

## Abstract

In aquaculture protein source for the diets of aqua species is most important. Day by day previously used plant-based protein sources are less available due to economic issues. So, a less expensive protein source is necessary which effects positively to aquatic animals. In this study, DDGS is used in place of soybean meal partially. An experiment was designed to evaluate the effect of the replacement of soybean meal with dried distillers grain with solubles (DDGS) on the oxidative parameter of cat fish (*Pangasius pangasius*). 64 fishes were divided into 8 glass aquariums 8 in each aquarium. Four isonitrogenous| and isocaloric diets were prepared with different percentages of DDGS at control (0%), 25%, 50%, and 75% were provided to fish at 4% body weight for 75 days. There were no significant differences ( $p > 0.05$ ) observed in antioxidant enzymes (SOD, GST, GSH, CAT) of liver and kidney. There was little increase in the hepatocytes of 0% and 25% dietary groups. However, no noticeable differences were present among all other groups (50%, 75%) of hepatocytes. It can be concluded that adding DDGS to the fish diet showed no negative effect on *Pangasius pangasius* growth and antioxidant enzyme status.