien-Schichten), lowermost Miocene (Corbicula-Schichten) or their equivalents.

1. Ostracoda

Remark: The remarks of Sonne (1982) and of Liebau (1991) concerning some species mentioned in the older literature have been considered.

1. *Argilloecia laevissima* (Bornemann, 1855)
2. *Aulocytheridea* aff. *faboides robusta* Moos, 1970
3. *Bairdia contracta* Jones, 1895
4. *Bairdia oviformis* Speyer, 1863
5. *Bairdia reussi* Speyer, 1863
6. *Bairdia subdeltoidea* (v. Münster, 1830)
7. *Bairdia tenuis* Lienenklaus, 1905
8. *Beatamoosina edita* (Lienenklaus, 1894)
9. *Bosquetina curta* Bassiouni, 1962
= *Bosquetina pectinata curta* Bassiouni
10. *Bosquetina lienenklausi* Witt, 1967
11. *Bosquetina* sp. B in Witt (1967)
12. *Bosquetina* sp. in Goerlich (1958)
13. *Brachycythere* cf. *tarentina* (Baird, 1850)
14. *Bythocypris arquata* (v. Münster, 1830)
15. *Bythocythere neerlandica* Kuiper, 1918
16. *Bythocythere* cf. *neerlandica* Kuiper, 1918
17. *Bythocythere undulata* (Speyer, 1863)
18. *Bythocythere* sp. in Goerlich (1958)
19. ?*Bythoceratina* sp. in Faupel (1975)
20. *Callistocythere canaliculata* (Reuss, 1850)
21. *Candona albicans* Brady, 1864
22. *Candona candida* (Müller, 1785)
23. *Candona candidula* Lienenklaus, 1905
24. *Candona praecox* Straub, 1952
25. *Candona recta* Lienenklaus, 1905
26. *Candona* cf. *recta* Lienenklaus, 1905
27. *Candona reptans* (Baird, 1848)
28. *Candona rhenana* Lienenklaus, 1905
29. *Candona subaequalis* Jones, 1857
30. *Candona* aff. *weltneri* Hartwig, 1898
31. *Candona* sp. in DoebI et al. (1972)
32. *Candona* sp. in Picot et al. (1999)
33. *Candonopsis* cf. *arida* Sieber, 1905
34. *Cavernopsis ruessingensis* Schäfer, 1993
= *Cavernopsis* sp. in Schäfer (1984)
35. *Cavernopsis sonnei* Schäfer, 1993
= "Dreiecksostracod" in DoebI et al. (1972)
36. *Cladarocythere spathacea* (Lienenklaus, 1905)
= *Cytheridea fragilis* Lienenklaus, 1905
37. *Clithrocytheridea* sp. 1 in Ellermann (1958, 1969)
38. *Costa hermi* Witt, 1967
39. *Costa polytrema* (Brady, 1878)
40. *Costa tricostata elegantissima* (Lienenklaus, 1894)
41. *Cuneocythere marginata* (Bosquet, 1852)
= *Cuneocythere truncata* Lienenklaus, 1894
42. *Cushmanidea bradiana* (Lienenklaus, 1894)
43. *Cushmanidea brevis* (Lienenklaus, 1894)
44. *Cushmanidea denticulata* (Lienenklaus, 1894)
45. *Cushmanidea falcata* (Reuss, 1850)
46. *Cushmanidea* cf. *falcata* (Reuss, 1850)
47. *Cushmanidea haskinsi* Keen, 1977
48. *Cushmanidea lithodomoides* (Bosquet, 1852)

49. *Cushmanidea scrobiculata* (Lienenklaus, 1894)
50. *Cyamocytheridea devexa* (Lienenklaus, 1905)
51. *Cyamocytheridea fabaeformis* (Speyer, 1863)
52. *Cyamocytheridea punctatella* (Bosquet, 1852)
= *Cytheridea cuneata* Lienenklaus, 1896
53. *Cyamocytheridea* sp. Cy21 in Doebli and Malz
(1962)
54. ?*Cyamocytheridea* sp. in Gebhardt and Prinz-Grimm
(1999)
55. *Cypria curvata* Lienenklaus, 1905
56. ?*Cypria curvata* (Lienenklaus) in Gebhardt (2003)
57. *Cyprideis glabra* Goerlich, 1953
58. *Cyprideis rara* Goerlich, 1953
59. *Cyprideis traisensis* Malz & Triebel, 1970
60. ?*Cyprideis* cf. *traisensis* Triebel in Gebhardt (2003)
61. *Cyprideis* n.sp. in Schenk (1957)
62. *Cypridopsis?* *cyclocypriformae* Carbonnel and
Ritzkowski, 1969
63. ?*Cypridopsis* cf. *hessani* Carbonnel and Ritzkowski,
1969
64. *Cypridopsis kinkelini* Lienenklaus, 1905
65. *Cypridopsis similis* (Lienenklaus, 1905)
66. *Cyprodopsis* cf. *wolffi* Carbonnel and Ritzkowski,
1969
67. *Cypridopsis* sp. in Picot et al. (1999)
68. *Cypridopsis*(?) sp. in Kuster-Wendenburg (1969)
69. *Cyprinotus* sp. in Doebli et al. (1972)
70. *Cypris francofurti* Lienenklaus, 1905
71. *Cypris gibba* Ramdohr, 1808
72. *Cypris ovum* Jurine, 1820
73. *Cypris setigera* Jones, 1850
74. *Cypris* sp. in Böhl (1928)
75. *Cythere angulatopora* Roemer, 1838
76. *Cythere bicostulata* Speyer, 1863
77. *Cythere bornemanni* Speyer, 1863
78. *Cythere incisa* Speyer, 1863
79. *Cythere millepunctata* Speyer, 1863
80. *Cythere sphaerulolineata* Jones, 1857
81. *Cythere trachypora* Jones, 1857
82. *Cythereis obliquata* (Reuss, 1856)
83. *Cythereis* sp. 1 in Ellermann (1958, 1960)
84. *Cytherella beyrichi* (Reuss, 1851)
85. *Cytherella compressa* (v. Münster, 1830)
86. *Cytherella elliptica* Brady, 1878
87. *Cytherella gracilis* Lienenklaus, 1894
88. *Cytherella parallela* Reuss, 1844
89. *Cytherella* cf. *parallela* (Reuss, 1844)
90. *Cytherella* cf. *pustulosa* Keij, 1957
91. *Cytherella rugosa* Lienenklaus, 1900
92. *Cytherella transversa* Speyer 1863
93. *Cytherella* sp. in Gebhardt (2003)
94. *Cytherelloidea jonesiana* (Bosquet, 1852)
95. *Cytherelloidea praesulcata* (Lienenklaus, 1894)
= *Cytheridea eberti* Lienenklaus, 1894
96. *Cytheretta bassiounii* Uffenorde, 1981
97. *Cytheretta* aff. *concinna* Triebel, 1952
98. *Cytheretta gutzwilleri* Oertli, 1956
99. *Cytheretta jurinei* (v. Münster, 1830)
100. *Cytheretta moosi* Bassiouni, 1962
101. *Cytheretta pilgeri* Bassiouni, 1962
102. *Cytheretta plicata* (v. Münster, 1830)
103. *Cytheretta posticalis* Triebel, 1952
104. *Cytheretta procera* (Lienenklaus, 1894)
105. *Cytheretta ramosa* (Lienenklaus, 1905)
106. *Cytheretta* cf. *ramosa* (Lienenklaus, 1905)
107. *Cytheretta semipunctata* (Bornemann, 1855)
108. *Cytheretta tenuipunctata* (Bosquet, 1852)
109. *Cytheretta tenuistriata* (Reuss, 1853)
110. *Cytheridea* (*Cytheridea*) *bavarica* Goerlich, 1953
111. *Cytheridea bosqueti* Speyer, 1863
112. *Cytheridea* cf. *debilis* Jones, 1857
113. *Cytheridea fallens* Oertli, 1956
114. *Cytheridea genavensis* Oertli, 1956
115. *Cytheridea horstgenensis* Bassiouni, 1962

116. *Cytheridea muelleri* (v. Münster, 1830)
= *Cytheridea* sp. C66 in Doebl and Malz (1962)
117. *Cytheridea* cf. *muelleri* (v. Münster, 1830)
118. *Cytheridea* aff. *muelleri* (v. Münster, 1830)
119. *Cytheridea mülleri* var. *torrosa* Jones, 1854
120. *Cytheridea mülleri* var. *papillosa* Bosquet, 1852
121. *Cytheridea (Cytheridea) mülleri truncatula* Goerlich, 1953
122. *Cytheridea mülleri* Form a (v. Münster) in Goerlich (1958)
123. *Cytheridea mülleri* Form b (v. Münster) in Goerlich (1958)
124. *Cytheridea pernota* Oertli and Keij, 1955
125. *Cytheridea* sp. 1 in Ellermann (1958, 1960)
126. *Cytheridea* sp. in Uffenorde (1980)
127. *Cytherideis* aff. *brevis* Lienenklaus, 1894
128. *Cytherideis trigonalis* Jones, 1890
129. *Cytheromorpha zinndorfi* (Lienenklaus, 1905)
= *Cytheromorpha* sp. in Krause (1991),
May (1999), Rothausen and Sonne (1984)
130. *Cytheromorpha* cf. *zinndorfi* (Lienenklaus, 1905)
131. *Cytheropteron (Cytheropteron) cordiforme*
Lienenklaus, 1894
132. *Cytheropteron* cf. *cordiforme* Lienenklaus, 1894
133. *Cytheropteron pipistrella* Brady, 1878
134. *Cytheropteron (Cytheropteron) steinmanni* Kuiper, 1918
135. *Cytheropteron tricorne* (Bornemann, 1855)
136. *Cytheropteron* sp. indet in Uffenorde (1989)
= *Cytheropteron* sp. in Uffenorde (1980)
137. *Cytherura* aff. *gibba* Müller, 1785
138. *Cytherura sulcata* Lienenklaus, 1905
139. *Cytherura* sp. in Schenk (1957)
140. *Cytherura* sp. in Schäfer (1984)
141. *Echinocythereis* cf. *echinata* (Reuss, 1851)
142. *Echinocythereis hirsuta* (Lienenklaus, 1894)
143. *Echinocythereis hispida* (Speyer, 1863)
144. *Echinocythereis hispida* (Speyer, 1863) - *E. hirsuta*
(Lienenklaus, 1894)
145. *Echinocythereis* cf. *lyelliana* (Bosquet, 1852)
146. *Echinocythereis prieniensis* Witt, 1967
147. *Echinocythereis scabra* (v. Münster, 1830)
148. *Echinocythereis subcornuta* (Lienenklaus, 1900)
149. *Echinocythereis variolata* (Egger, 1858)
150. *Echinocythereis* sp. 1 in Uffenorde (1981, 1986)
151. *Eocytheropteron* sp. A in Oertli (1956)
152. *Eucypris acuta* (Lienenklaus, 1905)
153. *Eucypris agglutinans* (Lienenklaus, 1905)
= *Eucypris* n.sp. in Triebel (1963)
= *Eucypris* sp. in May (1999)
154. *Eucythere triangularis* Lienenklaus, 1894
155. *Eucythere triangularis* Lienenklaus subsp. 1 in
Uffenorde (1981, 1986)
156. *Eucythere* sp. in Uffenorde (1980, 1981, 1986)
157. *Eucytheridea fissodentata* (Lienenklaus, 1894)
158. *Eucytheridea rostrata* Bassiouni, 1962
159. *Eucytherura* cf. *keiji* Pietrzeniuk, 1969
160. *Eucytherura macropora* (Lienenklaus, 1894)
161. *Eucytherura moosae* Faupel, 1975
162. *Eucytherura quadropustulata* Moos, 1973
163. *Eucytherura* cf. *schoenewaldensis* Pietrzeniuk,
1969
164. *Eucytherura* sp. A in Faupel (1975)
165. *Eucytherura* sp. in Uffenorde (1989)
166. *Falunia (Falunia) sphaerulolineata* (Jones, 1857)
167. *Hazelina biornata* (Bornemann, 1855)
168. *Haplocytheridea dacica dacica* (Héjjas, 1894)
169. *Haplocytheridea* cf. *perforata* (Roemer, 1838)
170. *Haplocytheridea* n.sp. in Schenk (1957)
171. *Hemicyprideis angulata* Schäfer, 1984
172. *Hemicyprideis basiliensis* (Oertli, 1956)
173. *Hemicyprideis clivosa* Malz, 1978
174. *Hemicyprideis* cf. *gilletae* (Stchepinski, 1960)
175. *Hemicyprideis grekoffi* (Carbonnel, ?1985)

176. *Hemicyprideis helvetica* (Lienenklaus, 1895)
= *Haplocytheridea* sp. Ce96 in Doebl and Malz (1962)
177. *Hemicyprideis intercedens* Malz, 1978
178. *Hemicyprideis krejicii* Malz, 1978
179. *Hemicyprideis* cf. *krejicii* Malz, 1978
180. *Hemicyprideis lienenklausi* Malz, 1978
181. *Hemicyprideis miocaenica* (Lienenklaus, 1905)
= *Cyprideis?* sp. H11 in Doebl and Malz (1962)
182. *Hemicyprideis* cf. *olmensis* Triebel, 1970
183. *Hemicyprideis rhenana* (Lienenklaus, 1905)
184. *Hemicyprideis* cf. *trigonella* Triebel, 1970
185. *Henryhowella asperrima* (Reuss, 1850)
186. "*Hermanites*" *excancellata* (Neviani, 1928)
187. *Hermanites haidingeri hoernesii* (Speyer, 1863)
188. *Heterocypris parva* (Lienenklaus, 1905)
189. *Heterocypris* cf. *parva* (Lienenklaus, 1905)
190. *Heterocypris* aff. *parva* (Lienenklaus, 1905)
191. *Ilyocypris boehli* Triebel, 1941
192. *Ilyocypris essertinensis* (Carbonnel, 1985)
193. *Ilyocypris tribullata* Lienenklaus, 1905
194. *Ilyocypris* cf. *tribullata* Lienenklaus, 1905
195. *Ilyocypris tuberculata* Lienenklaus, 1905
196. *Ilyocypris* sp. in Schenk (1957)
197. *Ilyocypris* sp. in Doebl et al. (1972)
198. *Ilyocypris* sp. in Sonne (1982)
199. *Kangarina sinuatum* Lienenklaus, 1894
200. *Krithe bradiana* Lienenklaus, 1894
201. *Krithe pernoides* (Bornemann, 1855)
202. *Leguminocythereis lienenklausi* Oertli, 1956
203. *Leguminocythereis scrobiculata* (v. Münster, 1930)
204. *Leguminocythereis zoebeleini* Witt, 1967
205. "*Lixouria*" *unicostulata* (Kuiper, 1918)
206. *Loxoconcha* aff. *boldi* Bassiouni, 1965
207. *Loxoconcha favata* Kuiper, 1918
208. *Loxoconcha* aff. *favata* Kuiper, 1918
209. *Loxoconch* cf. *grandis* Pietrzeniuk, 1969
210. *Loxoconcha nystiana* (Bosquet, 1852)
211. *Loxoconcha subovata* (v. Münster, 1830)
212. *Loxoconcha* cf. *tenera* Pietrzeniuk, 1969
213. *Loxoconch tenuimargo* (Reuss, 1856)
= *Loxoconcha subtriangularis* (Speyer, 1863)
214. *Loxoconcha* aff. *truncata* Bassiouni, 1962
215. *Loxoconcha* cf. *variolata* Brady, 1878
216. *Loxoconcha wanneri* Kuiper, 1918
217. *Loxoconcha* sp. in Uffenorde (1980, 1981, 1986)
218. *Malzina moguntiacca* Schäfer, 1993
219. *Malzina reticulata* Schäfer, 1993
220. *Megahemicythere* sp. A in Witt (1967)
221. *Metacypris danubialis punctata* (Straub, 1952)
222. *Metacypris* sp. in Sonne (1982), Rothausen and Sonne (1984)
223. *Microcytherura (Tetracytherura) lienenklausi* Moos, 1971
224. *Moenocypris* sp. in Engesser et al. (1993)
225. ?*Moenocypris* sp. in Picot (1999)
226. *Muellerina latimarginata* (Speyer, 1863)
227. *Muellerina latimarginata* (Speyer) Morphotyp 1 in Gramann (1986)
228. *Murrayina?* *lyrata* (Reuss, 1856)
229. *Neocyprideis enkheimensis* Malz, 1973
230. *Neocyprideis parallela* (Lienenklaus, 1905)
= *Cytheridea williamsoni* Bosquet
231. *Neocyprideis* sp. in Schäfer (1984)
232. ?*Neocyprideis* sp. in Gebhardt and Prinz-Grimm (1999)
233. *Olimfalunia starringi* (Kuiper, 1918)
234. *Pajenborchella wursterheidensis* Uffenorde, 1989
235. *Paracyprideis rarefistulosa* (Lienenklaus, 1905)
236. *Paracypris* cf. *aerodynamica* Oertli, 1956
237. *Paracypris* cf. *contracta* (Jones, 1857)
238. *Paracytheridea bilacunosa* (Speyer, 1863)
239. *Paracytheridea triquetra* (Reuss, 1850)

240. *Paracytheridea* cf. *triquetra* (Reuss, 1850)
241. *Paracytheridea* sp. in Mehrnusch (1965)
242. *Paralymnocythere* sp. in Krause (1991)
243. *Pataviella alciensis* Liebau, 1991
 = *Quadracythere confluens* cf. *confluens*
 (Reuss, 1856) in Faupel (1975)
 = „*Quadracythere*“ sp. in DoebI et al.
 (1972)
244. *Pataviella bavarica* (Lienenklaus, 1896)
245. *Pataviella dobergensis* Liebau, 1991
246. *Pataviella felsensis* (Kollmann, 1971)
247. *Pataviella gracilis* Liebau, 1991
248. *Pataviella imitans* Liebau, 1991
249. *Pataviella lamellosa* Liebau, 1991
250. *Pataviella molassica* (Witt, 1967)
251. *Pataviella rugosa* (v. Münster, 1830)
 = *Quadracythere confluens xeniae* Moos, 1963
 = *Quadracythere confluens?* (Reuss, 1856)
 = *Quadracythere confluens confluens*
 (Reuss, 1856)
 = *Quadracythere* sp. in Rothausen and
 Sonne (1984)
252. *Phacorhabdotus varians* (Bornemann, 1855)
253. *Pocorniella calix* Oertli, 1956
254. *Pontocypris dispar* Müller, 1894
255. *Pontocythere?* *angusta* (v. Münster, 1830)
256. *Pontocythere therwilensis* Oertli, 1956
257. *Pseudocandona fertilis* (Triebel, 1963)
258. *Pterigocythereis ceratoptera* (Bosquet, 1852)
 = *Pterigocythereis* aff. *ceratoptera* (Bosquet) in
 DoebI et al. (1972)
259. *Pterigocythereis cornuta* (v. Münster, 1830)
260. *Pterigocythereis* cf. *cornuta* (Roemer, 1838)
261. *Pterigocythereis fimbriata* (v. Münster, 1830)
262. *Pterigocythereis glimmerodensis* Faupel, 1975
263. *Pterigocythereis helvetica* Oertli, 1956
264. *Pterigocythereis monoceros* (Reuss, 1856)
265. *Pterigocythereis subcoronata* (Speyer, 1863)
266. *Pterigocythereis* sp. 1 in Ellermann (1958, 1960)
267. *Pterigocythereis* sp. 2 in Ellermann (1958, 1960)
268. *Pterigocythereis* sp. 3 in Ellermann (1958, 1960)
269. *Pterigocythereis* sp. indet in Uffendorde (1989)
270. *Pterigocythereis* sp. in Gebhardt (2003)
271. *Pulaviella muelleriana* (Lienenklaus, 1900)
272. *Quadracythere macropora* (Bosquet, 1852)
273. „*Quadracythere*“ sp.2 in Uffendorde (1980, 1981,
 1986)
274. *Rockallia* sp. in Uffendorde (1989)
275. *Schizocythere bündensis* Triebel, 1950
276. *Schuleridea oculata* Moos, 1970
277. *Schuleridea* cf. *oculata* Moos, 1970 in Uffendorde
 (1981, 1986)
278. *Semicytherura alata* (Lienenklaus, 1894)
279. *Semicytherura gracilis foliacea* Moos, 1971
280. *Semicytherura reticulata* (Lienenklaus, 1894)
281. *Semicytherura rothauseni* Schäfer, 1993
282. *Semicytherura* sp. A in Sonne (1988)
283. *Stenocypris* sp. in Kuster-Wendenburg (1969)
284. *Stenocypris* sp. in Mehrnusch (1965)
285. „Streifenostracod (cf. Nr. 2 Straub)“ in Mehrnusch
 (1965)
286. *Tetracytherura angulosa* (Seguenza, 1880)
287. *Thaerocythere sagittata* Liebau, 1991
288. *Thaerocythere polita* Liebau, 1991
289. *Thaerocythere transiens* (Moos, 1963)
290. *Thaerocythere* cf. *transiens* (Moos, 1963)
291. „*Thalassocythere*“ sp. in Uffendorde (1989)
292. *Virgatocypris* sp. in Engesser et al. (1993)
293. *Xestoleberis elongata* Lienenklaus, 1894
294. *Xestoleberis rhenana* Lienenklaus, 1905
295. *Xestoleberis tumida* (Reuss, 1850)

2. Foraminifera

1. *Alabamina budensis* (Hantken, 1875)
2. *Alabamina* sp. 1 in Indans (1958)
3. *Alliatina tollmanni* Langer, 1969
4. *Allomorphina macrostoma* Karrer, 1862
5. *Allomorphina trigona* Reuss, 1850
6. *Almaena osnabrugensis* (Roemer, 1838)
7. „*Almaena*“ *osnabrugensis* (Roemer) „var. *escornebovensis*“ (Sigal, 1949)
8. *Ammobaculites humboldti* (Reuss, 1851)
9. *Ammobaculites* sp. in Gebhardt (2003)
10. *Ammodiscus cretaceus* (Reuss, 1845)
11. *Ammodiscus polygyrus* (Reuss, 1863)
12. *Ammodiscus* sp. in Mehrnusch (1965)
13. *Ammonia beccarii* (Linné, 1758)
14. *Ammonia kiliani* (Andreae, 1884)
15. *Ammonia propingua* (Reuss, 1856)
16. *Ammotium* sp. in Gebhardt (2003)
17. *Amphicoryna budensis* (Hantken, 1875)
= *Amphicoryna badensis* (d'Orbigny)
18. *Amphicoryna imperfectecostata* (Silvestri, 1872)
19. *Amphimorphina haueriana* Neugeboren, 1850
20. *Amphicoryna scalaris* (Batsch, 1791)
21. *Angulogerina angulosa* (Williamson, 1858)
22. *Angulogerina germanica* Cushman and Edwards, 1938
= *Angulogerina* ex gr. *gracilis-tenuistriata* in Gramann and Spiegler (1986)
= *Uvigerina tenuistriata* Reuss in Wenz (1921), Kümmerle (1963)
23. *Anomalina grosserugosa* (Gümbel, 1886)
24. *Anomalina ammonoides* (Reuss, 1844)
25. *Apiopterina cylindroides* (Reuss, 1851)
26. *Astacolus minimus* (Hantken, 1875)
27. *Asterigerina carinata* (d'Orbigny)
28. *Asterigerina frankei* Ten Dam and Reinhold, 1941
29. *Asterigerina gürichi* (Franke, 1912)
30. *Asterigerina planorbis* d'Orbigny, 1846
31. *Asterigerina praeplanorbis* Hagn, 1955
32. *Asterigerina staeschei* Ten Dam and Reinhold, 1941
33. *Bathysiphon filiformis* Sars, 1872
34. *Bitubulogenerina kasselensis* (Batjes, 1958)
35. *Bolivina* cf. *alata* (Seguenza, 1862)
36. *Bolivina alzeyensis* Mehrnusch, 1985
37. *Bolivina antiqua* d'Orbigny, 1846
38. *Bolivina* cf. *antiquaeformis* Cicha and Zapletalova, 1963
39. *Bolivina aquitanica* Mehrnusch, 1985
40. *Bolivina beyrichi* Reuss, 1851
41. *Bolivina* cf. *beyrichi bituminosa* Spandel, 1909
42. *Bolivina beyrichi carinata* Hantken, 1875
43. *Bolivina beyrichi substriata* Reuss, 1870
44. *Bolivina* cf. *böttgeri* Spandel, 1909
45. *Bolivina budensis* (Hantken, 1875)
46. *Bolivina crassocostata* Mehrnusch, 1985
47. *Bolivina crenulata* Cushman, 1936
48. *Bolivina curvata* Mehrnusch, 1990
49. *Bolivina dilatata* Reuss, 1850
50. *Bolivina* cf. *dilatata brevis* Cicha and Zapletalova, 1963
51. *Bolivina dilatata hyalina* Hofmann, 1967
52. *Bolivina elongata* Hantken, 1875
= *Bolivina acerosa* Cushman in Grossheide and Trunko
= *Bolivina antiqua* d'Orbigny in Kümmerle 1963 and in (?)Gramann 1989
53. *Bolivina euzona* Hofmann, 1967
54. *Bolivina fastigia* Cushman, 1936
= *Bolivina* aff. *scalprata miocenica* Macfadyen in Doebel et al. 1972
55. *Bolivina* cf. *fastigia droogeri* Cicha and Zapletalova, 1963
56. *Bolivina floridanaformis* Mehrnusch, 1993
57. *Bolivina gnara* Hofmann, 1967

58. *Bolivina grossauheimensis* (Wiesner, 1974)
= *Bolivina* cf. *antiqua* d'Orbigny in Doebl et al.
(1972)
59. *Bolivina hebes* Macfadyen, 1930
60. *Bolivina* aff. *imporcata* Cushman and Todd, 1945
61. *Bolivina indansi* Mehrnusch, 1993
62. *Bolivina korynoides* Hofmann, 1967
63. *Bolivina korynoides subtumida* Hofmann, 1967
64. *Bolivina liebusi* Hofmann, 1967
65. *Bolivina* cf. *melettica* Andreae, 1884
66. *Bolivina moguntiaca* Bartenstein and Heinemann,
1954
67. *Bolivina molassica* Hofmann, 1967
68. *Bolivina nobilis* Hantken, 1875
69. *Bolivina obliquostriata* Mehrnusch, 1993
70. *Bolivina oligocaenica* Spandel, 1909
71. *Bolivina oligocaenica varica* Hofmann, 1967
72. *Bolivina osnabrugensis* Grossheide and Trunko,
1965
73. *Bolivina plicatella* Cushman, 1930
74. *Bolivina plicatella mera* Cushman and Ponton, 1932
75. *Bolivina plicatelliformis* Mehrnusch, 1993
76. *Bolivina punctata* d'Orbigny, 1839
77. *Bolivina reticulata* Hantken, 1875
78. *Bolivina rossenrayensis* Mehrnusch, 1993
79. *Bolivina rothauseni* Mehrnusch, 1993
80. *Bolivina scitula* Hofmann, 1967
81. *Bolivina seminudaformis* Mehrnusch, 1993
82. *Bolivina* cf. *semistriata* Hantken, 1868
83. *Bolivina sommerbergensis* Mehrnusch, 1985
84. *Bolivina sonnei* Mehrnusch, 1993
85. *Bolivina subaenariensis mexicana* Cushman, 1922
86. *Bolivina subalpina* Hofmann, 1967
87. *Bolivina subexcavata* Cushman and Wickenden,
1929
88. *Bolivina tereta* (Cushman, 1936)
89. *Bolivina terquemi ostiocarinata* Lindenberg, 1965
90. *Bolivina* n.sp. aff. *textilarioides* Reuss, 1863
91. *Bolivina trunensis* Hofmann, 1967
= *Bolivina crenulata trunensis* Hofmann
= *Bolivina plicatella trunensis* Hofmann
92. *Bolivina versatilis* Hofmann, 1967
93. *Bolivina* sp. 1 in Mehrnusch (1989)
94. *Bolivina* sp. 3 in Mehrnusch (1991)
95. *Bolivina* sp. 4 in Mehrnusch (1991)
96. *Bolivina* sp. 5 in Mehrnusch (1991)
97. *Bolivina* sp. 6 in Mehrnusch (1991)
98. *Bolivina* sp. 7 in Mehrnusch (1991)
99. *Bolivina* sp. 8 in Mehrnusch (1991)
100. *Bolivina* sp. 9 in Mehrnusch (1993)
101. *Bolivina* sp. 11 in Mehrnusch (1993)
102. *Bolivina* sp. 14 in Mehrnusch (1993)
103. *Bolivina* sp. indet. in Paul (1938)
104. *Bolivinella rugosa* Howe, 1930
105. *Bolivinella virgata* Cushman, 1929
106. *Budashevaella multicamerata* (Voloshinova, 1961)
107. *Bulimina acicula* Andreae, 1884
108. *Bulimina affinis* d'Orbigny, 1839
109. *Bulimina arndti* Hagn, 1952
110. *Bulimina elegans* d'Orbigny, 1926
111. *Bulimina inflata* Seguenza, 1862
112. *Bulimina micra* Luczkowska, 1967
113. *Bulimina striata* d'Orbigny, 1843
114. *Bulimina* sp. indet. in Paul (1938)
115. *Bulimina* sp. in Prell-Müssig (1965)
116. *Buliminella elegantissima* (d'Orbigny, 1839)
117. *Buliminella pulchra* (Terquem, 1882)
118. *Burseolina calabra* Seguenza, 1880
119. *Cancris auriculus* (Fichtel and Moll, 1798)
120. *Cancris auriculus primitivus* Cushman and Todd,
1942
121. *Cancris oblongus* (Williamson, 1848)
122. *Cancris subconicus* (Terquem, 1882)
123. *Cancris turgidus* Cushman and Todd, 1942

124. *Cassidulina laevigata* d'Orbigny, 1826
125. *Cassidulina* sp. in Mehrnusch (1965)
126. *Cassidulinita aquaeturris* Wiesner, 1974
127. *Cassidulinoidea bodeni* Hagn, 1952
128. *Caucasina coprolithoides* (Andeae, 1884)
= *Bulimina pupoides (ovata)* d'Orbigny in
Paul (1938)
129. *Caucasina elongata* (d'Orbigny, 1846)
130. *Caucasina oligocaenica* Khalilov, 1951
131. *Caucasina schischkinskayae* (Samoilova, 1947)
132. *Ceratobulimina haueri* (d'Orbigny, 1846)
133. *Chilostomella ovoidea* Reuss, 1850
134. *Chilostomella czizeki* Reuss, 1850
135. *Cibicides aknerianus* d'Orbigny, 1856
136. *Cibicides boueanus* (d'Orbigny, 1846)
= *Rotalia tenuimargo* Reuss in Böhl 1928
137. *Cibicides crassiperforatus* Grossheide and Trunko,
1965
138. *Cibicides dutemplei reussi* (Silvestri, 1906)
139. *Cibicides dutemplei tener* Grossheide and Trunko,
1965
140. *Cibicides dobergensis* Grossheide and Trunko,
1965
141. *Cibicides latiumbilicatus latiumbilicatus* Grossheide
and Trunko, 1965
142. *Cibicides latiumbilicatus magnus* Grossheide and
Trunko, 1965
143. *Cibicides lobatulus* (Walker and Jacob, 1798)
= *Truncatulina lobatula* d'Orbigny in Böhl
(1928)
144. *Cibicides refulgens* de Montfort, 1808
= *Cibicides borislawensis* Aisenstat
= *Cibicides* sp. in Krause (1991)
145. *Cibicides roemeri* (Reuss, 1856)
146. *Cibicides telegdii* Grossheide and Trunko, 1965
147. *Cibicides tenellus* (Reuss, 1865)
148. *Cibicides* sp. in Mehrnusch (1965)
149. *Cibicides* sp. in Prell-Müssig (1965)
150. *Cibicides amphisyliensis-pseudoungerianus*-group
151. *Cibicioidea communis* (Roemer, 1838)
152. *Cibicidoides dutemplei* (d'Orbigny, 1846)
153. *Cibicidoides pseudoungerianus* (Cushman, 1922)
154. *Cibicidoides ungerianus filicosta* (Hagn, 1952)
155. *Cibicidoides ungerianus ungerianus* (d'Orbigny,
1846)
156. *Cibroelphidium poeyanum* (d'Orbigny, 1839)
157. *Conuspira* cf. *involvens* (Reuss, 1850)
158. *Conuspira* sp. in Engesser et al. (1993)
159. *Coryphostoma sinuosa* (Cushman, 1936)
160. *Coryphostoma* sp. in Reiser (1987)
161. *Coscinodiscus* sp. in Gramann (1989)
162. *Cybrononion subnodosum minor* (Ellermann, 1960)
163. *Cyclammia acutidorsata* (Hantken, 1868)
164. *Cyclammia obesa* Cushman and Laiming, 1931
165. *Cyclammia placenta „exigua“* (Schrodt, 1893)
166. *Cyclammia praecancellata* Voloshinova, 1939
167. *Cycloforina* cf. *contorta* (d'Orbigny, 1846)
168. *Cyclogyra* sp. in Krause (1991)
169. *Cycloloculina* cf. *annulata* Heron-Allen and Earland,
1908
170. *Dentalina acuticauda* Reuss, 1851
171. *Dentalina boueana* d'Orbigny, 1846
172. *Dentalina capitata* (Boll, 1846)
173. *Dentalina communis* d'Orbigny, 1826
174. *Dentalina globifera* Reuss, 1856
175. *Dentalina intermittens* (Roemer, 1838)
176. *Dentalina konincki* Reuss, 1861
177. *Dentalina münsteri* Reuss, 1856
178. *Dentalina obliquestriata* Reuss, 1851
179. *Dentalina soluta* Reuss, 1851
180. *Dentalina* sp. in Mehrnusch (1965)
181. *Dentalina* sp. in Prell-Müssig (1965)
182. *Dentalina* sp. in Sonne (1982)
183. ?*Dentalina* sp. in Gebhardt (2003)

184. *Discorbina sphaeruligera* Schwager, 1883
185. *Discorbis alteconicus* (Pokorny, 1956)
186. *Discorbis floridanus* Cushman, 1922
187. *Discorbis hosiusi* Grossheide and Trunko, 1965
188. *Discorbis orbicularis* (Terquem, 1876)
189. *Discorbis parisiensis* (d'Orbigny, 1826)
190. *Discorbis patelliformis* (Brady, 1884)
191. *Discorbis rugosa* (d'Orbigny, 1839)
192. *Discorbis subinflata* Schwager, 1883
193. *Discorbis trochus* (Roemer, 1838)
194. *Discorbis turbo* (d'Orbigny, 1826)
195. *Discorbis* sp. C in DoebI et al. (1972)
196. *Discorbis* sp. in Mehrnusch (1965)
197. *Dorothia paupercula* (Cushman, 1911)
198. *Ehrenbergina variabilis aculeata* Spiegler, 1973
199. *Ehrenbergina variabilis variabilis* Trunko, 1965
200. *Ehrenbergina serrata* Reuss, 1850
201. *Elphidiella cryptostoma* (Egger, 1857)
202. *Elphidiella heteropora* (Egger, 1857)
203. *Elphidiella subcarinata* (Egger, 1957)
204. *Elphidiella subnodosum* (Roemer, 1838)
205. *Elphidiella turgescens* (Cushman, 1936)
206. *Elphidium* cf. *advenum* (Cushman, 1930)
207. *Elphidium* cf. *articulatum* (d'Orbigny, 1839)
208. *Elphidium crispum* (Linné, 1758)
209. *Elphidium simplex* Cushman, 1933
210. *Elphidium subnodosum minor* Ellermann, 1960
211. *Elphidium* sp. 1 in Grossheide and Trunko (1965)
212. *Elphidium* sp. in Gebhardt (2003)
= ?*Elphidium* sp. D in DoebI et al. (1972)
213. *Eoeponidella ampliportata* Reiser, 1987
214. *Eoeponidella semiplana* Wiesner, 1974
215. *Eoeponidella zinndorfi* (Paalzow, 1924)
216. *Epistomina elegans* (d'Orbigny, 1826)
217. *Epistominella gerdae* Wiesner, 1974
218. *Epistominella molassica* (Hagn, 1952)
219. *Eponides* cf. *candidulus* (Schwager, 1883)
220. *Eponides constans* Reiser, 1987
221. *Eponides crenulatus* (Reuss, 1869)
222. *Eponides praecinctus* (Karrer, 1868)
223. *Eponides pygmaeus* (Hantken, 1875)
224. *Eponides stellatus* (Reuss, 1856)
225. *Eponides* sp. 2 in Grossheide and Trunko (1965)
226. *Eponides* sp. in Mehrnusch (1965)
227. *Eponides* sp. in Gebhardt (2003)
228. *Escornebovina orthorapha* (Egger, 1857)
229. *Escornebovina trochiformis* (Andreae, 1884)
230. *Fissurina kapellensis* Spiegler, 1974
231. *Fissurina laevigata* Reuss, 1850
232. *Fissurina orbignyana* Seguenza, 1862
233. *Fissurina obtusa* Egger, 1857
234. *Flabellinella tenuissima* (Hantken, 1875)
235. *Fronicularia cuneata* (Roemer, 1838)
236. *Fronicularia oblonga* (Roemer, 1838)
237. *Fronicularia striata* (Roemer, 1838)
238. *Fursenkoina mustoni* (Andreae, 1884)
239. *Gaudryina chilostoma* Reuss, 1852
240. *Glabratella miocaenica* Schäfer, 1984
241. *Glabratellina arcuata* Seiglie and Bermúdez, 1965
242. *Glandulina aequalis* Reuss, 1863
243. *Glandulina dimorpha* (Bornemann, 1855)
244. *Globobulimina bathyalis* Reiser, 1987
245. *Globobulimina* sp. in Reiser (1987)
246. *Globocassidulina crassa* (d'Orbigny, 1839)
247. *Globocassidulina oblonga* (Reuss, 1850)
248. *Globulina ampulla* Jones, 1852
249. *Globulina gibba fissicostata* (Cushman and Ozawa,
1930)
250. *Globulina gibba* d'Orbigny, 1826
251. *Globulina gibba punctata* d'Orbigny, 1846
252. *Globulina gibba tuberculata* d'Orbigny, 1846
253. *Globulina inaequalis* Reuss, 1850
254. *Globulina minuta* (Roemer, 1838)
255. *Globulina muensteri* (Reuss, 1856)

256. *Globulina* sp. in Mehrnusch (1965)
257. *Glomospira charoides* (Jones and Parker, 1860)
258. *Glomospira* sp. indet. in Prell-Müssig (1965)
259. *Guttulina austriaca* d'Orbigny, 1846
260. *Guttulina communis* (d'Orbigny, 1826)
= *Guttulina irregularis* (d'Orbigny) in
Kümmerle (1963)
= *Guttulina problema* d'Orbigny in Grossheide
and Trunko (1965)
261. *Guttulina ovata* (d'Orbigny, 1846)
= *Guttulina* cf. *pulchella* d'Orbigny in
Kümmerle (1963)
262. *Guttulina praelonga* (Egger, 1857)
263. *Guttulina problema* d'Orbigny, 1826
264. *Guttulina problema frankei* Cushman and Ozawa,
1930
265. *Guttulina spicaeformis* (Roemer, 1838)
266. *Guttulina?* sp. indet. in Prell-Müssig (1965)
267. *Guttulina* sp. in Sonne (1982)
268. *Gyroidina brockerti* Reiser, 1987
269. *Gyroidina eggeri* Wenger, 1987
270. *Gyroidina girardana* (Reuss, 1851)
271. *Gyroidina parva* Cushman and Renz, 1941
272. *Gyroidina soldanii* (d'Orbigny, 1826)
273. *Gyroidina* sp. in Prell-Müssig (1965)
274. *Hanzawaia asterizans* (Fichtel and Moll, 1798)
275. ?*Haplophragmoides deforme* (Andreae, 1884)
276. *Haplophragmium humboldti* Reuss, 1852
277. *Haplophragmoides latidorsatus* (Bornemann, 1855)
278. *Haplophragmoides suborbicularis* (Grzybowski,
1896)
279. ?*Haplophragmoides* sp. in Gebhardt (2003)
280. *Hoeglundina elegans* (d'Orbigny, 1926)
281. *Karreriella chilostoma* (Reuss, 1852)
282. *Karreriella hantkeniana* Cushman, 1936
283. *Karreriella postsiphonella* (Spandel, 1909)
284. *Karreriella siphonella* (Reuss, 1851)
285. *Karreriella siphonella exilis* Hagn, 1952
286. *Lagena elegantissima* (Bornemann, 1855)
287. *Lagena gracilicosta* Reuss, 1863
288. *Lagena hexagona* (Williamson, 1858)
289. *Lagena hystrix* Reuss, 1863
290. *Lagena isabella* d'Orbigny, 1839
291. *Lagena laevis* (Montagu, 1803)
292. *Lagena modesta inducta* Matthes, 1939
293. *Lagena oxystoma* Reuss, 1863
294. *Lagena striata* (d'Orbigny, 1839)
295. *Lagena sulcata* (Walker and Jacob, 1798)
296. *Lagena* sp. in Mehrnusch (1965)
297. *Lenticulina (Rob.) acosta* (Bermudez, 1949)
298. *Lenticulina (Ast.) arcuata* (Philippi, 1843)
299. *Lenticulina calcar* (Linné, 1758)
300. *Lenticulina cultrata* (Monfort, 1808)
301. *Lenticulina deformis* (Reuss, 1851)
302. *Lenticulina gerlachi* (Reuss 1863)
303. *Lenticulina (Rob.) inornata* (d'Orbigny, 1846)
304. *Lenticulina (Rob.) intermedia* (d'Orbigny, 1846)
305. *Lenticulina (Rob.) magdeburgica* (Philippi, 1846)
306. *Lenticulina (Rob.) osnabrugensis* (Roemer, 1838)
307. *Lenticulina* cf. *simplex* (d'Orbigny, 1846)
308. *Lenticulina vortex* (Fichtel and Moll, 1798)
309. *Lenticulina (Rob.)* sp. in Mehrnusch (1965)
310. *Lenticulina* sp. indet. in Prell-Müssig (1965)
311. *Lippsina demens* (Bik, 1964)
312. ?*Lippsina demens* (Bik) in Gebhardt (2003)
313. *Marginulina böttcheri* (Reuss, 1863)
314. *Marginulina hantkeni* Bandy, 1949
315. *Marginulina similis* d'Orbigny, 1846
316. *Marginulina* sp. in Prell-Müssig (1965)
317. *Martinottiella communis* (d'Orbigny, 1846)
318. *Melonis affinis* (Reuss, 1851)
319. *Melonis pompilioides* (Fichtel and Moll, 1798)
320. *Miliammina paleocenica* Kiesel, 1970
321. ?*Miliammina* sp. in Gebhardt (2003)

322. *Miliolinella* cf. *subrotunda* (Montagu, 1803)
 = *Quinqueloculina impressa* Reuss in
 Wenz (1921)
 = *Quinqueloculina bicatinella* (Reuss) in
 Indans (1956)
 = *Quinqueloculina akneriana* d'Orbigny in
 Kümmerle (1963)
 = *Spirosigmoilina?* sp. A in Doebl et al.
 (1972)
323. *Neobulimina* cf. *angularima* Poag, 1966
324. *Neocorbina patella* (Egger, 1857)
325. *Neoeponides schreibersi* (d'Orbigny, 1846)
326. *Nodosaria* cf. *acuminata* Hantken, 1875
327. *Nodosaria bactridium* Reuss, 1866
328. *Nodosaria conspurcata* Reuss, 1851
329. *Nodosaria elegantissima* (d'Orbigny, 1846)
330. *Nodosaria hispida* (Soldani, 1798)
331. *Nodosaria* cf. *kinkelini* Spandel, 1909
332. *Nodosaria ortenburgensis* Reiser, 1987
333. *Nodosaria ovicula* d'Orbigny, 1826
334. *Nodosaria pyrula* d'Orbigny, 1826
335. *Nodosaria pyrula semirugosa* d'Orbigny, 1846
336. *Nodosaria raphanistrum* (Linné, 1758)
337. *Nodosaria rudis* d'Orbigny, 1846
338. ?*Nodosaria* sp. in Gebhardt (2003)
339. *Nonion depressulum* (Walker and Jacob, 1798)
340. *Nonion elongatum* (d'Orbigny, 1852)
341. *Nonion incrassatum* (Fichtel and Moll, 1798)
342. *Nonion punctatum* (d'Orbigny, 1846)
343. *Nonion umbilicatum* (Walker and Jacob, 1798)
344. *Nonion* sp. in Mehrnusch (1965)
345. *Nonion* sp. in Prell-Müssig (1965)
346. *Nonionella liebusi* Hagn, 1952
347. *Nonionella st.odiliae* (Andreae, 1884)
348. *Nonionella* sp. in Mehrnusch (1965)
349. *Nonionina boueana* d'Orbigny, 1846
350. *Nonionina communis* (d'Orbigny, 1846)
351. *Nonionina nonionelloides* (Ten Dam and Reinhold,
 1942)
352. *Nonionina perforata* d'Orbigny, 1846
353. *Nonionina punctata* d'Orbigny, 1846
354. *Nonionina scaphus* (Fichtel and Moll, 1798)
355. *Nuttallides* sp. in Reiser (1987)
356. *Oolina globosa* (Montagu, 1803)
357. *Oridorsalis umbonatus* (Reuss, 1851)
358. *Palmula* cf. *budensis* (Hantken, 1875)
359. *Palmula obliqua* (Roemer, 1838)
360. *Palmula oblonga* (Roemer, 1838)
361. *Pararotalia canui* (Cushman, 1928)
362. *Pararotalia canui rhenana* (Ellermann, 1960)
363. *Pararotalia fallax* (Steuer, 1904)
364. *Pararotalia* sp. in Reiser (1987)
365. *Patellina corrugata* Williamson, 1858
366. *Planorbulina diffiformis* Roemer, 1938
367. *Planorbulina mediterraneensis* d'Orbigny, 1826
368. *Planularia auricula* (Roemer, 1841)
369. *Planularia kubinyii* (Hantken, 1868)
370. *Planularia moravica* (Karrer, 1865)
371. *Planularia trinae* Bermudez, 1949
372. *Planulina alticosta* Ten Dam and Reinhold, 1942
373. *Planulina costata* (Hantken, 1875)
374. *Planulina osnabrugensis* (Roemer, 1838)
375. *Plectofrondicularia digitalis* (Neugeboren, 1850)
376. *Plectofrondicularia seminuda* (Reuss, 1851)
377. *Plectofrondicularia striata* (Hantken, 1875)
378. *Plectofrondicularia vaughani* Cushman, 1927
379. *Polymorphina cylindroides* Roemer, 1838
380. *Polymorphina lanceolata* d'Orbigny, 1846
381. *Polymorphina sororia* Reuss, 1863
382. „*Polymorphina*“ n.gen.? n.sp.? in Prell-Müssig
 (1965)
383. *Praeglobbulimina pyrula* (d'Orbigny, 1846)
384. *Praeglobbulimina spinescens* (Brady, 1881)
385. *Protelphidium decoratum* (Cushman and

- McGlamery, 1939)
 = *Nonionina buxovillana* Andreae in Böhl
 (1928)
 = *Nonion* sp. in Kümmerle 1963, Krause
 (1991)
 = *Elphidium simplex* Cushman in Doehl et al.,
 (1972)
386. *Protelphidium granosum* (d'Orbigny, 1846)
 = *Nonion* sp. in Krause (1991)
 = *Anomalina granosa* (Hantken) in Prell-
 Müssig (1965)
387. *Protelphidium nonioninoides* (Andreae, 1884)
388. *Protelphidium krejci grafi* Wiesner, 1974
389. *Protelphidium roemeri* (Cushman, 1936)
390. *Protelphidium* sp. in Reiser (1987)
391. *Pseudopolymorphina nodosaria* (Reuss, 1863)
392. *Pseudopolymorphina obscura* (Roemer, 1838)
393. *Pseudopolymorphina subnodosa* (Reuss, 1861)
394. *Pullenia bulloides* (d'Orbigny, 1846)
395. *Pullenia compressiuscula* Reuss, 1866
396. *Pullenia inflata* Weber, 1937
397. *Pullenia quinqueloba* (Reuss, 1851)
398. *Pullenia sphaeroides* d'Orbigny, 1926
399. *Pullenia* sp. in Mehrnusch (1965)
400. *Pyrgo bulloides* (d'Orbigny, 1826)
401. *Pyrgo obesa* (Reuss, 1865)
402. *Pyrulina cylindroides* Roemer, 1838
403. *Pyrulina fusiformis* (Roemer, 1838)
404. *Pyrulina lanceolata* (Reuss, 1851)
405. *Quinqueloculina akneriana* d'Orbigny, 1846
 = *Quinqueloculina simplex* Terquem
406. *Quinqueloculina angusta* Reuss, 1850
407. *Quinqueloculina badensis* d'Orbigny, 1846
408. *Quinqueloculina* cf. *bosciana* d'Orbigny, 1839
 = *Triloculina* cf. *consobrina* d'Orbigny in
 Doehl et al. (1972)
409. *Quinqueloculina cibrosa* (Egger, 1957)
410. *Quinqueloculina contorta* d'Orbigny, 1846
411. *Quinqueloculina hauerina* (d'Orbigny, 1846)
412. *Quinqueloculina impressa* Reuss, 1851
413. *Quinqueloculina impressa subovalis* (Andreae,
 1884)
414. *Quinqueloculina juleana* d'Orbigny, 1846
415. *Quinqueloculina laevigata* d'Orbigny, 1839
 = *Quinqueloculina seminulum* Linné in Doehl
 et al., (1972)
 = *Quinqueloculina seminula* Linné in
 Kümmerle (1963)
 = *Quinqueloculina* sp. in Krause (1991)
416. *Quinqueloculina ludwigi* Reuss, 1866
417. *Quinqueloculina mayeriana* d'Orbigny, 1846
418. *Quinqueloculina oblonga* (Montagu, 1803)
419. *Quinqueloculina oblonga* Reuss, 1856
420. *Quinqueloculina opaca* Reuss, 1863
421. *Quinqueloculina pygmaea* Reuss, 1850
422. *Quinqueloculina rotunda* (d'Orbigny, 1893)
423. *Quinqueloculina* cf. *seminuda* Reuss, 1866
424. *Quinqueloculina seminula* (Linné, 1758)
425. *Quinqueloculina sem.* var. *isabelli* d'Orbigny, 1839
426. *Quinqueloculina speciosa* Reuss, 1856
427. *Quinqueloculina triangularis* d'Orbigny, 1846
428. *Quinqueloculina* sp. in Prell-Müssig (1965)
429. *Rectobolivina zsigmondyi* (Hantken, 1868)
430. ?*Recurvoides* sp. in Gebhardt (2003)
431. *Reussella aperta* Cushman, 1945
432. *Reussella spinulosa* (Reuss, 1850)
433. *Rhabdammina discreta* Brady, 1881
434. *Robertina declivis* (Reuss, 1863)
435. *Robulus* cf. *depauperatus* (Reuss, 1851)
436. *Rosalina bahamaensis* Todd and Low 1971
 = *Rosalina globularis* d'Orbigny in Kümmerle
 (1963)
437. *Rosalina bradyi* (Cushman, 1915)
438. *Rosalina globularis* (d'Orbigny, 1826)

439. *Rosalina* cf. *mittelli* Carter, 1964
440. *Rosalina semiporata* (Egger, 1857)
441. *Rotalia badensis* Czjzek, 1848
442. *Rotalia haidingeri* d'Orbigny, 1846
443. *Rotalia nana* Reuss, 1850
444. *Rotalia trochus* ssp. 1 in Grossheide and Trunko (1965)
445. *Rotalia trochus* ssp. 2 in Grossheide and Trunko (1965)
446. *Saccamina*? sp. in Prell-Müssig (1965)
447. ?*Saccamina* sp. in Gebhardt (2003)
448. *Saracenaria arcuata* (d'Orbigny, 1846)
449. *Saracenaria magna* Spiegler, 1974
450. *Saracenaria propinqua* (Hantken, 1875)
451. *Sigmoilinita tenuis* (Czjzek, 1848)
452. *Sigmoilinita* sp. in Reiser (1987)
453. *Sigmoilopsis colomi* (Glaçon and Magné, 1953)
454. *Sigmomorphina regularis* (Roemer, 1838)
455. *Sigmomorphina semitecta varians* (Terquem, 1882)
456. *Sinoloculina consobrina* (d'Orbigny, 1846)
457. *Siphonodosaria* sp. in Mehrnusch (1965)
458. *Siphonina fimbriata* Reuss, 1850
459. *Siphonina jacksonensis* Cushman and Applin, 1926
460. *Siphonina reticulata* (Czjzek, 1848)
461. *Sphaeroidina austriaca* d'Orbigny, 1846
462. *Sphaeroidina bulloides* d'Orbigny, 1826
463. *Sphaeroidina variabilis* Reuss, 1851
464. *Spiroloculina dorsata* Reuss, 1866
465. *Spiroplectammina attenuata* (Reuss, 1851)
466. *Spiroplectammina carinata* (d'Orbigny, 1846)
467. *Spiroplectammina deperdita* (d'Orbigny, 1846)
468. *Spiroplectammina pectinata* (Reuss, 1850)
469. *Stainforthia acuta* (d'Orbigny, 1846)
470. *Stainforthia schreibersiana* (Czjzek, 1848)
471. *Stilostomella adolphina* (d'Orbigny, 1846)
472. *Stilostomella consobrina* (d'Orbigny, 1846)
473. *Stilostomella danuviensis* Wenger, 1987
474. *Stilostomella emaciata* (Reuss, 1851)
475. *Stilostomella ewaldi* (Reuss, 1951)
476. *Stilostomella hirsuta* (d'Orbigny, 1826)
477. *Stilostomella longiscata* (d'Orbigny, 1846)
478. *Stilostomella perscripta* (Egger, 1857)
479. *Stilostomella scabra* (Reuss, 1850)
480. *Stomatobina acarinata* Pokorny, 1956
481. *Svratkina perlata* (Andreae, 1884)
482. *Textularia agglutinans* d'Orbigny, 1839
483. *Textularia attenuata* Reuss, 1851
484. *Textularia carinata* d'Orbigny, 1846
485. *Textularia cognata* (Reuss, 1863)
486. *Textularia deperdita* d'Orbigny, 1846
487. *Textularia lacerta* Reuss, 1851
488. *Textularia mayeriana* d'Orbigny, 1846
489. *Textularia sagittula* Defrance, 1824
490. *Tolypammina schaudinni* Rhumbler, 1904
491. *Trifarina angulosa* (Williamson, 1858)
492. *Trifarina bradyi* Cushman, 1923
493. *Trifarina globosa* (Stolz, 1925)
494. *Trifarina gracilis* (Reuss, 1851)
= *Trifarina gracilis* (Reuss) var. *germanica*
Cushman and Edwards
495. *Triloculina austriaca* d'Orbigny, 1846
496. *Triloculina* cf. *byramensis* Cushman and Todd, 1946
497. *Triloculina enoplostoma* Reuss, 1851
498. *Triloculina inflata* d'Orbigny, 1846
499. „*Triloculina subrotundata* (Montagu)“ in Grossheide and Trunko (1965)
500. *Triloculina trigonula* (Lamarck, 1804)
501. *Triloculina* sp. B in Doehl et al. 1972
502. *Trochammina* cf. *globigeriniformis* (Parker and Jones, 1865)
503. *Trochammina* sp. in Gebhardt (2003)
504. *Turrilina alsatica* Andreae, 1884
505. *Turrilina andreaei* Cushman, 1928
506. *Uvigerina asperula* Czjzek, 1848

507. *Uvigerina cichai* Reiser, 1987
508. *Uvigerina farinosa* Hantken, 1875
509. *Uvigerina hantkeni* Cushman and Edwards, 1937
510. *Uvigerina hemmooriensis* Daniels and Spiegler,
1977
511. *Uvigerina* cf. *jacksonensis* Cushman, 1925
512. *Uvigerina posthantkeni* Papp, 1971
513. *Uvigerina pigmaea* d'Orbigny, 1826
514. *Uvigerina rudlingensis* Papp, 1975
515. *Uvigerina semiornata saprophila* Daniels and
Spiegler, 1977
516. *Uvigerinella michelsi* Wiesner, 1974
= *Uvigerinella* aff. *californica* Cushman in
Doehl et al. (1972)
= *Uvigerinella* cf. *nudo-costata* Cushman in
Prell-Müssig (1965)
517. *Vaginulina* cf. *deprofunda* Cushman, 1939
518. *Vaginulina mexicana* Nuttall, 1932
519. *Vaginulinopsis crista* Spiegler, 1974
520. *Vaginulinopsis gladius* (Philippi, 1843)
521. *Vaginulinopsis pedum* (d'Orbigny, 1846)
522. *Vaginulinopsis pseudodecorata* Hagn, 1952
523. *Vaginulinopsis tenuis* (Bornemann, 1855)
524. *Valvulina austriaca* d'Orbigny, 1846
525. *Valvulineria complanata* (d'Orbigny, 1846)
526. *Valvulineria petrolei* (Andreae, 1884)
527. *Virgulina pertusa* Reuss, 1861
528. *Virgulina* sp. indet. in Paul (1938)
529. *Virgulinella chalkophila* (Hagn, 1952)
530. *Virgulinopsis tuberculata* (Egger, 1857)
531. *Voorthuyseniella dingdenensis* Keij, 1970
532. *Voorthuyseniella escorneboviensis* Keij, 1970
533. *Voorthuyseniella irregularis* Keij, 1970
534. *Voorthuyseniella pulchra* Keij, 1970
535. *Vulvulina spinosa* Cushman, 1927

Table 1. Distribution of ostracoda - early Chattian

Species	Regions						
	NGB	LRE	WFH	MAI	URG	MOB	MOS
3. Bairdia contracta Jones			X				
4. Bairdia oviformis Speyer		X					
5. Bairdia reussi Speyer		X					
6. Bairdia subdeltoidea (v. Münster)		X		X			
7. Bairdia tenuis Lienenklaus				X			
10. Bosquetina lienenklausi Witt							X
12. Bosquetina sp. in Goerlich (1958)			X				
14. Bythocypris arcuata (v. Münster)		X	X				
15. Bythocythere neerlandica Kuiper		X					
16. Bythocythere cf. neerlandica Kuiper		X					
17. Bythocythere undulata (Speyer)		X					
19. ?Bythoceratina sp. in Faupel (1975)		X					
22. Candona candida (Müller)			X				
24. Candona praecox Straub				X			
25. Candona recta Lienenklaus				X			
27. Candona reptans (Baird)			X				
29. Candona subaequalis Jones			X				
30. Candona aff. weltneri Hartwig			X				
36. Cladocythere spathacea (Lienenklaus)				X			
37. Clithrocytherideasp. 1 in Ellermann (1958, 1969)		X					
41. Cuneocythere marginata (Bosquet)		X	X				
42. Cushmanidea bradiana (Lienenklaus)		X					
43. Cushmanidea brevis (Lienenklaus)		X					
44. Cushmanidea denticulata (Lienenklaus)		X					
45. Cushmanidea falcata (Reuss)		X					
46. Cushmanidea cf. falcata (Reuss)				X			
48. Cushmanidea lithodomoides (Bosquet)		X					
49. Cushmanidea scrobiculata (Lienenklaus)		X					
50. Cyamocytheridea devexa (Lienenklaus)							X
51. Cyamocytheridea fabaeformis (Speyer)		X					
52. Cyamocytheridea punctatella (Bosquet)			X	X		X	X
53. Cyamocytheridea sp. Cy21 in Doebl and Malz (1962)					X		
54. ?Cyamocytheridea sp. in Gebhardt and Prinz-Grimm (1999)			X				
55. Cypria curvata Lienenklaus		X	X				
57. Cyprideis glabra Goerlich				X	X	X	
58. Cyprideis rara Goerlich						X	
62. Cypridopsis? cyclocypriformae Carbonnel and Ritzkowski			X				
65. Cypridopsis similis (Lienenklaus)				X			
66. Cyprodopsis cf. wolffi Carbonnel and Ritzkowski			X				
71. Cypris gibba Ramdohr			X				
72. Cypris ovum Jurine			X				
73. Cypris setigera Jones			X				
74. Cypris sp. in Böhl (1928)			X				
75. Cythere angulatopora Reuss			X				
76. Cythere bicostulata Speyer		X	X				
77. Cythere bornemanni Speyer		X					
78. Cythere incisa Speyer		X					
79. Cythere millepunctata Speyer		X					
80. Cythere sphaerulolineata Jones			X				
81. Cythere trachypora Jones			X				
82. Cythereis obliquata (Reuss)		X					
84. Cytherella beyrichi (Reuss)		X	X				
85. Cytherella compressa (v. Münster)		X					
87. Cytherella gracilis Lienenklaus		X		X			
88. Cytherella parallela Reuss			X	X			
89. Cytherella cf. parallela (Reuss)		X					
90. Cytherella cf. pustulosa Keij		X					
91. Cytherella rugosa Lienenklaus			X				
92. Cytherella transversa Speyer		X					
94. Cytherelloidea jonesiana (Bosquet)		X		X			
95. Cytherelloidea praesulcata (Lienenklaus)		X		X	X		X
96. Cytheretta aff. concinna Triebel		X					
98. Cytheretta gutzwilleri Oertli							X
99. Cytheretta jurinei (v. Münster)		X	X	X	X		
102. Cytheretta plicata (v. Münster)		X	X				
103. Cytheretta posticalis Triebel		X					X
105. Cytheretta ramosa (Lienenklaus)			X	X			
107. Cytheretta semipunctata (Bornemann)		X	X				
108. Cytheretta tenuipunctata (Bosquet)							X
109. Cytheretta tenuistriata (Reuss)		X					
110. Cytheridea (Cytheridea) bavarica Goerlich							X

Species	NGB	LRE	WFH	MAI	URG	MOB	MOS
111. Cytheridea bosqueti Speyer	X						
113. Cytheridea fallens Oertli	X						
116. Cytheridea muelleri (v. Münster)	X		X	X	X		
117. Cytheridea cf. muelleri (v. Münster)			X				
118. Cytheridea aff. muelleri (v. Münster)				X			
119. Cytheridea mülleri var torrosa Jones			X				
120. Cytheridea mülleri var papillosa Bosquet			X				
121. Cytheridea (Cytheridea) mülleri truncatula Oerlich						X	
122. Cytheridea mülleri Form a (v. Münster) in Goerlich (1958)		X					
124. Cytheridea pernota Oertli and Keij		X					X
125. Cytheridea sp. 1 in Ellermann (1958, 1960)		X					
127. Cytherideis aff. brevis Lienenklaus			X				
128. Cytherideis trigonalis Jones			X				
129. Cytheromorpha zinndorfi (Lienenklaus)			X	X	X		
131. Cytheropteron (Cytheropteron) cordiforme Lienenklaus	X						
134. Cytheropteron (Cytheropteron) steinmarki Kuiper	X						
137. Cytherura aff. gibba Müller				X			
138. Cytherura sulcata Lienenklaus			X	X			
141. Echinocythereis cf. echinata (Reuss)		X					
143. Echinocythereis hispida (Speyer)	X						
146. Echinocythereis prieniensis Witt						X	
147. Echinocythereis scabra (v. Münster)	X					X	
151. Eocytheropteron sp. A in Oertli (1956)							X
153. Eucypris agglutinans (Lienenklaus)			X				
154. Eucythere triangularis Lienenklaus	X						
159. Eucytherura cf. keiji Pietrzeniuk	X						
160. Eucytherura macropora (Lienenklaus)	X						
161. Eucytherura moosae Faupel	X						
162. Eucytherura quadropustulata Moos	X						
163. Eucytherura cf. schoenewaldensis Pietrzeniuk	X						
164. Eucytherura sp. A in Faupel (1975)	X						
166. Falunia (Falunia) sphaerulolineata (Jones)	X						
168. Haplocytheridea dacica dacica Héjjas						X	
169. Haplocytheridea cf. perforata (Roemer)		X					
172. Hemicyprideis basiliensis (Oertli)			X	X	X		X
176. Hemicyprideis helvetica (Lienenklaus)			X	X		X	X
185. Henryhowella asperima (Reuss)	X	X					
187. Hermanites haidingeri hoernesii (Speyer)	X						
191. Ilyocypris boehli Triebel			X				
198. Ilyocypris sp. in Sonne (1982)				X			
199. Kangarina sinuatum Lienenklaus	X						
200. Krithe bradiana Lienenklaus							
201. Krithe pernoides (Bornemann)	X	X					
202. Leguminocythereis lienenklausi Oertli							X
203. Leguminocythereis scrobiculata (v. Münster)	X	X		X			
208. Loxoconcha aff. favata Kuiper			X				
209. Loxoconch cf. grandis Pietrzeniuk	X						
210. Loxoconcha nystiana (Bosquet)							
211. Loxoconcha subovata (v. Münster)	X			X			
213. Loxoconch tenuimargo (Reuss)	X		X				
220. Megahemicythere sp. A in Witt (1967)						X	
222. Metacypris sp. in Sonne (1982), Rothausen and Sonne (1984)				X			
223. Microcytherura (Tetracytherura) lienenklausi Moos	X						
226. Muellerina latimarginata (Speyer)	X	X		X			
228. Murrayina? lyrata (Reuss)	X	X					
230. Neocyprideis parallela (Lienenklaus)			X	X			
232. ?Neocyprideis sp. in Gebhardt and Prinz-Grimm (1999)			X				
235. Paracyprideis rarefistulosa (Lienenklaus)		X		X			
238. Paracytheridea bilacunosa (Speyer)	X						
239. Paracytheridea triquetra (Reuss)			X	X			
240. Paracytheridea cf. triquetra (Reuss)	X						
241. Paracytheridea sp. in Mehrnusch (1965)				X			
251. Pataviella rugosa (v. Münster)	X					X	
252. Phacorhabdotus varians (Bornemann)	X						
253. Pocorniella calix Oertli							X
254. Pontocypris dispar Müller			X				
255. Pontocythere? angusta (v. Münster)		X					
256. Pontocythere therwilensis Oertli							X
257. Pseudocandona fertilis (Triebel)			X				
258. Pterigocythereis ceratoptera (Bosquet)						X	X
259. Pterigocythereis cornuta (v. Münster)		X					
260. Pterigocythereis cf. cornuta (Roemer)	X	X					
261. Pterigocythereis fimbriata (v. Münster)	X	X		X		X	
262. Pterigocythereis glimmerodensis Faupel	X						
263. Pterigocythereis helvetica Oertli							X
264. Pterigocythereis monoceros (Reuss)	X						

Species	NGB	LRE	WFH	MAI	URG	MOB	MOS
265. Pterigocythereis subcoronata (Speyer)	X	X					
266. Pterigocythereis sp. 1 in Ellermann (1958, 1960)		X					
268. Pterigocythereis sp. 3 in Ellermann (1958, 1960)		X					
272. Quadracythere macropora (Bosquet)							X
275. Schizocythere bündensis Triebel	X	X					
276. Schuleridea oculata Moos	X						
278. Semicytherura alata (Lienenklaus)	X		X	X			
279. Semicytherura gracilis foliacea Moos	X						
280. Semicytherura reticulata (Lienenklaus)	X						
284. Stenocypris sp. in Mehrnusch (1965)					X		
285. "Streifenostracod (cf. Nr. 2 Straub)" in Mehrnusch (1965)					X		
287. Thaerocythere sagittata Liebau	X						
289. Thaerocythere transiens (Moos)	X						
293. Xestoleberis elongata Lienenklaus		X					
294. Xestoleberis rhenana Lienenklaus			X	X			
295. Xestoleberis tumida (Reuss)	X						

Table 2. Distribution of ostracoda - late Chattian

Species	Regions						
	NGB	LRE	WFH	MAI	URG	MOB	MOS
1. Argilloecia laevis (Bornemann)	X	X					
2. Alucocytheridea aff. faboides robusta Moos	X						
8. Beatamoosina edita (Lienenklaus)	X						
12. Bosquetina sp. in Goerlich (1958)		X					
13. Brachyocythere cf. tarentina (Baird)		X					
14. Bythocypris arquata (v. Münster)		X	X				
18. Bythocythere sp. in Goerlich (1958)		X					
20. Callistocythere canaliculata (Reuss)			X				
21. Candona albicans Brady			X				
23. Candona candidula Lienenklaus			X				
24. Candona praecox Straub					X		
25. Candona recta Lienenklaus			X				
32. Candona sp. in Picot et al. (1999)							X
34. Cavernopsis ruessingensis Schäfer			X	X			
35. Cavernopsis sonnei Schäfer				X			
37. Clithrocytherideasp. 1 in Ellermann (1958, 1969)	X						
38. Costa hermi Witt						X	
41. Cuneocythere marginata (Bosquet)	X	X					
45. Cushmanidea falcata (Reuss)	X	X					
47. Cushmanidea haskinsi Keen	X						
48. Cushmanidea lithodomoides (Bosquet)	X	X					
49. Cushmanidea scrobiculata (Lienenklaus)		X					
51. Cyamocytheridea fabaeformis (Speyer)		X					
52. Cyamocytheridea punctatella (Bosquet)						X	
55. Cypria curvata Lienenklaus	X						
56. ?Cypria curvata (Lienenklaus) in Gebhardt (2003)		X					
57. Cyprideis glabra Goerlich					X		
59. Cyprideis traisensis Malz & Triebel				X			
61. Cyprideis n.sp. in Schenk (1957)			X				
64. Cypridopsis kinkelini Lienenklaus			X	X			
65. Cypridopsis similis (Lienenklaus)			X	X			
66. Cyprodopsis cf. wolffi Carbonnel and Ritzkowski			X				
67. Cypridopsis sp. in Picot et al. (1999)							X
82. Cythereis obliquata (Reuss)	X						
83. Cythereis sp. 1 in Ellermann (1958, 1960)		X					
84. Cythereella beyrichi (Reuss)	X	X					
85. Cythereella compressa (v. Münster)	X	X					
87. Cythereella gracilis Lienenklaus	X	X					
92. Cythereella transversa Speyer	X						
93. Cythereella sp. in Gebhardt (2003)			X				
96. Cytheretta bassionii Uffenorde	X						
99. Cytheretta jurinei (v. Münster)	X	X					
102. Cytheretta plicata (v. Münster)		X					
106. Cytheretta cf. ramosa (Lienenklaus)		X					
107. Cytheretta semipunctata (Bornemann)	X	X					
108. Cytheretta tenuipunctata (Bosquet)						X	
112. Cytheridea cf. debilis Jones			X				
114. Cytheridea genavensis Oertli							X
116. Cytheridea muelleri (v. Münster)	X		X				
121. Cytheridea (Cytheridea) mülleri truncatula Goerlich						X	
122. Cytheridea mülleri Form a (v. Münster) in Goerlich (1958)		X					
123. Cytheridea mülleri Form b (v. Münster) in Goerlich (1958)		X					
124. Cytheridea pernota Oertli and Keij	X	X					
125. Cytheridea sp. 1 in Ellermann (1958, 1960)		X					
129. Cytheromorpha zinndorfi (Lienenklaus)			X	X	X		X
132. Cytheropteron cf. cordiforme Lienenklaus		X					
133. Cytheropteron pipistrella Brady		X					
136. Cytheropteron sp. indet in Uffenorde (1989)	X						
138. Cytherura sulcata Lienenklaus			X				
139. Cytherura sp. in Schenk (1957)			X				
140. Cytherura sp. in Schäfer (1984)				X			
143. Echinocythereis hispida (Speyer)	X	X					
144. Echinocythereis hispida (Speyer) -E. hirsuta (Lienenklaus)	X						
145. Echinocythereis cf. lyelliana (Bosquet)		X					
146. Echinocythereis prieniensis Witt						X	
147. Echinocythereis scabra (v. Münster)						X	
148. Echinocythereis subcornuta (Lienenklaus)	X						
150. Echinocythereis sp. 1 in Uffenorde (1981, 1986)	X						
153. Eucypris agglutinans (Lienenklaus)			X	X	X		
154. Eucythere triangularis Lienenklaus	X	X					
156. Eucythere sp. in Uffenorde (1980, 1981, 1986)	X						
157. Eucytheridea fissodentata (Lienenklaus)	X						

Species	NGB	LRE	WFH	MAI	URG	MOB	MOS
158. Eucytheridea rostrata Bassiouni	X						
160. Eucytherura macropora (Lienenklaus)	X	X					
165. Eucytherura sp. in Uffenorde (1989)	X						
167. Hazelina biornata (Bornemann)	X						
168. Haplocytheridea dacica dacica (Héjjas)						X	X
169. Haplocytheridea perforata (Roemer)		X					
170. Haplocytheridea n.sp. in Schenk (1957)			X				
171. Hemicyprideis angulata Schäfer				X			
173. Hemicyprideis clivosa Malz			X	X	X		
174. Hemicyprideis cf. gilletteae (Stchepinski)			X				
175. Hemicyprideis grekoffi (Carbonnel)							X
176. Hemicyprideis helvetica (Lienenklaus)				X	X	X	
177. Hemicyprideis intercedens Malz			X				
178. Hemicyprideis krejci Malz			X	X			
179. Hemicyprideis cf. krejci Malz				X			
180. Hemicyprideis lienenklausi Malz			X				
181. Hemicyprideis miocaenica (Lienenklaus)			X		X		
182. Hemicyprideis cf. olmensis Triebel			X				
183. Hemicyprideis rhenana (Lienenklaus)			X	X			
185. Henryhowella asperrima (Reuss)	X	X					
186. "Hermanites" excancellata (Neviani)	X						
188. Heterocypris parva (Lienenklaus)				X			
189. Heterocypris cf. parva (Lienenklaus)				X			
190. Heterocypris aff. parva (Lienenklaus)							X
191. Ilyocypris boehli Triebel			X				
192. Ilyocypris essertinensis (Carbonnel)							X
193. Ilyocypris tribullata Lienenklaus			X	X			
194. Ilyocypris cf. tribullata Lienenklaus				X			
196. Ilyocypris sp. in Schenk (1957)			X				
200. Kriithe bradiana Lienenklaus		X					
201. Kriithe pernoides (Bornemann)	X	X					
203. Leguminocythereis scrobiculata (v. Münster)	X	X					
205. "Lixouria" unicostulata (Kuiper)	X						
206. Loxoconcha aff. boldi Bassiouni	X						
207. Loxoconcha favata Kuiper		X					
210. Loxoconcha nystiana (Bosquet)		X					
211. Loxoconcha subovata (v. Münster)	X	X					
212. Loxoconcha cf. tenera Pietrzeniuk	X						
213. Loxoconch tenuimargo (Reuss)		X					
214. Loxoconcha aff. truncata Bassiouni	X						
217. Loxoconcha sp. in Uffenorde (1980, 1981, 1986)	X						
220. Megahemicythere sp. A in Witt						X	
221. Metacypris danubialis punctata (Straub)							X
224. Moenocypris sp. in Engesser et al. (1993)				X			
225. ?Moenocypris sp. in Picot (1999)							X
226. Muellerina latimarginata (Speyer)	X	X					
228. Murrayina? lyrata (Reuss)	X	X					
229. Neocyprideis enkeimensis Malz				X			
230. Neocyprideis parallela (Lienenklaus)			X				
231. Neocyprideis sp. in Schäfer (1984)				X			
234. Pajenborchella wursterheidensis Uffenorde	X						
235. Paracyprideis rarefistulosa (Lienenklaus)		X					
236. Paracypris cf. aerodynamica Oertli		X					
237. Paracypris cf. contracta (Jones)	X						
243. Pataviella aliciensis Liebau			X				
245. Pataviella dobergensis Liebau	X						
247. Pataviella gracilis Liebau			X				
251. Pataviella rugosa (v. Münster)	X		X	X			
252. Phacorhabdotus varians (Bornemann)	X						
255. Pontocythere? angusta (v. Münster)		X					
257. Pseudocandona fertilis (Triebel)							X
258. Pterigocythereis ceratoptera (Bosquet)	X		X	X		X	
259. Pterigocythereis cornuta (v. Münster)		X					
260. Pterigocythereis cf. cornuta (Roemer)		X					
261. Pterigocythereis fimbriata (v. Münster)	X	X				X	
262. Pterigocythereis glimmerodensis Faupel			X				
264. Pterigocythereis monoceros (Reuss)		X					
266. Pterigocythereis sp. 1 in Ellermann (1958, 1960)		X					
267. Pterigocythereis sp. 2 in Ellermann (1958, 1960)		X					
268. Pterigocythereis sp. 3 in Ellermann (1958, 1960)		X					
269. Pterigocythereis sp. indet in Uffenorde (1989)	X						
270. Pterigocythereis sp. in Gebhardt (2003)			X				
271. Pulaviella muelleriana (Lienenklaus)	X						
273. "Quadracythere" sp.2 in Uffenorde (1980, 1981, 1986)	X						
274. Rockallia sp. in Uffenorde (1989)	X						
275. Schizocythere bündensis Triebel		X					
276. Schuleridea oculata Moos	X						
277. Schuleridea cf. oculata Moos in Uffenorde (1981, 1986)	X						
281. Semicytherura rothauseni Schäfer				X			

Species	NGB	LRE	WFH	MAI	URG	MOB	MOS
282. <i>Semicytherura</i> sp. A in Sonne (1988)				X			
286. <i>Tetracytherura</i> angulosa (Seguenza)		X					
287. <i>Thaerocythere</i> sagittata Liebau	X						
288. <i>Thaerocythere</i> polita Liebau	X						
289. <i>Thaerocythere</i> transiens (Moos)	X						
290. <i>Thaerocythere</i> cf. transiens (Moos)	X						
292. <i>Virgatoocypris</i> sp. in Engesser et al. (1993)					X		
293. <i>Xestoleberis</i> elongata Lienenklaus		X					

Table 3. Distribution of ostracoda - Aquitanian

NGB=North German Basin, WFH=Wetterau-Frankfurt-Hanau Basin

MAI=Mainz Basin, URG=Upper Rhine Graben, MOB=Bavarian Molasse Basin

Species	Regions				
	NGB	WFH	MAI	URG	MOB
2. Aulocytheridea aff. faboides robusta Moos	X				
8. Beatamoosina edita (Lienenklaus)	X				
9. Bosquetina curta Bassiouni	X				
11. Bosquetina sp. B in Witt (1967)					X
23. Candona candidula Lienenklaus		X			
24. Candona praecox Straub			X		
25. Candona recta Lienenklaus			X		
26. Candona cf. recta Lienenklaus			X		
28. Candona rhenana Lienenklaus		X	X		
31. Candona sp. in DoebI et al. (1972)			X		
32. Candona sp. in Picot et al. (1999)					
33. Candonopsis cf. arida Sieber			X		
34. Cavernopsis ruessingensis Schäfer			X		
35. Cavernopsis sonnei Schäfer			X		
38. Costa hermi Witt					X
39. Costa polytrema (Brady)	X				
40. Costa tricostata elegantissima (Lienenklaus)	X				
45. Cushmanidea falcata (Reuss)	X				
47. Cushmanidea haskinsi Keen	X				
48. Cushmanidea lithodomoides (Bosquet)	X				
55. Cypria curvata Lienenklaus		X			
56. ?Cypria curvata (Lienenklaus) in Gebhardt (2003)		X			
60. ?Cyprideis cf. traisensis Triebel in Gebhardt (2003)		X			
63. ?Cypridopsis cf. hessani Carbonnel and Ritzkowski in Gebhardt (2003)		X			
64. Cypridopsis kinkelini Lienenklaus		X	X	X	
65. Cypridopsis similis (Lienenklaus)		X	X		
68. Cypridopsis(?) sp. in Kuster-Wendenburg (1969)			X		
69. Cyprinotus sp. in DoebI et al. (1972)			X		
70. Cypris francofurti Lienenklaus		X			
84. Cytherella beyrichi (Reuss)	X				
86. Cytherella elliptica Brady	X				
87. Cytherella gracilis Lienenklaus	X				
96. Cytheretta bassiounii Uffenorde	X				
100. Cytheretta moosi Bassiouni	X				
101. Cytheretta pilgeri Bassiouni	X				
104. Cytheretta procera (Lienenklaus)	X				
115. Cytheridea horstgenensis Bassiouni	X				
117. Cytheridea cf. muelleri (v. Münster)	X				
124. Cytheridea pernota Oertli and Keij	X				
126. Cytheridea sp. in Uffenorde (1980)	X				
129. Cytheromorpha zinndorfi (Lienenklaus)		X	X	X	
130. Cytheromorpha cf. zinndorfi (Lienenklaus)			X		
140. Cytherura sp. in Schäfer (1984)			X		
142. Echinocythereis hirsuta (Lienenklaus)	X				
143. Echinocythereis hispida (Speyer)	X				
144. Echinocythereis hispida (Speyer) E. hirsuta (Lienenklaus)	X				
147. Echinocythereis scabra (v. Münster)	X				
149. Echinocythereis variolata (Egger)	X				
152. Eucypris acuta (Lienenklaus)			X		
153. Eucypris agglutinans (Lienenklaus)		X	X	X	
154. Eucythere triangularis Lienenklaus	X				
156. Eucythere sp. in Uffenorde (1980, 1981, 1986)	X				
157. Eucytheridea fissidentata (Lienenklaus)	X				
158. Eucytheridea rostrata Bassiouni	X				
160. Eucytherura macropora (Lienenklaus)	X				
177. Hemicyprideis intercedens Malz		X	X		
178. Hemicyprideis krejci Malz		X	X		
179. Hemicyprideis cf. krejci Malz			X		
180. Hemicyprideis lienenklausi Malz		X	X	X	
181. Hemicyprideis miocaenica (Lienenklaus)		X	X	X	
183. Hemicyprideis rhenana (Lienenklaus)			X		
185. Henryhowella asperrima (Reuss)	X				
186. "Hermanites" excancellata (Neviani)	X				
188. Heterocypris parva (Lienenklaus)		X	X		
189. Heterocypris cf. parva (Lienenklaus)			X		
193. Ilyocypris tribullata Lienenklaus		X	X		
194. Ilyocypris cf. tribullata Lienenklaus			X		
195. Ilyocypris tuberculata Lienenklaus			X		
197. Ilyocypris sp. in DoebI et al. (1972)			X		
201. Krithe pernoides (Bornemann)	X				
204. Leguminocythereis zoebeleini Witt					X
206. Loxoconcha aff. boldi Bassiouni	X				

Species	NGB	WFH	MAI	URG	MOB
211. Loxoconcha subovata (v. Münster)	X				
214. Loxoconcha aff. truncata Bassiouni	X				
215. Loxoconcha cf. variolata Brady	X				
216. Loxoconcha wanneri Kuiper	X				
218. Malzina moguntiaci Schäfer			X		
219. Malzina reticulata Schäfer			X		
224. Moenocypris sp. in Engesser et al. (1993)			X		
226. Muellerina latimarginata (Speyer)	X				
227. Muellerina latimarginata (Speyer) Morphotyp 1 in Gramann (1986)	X				
233. Olimfalunia starringi (Kuiper)	X				
242. Paralytnocythere sp. in Krause (1991)			X		
244. Pataviella bavarica (Lienenklaus)					X
246. Pataviella felsensis (Kollmann)					X
248. Pataviella imitans Liebau					X
249. Pataviella lamellosa Liebau					X
250. Pataviella molassica (Witt)					X
251. Pataviella rugosa (v. Münster)					X
261. Pterigocythereis fimbriata (v. Münster)	X				
269. Pterigocythereis sp. indet in Uffendorde (1989)	X				
276. Schuleridea oculata Moos	X				
277. Schuleridea cf. oculata Moos	X				
281. Semicytherura rothauseni Schäfer			X		
283. Stenocypris sp. in Kuster-Wendenburg (1969)			X		
291. "Thalassocythere" sp. in Uffendorde (1989)	X				

Table 4. Distribution of foraminifera - early Chattian

NGB=North German Basin, LRE=Lower Rhine Embayment,
WFH=Wetterau-Frankfurt-Hanau Basin, MAI=Mainz Basin, URG=Upper Rhine Graben,
MOB=Bavarian Molasse Basin

Species	Regions					
	NGB	LRE	WFH	MAI	URG	MOB
1. Alabamina budensis(Hantken)						x
3. Alliatina tollmanniLanger						x
4. Allomorphina macrostomaKarrer						x
6. Almaena osnabrugensis(Roemer)	x					x
8. Ammobaculites humboldti(Reuss)						x
9. Ammobaculites sp. in Gebhardt (2003)			x			
10. Ammodiscus cretaceus(Reuss)						x
11. Ammodiscus polygyrus(Reuss)	x					
12. Ammodiscus sp. in Mehrnusch (1965)				x		
13. Ammonia beccarii (Linné)		x				
14. Ammonia kiliani (Andreae)			x	x	x	x
15. Ammonia propingua(Reuss)						x
17. Amphicoryna budensis(Hantken)						x
18. Amphicoryna imperfectecostata(Silvestri)						x
19. Amphimorphina hauerianaNeugeboren						x
20. Amphicoryna scalaris(Batsch)						x
21. Angulogerina angulosa(Williamson)	x					
22. Angulogerina germanicaCushman and Edwards	x		x	x		x
24. Anomalina ammonoides(Reuss)				x		
25. Apiopterina cylindroides(Reuss)?					x	
26. Astacolus minimus (Hantken)						x
27. Asterigerina carinata(d'Orbigny)					x	
28. Asterigerina frankelTen Dam and Reinhold					x	
29. Asterigerina gürichi(Franke)	x	x				x
31. Asterigerina praeplanorbisHagn						x
32. Asterigerina staescheiTen Dam and Reinhold	x				x	
33. Bathysiphon filiformisSars						x
34. Bitubulogenerina kasselensisBatjes)	x					
35. Bolivina cf. alata (Seguenza)				x		
37. Bolivina antiqua d'Orbigny					x	x
39. Bolivina aquitanaMehrnusch				x		
40. Bolivina beyrichiReuss			x	x	x	x
42. Bolivina beyrichi carinataHantken				x		
43. Bolivina beyrichi substriataReuss					x	
44. Bolivina cf. böttgeri Spandel				x		
45. Bolivina budensis (Hantken)				x		x
47. Bolivina crenulataCushman						x
49. Bolivina dilatata Reuss				x	x	
51. Bolivina dilatata hyalinaHofmann						x
52. Bolivina elongataHantken	x		x	x		x
54. Bolivina fastigiaCushman	x	x		x		x
59. Bolivina hebes Macfadyen						x
60. Bolivina aff. imporcata Cushman and Todd	x					
61. Bolivina indansiMehrnusch		x				
62. Bolivina korynoidesHofmann						x
64. Bolivina liebusiHofmann						x
65. Bolivina cf. melettica Andreae			x			
66. Bolivina moguntiacaeBartenstein and Heinemann			x			
67. Bolivina molassicaHofmann						x
68. Bolivina nobilisHantken			x	x		
69. Bolivina obliquostrataMehrnusch		x				
70. Bolivina oligocaenicaSpandel						x
73. Bolivina plicatellaCushman		x		x		
75. Bolivina plicatelliformisMehrnusch		x				
76. Bolivina punctata d'Orbigny				x	x	
77. Bolivina reticulataHantken				x		x
78. Bolivina rossenrayensisMehrnusch		x				
81. Bolivina seminudaformisMehrnusch				x	x	
82. Bolivina cf. semistriata Hantken				x		
84. Bolivina sonneiMehrnusch		x				
85. Bolivina subaenariensis mexicanaCushman					x	
86. Bolivina subalpinaHofmann						x
87. Bolivina subexcavataCushman and Wickenden		x				
88. Bolivina tereta (Cushman)				x		x
91. Bolivina trunensisHofmann				x		
92. Bolivina versatilisHofmann						x
93. Bolivina sp. 1 in Mehrnusch (1989)				x		
96. Bolivina sp. 5 in Mehrnusch (1991)			x			
100. Bolivina sp. 9 in Mehrnusch (1993)		x				
104. Bolivinelina rugosaHowe						x
105. Bolivinelina virgataCushman						x

Species	NGB	LRE	WFH	MAI	URG	MOB
106. Budashevella multicamerata (Voloshinova)						x
107. Bulimina acicula Andreae				x	x	
108. Bulimina affinis d'Orbigny					x	
109. Bulimina arndti Hagn						x
111. Bulimina inflata Seguenza					x	
113. Bulimina striata d'Orbigny						x
116. Buliminella elegantissima (d'Orbigny)				x		x
117. Buliminella pulchra (Terquem)			x			
119. Cancris auriculus (Fichtel and Moll)	x	x				x
121. Cancris oblongus (Williamson)			x			
122. Cancris subconicus (Terquem)						x
123. Cancris turgidus Cushman and Todd	x	x				
124. Cassidulina laevigata d'Orbigny					x	
125. Cassidulina sp. in Mehrnusch (1965)				x		
127. Cassidulinoides bodeni Hagn						x
128. Caucasina coprolithoides (Andreae)			x		x	x
129. Caucasina elongata (d'Orbigny)	x	x				x
130. Caucasina oligocaenica Khalilov						x
131. Caucasina schischkinskaya (Samoilova)						x
132. Ceratobulimina haueri (d'Orbigny)					x	
133. Chilostomella ovoidea Reuss						x
134. Chilostomella czizeki Reuss						x
135. Cibicides aknerianus d'Orbigny	x					
136. Cibicides boueanus (d'Orbigny)	x		x			x
143. Cibicides lobatulus (Walker and Jacob)	x		x	x	x	x
144. Cibicides refulgens de Montfort			x		x	
147. Cibicides tenellus (Reuss)				x		
148. Cibicides sp. in Mehrnusch (1965)				x		
150. Cibicides amphisyliensis-pseudoungarianus group					x	
151. Cibicoides communis (Roemer)						x
152. Cibicoides dutemplei (d'Orbigny)	x					x
153. Cibicoides pseudoungarianus (Cushman)						x
154. Cibicoides ungerianus fillicostus (Hagn)						x
155. Cibicoides ungerianus ungerianus (d'Orbigny)						x
157. Conuspira cf. involvens (Reuss)	x					
160. Coryphostoma sp. in Reiser (1987)						x
163. Cyclammmina acutidorsata (Hantken)						x
164. Cyclammmina obesa Cushman and Laiming						x
165. Cyclammmina placenta "exigua" (Schrodt)					x	
167. Cycloforina cf. contorta (d'Orbigny)			x			
169. Cycloloculina cf. annulata Heron-Allen and Earland	x					
170. Dentalina acuticauda Reuss	x					
171. Dentalina boueana d'Orbigny			x			
172. Dentalina capitata (Boll)	x	x				
173. Dentalina communis d'Orbigny						x
174. Dentalina globifera Reuss	x					
175. Dentalina intermitens (Roemer)		x				
177. Dentalina münsteri Reuss	x	x				
178. Dentalina obliquestriata Reuss			x			
179. Dentalina soluta Reuss	x					
180. Dentalina sp. in Mehrnusch (1965)				x		
182. Dentalina sp. in Sonne (1982)				x		
184. Discorbina sphaeruligera Schwager			x			
185. Discorbis alteconicus (Pokorný)						x
188. Discorbis orbicularis (Terquem)	x			x	x	
189. Discorbis parisiensis (d'Orbigny)					x	
190. Discorbis patelliformis (Brady)	x					
193. Discorbis trochus (Roemer)	x					
194. Discorbis turbo (d'Orbigny)				x		
196. Discorbis sp. in Mehrnusch (1965)				x		
197. Dorothis pauperula (Cushman)						x
198. Ehrenbergina variabilis aculeata Spiegler	x					
199. Ehrenbergina variabilis variabilis Brunko	x					
200. Ehrenbergina serrata Reuss	x					
201. Elphidiella cryptostoma (Egger)						x
202. Elphidiella heteropora (Egger)						x
203. Elphidiella subcarinata (Egger)					x	x
204. Elphidiella subnodosum (Roemer)	x	x				x
205. Elphidiella turgescens (Cushman)						x
206. Elphidium cf. advenum (Cushman)						x
208. Elphidium crispum (Linne)						x
210. Elphidium subnodosum minor Ellermann	x	x				
213. Epeponidella ampliportata Reiser						x
218. Epistominella molassica (Hagn)						x
219. Eponides cf. candidulus (Schwager)			x			
220. Eponides constans Reiser						x

Species	NGB	LRE	WFH	MAI	URG	MOB
222. Eponides praecinctus(Karrer)					x	
223. Eponides pygmaeus(Hantken)	x		x	x	x	
224. Eponides stellatus(Reuss)					x	
226. Eponides sp. in Mehrnusch (1965)				x		
228. Escornebovina orthorapha(Egger)						x
229. Escornebovina trochiformis(Andreae)	x			x		x
230. Fissurina kapellensisSpiegler	x					
231. Fissurina laevigataReuss						x
232. Fissurina orbignyanaSeguenza						x
233. Fissurina obtusaEgger						x
234. Flabellinella tenuissima(Hantken)						x
235. Frondicularia cuneata(Roemer)	x	x				
237. Frondicularia striata(Roemer)	x	x				
238. Fursenkoina mustoni(Andreae)						x
239. Gaudryina chilostomaReuss			x			
241. Glabratellina arcuataSeiglie and Bermúdez						x
242. Glandulina aequalisReuss					x	x
243. Glandulina dimorpha(Bornemann)						x
244. Globobulimina bathyalisReiser						x
245. Globobulimina sp. in Reiser (1987)						x
246. Globocassidulina crassa(d'Orbigny)	x					x
247. Globocassidulina oblonga(Reuss)					x	x
249. Globulina gibba fissicostata(Cushman and Ozawa)	x					
250. Globulina gibba d'Orbigny	x			x		x
251. Globulina gibba punctata d'Orbigny	x					
252. Globulina gibba tuberculata d'Orbigny	x					
254. Globulina minuta (Roemer)			x			
255. Globulina muensteri(Reuss)						x
256. Globulina sp. in Mehrnusch (1965)				x		
260. Guttulina communis(d'Orbigny)	x		x			
261. Guttulina ovata (d'Orbigny)	x		x			
262. Guttulina praelonga(Egger)						x
263. Guttulina problema d'Orbigny	x					x
264. Guttulina problema franke(Cushman and Ozawa)						x
267. Guttulina sp. in Sonne (1982)				x		
268. Gyroidina brockertiReiser						x
269. Gyroidina eggeri Wenger						x
270. Gyroidina girardana (Reuss)		x			x	
271. Gyroidina parva Cushman and Renz						x
272. Gyroidina soldanii(d'Orbigny)	x		x	x		x
274. Hanzawaia asterizans(Fichtel and Moll)						x
275. Haplophragmoides deforme(Andreae)					x	
276. Haplophragmium humboldtiReuss			x			
277. Haplophragmoides latidorsatus(Bornemann)	x					
278. Haplophragmoides suborbicularis(Grzybowski)						x
280. Hoeglundina elegans(d'Orbigny)						x
281. Karreriella chilostoma(Reuss)	x	x				
282. Karreriella hantkenianaCushman						x
283. Karreriella postsiphonella(Spandel)						x
284. Karreriella siphonella(Reuss)		x				x
286. Lagena elegantissima (Bornemann)					x	
287. Lagena gracilicostaReuss						x
288. Lagena hexagona (Williamson)	x					
290. Lagena isabella d'Orbigny			x			
291. Lagena laevis (Montagu)						x
292. Lagena modesta inductaMatthes	x					
295. Lagena sulcata (Walker and Jacob)	x				x	x
296. Lagena sp. in Mehrnusch (1965)				x		
297. Lenticulina (Rob.) acosta(Bermudez)		x				
298. Lenticulina (Ast.) arcuata(Philippi)	x	x				
299. Lenticulina calcar(Linné)						x
300. Lenticulina cultrata(Monfort)						x
301. Lenticulina deformis(Reuss)	x				x	
302. Lenticulina gerlachi(Reuss)						x
303. Lenticulina (Rob.) inornata(d'Orbigny)						x
304. Lenticulina (Rob.) intermedia(d'Orbigny)		x	x			
306. Lenticulina (Rob.) osnabrugensis(Roemer)		x				
307. Lenticulina cf. simplex (d'Orbigny)	x					
308. Lenticulina vortex(Fichtel and Moll)						x
309. Lenticulina (Rob.) sp. in Mehrnusch (1965)				x		
310. Lenticulina sp. indet. in Prell-Mussig (1965)					x	
311. Lippsina demens (Bik)			x			
312. ?Lippsina demens (Bik) in Gebhardt (2003)			x			
313. Marginulina böttcheri(Reuss)	x					
314. Marginulina hantkeniBandy						x
315. Marginulina similis d'Orbigny						x

Species	NGB	LRE	WFH	MAI	URG	MOB
316. Marginulina sp. in Prell-Mussig (1965)					x	
317. Martinottiella communis(d'Orbigny)		x				
318. Melonis affine (Reuss)		x		x	x	x
319. Melonis pompilioides(Fichtel and Moll)						x
320. Miliammina paleocenic(Kiesel)						x
322. Miliolinella cf. subrotunda (Montagu)	x			x		
324. Neocorbina patella (Egger)						x
325. Neoeponides schreibers(d'Orbigny)	x		x			
326. Nodosaria cf. acuminata Hantken						x
327. Nodosaria bactridiumReuss						x
328. Nodosaria conspurcataReuss			x			
329. Nodosaria elegantissima(d'Orbigny)						x
330. Nodosaria hispida (Soldani)						x
331. Nodosaria cf. kinkelini Spandel				x		
332. Nodosaria ortenburgensisReiser						x
333. Nodosaria ovicula d'Orbigny				x		
334. Nodosaria pyrula d'Orbigny	x					
335. Nodosaria pyrula semirugosa d'Orbigny						x
336. Nodosaria raphanistrum(Linné)						x
337. Nodosaria rudis d'Orbigny					x	
343. Nonion umbilicatum(Walker and Jacob)	x					
344. Nonion sp. in Mehrnusch (1965)				x		
346. Nonionella liebusiHagn						x
348. Nonionella sp. in Mehrnusch (1965)				x		
350. Nonionina communis(d'Orbigny)	x	x				x
351. Nonionina nonionelloides(Ten Dam and Reinhold)	x					
352. Nonionina perforata d'Orbigny			x			
353. Nonionina punctata d'Orbigny			x			
354. Nonionina scaphus(Fichtel and Moll)	x					
355. Nuttallides sp. in Reiser (1987)						x
356. Oolina globosa (Montagu)						x
357. Oridorsalis umbonatus(Reuss)	x				x	x
358. Palmula cf. budensis (Hantken)						x
359. Palmula obliqua (Roemer)	x	x				
360. Palmula oblonga (Roemer)	x	x				
361. Pararotalia canui (Cushman)						x
362. Pararotalia canui rhenana(Ellermann)			x			
363. Pararotalia fallax(Steuer)	x			x		
364. Pararotalia sp. in Reiser (1987)						x
365. Patellina corrugataWilliamson	x					
366. Planorbulina difffiformisRoemer	x					
367. Planorbulina mediterraneensis d'Orbigny				x		
369. Planularia kubinyii(Hantken)						x
370. Planularia moravica(Karrer)						x
371. Planularia trinae Bermudez	x	x				
372. Planulina alticostaTen Dam and Reinhold					x	
373. Planulina costata (Hantken)						x
374. Planulina osnabrugensisRoemer			x			
375. Plectofrondicularia digitalis(Neugeboren)						x
376. Plectofrondicularia seminuda(Reuss)	x					
377. Plectofrondicularia striata(Hantken)						x
378. Plectofrondicularia vaughanCushman						x
379. Polymorphina cylindroides Römer				x		
380. Polymorphina lanceolata d'Orbigny				x	x	
381. Polymorphina sororia Reuss				x	x	
383. Praeglobobuliminapyrula (d'Orbigny)						x
385. Protelphidium decoratum (Cushman and McGlamery)	x		x			
386. Protelphidium granosum (d'Orbigny)	x	x	x	x	x	x
387. Protelphidium nonioninoides (Andreae)			x	x		
389. Protelphidium roemeri (Cushman)	x			x		
390. Protelphidium sp. in Reiser (1987)						x
391. Pseudopolymorphinanodosaria (Reuss)			x			
392. Pseudopolymorphinaobscura (Roemer)	x					
393. Pseudopolymorphinasubnodosa (Reuss)	x					
394. Pullenia bulloides (d'Orbigny)	x	x				x
395. Pullenia compressiusculaReuss				x		
396. Pullenia inflata Weber						x
397. Pullenia quinqueloba (Reuss)				x	x	x
398. Pullenia sphaeroides d'Orbigny				x		
399. Pullenia sp. in Mehrnusch (1965)				x		
400. Pyrgo bulloides (d'Orbigny)	x					
403. Pyrulina fusiformis (Roemer)	x					x
404. Pyrulina lanceolata (Reuss)				x		
405. Quinqueloculina akneriana d'Orbigny	x		x			
406. Quinqueloculina angusta Reuss					x	
409. Quinqueloculina cibrosa (Egger)						x

Species	NGB	LRE	WFH	MAI	URG	MOB
411. Quinqueloculina hauerina (d'Orbigny)						x
412. Quinqueloculina impressa Reuss			x	x		
413. Quinqueloculina impressa subovalis (Andreae)				x		
414. Quinqueloculina juleana d'Orbigny	x					
415. Quinqueloculina laevigata d'Orbigny	x					
416. Quinqueloculina ludwigi Reuss						x
417. Quinqueloculina mayeriana d'Orbigny			x			
418. Quinqueloculina oblonga (Montagu)	x				x	
422. Quinqueloculina rotunda (d'Orbigny)					x	
424. Quinqueloculina seminula (Linne)				x	x	
427. Quinqueloculina triangularis d'Orbigny			x			
429. Rectobolivina zsigmondyi (Hantken)						x
430. ?Recurvoides sp. in Gebhardt (2001)			x			
431. Reussella aperta Cushman						x
432. Reussella spinulosa (Reuss)	x					
433. Rhabdammina discreta Brady						x
434. Robertina declivis (Reuss)	x					
436. Rosalina bahamaensis Todd and Low	x					
437. Rosalina bradyi (Cushman)			x			
438. Rosalina globularis (d'Orbigny)				x		
440. Rosalina semiporata (Egger)						x
441. Rotalia badensis Czjzek			x			
442. Rotalia haidingeri d'Orbigny			x			
443. Rotalia nana Reuss			x			
448. Saracenaria arcuata (d'Orbigny)						x
450. Saracenaria propinqua (Hantken)						x
451. Sigmolinita tenuis (Czjzek)						x
452. Sigmolinita sp. in Reiser (1987)						x
453. Sigmolopsis colomi (Glaçon and Magné)						x
454. Sigmomorphina regularis (Roemer)	x	x				
456. Sinoloculina consobrina (d'Orbigny)			x			x
457. Siphonodosaria sp. in Mehrnusch (1965)				x		
458. Siphonina fimbriata Reuss	x					
459. Siphonina jacksonensis Cushman and Applin					x	
460. Siphonina reticulata (Czjzek)						x
461. Sphaeroidina austriaca d'Orbigny			x			
462. Sphaeroidina bulloides d'Orbigny				x		x
463. Sphaeroidina variabilis Reuss	x					
464. Spiroloculina dorsata Reuss	x					
465. Spiroplectammina attenuata (Reuss)				x		
466. Spiroplectamminacarinata (d'Orbigny)				x		x
467. Spiroplectammina deperdita (d'Orbigny)	x					
468. Spiroplectammina pectinata (Reuss)						x
469. Stainforthia acuta (d'Orbigny)						x
470. Stainforthia schreibersiana (Czjzek)	x	x	x			
471. Stilostomella adolphina (d'Orbigny)						x
472. Stilostomella consobrina (d'Orbigny)						x
474. Stilostomella emaciata (Reuss)						x
475. Stilostomella ewaldi (Reuss)	x			x	x	
477. Stilostomella longiscata (d'Orbigny)						x
478. Stilostomella perscripta (Egger)						x
479. Stilostomella scabra (Reuss)						x
480. Stomatorbina acarinata Pokorný						x
481. Svatkina perlata (Andreae)	x					
482. Textularia agglutinans d'Orbigny						x
483. Textularia attenuata Reuss				x		
484. Textularia carinata d'Orbigny				x		
485. Textularia cognata (Reuss)			x			
486. Textularia deperdita d'Orbigny						x
487. Textularia lacerta Reuss				x		
489. Textularia sagittula Defrance			x			
491. Trifarina angulosa (Williamson)						x
492. Trifarina bradyi Cushman					x	x
494. Trifarina gracilis (Reuss)						x
495. Triloculina austriaca d'Orbigny	x					
496. Triloculina cf. byramensis Cushman and Todd						x
497. Triloculina enoplostoma Reuss	x					
498. Triloculina inflata d'Orbigny			x			
500. Triloculina trigonula (Lamarck)				x		
504. Turrilina alsatica Andreae			x	x	x	
505. Turrilina andreaei Cushman				x		
506. Uvigerina asperula Czjzek					x	
507. Uvigerina cichai Reiser						x
509. Uvigerina hantkeni Cushman and Edwards						x
511. Uvigerina cf. jacksonensis Cushman					x	
512. Uvigerina posthantkeni Papp						x

Species	NGB	LRE	WFH	MAI	URG	MOB
513. <i>Uvigerina pygmaea</i> d'Orbigny			x			
514. <i>Uvigerina rudlingensis</i> Papp						x
515. <i>Uvigerina semiornata</i> saprophila Daniels and Spiegler	x					
516. <i>Uvigerinella michelsi</i> Wiesner			x			
518. <i>Vaginulina mexicana</i> Nuttall	x	x				
520. <i>Vaginulinopsis gladius</i> (Philippi)	x	x				x
521. <i>Vaginulinopsis pedum</i> (d'Orbigny)						x
522. <i>Vaginulinopsis pseudodecorata</i> Hagn						x
523. <i>Vaginulinopsis tenuis</i> (Bornemann)						x
524. <i>Valvulina austriaca</i> d'Orbigny			x			
525. <i>Valvulineria complanata</i> (d'Orbigny)						x
526. <i>Valvulineria petrolei</i> (Andreae)				x		x
529. <i>Virgulinella chalkophila</i> (Hagn)						x
530. <i>Virgulinopsis tuberculata</i> (Egger)						x
531. <i>Voorthuysenielladingdenensis</i> Keij	x					
532. <i>Voorthuyseniellaescorneboviensis</i> Keij	x					
533. <i>Voorthuyseniella irregularis</i> Keij	x					
534. <i>Voorthuyseniellapulchra</i> Keij	x					
535. <i>Vulvulina spinosa</i> Cushman						x

Table 5. Distribution of foraminifera - late Chattian

NGB=North German Basin, LRE=Lower Rhine Embayment,
WFH=Wetterau-Frankfurt-Hanau Basin, MAI=Mainz Basin, URG=Upper Rhine Graben,
MOB=Bavarian Molasse Basin

Species	Regions					
	NGB	LRE	WFH	MAI	URG	MOB
1. Alabamina budensis (Hantken)						x
2. Alabamina sp. 1 in Indans (1958)		x				
5. Allomorphina trigona Reuss						x
6. Almaena osnabrugensis (Roemer)						x
7. "Almaena" osnabrugensis (Roemer) "varescornebovensis" (Sigal)						x
9. Ammobaculites sp. in Gebhardt (2003)			x			
10. Ammodiscus cretaceus (Reuss)						x
11. Ammodiscus polygyrus (Reuss)	x					
15. Ammonia propingua (Reuss)						x
16. Ammotium sp. in Gebhardt (2003)			x			
17. Amphicoryna budensis (Hantken)						x
19. Amphimorphina haueriana Neugeboren						x
22. Angulogerina germanica Cushman and Edwards	x		x			
23. Anomalina grosserugosa (Gümbel)					x	
29. Asterigerina gürichi (Franke)	x	x				
32. Asterigerina staeschei Ten Dam and Reinhold		x				
33. Bathysiphon filliformis Sars						x
34. Bitubulogenerinakasselensis (Batjes)	x					
36. Bolivina alzeyensis Mehrnus				x		
37. Bolivina antiqua d'Orbigny				x		x
38. Bolivina cf. antiquaeformis Cicha and Zapletalova				x		
39. Bolivina aquitana Mehrnus			x	x	x	
40. Bolivina beyrichi Reuss		x		x	x	x
41. Bolivina cf. beyrichi bituminosa Spandel				x		
42. Bolivina beyrichi carinata Hantken						x
46. Bolivina crassocostata Mehrnus				x		
47. Bolivina crenulata Cushman				x		x
48. Bolivina curvata Mehrnus				x		
49. Bolivina dilatata Reuss	x	x				
50. Bolivina cf. dilatata brevis Cicha and Zapletalova				x		
51. Bolivina dilatata hyalina Hofmann						x
52. Bolivina elongata Hantken	x		x	x		x
53. Bolivina euzona Hofmann						x
54. Bolivina fastigia Cushman	x	x	x	x		x
55. Bolivina cf. fastigia droogeri Cicha and Zapletalova				x		
56. Bolivina floridanaformis Mehrnus		x				
57. Bolivina gnara Hofmann						x
58. Bolivina grossauheimensis (Wiesner)			x	x	x	
59. Bolivina hebes Macfadyen						x
62. Bolivina korynoides Hofmann						x
63. Bolivina korynoides subtumida Hofmann						x
64. Bolivina liebusi Hofmann						x
66. Bolivina moguntia Bartenstein and Heinemann			x	x	x	
67. Bolivina molassica Hofmann				x		x
68. Bolivina nobilis Hantken						x
70. Bolivina oligocaenica Spandel		x				x
71. Bolivina oligocaenica varica Hofmann				x		x
72. Bolivina osnabrugensis Grossheide and Trunko	x	x				
73. Bolivina plicatella Cushman		x		x		
74. Bolivina plicatella mera Cushman and Ponton				x		
75. Bolivina plicatelliformis Mehrnus		x				
77. Bolivina reticulata Hantken						x
79. Bolivina rothauseni Mehrnus	x	x				
80. Bolivina scitula Hofmann				x		
83. Bolivina sommerbergensis Mehrnus			x	x		
84. Bolivina sonnei Mehrnus	x					
86. Bolivina subalpina Hofmann				x		x
88. Bolivina tereta (Cushman)		x		x		x
89. Bolivina terquemi ostiocarinata Lindenberg		x				
90. Bolivina n.sp. aff. textilarioides Reuss					x	
91. Bolivina trunensis Hofmann				x		x
92. Bolivina versatilis Hofmann						x
96. Bolivina sp. 5 in Mehrnus (1991)			x			
98. Bolivina sp. 7 in Mehrnus (1991)			x			
101. Bolivina sp. 11 in Mehrnus (1993)		x				
102. Bolivina sp. 14 in Mehrnus (1993)		x				
112. Bulimina micra Luczkowska				x		
113. Bulimina striata d'Orbigny						x
116. Buliminella elegantissima (d'Orbigny)			x	x		x
117. Buliminella pulchra (Terquem)			x			
118. Burseolina calabra Seguenza	x					

Species	NGB	LRE	WFH	MAI	URG	MOB
119. Cancris auriculus (Fichtel and Moll)	x	x				x
120. Cancris auriculus primitivus Cushman and Todd	x					
121. Cancris oblongus (Williamson)			x			
122. Cancris subconicus (Terquem)						x
123. Cancris turgidus Cushman and Todd	x	x				
126. Cassidulinita aquaeturris Wiesner				x		
128. Caucasia coprolithoides (Andeae)			x		x	x
129. Caucasia elongata (d'Orbigny)	x	x	x	x	x	
131. Caucasia schischkinskayae (Samoilova)				x		x
132. Ceratobulimina haueri (d'Orbigny)						x
133. Chilostomella ovoidea Reuss						x
134. Chilostomella czizeki Reuss						x
136. Cibicides boueanus (d'Orbigny)	x			x		x
137. Cibicides crassiperforatus Grossheide and Trunko	x					
138. Cibicides dutemplei reussi (Silvestri)	x					
139. Cibicides dutemplei tener Grossheide and Trunko	x					
140. Cibicides dobergensis Grossheide and Trunko	x					
141. Cibicides latumbilicatus latumbilicatus Grossheide and Trunko	x					
142. Cibicides latumbilicatus magnus Grossheide and Trunko	x					
143. Cibicides lobatulus (Walker and Jacob)	x	x	x		x	x
144. Cibicides refulgens de Montfort	x		x			
145. Cibicides roemeri (Reuss)	x					
146. Cibicides telegdii Grossheide and Trunko	x					
147. Cibicides tenellus (Reuss)	x					
151. Cibicoides communis (Roemer)	x					x
152. Cibicoides dutemplei (d'Orbigny)	x					x
153. Cibicoides pseudoungerianus (Cushman)						x
154. Cibicoides ungerianus filicosta (Hagn)						x
155. Cibicoides ungerianus ungerianus (d'Orbigny)						x
156. Cibroelphidium poeyanum (d'Orbigny)			x			
158. Conuspira sp. in Engesser et al. (1993)				x		
163. Cyclamina acutidorsata (Hantken)						x
167. Cycloforina cf. contorta (d'Orbigny)			x			
172. Dentalina capitata (Boll)		x				
174. Dentalina globifera Reuss		x				
175. Dentalina intermittens (Roemer)		x				
177. Dentalina münsteri Reuss		x				
178. Dentalina obliquestriata Reuss		x				
183. ?Dentalina sp. in Gebhardt (2003)			x			
185. Discorbis alteconicus (Pokorny)						x
186. Discorbis floridanus Cushman				x		
187. Discorbis hosiusi Grossheide and Trunko	x					
188. Discorbis orbicularis (Terquem)	x		x			
190. Discorbis patelliformis (Brady)	x					
191. Discorbis rugosa (d'Orbigny)					x	
192. Discorbis subinflata Schwager				x		
193. Discorbis trochus (Roemer)	x	x				x
195. Discorbis sp. C in Doebl et al. (1972)				x		
198. Ehrenbergina variabilis aculeata Spiegler	x					
199. Ehrenbergina variabilis variabilis Trunko	x					
200. Ehrenbergina serrata Reuss	x	x				
201. Elphidiella cryptostoma (Egger)	x					x
203. Elphidiella subcarinata (Egger)						x
204. Elphidiella subnodosum (Roemer)	x	x				
207. Elphidium cf. articulatum (d'Orbigny)				x		
209. Elphidium simplex Cushman				x		
210. Elphidium subnodosum minor Ellermann	x	x				
211. Elphidium sp. 1 in Grossheide and Trunko	x					
212. Elphidium sp. in Gebhardt (2003)				x		
213. Eoepionidella ampliportata Reiser						x
214. Eoepionidella semiplana Wiesner			x			
215. Eoepionidella zinddorfi (Paalzow)			x	x		
216. Epistomina elegans (d'Orbigny)		x	x			
219. Eponides cf. candidulus (Schwager)	x					
221. Eponides crenulatus (Reuss)					x	
224. Eponides stellatus (Reuss)		x				
225. Eponides sp. 2 Grossheide and Trunko	x					
227. Eponides sp. in Gebhardt (2003)			x			
228. Escornebovina orthorapha (Egger)						x
229. Escornebovina trochiformis (Andreae)						x
230. Fissurina kapellensis Spiegler	x					
233. Fissurina obtusa Egger						x
235. Frondicularia cuneata (Roemer)		x				
236. Frondicularia oblonga (Roemer)		x				
237. Frondicularia striata (Roemer)		x				
238. Fursenkoina mustoni (Andreae)						x

Species	NGB	LRE	WFH	MAI	URG	MOB
240. Glabratella miocaenica Schäfer				x		
241. Glabratellina arcuata Seiglie and Bermúdez			x			x
244. Globobulimina bathyalis Reiser						x
246. Globocassidulina crassa (d'Orbigny)	x					x
247. Globocassidulina oblonga (Reuss)		x			x	x
248. Globulina ampulla Jones			x			
249. Globulina gibba fissicostata (Cushman and Ozawa)	x					
250. Globulina gibba d'Orbigny	x					x
252. Globulina gibba tuberculata d'Orbigny	x					
253. Globulina inaequalis Reuss	x					
254. Globulina minuta (Roemer)	x					
257. Glomospira charoides (Jones and Parker)						x
259. Guttulina austriaca d'Orbigny	x					
260. Guttulina communis (d'Orbigny)	x		x			
261. Guttulina ovata (d'Orbigny)			x			
263. Guttulina problema d'Orbigny	x					x
265. Guttulina spicaeformis (Roemer)	x					
266. Guttulina? sp. indet. in Prell-Müssig (1965)					x	
268. Gyroidina brockerti Reiser						x
270. Gyroidina girardana (Reuss)		x				
271. Gyroidina parva Cushman and Renz						x
272. Gyroidina soldanii (d'Orbigny)		x		x	x	x
277. Haplophragmoides latidorsatus (Bornemann)	x					
278. Haplophragmoides suborbicularis (Grzybowski)						x
279. ?Haplophragmoides sp. in Gebhardt (2003)			x			
280. Hoeglundina elegans (d'Orbigny)						x
281. Karreriella chilostoma (Reuss)			x			
284. Karreriella siphonella (Reuss)			x			
288. Lagena hexagona (Williamson)	x					
289. Lagena hystrix Reuss	x					
291. Lagena laevis (Montagu)						x
293. Lagena oxystoma Reuss	x					
294. Lagena striata (d'Orbigny)	x					
295. Lagena sulcata (Walker and Jacob)	x					
297. Lenticulina (Rob.) acosta (Bermudez)			x			
298. Lenticulina (Ast.) arcuata (Philippi)			x			
302. Lenticulina gerlachi (Reuss)						x
303. Lenticulina (Rob.) inornata (d'Orbigny)		x				x
304. Lenticulina (Rob.) intermedia (d'Orbigny)	x					
305. Lenticulina (Rob.) magdeburgica (Philippi)			x			
306. Lenticulina (Rob.) osnabrugensis (Roemer)			x			
308. Lenticulina vortex (Fichtel and Moll)						x
312. ?Lippisina demens (Bik) in Gebhardt (2003)			x			
314. Marginulina hantkeni Bandy						x
317. Martinottiella communis (d'Orbigny)		x				
318. Melonis affine (Reuss)	x	x				
321. ?Miliammina sp. in Gebhardt (2003)			x			
322. Miliolinella cf. subrotunda (Montagu)		x	x	x		
323. Neobulimina cf. angularima Poag				x		
325. Neoeponides schreibersi (d'Orbigny)	x			x		
330. Nodosaria hispida (Soldani)						x
332. Nodosaria ortenburgensis Reiser						x
335. Nodosaria pyrula semirugosa d'Orbigny						x
338. ?Nodosaria sp. in Gebhardt (2003)			x			
339. Nonion depressulum (Walker and Jacob)					x	
340. Nonion elongatum (d'Orbigny)	x					
341. Nonion incrassatum (Fichtel and Moll)					x	
342. Nonion punctatum (d'Orbigny)			x			
346. Nonionella liebusi Hagn						x
347. Nonionella st. odiliae (Andreae)			x			
349. Nonionina boueana d'Orbigny	x	x				
350. Nonionina communis (d'Orbigny)		x	x			x
351. Nonionina nonionelloides (Ten Dam and Reinhold)	x					
354. Nonionina scaphus (Fichtel and Moll)	x					
355. Nuttallides sp. in Reiser (1987)						x
357. Oridorsalis umbonatus (Reuss)		x				
359. Palmula obliqua (Roemer)		x				
360. Palmula oblonga (Roemer)	x	x				
362. Pararotalia canui rhenana (Ellermann)			x			
363. Pararotalia fallax (Steuer)	x					
365. Patellina corrugata Williamson			x			
367. Planorbulina mediterraneanensis d'Orbigny			x	x		
368. Planularia auricula Roemer	x					
370. Planularia moravica (Karrer)						x
371. Planularia trinae Bermudez		x				
374. Planulina osnabrugensis (Roemer)		x				

Species	NGB	LRE	WFH	MAI	URG	MOB
376. Plectofrondiculariaseminuda (Reuss)	x					
383. "Polymorphina" n.gen.? n.sp.? in Prell-Müssig (1965)					x	
384. Praeglobobuliminapyrula (d'Orbigny)						x
385. Praeglobobuliminaspinescens (Brady)						x
386. Protelphidium decoratum (Cushman and McGlamery)			x			
387. Protelphidium granosum (d'Orbigny)	x	x	x			
389. Protelphidium krejcigrafi Wiesner			x			
390. Protelphidium roemeri (Cushman)	x	x				
395. Pullenia bulloides (d'Orbigny)	x	x				x
398. Pullenia quinqueloba (Reuss)		x				x
399. Pullenia sphaeroides d'Orbigny		x				
402. Pyrgo obesa (Reuss)	x					
403. Pyrulina cylindroides d'Orbigny	x					
404. Pyrulina fusiformis (Roemer)	x					x
406. Quinqueloculina akneriana d'Orbigny	x		x	x		
409. Quinqueloculina cf. bosciiana d'Orbigny			x	x		
410. Quinqueloculina contorta d'Orbigny			x			
412. Quinqueloculina impressa Reuss		x				
415. Quinqueloculina laevigata d'Orbigny			x			
419. Quinqueloculina oblonga Reuss	x	x				
423. Quinqueloculina cf. seminuda Reuss		x				
424. Quinqueloculina seminula (Linne)				x	x	
426. Quinqueloculina speciosa Reuss		x				
428. Quinqueloculina sp. in Prell-Müssig (1965)					x	
432. Reussella spinulosa (Reuss)						x
434. Robertina declivis (Reuss)		x				
435. Robulus cf. depauperatus (Reuss)						x
436. Rosalina bahamaensis Todd and Low			x			
437. Rosalina bradyi (Cushman)	x		x			
438. Rosalina globularis (d'Orbigny)		x				
439. Rosalina cf. mitchelli Carter				x		
444. Rotalia trochus ssp. 1 in Grossheide and Trunko	x					
445. Rotalia trochus ssp. 2 in Grossheide and Trunko	x					
446. Saccamina? sp. in Prell-Müssig (1965)					x	
447. ?Saccamina sp. in Gebhardt (2003)			x			
448. Saracenaria arcuata (d'Orbigny)						x
449. Saracenaria magna Spiegler	x					
451. Sigmolinita tenuis (Czjzek)						x
454. Sigmomorphina regularis (Roemer)	x	x				
455. Sigmomorphina semitecta varians (Terquem)			x			
460. Siphonina reticulata (Czjzek)						x
462. Sphaeroidina bulloides d'Orbigny		x				
463. Sphaeroidina variabilis Reuss		x				
466. Spiroplectaminacarinata (d'Orbigny)	x	x				x
469. Stainforthia acuta (d'Orbigny)						x
470. Stainforthia schreibersiana (Czjzek)	x	x	x			
471. Stilostomella adolphina (d'Orbigny)						x
472. Stilostomella consobrina (d'Orbigny)						x
474. Stilostomella emaciata (Reuss)						x
477. Stilostomella longiscata (d'Orbigny)						x
478. Stilostomella perscripta (Egger)						x
481. Svratkina perlata (Andreae)	x					
482. Textularia agglutinans d'Orbigny						x
485. Textularia cognata (Reuss)		x				
488. Textularia mayeriana d'Orbigny	x					
489. Textularia sagittula Defrance		x				
490. Tolympamina schaudinni Rhumbler					x	
491. Trifarina angulosa (Williamson)						x
492. Trifarina bradyi Cushman						x
493. Trifarina globosa (Stolz)						x
494. Trifarina gracilis (Reuss)						x
498. Triloculina inflata d'Orbigny		x				
499. "Triloculina subrotundata (Montagu)" in Grossheide und Trunko	x					
500. Triloculina trigonula (Lamarck)	x	x				
501. Triloculina sp. B in Doebl et al. (1972)				x		
502. Trochammina cf. globigeriniformis (Parker and Jones)			x			
503. Trochammina sp. in Gebhardt (2003)			x			
512. Uvigerina posthantkeni Papp						x
514. Uvigerina rudlingensis Papp						x
515. Uvigerina semiornata saphrophila Daniels and Spiegler	x					
516. Uvigerinella michelsi Wiesner			x	x		
517. Vaginulina cf. deprofunda Cushman	x					
519. Vaginulinopsis crista Spiegler	x					
520. Vaginulinopsis gladius (Philippi)		x				
522. Vaginulinopsis pseudodecorata Hagn						x
525. Valvulineria complanata (d'Orbigny)		x				x
526. Valvulineria petrolei (Andreae)						x

Species	NGB	LRE	WFH	MAI	URG	MOB
527. <i>Virgulina pertusa</i> Reuss		x				
529. <i>Virgulinema chalkophila</i> (Hagn)						x
530. <i>Virgulinoopsis tuberculata</i> (Egger)						x
531. <i>Voorthuysenielladingdenensis</i> Keij	x					
532. <i>Voorthuyseniellaescorneboviensis</i> Keij	x					
533. <i>Voorthuyseniellairregularis</i> Keij	x					
534. <i>Voorthuyseniellapulchra</i> Keij	x					

Table 6. Distribution of foraminifera - Aquitanian

NGB=North German Basin, WFH=Wetterau-Frankfurt-Hanau Basin

MAI=Mainz Basin, URG=Upper Rhine Graben, MOB=Bavarian Molasse Basin

Species	Regions				
	NGB	WFH	MAI	URG	MOB
6. Almaena osnabrugensis(Roemer)					x
9. Ammobaculites sp. in Gebhardt (2003)		x			
17. Amphicoryna budensis(Hantken)					x
18. Amphicoryna imperfectecostata(Silvestri)					x
29. Astigerina gürichi(Franke)	x				
32. Astigerina staeschei(Ten Dam and Reinhold)	x				
37. Bolivina antiqua(d'Orbigny)	x			x	x
39. Bolivina aquitana(Mehrnusch)			x		
40. Bolivina beyrichi(Reuss)				x	x
42. Bolivina beyrichicarinata Hantken					x
45. Bolivina budensis (Hantken)					x
47. Bolivina crenulata(Cushman)			x		x
48. Bolivina curvata Mehrnusch			x		
49. Bolivina dilatata Reuss			x	x	
51. Bolivina dilatata hyalina(Hofmann)					x
52. Bolivina elongata(Hantken)	x	x			x
53. Bolivina euzona Hofmann					x
54. Bolivina fastigia(Cushman)					x
57. Bolivina gnara Hofmann					x
58. Bolivina grossaheimensis(Wiesner)	x				
59. Bolivina hebes Macfadyen					x
62. Bolivina korynoides(Hofmann)					x
63. Bolivina korynoides subtumida(Hofmann)					x
64. Bolivina liebusi(Hofmann)					x
66. Bolivina moguntiac(Bartenstein and Heinemann)	x	x	x		
67. Bolivina molassica(Hofmann)					x
70. Bolivina oligocaenica(Spandel)					x
74. Bolivina plicatella mera(Cushman and Ponton)			x		
76. Bolivina punctata d'Orbigny				x	
77. Bolivina reticulata(Hantken)					x
80. Bolivina scitula(Hofmann)			x		
86. Bolivina subalpina(Hofmann)					x
90. Bolivina n. sp. aff. textilarioides Reuss				x	
91. Bolivina trunensis(Hofmann)	x				x
92. Bolivina versatilis(Hofmann)					x
94. Bolivina sp. 3 in Mehrnusch (1991)				x	
95. Bolivina sp. 4 in Mehrnusch (1991)				x	
97. Bolivina sp. 6 in Mehrnusch (1991)				x	
98. Bolivina sp. 7 in Mehrnusch (1991)				x	
99. Bolivina sp. 8 in Mehrnusch (1991)				x	
103. Bolivina sp. indet. in Paul (1938)				x	
109. Bulimina arndti(Hagn)					x
110. Bulimina elegans d'Orbigny				x	
112. Bulimina micra Luczkowska			x		
114. Bulimina sp. indet. in Paul (1938)				x	
115. Bulimina sp. in Prell-Müssig (1965)				x	
116. Buliminella elegantissima(d'Orbigny)			x		
117. Buliminella pulchra(Terquem)	x				
122. Cancris subconicus(Terquem)					x
126. Cassidulinita aquaeturri(Wiesner)	x	x			
128. Caucasina coprolithoides(Andeae)		x		x	x
129. Caucasina elongata (d'Orbigny)	x	x	x	x	
132. Ceratobulimina haueri(d'Orbigny)	x				
136. Cibicides boueanus(d'Orbigny)	x				
143. Cibicides lobatulus(Walker and Jacob)	x				
144. Cibicides refulgens de Montfort			x		
149. Cibicides sp. in Prell-Müssig (1965)				x	
156. Cibroelphidium poeyanum(d'Orbigny)		x			
158. Conuspira sp. in Engesser et al. (1993)			x		
159. Coryphostoma sinuosa(Cushman)	x				
161. Coscinodiscus sp. in Gramann (1989)	x				
166. Cyclammina praecancellata(Oloshinova)					x
168. Cyclogyra sp. in Krause (1991)			x		
176. Dentalina konincki(Reuss)	x				
179. Dentalina soluta Reuss	x				
192. Discorbis subinflata(Schwager)			x		
194. Discorbis turbo (d'Orbigny)				x	
195. Discorbis sp. C in Doebl et al. (1972)			x		
198. Ehrenbergina variabilis aculeata(Spiegler)	x				
199. Ehrenbergina variabilis variabilis(Erunko)	x				
200. Ehrenbergina serrata(Reuss)	x				
201. Elphidiella cryptostoma(Egger)					x

Species	NGB	WFH	MAI	URG	MOB
203. Elphidiella subcarinata(Egger)					x
207. Elphidium cf. articulatum (d'Orbigny)			x		
212. Elphidium sp. In Gebhardt (2003)		x	x		
215. Eoeponidella zinndorfi(Paalzow)		x	x		
238. Fursenkoina mustoni(Andreae)					x
240. Glabratella miocaenicaSchäfer			x		
258. Glomospira sp. indet. in Prell-Müssig (1965)				x	
269. Gyroidina eggeri Wenger					x
273. Gyroidina sp. in Prell-Müssig (1965)				x	
311. Lippsina demens (Bik)		x	x		
317. Martinottiella communis(d'Orbigny)	x				
323. Neobulimina cf. angularima Poag			x		
325. Neoeponides schreibers(d'Orbigny)			x		
342. Nonion punctatum (d'Orbigny)		x			
345. Nonion sp. in Prell-Müssig (1965)				x	
346. Nonionella liebusiHagn					x
370. Planularia moravica(Karrer)					x
375. Plectofrondicularia digitalis(Neugeboren)					x
385. Protelphidium decoratum(Cushman and McGlamery)		x	x		
386. Protelphidium granosum(d'Orbigny)		x	x		
388. Protelphidium krejci(graflWiesner)		x			
389. Protelphidium roemerii(Cushman)	x				
394. Pullenia bulloides(d'Orbigny)	x				
405. Quinqueloculina akneriana(d'Orbigny)		x	x		
407. Quinqueloculina badensis(d'Orbigny)				x	
408. Quinqueloculina cf. boschiana d'Orbigny			x		
415. Quinqueloculina laevigata(d'Orbigny)		x	x		
418. Quinqueloculina oblonga(Montagu)				x	
421. Quinqueloculina pygmaeaReuss				x	
424. Quinqueloculina seminula(Linné)			x	x	
425. Quinqueloculina sem.var. isabelli d'Orbigny				x	
437. Rosalina bradyi (Cushman)		x			
453. Sigmolopsis colomi(Glaçon and Magné)					x
460. Siphonina reticulata(Czjzek)					x
466. Spiroplectamina carinata(d'Orbigny)	x				
470. Stainforthia schreibersiana(Czjzek)	x			x	
473. Stilostomella danuviensisWenger					x
475. Stilostomella ewaldi(Reuss)	x				
476. Stilostomella hirsuta(d'Orbigny)	x				
492. Trifarina bradyi Cushman	x				
493. Trifarina globosa (Stolz)					x
501. Triloculina sp. B in Doehl et al. (1972)			x		
503. Trochammina sp. in Gebhardt (2003)		x			
504. Turrilina alsaticaAndreae				x	
508. Uvigerina farinosaHantken				x	
510. Uvigerina hemmooriensisDaniels and Spiegler	x				
512. Uvigerina posthantkenPapp					x
516. Uvigerinella michelsWiesner		x			
528. Virgulina sp. indet. in Paul (1938)				x	
529. Virgulinella chalkophila(Hagn)					x
530. Virgulinoopsis tuberculata(Egger)					x