

ISBN: 978-620-2-67120-0

## Chapter 10

### **Comparative Analysis of Haematological Parameters of *Labeo rohita* and *Channa striata* Fishes from Different Habitat**

**Pradip Kumar Prusty**, Sushree Elora, Gagan Kumar Panigrahi

School of Applied Sciences, **Centurion University of Technology and Management, Odisha, India.**

#### **Abstract**

Alive fresh water fishes *Labeorohita* and *Channa striata* were collected from river and pond respectively and their haematological parameters were studied thoroughly. The aim of this study was to compare the haematological profile of two different fish species from two different habitat and to establish the similarities and differences between these species. The blood parameters viz., RBC and WBC count, Hb, PCV, MCV, MCH and MCHC values were analysed. These results clearly shows that the haematological parameters showed slight fluctuation between the two species. RBC and PCV results from the experiment were higher in *Channa striata* as compared to *Labeorohita*.

**Keywords:** River water and pond water fishes, haematological parameters, statistical analysis.

#### **Introduction**

Aquaculture is one of the fastest growing food producing sectors which play an important role in providing nutrition over the year (Rani et al., 2016). From the ancient period fish is used to be considered as a source of nutritious food because it is rich in protein, vitamins, essential amino acids and fatty acids. Omega three fatty acids, which is abundantly found in fishes that help in prevention of coronary heart diseases and other cardiovascular diseases. Fish culture is increasing to compensate the shortage of animal protein all over the world (Leaf et al., 2008). The Fish will be badly affected under intensive culture condition. These awaited drawbacks enforced the fish pathologist to seek for other alternatives. In fish culture immune stimulants are used to prevent the diseases and could solve the problems of massive antibiotics use (Ortuno, et al., 2002). These awaited drawbacks enforced the fish pathologist to seek for other alternatives. The use of immune stimulants in fish culture for the prevention of diseases in a