



# STUDY OF THE PROTEIN EFFICIENCY RATIOS (PER) AND GROSS FOOD CONVERSION EFFICIENCIES (GFCE) OF *OREOCHROMIS NILOTICUS* FED WITH AND WITHOUT PROBIOTICS FORMULATED FEED

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**Abstract:** In this study, the Protein Efficiency Ratio (PER) and Gross Food Conversion Ratio (GFCE) of freshwater fish fed on a diet supplemented with probiotics were evaluated. Such fish appeared to be healthier than the control set of fishes when given a diet supplemented with probiotics formulated feed as compared to those not receiving without probiotics formulated feed. Fishes that consumed probiotics formulated feed exhibited higher Protein Efficiency Ratios and Gross Food Conversion efficiencies than without probiotics formulated feed.

**Index Terms -** Probiotics, PER, GFCE

## INTRODUCTION

Aquaculture is currently the world's fastest growing animal production sector, aided by increased production of formulated supplemental feeds for aquatic animals (National Research Council 1993). Furthermore, in aquaculture, as in other animal production systems, the primary goal of feed formulation is to ensure good fish flesh and to prevent environmental deterioration, both of which are related to nutrition (M.P. Bhilave 2016).

In monoculture systems, the adding price of feed is considered as one of the most important factors that limit profitability, substantially caused due to the high cost of fishmeal used as a principal source of protein (Usmani *et al.*, 1997).

