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Chapter 9

Biochemical Assessment of the *Piaractus Brachypomus*

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Abstract

Fish are gill-bearing aquatic craniate animals that lack limbs with digits. Fishes are found in almost all aquatic environments, whether it be hot springs, the Atlantic, high elevated lakes (17,000 feet), under the sea (23,000 feet), salty and fresh water. Fishes are the sources of higher amount of protein and other organic products. Hence, they are widely being accepted as a good source of protein and other essential elements for the maintenance of the healthy body. Fish are of great interest to humans for many reasons. Most important and obvious reason of fishes being of high interest is their role as a moderate but important part of the world's food supply. The present study deals with the analysis of the biochemical content of the alien Red-bellied pacu. The fish was collected from the local fish market near the Mahanadi River bank, Cuttack. The measurements such as the length and weight were estimated in the CUTM Laboratory. The species being an exotic species the proximate biochemical parameters such as protein, carbohydrate and minerals content were estimated which will be of greater use in the species selection for fish farming in Odisha.

Keywords: Fish, Red-bellied Pacu, Biochemical analysis, Protein, Carbohydrate, Minerals

Introduction

Odisha is one of the coastal states lying in the eastern margin of the Indian Peninsula that shares 480 Km of the coast line with the Bay of Bengal (Beura, 2009). Fish is a high protein food consumed by the large percentage of population because of its high palatability, low cholesterol and tender flesh. It is the cheapest source of animal protein and other vital nutrients required in the human diet particularly in the low and middle grade income groups, because of which it is referred to as poor man's protein. According to the statistics unveiled by Ministry of Animal Husbandry, Dairying and Fisheries inland captive