

CALIZAS: RESTOS FÓSILES

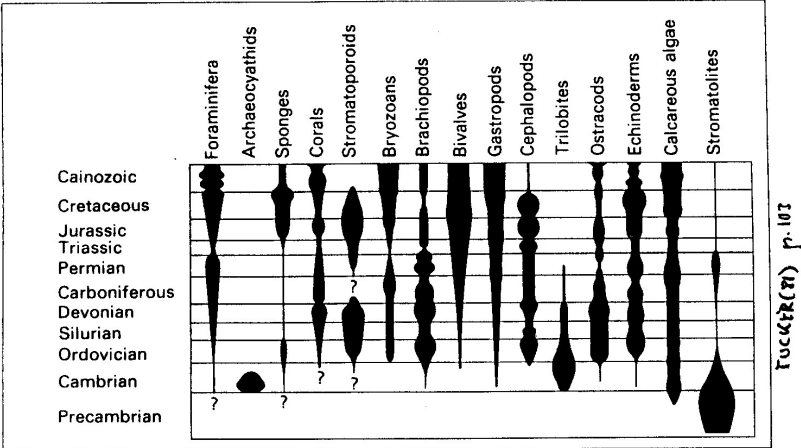


Fig. 4.7 Age range and generalized taxonomic diversity of principal carbonate-secreting organisms (modified from Horowitz & Potter (1971)).

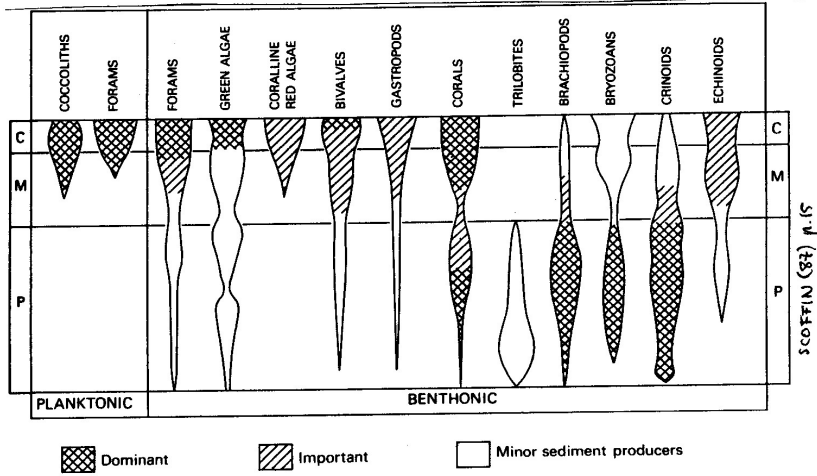


Figure 4.1 Diversity, abundance and relative importance of various calcareous marine organisms as sediment producers. After Wilkinson (1979).

SKELETAL COMPOSITIONS

TAXON	ARAG.	CALCITE										BOTH ARAGONITE AND CALCITE
		%Mg										
		0	5	10	15	20	25	30	35			
CALCAREOUS ALGAE:												
RED				X					X			
GREEN	X											
COCCOLITHS				X								
FORAMINIFERA:												
BENTHONIC	O			X		X			--X			
PLANKTONIC				X-X								
SPONGES:	O			X		X						
COELENTERATES:												
STROMATOPORIDS (A)	X			X?								
MILLEPORIDS	X											
RUGOSE (A)				X---								
TABULATE (A)				X?								
SCLERACTINIAN	X											
ALCYONARIAN	O			X		X						
BRYOZOANS:	O			X-X							O	
BRACHIOPODS:				X-X								
MOLLUSKS:												
CHITONS	X											
PELECYPODS	X			X-X							X	
GASTROPODS	X			X-X							X	
PTEROPODS	X											
CEPHALOPODS (MOST)	X											
BELEMNOIDS & APTYCHI (A)				X								
ANNELIDS (SERPULIDS):	X			X-X							X	
ARTHROPODS:												
DECAPODS				X-X								
OSTRACODES				X-X								
BARNACLES				X-X								
TRILOBITES (A)				X								
ECHINODERMS:				X		X						

X Common

O Rare

(A) Not based on modern forms

X Common O Rare (A) Not based on modern forms

ESTIMACIÓN VISUAL DE FÓSILES

ALGAS

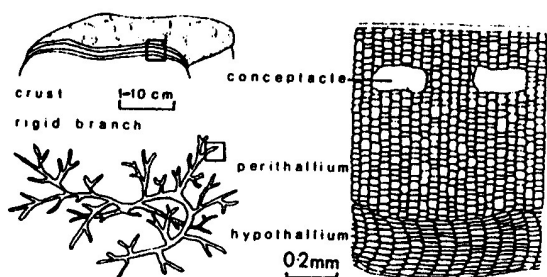


Figure 4.48 Skeletal structure of crustose coralline (melo-besoid) algae. After Wray, in Haq and Boersma (1978)

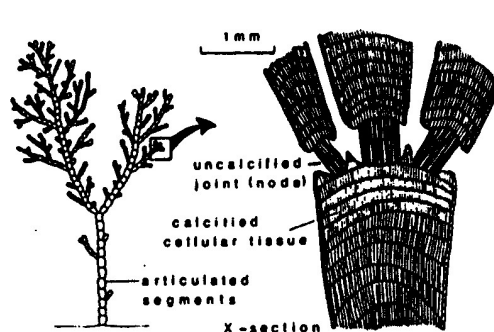


Figure 4.57 Skeletal structure of articulated coralline algae. After Wray, in Haq and Boersma (1978)

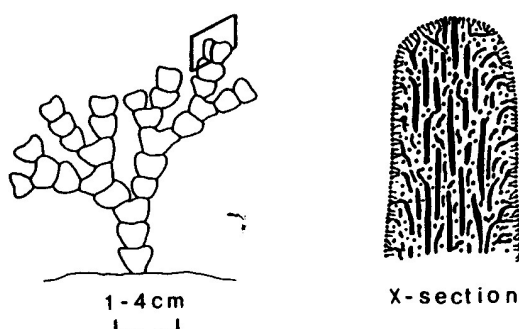


Figure 4.61 Codiacean algal skeletal structure. After Wray, in Haq and Boersma (1978)

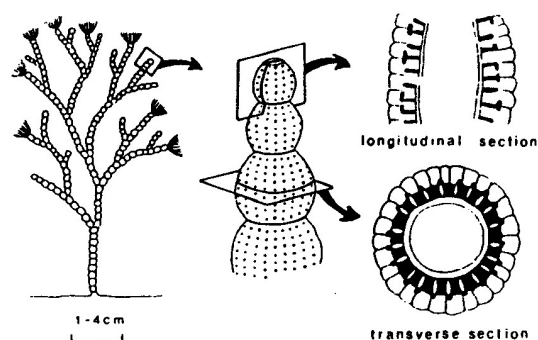
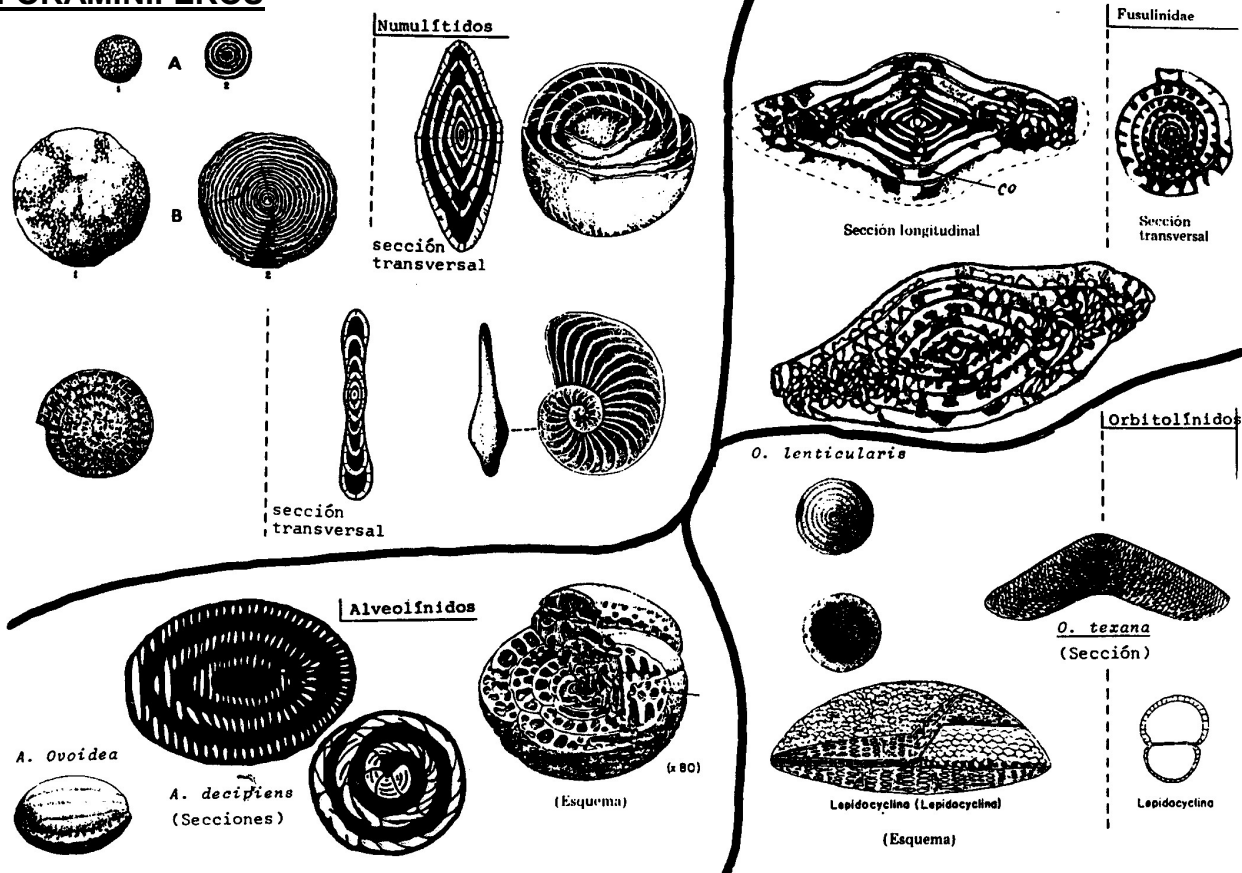


Figure 4.64 Dasycladacean algal skeletal structure. After Wray, in Haq and Boersma (1978)

FORAMINÍFEROS



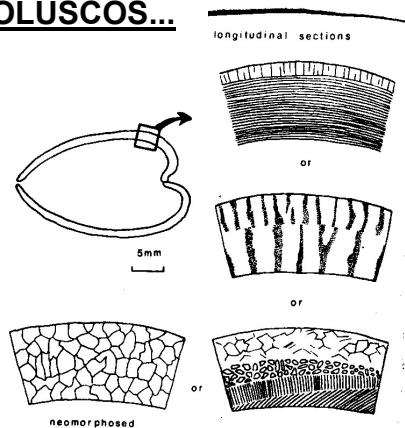
MOLUSCOS...

Figure 4.10 Bivalve skeletal structure

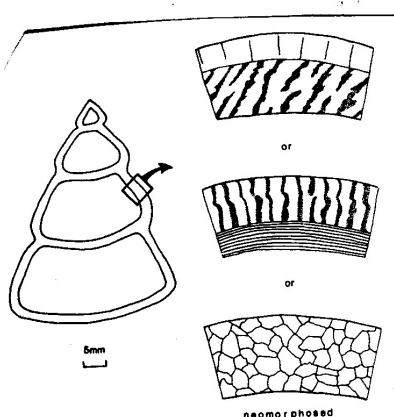


Figure 4.13 Gastropod skeletal structure

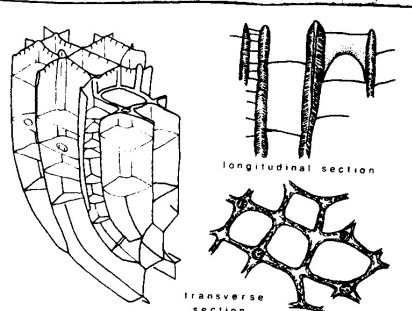


Figure 4.21 Skeletal structure of bryozoan colony

Rugose coral

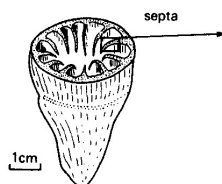


Figure 4.28 Coral skeletal structure showing the arrangement of fibres into trabeculae. After Majewski (1969)

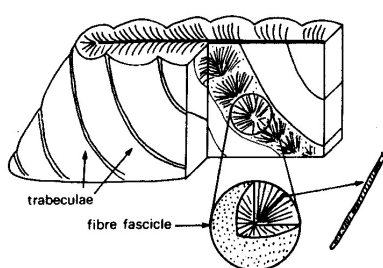


Figure 4.22 Trepostomata bryozoan skeletal structure

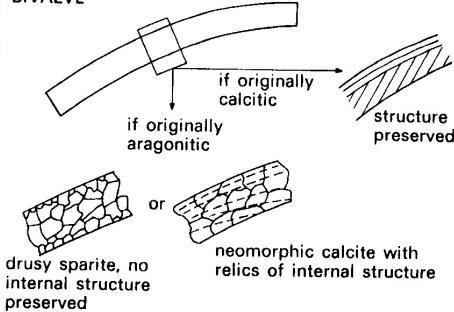
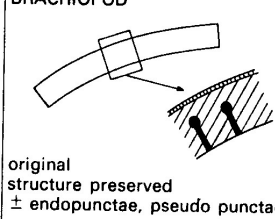
BIVALVE**BRACHIOPOD**

Figure 4.17 Brachiopod skeletal structure

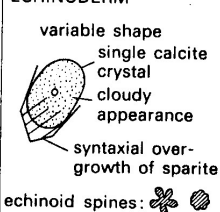
ECHINODERM

Figure 4.32 Sponge spicules. Scale (left) 100 µm; (right) 25 µm

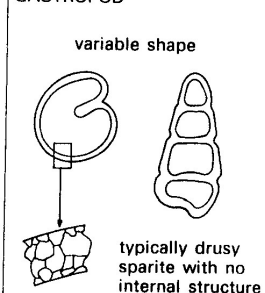
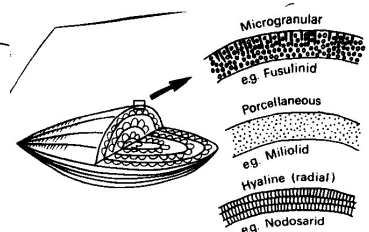
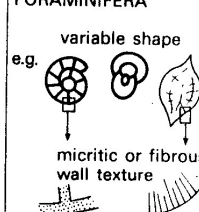
GASTROPOD**FORAMINIFERA**

Figure 4.2 Varieties of wall structure of skeletal foraminifera

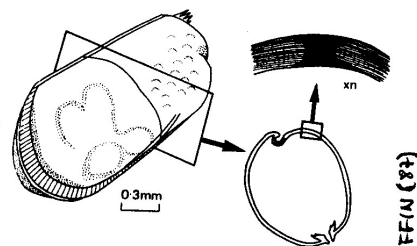


Figure 4.38 Ostracod skeletal structure

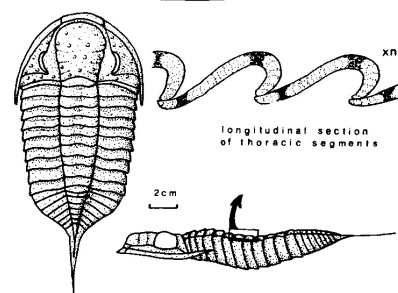
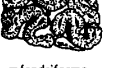
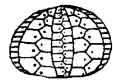
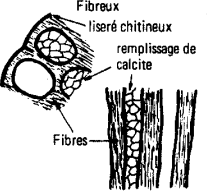


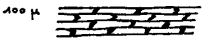
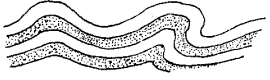
Figure 4.40 Trilobite skeletal structure

TUCKER (91)

SCOFFIN (87)

	NATURE DU TEST	COUPES PARTICULIERES (microscopie)	
ANNELIDES	Test marqué par la succession de 2 types de couches : - calcite fine sombre - calcite claire fibreuse		
LAMELLIBRANCHES	Test épais formé de plusieurs couches :  - Couche externe Prismatique (calcite) - Couche interne Lamelleuse (aragonite)	Coupes tangentielles dans la couche externe  Structure normale  individualité optique de chaque prisme Structure celluloprismatique structure cellulaire conservée mais mosaïque de calcite à l'intérieur	Les prismes d'Inocerame peuvent se détacher et être trouvés dans la roche
GASTEROPODES	Test calcaire, mince, noir, perforé (aragonite)  Schéma d'une structure à 3 couches	Coupes  transversale  longitudinale	Diagnostic de structure souvent difficile à établir car la calcitisation l'estompe
CEPHALOPODES	Test mince, calcaire, non perforé (aragonite) 	 Section oblique de rostre de Belemnite (L. polarisée) prismes de calcite radiale	Ne se distingue de certains gastéropodes involutes que par la présence de cloisons

	FORME GENERALE - STRUCTURE	NATURE DU TEST	COUPES PARTICULIERES (Microscopie)	
CORALUX	 simples  Rameux  compact  méandrique	A l'origine aragonite fibreuse, mais le plus souvent remplacée par calcite : - soit fibreuse - soit finement granule - soit en cristaux identiques à ceux du remplissage des vides.	 Tissus de Stromatopore  Coupe transversale dans un Polypier	
ECHINODERMES	 Echinoïde (schéma d'un oursin régulier)  Crinoïde	- Monocrystal de calcite - Réseau cellulaire fin (L.N.) souvent ferruginisé	 Section de piquant d'échinoderme  Coupe d'article de crinoïde	Le réseau cellulaire fin se rencontre aussi dans les algues corallinacées mais celles-ci ne sont pas monocrystallines
BRYOZOAIRES	 Exemple de 2 types d'assemblage de zoécies 	 Fibreux liseré chitineux remplissage de calcite Fibres	 Coupes longitudinales de 2 types de Bryozoaires 	

ALGUES	
DASYCLADACEES (algues vertes)	 longitudinale  tangentielle  transverses 
CODIACEES (algues vertes)	 Coupe  coupe transversale La région centrale comporte de gros tubes longitudinaux ramifiés. La zone subcorticale est percée de trous, aboutissant en surface des rameaux orthogonaux ("faux tissu") (Halimeda - Microcodium)
SOLENOPORES (algues rouges)	 100 µ files cellulaires du tissu
CORALLINACEES (algues rouges)	  Melobesiées - Lithotamniées
CYANOPHYCEES (algues bleues)	 Collenia (Stromatolites) apparence macroscopique  Colonies de tubes de Girvanelles Le diamètre des tubes est de 6 à 20 microns

BERTRAND (69)