

Phylum Cnidaria

Class **Hydrozoa** (Prec-R) - enteron unpartitioned; mainly soft bodied polyps, polyp colonies or medusae; few with calcareous skeletons.

Class **Scyphozoa** (Prec-R) - enteron with four simple partitions; mainly soft bodied medusae.

Class **Anthozoa** (Prec-R) - enteron partitioned in series or cycles of 2, 4, 6 and 8, some with paired mesenteries; polypoid only; many with skeletons. Only subclass with important fossil orders listed.

Subclass **Zoantharia** (Camb-R) - enteron partitioned by paired mesenteries inserted serially or cyclically in 2, 4 or 6 positions; anemones and corals (only latter listed below).

Order **Rugosa** (m.Ord-P) - solitary and colonial corals, usually with epitheca; major septa inserted serially in quadrants; minor septa often present; calcitic skeleton.

Suborder **Cystiphyllina** (m.Ord-m.Dev) - septa weak or absent; horizontal tissue either absent, simple tabulae or poorly differentiated vesicular tissue.

Suborder **Stauriina** (m.Ord-P) - septa generally well developed; tabulae and dissepiments usually clearly distinguished.

Order **Tabulata** (l.Ord-P) - colonial corals, usually with epitheca; septa often spinose or lacking; many with intercorallite communication; calcitic skeleton.

Suborder **Lichenariina** (Ord) - cerioid, fasciculate, incommunicate.

Suborder **Sarcinulida** (m.Ord-m.Dev) - cerioid, coenenchymal, thick trabecular walls, communicate.

Suborder **Auloporina** (m.Ord-P) - chains and bushes of small, conical to cylindrical corallites.

Suborder **Syringoporina** (m.Ord-P) - fasciculate, communicate.

Suborder **Favositina** (m.Ord-P) - cerioid, massive or branching, communicate.

Suborder **Halysitina** (m.Ord-u.Sil) - cateniform, incommunicate.

Suborder **Heliolitina** (m.Ord-m.Dev) - coenenchymal incommunicate.

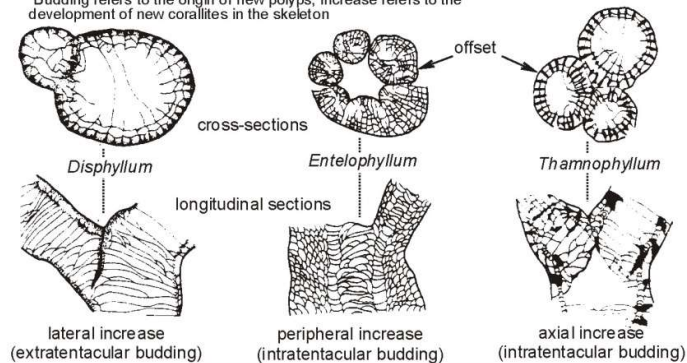
Order **Heterocorallia** (Dev-Carb) - solitary corals; septa inserted by repeated division of peripheral ends of single protoseptum; calcitic skeleton; rare.

Order **Scleractinia** (m.Trias-R) - solitary and colonial corals; usually lacking an epitheca; septa inserted cyclically in sextants; aragonitic skeleton.

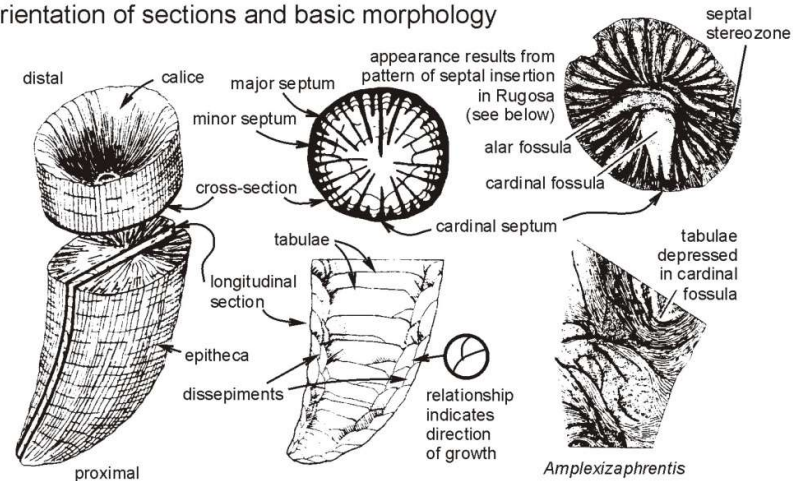
Subdivisions currently under review.

Increase (and probable budding type in polyp)

Budding refers to the origin of new polyps; increase refers to the development of new corallites in the skeleton

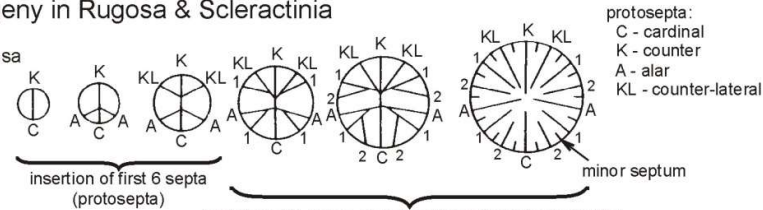


Orientation of sections and basic morphology

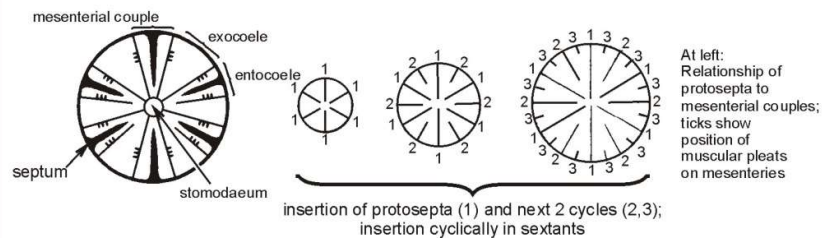


Ontogeny in Rugosa & Scleractinia

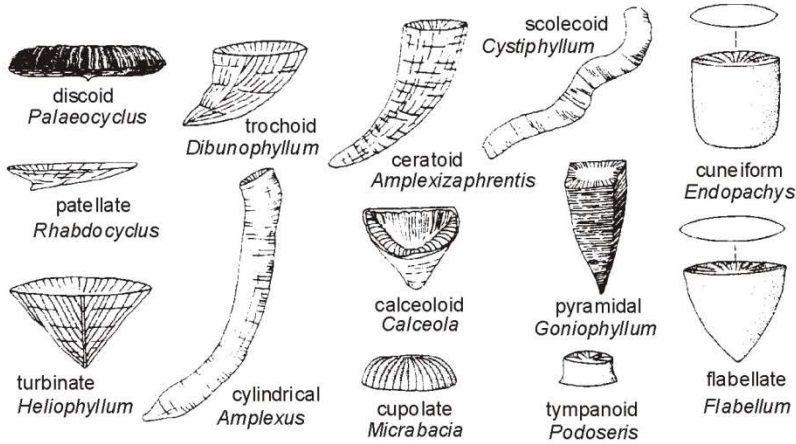
A. Rugosa



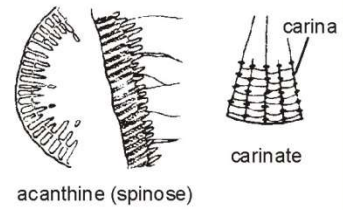
B. Scleractinia



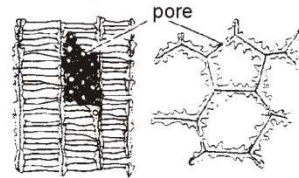
Solitary coral growth forms



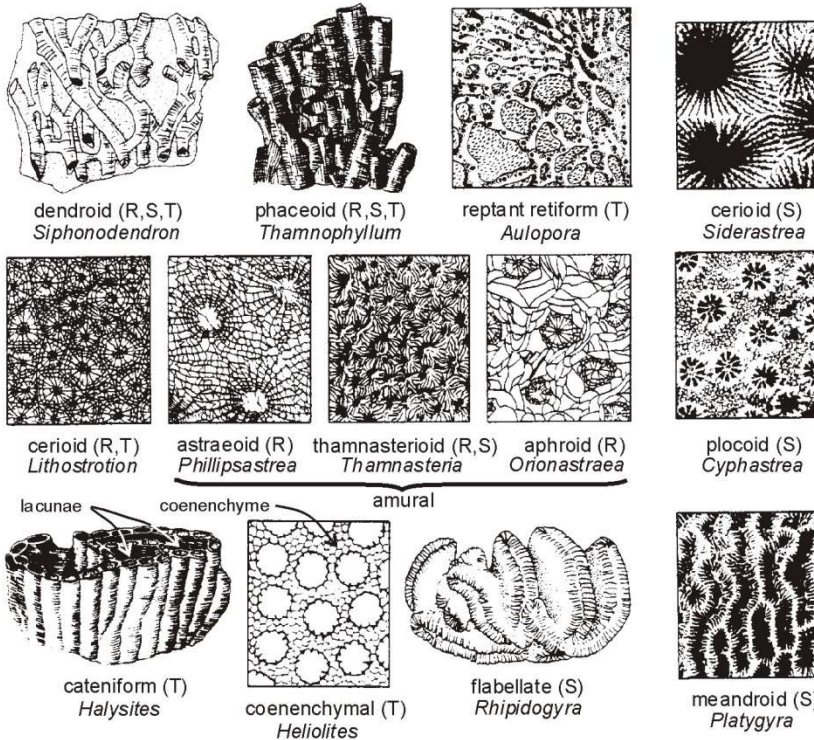
Septa



Mural pores



Structural organisation of colonial corals

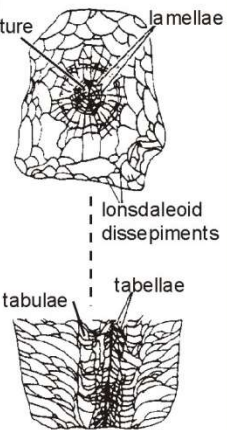


Dissepiments and tabulae



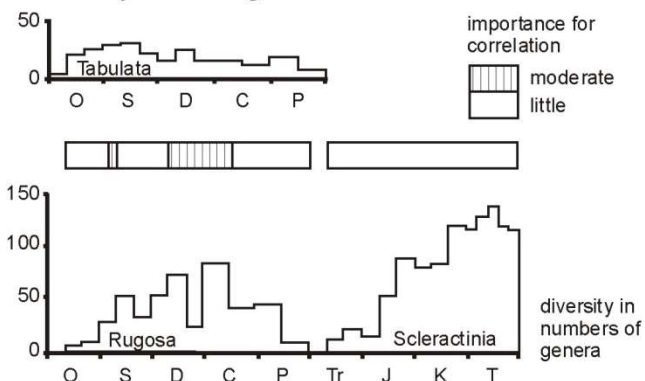
infundibuliform tabulae
Syringopora

axial structure

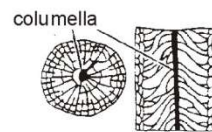


Actinocyathus

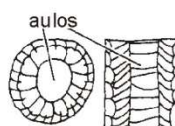
Diversity and range



Axial structures (and opposite)



Siphonodendron



Aulina