

## **Practical ichthyology**

### **Fish fungus diseases**

The most common fungus disease in fish are:

- 1- saprolegniasis
- 2- branchiomycosis
- 3- ichthyophoniasis
- 4- aspergillomycosis

#### **SAPROLEGNIASIS**

Saprolegniasis is a fungal disease of fish and fish eggs most commonly caused by the Saprolegnia species called "water molds." They are common in fresh or brackish water.

Saprolegnia is a genus of freshwater mould often called a "cotton mould" because of the characteristic white or grey, fibrous patches it forms.

The disease will attack an existing injury on the fish and can spread to healthy tissue. Poor water quality (for example, water with low circulation, low dissolved oxygen, or high ammonia) and high organic loads, including the presence of dead eggs, are often associated with Saprolegnia infections.

The most common presentation of water mold infection as relatively superficial, cotton like growth on the skin or gills. Such lesions usually begin as small, focal infections that can

rapidly spread over the surface of the body. New lesions are white and over time will become red, brown, or green.



## 2-Branchiomycosis

This disease is commonly referred to as "gill rot" due to massive necrosis of gills *Branchiomycosis* spp.

The disease occurs most commonly in overcrowded ponds with abundant organic matter and high ammonia levels. Usually warm water temperatures (20-25°C) bring about the disease. transmission: probably horizontal from other necrotic gills (spores).





### (3) Ichthyophthiriasis

usually seen as thick, fungus-like resting spores endemic in most feral cold water marine fish populations disease.

### 4-Aspergillomycosis

associated with genus, *Aspergillus* (those of you who have had Aquatic Nutrition. the *Aspergilli* are ubiquitous and typically involved in decay processes byproducts of degradation of feeds = aflatoxicosis Only recently discovered as a pathogen of farmed fish.

Pathology: abdominal distension, darkening of color, lethargy; copious amounts of fluid, hyphae in liver, spleen, kidney, intestine, swim bladder.

### Treatment

- 1- bath of NaCl for 5 minutes.
- 2-malacite green 100 ml/litter.
- 3- Copper sulfate.
- 4- formaline.