

- a. Hexasterophora &
- b. Amphidiscophora

ORDER (a): HEXASTEROPHORA

- spicules are "Hexasters", i.e., "start like in shape & 6-axes branching into rays at their extremity.
- amphidiscs - nt.

Ex - Euplectella (Venus' Flower Basket)

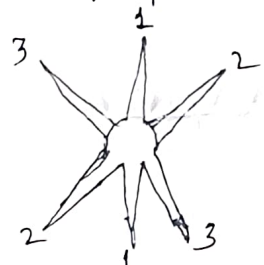


Fig: Hexasters

ORDER (b): AMPHIDISCOPHORA:

- as the name implies, "spicules are amphidiscs", i.e., "a convex disc & backwardsly directed. ~~no~~ teeth at both ends
- hexasters - nt.

Ex - Hyalonema (Glass rope sponge).

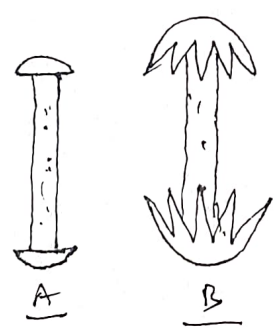


FIG: Amphidiscs

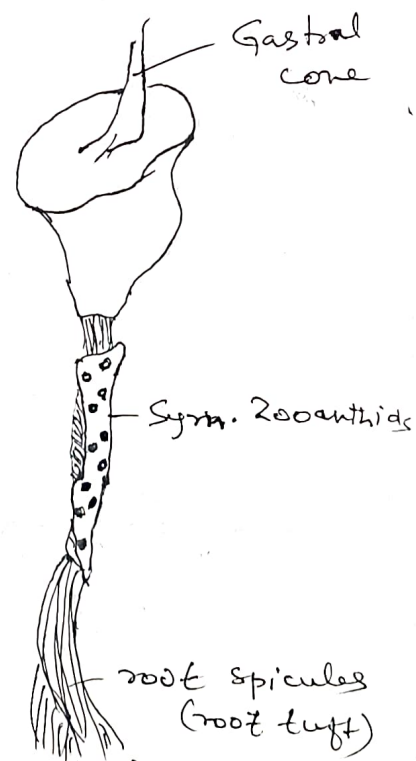


Fig: Hyalonema

CLASS: DEMOSPONGIA

A/O, HYMAN (1942) & ROTHSCILD (1969),
this class includes 3 - sub-classes: →

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A. Tetractinellida

B. Monaxonida &

C. Keratosa

① Sub-Class: Tetractinellida:

- Siliceous spicules are either -nt or 4-rayed (~~tetraaxon~~).

- Spongin fibres - nt.

It includes 3-orders:-

Order (i): Myxospongia:

- characterised by total -nt of skeleton.

- Very simple in str.

Ex - Oscarella

Order (ii): Carnosa

- leuconoid str.

- spicules ent triaenes triaenes & all in equal size.

Ex - Chondrilla

Order (iii): Choristida:

- Body in elaborate form

- Both the large (megascleres) & small (microscleres) spicules + nt.

- triaenes + nt.

Ex - Stelletta

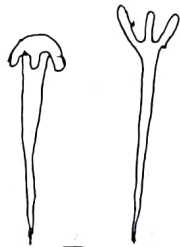


Fig: Triaenes

~~② Sub-Class: Tetractinellida:~~

② Sub-Class: Monaxonida

- skeleton of diactinal monaxon megascleres.

- ent or ent spongin.

It includes 4-orders:-

Order (i): Hadsoniina:

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- Megascleres & tylostyles.
- Microscleres may or may not be +nt.
- Spongin -nt.

Ex - Cliona (Boring sponge), Poterion etc.



Fig: A tylostyle

Order (ii): Halichondrina:

- Megascleres +nt but microscleres -nt.
- +nt of spongin in a little amount.

Ex - Halichondrina.

Order (iii): Poecilosclerina:

- Megascleres usually united by spongin into a regular network.

- Microscleres +nt.

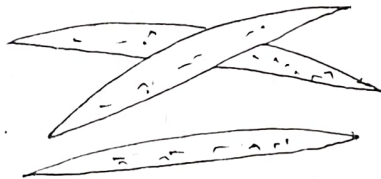
Ex - Myxilla

Order (iv): Haplosclerina:

~~Ex -~~ Megascleres of only one kind, 2-rayed & pointed at both ends, i.e., oxea type.

- microscleres may/may not be +nt.
- Spongin & +nt.

Ex - Chalina, Spongilla (fresh water sponges)



~~Fig: Megascleres~~

Fig: Megascleres (Oxea)

Sub-Class: Keratosa

- includes mainly horny sponges of massive ~~body~~ body.
- & leathery body surface.
- skeleton composed of spongin fibres & not spicules.

Ex - Euspongia (Bath sponges)
Hippospongia (Horse sponges)

CONCLUSION