

ABSTRACT

One of the agricultural sectors providing the most animal feeds in the world is aquaculture. Yeast is incorporated into aqua feed to increase fish productivity which boosts fish farming output. The goal of current research was to evaluate the impact of yeast-based protein source on the growth rate and digestive enzyme status of *Pangasius pangasius*. Hundred catfish were divided into four tanks with 25 fish fry each. The basal diet was served to the control group. Nupro was used as a protein source. 25% Nupro, 50% Nupro, and 65% Nupro were fed to the experimental groups of 25%, 50% and 65%. For 75 days, each group was provided food at a rate of 4% of its body weight three times every day. Results indicated that there was significant increase ($p < 0.05$) in the growth performance among all experimental groups. The 50% group showed highest weight gain % (5.15 ± 0.27 g) and feed efficiency ratio (0.56 ± 0.04). However, 25% group showed highest specific growth rate (6.95 ± 0.39 g). There was no statistically significant difference ($p > 0.05$) in Amylase and Protease enzyme activity across all groups. However, the highest levels of amylase and protease were seen in 25% and 65% groups, respectively. The activity of the lipase enzyme was significantly increased ($p < 0.05$) among all groups. Among all the experimental groups, Lipase enzyme activity was noticeably highest in the 50% group. It can be concluded that adding Nupro to fish diet can enhance *Pangasius pangasius's* growth and digestive enzymes status.

Keywords: Yeast, *Pangasius* catfish, Nupro, Growth performance, Digestive enzymes