DEEP-SEA SPONGES OF THE MEDITERRANEAN SEA

SPONGES (PHYLUM PORIFERA)

Sponges are among the most ancient animals to have appeared in the world's oceans. Currently, more than 8,000 species are recognized but over 25,000 are estimated to exist. They are distributed at all depths and latitudes, and in some areas, highly structured habitats known as sponges grounds are grouped around particular locations. Sponges are found in the Mediterranean Sea, especially in the deep-sea areas.

SIMILAR LOOKING GROUPS (ALGAE, ANTHOZOANS, BRYOZOANS, ASCIDIANS)

The only exception are the camouflaged sponges (family Cladorhizidae) that feed directly on small crustaceans. The sponge skeleton is made up of mineral siliceous (or calcareous) spicules and/or organic (spongocollagen) elements, although some few species lack a skeleton altogether. The surface of the sponge holds numerous innumerable and exhalant pores, known as ostia and oscules, through which the water enters and exits the sponge. Spicule identification is primarily based on the analyses of the skeleton, alongside with external characteristics. Sponges are divided into four classes, of which two, the Demospongiae and Hexactinellidae, are the most common and important in the deep-sea.

GLASS SPONGES – CLASS HEXACTINELLIDA

Hexactinellids, also known as glass sponges, constitute a predominantly deep-sea group, typically occurring at bathyal and abyssal depths (i.e., below 200 m). They are exclusively marine and comprise approximately 675 species worldwide. Their morphology usually varies between vase, blade, cup or tube-shaped and both stalked and non-stalked forms exist. They attach to hard bottom communities such as coral or other sponge skeletons.

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