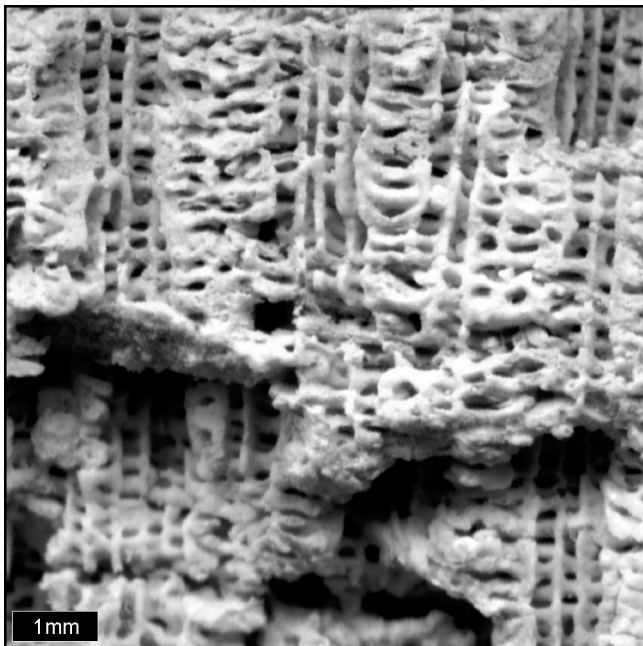


**Fig. 3c.** *Actinohelia elegans* (GOLDFUSS, 1826). Netherlands (Limburg) Maastricht, St. Pietersberg, ENCI Quarry; "Maastricht Fm, Meerssen Mbr", Upper Maastrichtian. DGP 4599. Detail from figure (b).



**Fig. 3d.** *Actinohelia elegans* (GOLDFUSS, 1826). Netherlands (Limburg) Maastricht, St. Pietersberg, ENCI Quarry; "Maastricht Fm, Meerssen Mbr", Upper Maastrichtian. DGP 4599. Longitudinal coral surface.

### *Actinocoenia* nom. obl.

**Author.** D'ORBIGNY, 1849.

**Type species.** *Astrea compressa* MICHELIN, 1847, MT.

**Type(s) of the TS.** MNHN (Paris): M01128\* (LT) - "Marno-calcaires à Gauthiericeras", Upper Coniacian, Les Corbières, Soulatge (Aude, France).

**Position.** uncertain Scleractinia in .

### *Actinoseris*

*Fig. 4*

**Author.** D'ORBIGNY, 1849.

**Type species.** *Actinoseris cenomaniensis* D'ORBIGNY, 1850.

**Type(s) of the TS.** MNHN (Paris): M03501\* (LT) - Middle to Upper Cenomanian, Le Mans (Sarthe, France).

**Diagnosis.** (Based on type(s) of the type species and topotypical material from the type locality). Solitary patellate coral. Calicular outline circular. Calice(s) large (ca. 15mm). Septa compact. Microstructure of septa unknown. QS getting slightly thinner towards the centre. Symmetry of septa radial and regularly hexamerall. Cycles of septa regular. Nine cycles ( $sy=6$ ,  $s=96$ ). Septal cycles (generations) differ in length, almost not in thickness. First three septal cycles reach to the center of the calice, subsequent cycles are shorter. Septa of younger cycles (generations) often and regularly connected to septa of older ones. Septal upper border smooth (probably due to preservation), lateral face with numerous fine thorns, inner margin unknown. Pali or paliform lobes absent. Costae present. Coastae on surface with fine granules. Synapticulae present, medium common. Columa made by a group of isolated granules. Endotheca unknown. Wall present, compact, formation unknown.

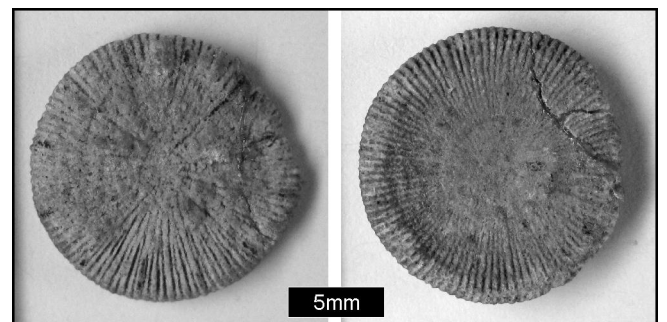
**Relationships.** According to WELLS (1956: 388) a junior synonym of *Cycloseris* MILNE-EDWARDS & HAIME, 1849. Very closely related to *Microseris*.

**Position.** Asteroseriidae.

**Abundance.** Rare.

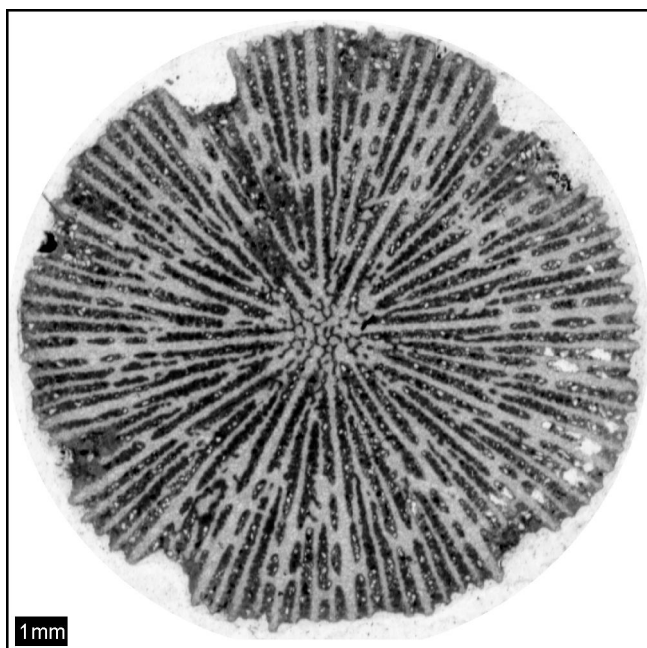
**Refs.** ALLOITEAU (1957: 339).

**Range.** (BAR) CEN (MAA).



**Fig. 4a.** *Actinoseris cenomaniensis* D'ORBIGNY, 1850. Lectotype. France (Sarthe) Le Mans; Middle to

Upper Cenomanian (Rhotomagense-Geslinianum zone). MNHN M03501. Transverse coral surface.



**Fig. 4b.** *Actinoseris cenomaniensis* D'ORBIGNY, 1850. France (Sarthe) Le Mans; Middle to Upper Cenomanian (Rhotomagense-Geslinianum zone). MNHN nn 16267. Transverse thin section.

### *Actinosmilia*

(jun. obj. syn. of *Lophosmilia* MILNE-EDWARDS & HAIME, 1848)

**Author.** D'ORBIGNY, 1849.

**Type species.** *Caryophyllia cenomana* MICHELIN, 1846, MT.

### *Adelastrea*

(sen. obj. syn. of *Brachycoenia* BEAUVAIS, 1982)

**Author.** REUSS, 1854.

**Type species.** *Adelastrea leptophylla* REUSS, 1854, MT.

**Type(s) of the TS.** NHMW (Wien): 1864/0040/1400\* (ST[s]) - "Gosau Gp", Upper Turonian to Campanian, Gosau basin (Oberösterreich, Austria).

**Relationships.** According to WELLS (1956) a junior synonym of *Synastrea* MILNE-EDWARDS & HAIME, 1848. *Brachycoenia* is an objective junior senior.

**Position.** uncertain Scleractinia in .

**Abundance.** Very rare. Monospecific.

**Refs.** BEAUVAIS (1982: II, 47).

**Range.** U.TUR - SAN.

LO: The material from the Late Campanian/Maastrichtian of the Oman described by

BARON-SZABO (2000) shows pennulae and therefore belongs to *Brachyseris*.

### *Adelocoenia*

(= *Cryptocoenia* D'ORBIGNY, 1849)

**Author.** D'ORBIGNY, 1849.

**Type species.** *Astrea castellum* MICHELIN, 1844, MT.

**Remarks on the type of the TS.** The type of *Astrea castellum* MICHELIN is probably lost according to ALLOITEAU (1948: 702). For his consideration, he used a specimen taken from the collection D'ORBIGNY (MNHN, Coll. D'ORBIGNY, 4452, now A09413) which he did not consider to be a neotype ("qui peut être considéré comme topotype") and which is not registered as such a neotype in the MNHN collection database. ALLOITEAU (1948) did not establish a neotype.

A neotype of *Astrea castellum* was first mentioned by RONIEWICZ (1966: 180): the specimen 4470-B of the Coll. D'ORBIGNY was supposed to have been selected by ALLOITEAU as a neotype, but it is not identical with the specimen used as a topotype by ALLOITEAU. RONIEWICZ (l.c., text fig. 7) provided a description and illustration of the specimen 4470-B but considered the genus as being synonymous with *Pseudocoenia*.

BARON-SZABO & BERTLING 1995 believed that "RONIEWICZ (1966: 180 ff.) found a great discrepancy in the neotype of ALLOITEAU and the original illustration by MICHELIN", which is simply not true, moreover, she accepted this specimen as the neotype.

According to the IRZN, neither the specimen 4452 (A09413) nor specimen 4470-B is a valid neotype. A neotype fixed by ALLOITEAU (1948) would have been acceptable, because the fixation would have served to solve a complex taxonomical problem, to clarify the problem of numerous stylinid genera without columella. A revising work on the generic level has a higher priority than on the specific level and therefore this fixation would have been convincing.

This does not concern the fixation of the neotype by RONIEWICZ (1966). Here the fixation is only used to distinguish two genera which is no complex taxonomical problem. Therefore, there exists no type of the species *Astrea castellum* MICHELIN and therefore the genus has an unknown status.

**Position.** Cyathophoridae.

**Refs.** BARON-SZABO & STEUBER (1996: 7); ALLOITEAU (1948: 701); LÖSER (1994: 10); LÖSER (1998); BARON-SZABO & BERTLING (1996);