

## عنوان مقاله:

Alteration in haemato-biochemical profiles of rainbow trout *Oncorhynchus mykiss* affected by *Saprolegnia* spp- A potential constraint for culture of trout in Kashmir Himalaya

## محل انتشار:

مجله علوم شیلات ایران، دوره 14، شماره 4 (سال: 1394)

تعداد صفحات اصل مقاله: 15

## نویسندگان:

A.F Shah

F.A Bhat

A.S Bhat

M.H Balkhi

A Abubakr

I Ahmad

## خلاصه مقاله:

Haemato-biochemical studies in rainbow trout infected with *Saprolegnia* were carried out under temperate climatic conditions of Kashmir valley to find out the variation in blood parameters. The trial was carried out on ۴۰۵ cultured rainbow trout fish ranging in length from ۴۷.۸ to ۶۹.۸ cm and in weight from ۱۳۰۰ to ۱۹۲۰ g. The same experiment was carried out on ۲,۷۰۰۰۰.۰۰ trout fish eggs from November ۲۰۱۰ to April ۲۰۱۱ at a trout fish farm, in Kokernag, India, on account of the susceptibility of eggs to fungal infestation. The infected fish showed signs of lethargy, irritation, loss of appetite, haemorrhages at the base of fins and deep wounds at the sites of severe infection associated with cottony wool like tufts on both the dorsal and ventral sides of the body. The fungi were isolated at high percentages from skin followed by fins and mouth. The haemato-biochemical profile was studied in forty (۴۰) normal and forty (۴۰) infected fish. The haemoglobin content, total erythrocyte count, packed cell volume, lymphocyte percentage, total serum protein, albumin and globulin levels decreased significantly ( $p < 0.05$ ) in the *Saprolegnia* infected fish as compared to that in the control. The white blood cells, erythrocyte sedimentation rate, mean corpuscular haemoglobin, mean cell volume, heterophill percentage and total serum glucose showed significant increase in the infected fish irrespective of sex. The infection was more pronounced during the winter season (Temp.  $< 10^{\circ}\text{C}$ ) as compared to that in summer (temp.  $< 17^{\circ}\text{C}$ ). Fungi induced stress leads to haemostatic imbalances in fish reflected in the haemato-biochemical profile and can thus be used as an indicator for *Saprolegnia* induced infection.

## کلمات کلیدی:

.Saprolegniasis, Fungal infection, Coldwater fish culture, Fish eggs

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1401894>

