

# BACTERIAL DISEASES OF FISH

PREPARED BY

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# Bacterial Diseases

- Bacteria are responsible for many fatal diseases in culture fishes like furunculosis, columnaris, fin and tail disease, dropsy, cotton mouth disease, tuberculosis etc

# Furunculosis

This disease is caused by *Aeromonas salmonicida* sp. Bacterium. Fishes living in dirty waters containing large amount of decaying matter, gets this disease. The symptoms are- boils on the skin, puss filled skin sores, bloody fins, blood discharge from the lesions, septicemia (bacteria reach blood), kidney necrosis etc. Fishes die in large numbers.

**Treatment:** Infected fishes should be removed and kept separately. In the initial stages of infection, dipping the fish in 0.5% copper sulphate or potassium permanganate for 2 minuits will be useful. Antibiotics like chloromycetin and tetracyclin are most effective at a dose of 5mg/100gms fish body weight.



# Columnaris/Reddish Bloch disease

Columnaris is caused by *Chondrococcus columnaris*. This disease is usually associated with low oxygen levels in the water. Initial symptoms are appearance of grayish patches on the body. These patches spread and become sores. The sores ooze blood. The gills are destroyed.

**Treatment:** Addition of 1ppm copper sulphate in the pond effectively control this disease. Tetramycin can be administered orally through food at the rate of 3mg/100gms of bodyweight of fish.

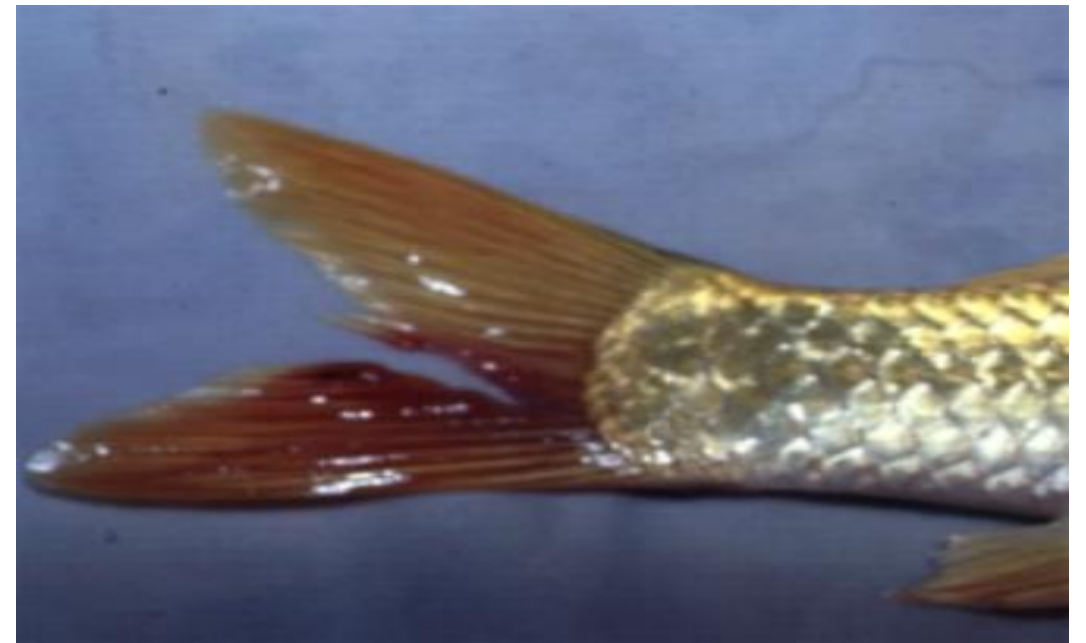




# Fin or Tail rot disease

This disease is caused by *Aeromonas liquefaciens* bacteria. Fin and tail rot is associated with poor sanitary conditions in fish ponds. In this disease the fin rays become brittle first and later break leading to complete destruction of the fins. The infection may also spread to body surface.

**Treatments:** In the initial stages of infection bathing the infected fishes in 0.5% copper sulfate solution for 2 minutes will cure the disease. In the advanced stages, Bath in a solution containing chloromycetin at 60mg per liter for 6 days is known to be an effective cure for this disease.



# Dropsy

It is caused by *Pseudomonas punctata*. It is characterized by yellow coloured fluid inside the body cavity. Scales and eyes protrude out. The intestines, liver, kidney become swollen. This is a fatal disease in culture systems.

**Treatment:** The infected fishes can be cured by giving 2 mins 0.5% potassium permanganate dipbath. Streptomycin and oxytetracyclin antibiotics give good results.



# Cotton Mouth Disease

This disease is caused by a filamentous bacteria called Fexibacteria. The main symptom of this disease is growth of white thread like structures around the mouth.

**Treatment:** This disease can be cured with antibiotics like chloramphenicol for 2-5 days at the rate of 100ppm in the pond water.





# Tuberculosis

It is caused by Mycobacterium which is difficult to diagnose without pathological studies. The symptoms are ulcers on body and on internal organs. Loss of weight.

**Treatment:** This disease can be cured by dipping the infected fish in 2% copper sulphate solution for 2 minutes for 5 days. Antibiotics are not successful.

