

Aquatic microbiology

- Aquatic microbiology is the science that deals with microscopic living organisms in fresh or salt water systems. While aquatic microbiology can encompass all microorganisms , including microscopic plants and animals, it more commonly refers to the study of bacteria, viruses, and fungi and their relation to other organisms in the aquatic environment .

Aquatic microorganism

- Aquatic algae
- Bacteria
- viruses
- fungi
- Protozoa etc.
- These are widely distributed throughout aquatic environments. They can be found in fresh water rivers, lakes, and streams, in the surface waters and sediments of the world's oceans, and even in hot springs. They have even been found supporting diverse communities at hydrothermal vents in the depths of the oceans.

- Aquatic microorganisms can be found living in environments where there are extremes in other physical parameters such as:
 - Pressure
 - Sunlight
 - Organic substances
 - Dissolved gases
 - And water clarity.

Important of aquatic microbiology

- Aquatic microorganisms and their activities are of great importance in many ways:
 1. They may affect the health of humans and other animal life.
 2. They occupy a key position in the food chain by providing rich nourishment for the next higher level of aquatic life.
 3. They are instrumental in the chain of biochemical reactions which accomplish recycling of elements, e.g., in mineralization.
 4. Aquatic microbiology, which in previous decades was studied by a relatively few microbiologists, has emerged as one of the more important areas of applied Microbiology.

Distribution of aquatic microorganisms in aquatic environments

- Microorganisms in the aquatic environment may occur at all depths ranging from the surface region to the very bottom of ocean trenches.
- The top "layers," especially the surface film, and the bottom sediments harbor the higher concentrations of microorganisms, particularly in deep waters.