

Preventing Off-Flavour Tilapia

Off-flavour in cultured tilapia is caused by micro-organisms in the water, such as algae and bacteria, which causes the fish to have an earthy-musty, metallic, sweet-sweet or muddy taste. It is important to note that not all micro-organisms in the water produce off-flavour as phytoplankton and zooplankton are important part of the fishes' diet. The development of these undesirable micro-organisms such as geosmin is usually caused by excess feed on the bottom of the pond and not by the fish ingesting mud. These off-flavour producing micro-organisms are usually ingested or absorbed through the gill or skin of the fish.

It is of paramount importance that farmers engage in taste testing before their fish are marketed. This is ideally done by cooking fish in a micro-wave oven for about five minutes without seasoning.



Preventative Measures

Off-flavour taste in cultured Tilapia can easily be prevented by good cultural practices, which include the following:

1. Feed fish properly. Feed should be evenly distributed around the perimeter of the pond.
2. Maintain good water quality.
3. Farmers should ensure that fishes are not over- fed resulting in the formation of excess feed in the bottom of the pond thus producing these off- flavour micro- organisms.
4. Adequate exchange of water through the cultured system to remove unused nutrients and minimize the growth of off-flavour causing micro-organisms

Corrective Measures

- Remove fishes from off- flavour ponds and place in clean ponds or tanks for 5-14 days. Fish should be fed to prevent weight loss.
- Add salt to the flowing water in the tank containing the off-flavoured fishes. A salinity of 10 ppt. is sufficient to destroy the micro- organisms yet harmless to the fishes

NB. It is of paramount importance that farmers engage in taste testing before their fish are marketed. This is ideally done by cooking in a microwave oven for about five minutes without seasoning.

For more information, contact the

Fisheries Division
AQUACULTURE BRANCH
Twickenham Park
Spanish Town
Tel: 984-9343 or 984-9444
Fax: 984-5194
Email: aquabranh@micaf.gov.jm