

Spoilage of fish

Spoilage is deterioration of fish so that it becomes unfit for human consumption.

Spoilage of fish can be studied as follow:

1. Microbial spoilage
2. Biochemical spoilage
3. Physiological spoilage

Microbial Spoilage

- A large number of microbes are present on the body surface and in the digestive tract of fish.
- On the death of fish, they attach the body tissues and cells and multiply rapidly.
- The quality of fish is affected by the action of growing microbes and enzymes.

Biochemical Spoilage

- Fresh fish is odorless but when biochemical spoilage occurs, it gives off odour.
- Off-odors develop due to production of compound trimethylamine.
- Oxidative rancidity may also produce off-odor (oxidation of unsaturated fatty acids).

Physiological Spoilage

- Fish always struggle to escape when caught.
- As a result of this excessive activity, all the glycogen get converted into glucose and used up.
- So there is no glycogen available for the conversion into lactic acid and pH doesn't decrease.
- As bacterial growth retards only at low pH, so spoilage will accelerate.