

SKELTON IN SPONGES

The skeleton is one of the most important features of sponges. It provides mechanical support and protection to the sponge body. It is also most useful diagnostic characteristic for classifying the sponges. It consists of spicules of spongin or both.

Spicules or sclerites are crystalline structures and consists of rays or spines radiating from a point. They may be calcareous or silicious or both. Both have a core of organic material around which is deposited either calcium carbonate or silica. Traces of other material like manganese, zinc, copper etc. also occur.

The spicules are classified into large macrocleres and smaller microcleres according to their size.

MACROCLERES:

The macrocleres makeup the supporting frame work of the sponge. whereas the microcleres occur throughout the mesenchyme. According to the shape, the macrocleres can be divided into the following types:

1) MONAXONS:

They are simple rod like or needle like spicules, formed by growth in one or both direction along a single axis. When growth has occurred in one

direction only, the spicule is called monaxonal monaxon or style. Styles are typically rounded at one end and pointed at other end. Style in which the broad end is knobbed are called tylostyle, those covered with horny processes are called acanthostyle.

