Ophiothrix (Brittle star)

Classification:

Kingdom: Animalia

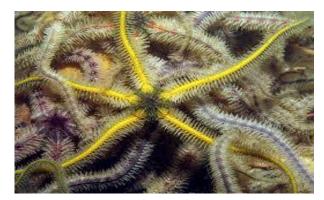
Phylum: Echinodermata

Class : Ophiuroidea

Order: Amphilepidida

Family: Ophiotrichidae

Genus : Ophiothrix



For further details, link

- Ophiothrix is a large and diverse genus of brittle stars (Ophiuroidea) within the phylum Echinodermata, known for their slender, jointed arms radiating from a central disc.
- Brittle stars are named for their ability to break off an arm in order to escape predators; the arm will grow back. They move by articulating their long, flexible arms rather than using tube feet like sea stars.

Characteristics:

- **Morphology:** Ophiothrix brittle stars have a distinct pentagonal disc and long, slender arms. They are known for their diverse color patterns and spiny textures.
- Arms: The arms are long, thin, and segmented, with each segment bearing spines.
- Coloration: Color patterns vary widely within the genus. Some species, like O. fragilis, can be violet, purple, red, yellowish, or pale grey, often with spots. O. angulata is often reddish-orange with a white line along the arms. O. suensoni can be pale mauve, pink, yellow, or red.
- **Size:** The disk diameter can vary, but some species, like Ophiothrix fragilis, can have a disk up to 2 cm in diameter with arms that are five times longer.
- **Spines:** Many Ophiothrix species have prominent spines on their arms and disk, which can be used for defense and attachment.

Habit and Habitat:

- **Feeding:** They are primarily detritivores and suspension feeders, using their arms to capture food particles from the water column or by feeding on organic matter on surfaces.
- **Association with other organisms:** Some Ophiothrix species have symbiotic relationships with other marine organisms, like sponges and corals, often using them as a base for feeding or hiding.
- Oceanic Distribution: Ophiothrix species are found in oceans worldwide, including tropical, subtropical, and even polar regions.
- Specific Habitats: Specific species can be found in diverse habitats, such as coral reefs (O. angulata and O. suensoni), rocky shores (O. fragilis), and sandy bottoms.
- Currents: Ophiothrix species often inhabit areas with strong water currents, which aid in capturing food particles.
- **Reef Ecosystems:** They play an important role in reef ecosystems, contributing to the overall biodiversity and food web.