Marine Fungi

Source: DTE

Marine **fungi,** comprising **5% of ocean biomass,** play a crucial role in ecosystems, thriving in environments ranging from rocky seashores to deep waters.

- **About:** Marine fungi are **microscopic organisms** that live in ocean environments, playing key roles in decomposition, symbiosis, and producing bioactive compounds.
- **Types: Obligate Marine Fungi** (exclusively marine), Facultative Marine Fungi (evolved from terrestrial environments, can survive in marine habitats)..
- **Survival Strategies:** Marine fungi adapt to **feast-famine** conditions by changing cell forms for better resource handling.
    - For example, ***Paradendryphiella salina,*** found on seaweeds, produces enzymes from bacteria to digest its host.
- **Ecological Importance:** Marine fungi are crucial for **nutrient cycling, ecosystem stability**.
    - **Lichens,** which represent a symbiotic relationship (fungi and algae living together), also contribute to marine ecosystems.
- **Fungi:** These **eukaryotic organisms** are **heterotrophs** (consume other plants or animals), functioning as **saprophytes** (feeding on dead and decaying organisms) or **parasites.**
    - Fungi reproduce sexually or asexually via **spores.** **R.H. Whittaker** classified Fungi as a distinct multicellular eukaryotic kingdom.
    - Fungi while beneficial in **medicine (e.g., antibiotics),** food, and industry, they can also cause diseases, and produce **toxic mycotoxins.**

Read more: Funga Taxonomic Kingdom

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