ABSTRACT

UPMAL DESWIRA. The use of Maize Destillers Dried Grain with Solubles (DDGS) as source of vegetable protein feed for giant gouramy Osphronemus gouramy Lac. Juvenile. Guided by MIA SETIAWATI and MUHAMMAD AGUS SUPRAYUDI.

This experiment was conducted to examine the effect of the use of DDGS as a source of vegetable protein on the growth of the giant gouramy O. gouramy Lac. juvenile. Feed is devided into two, the feed for testing of digestibility and testing of growth. The feed for testing of digestibility are References Diet (100% control of feed) and Test Diet (70% of control feed and 30% of DDGS), while the feed for testing of growth are 0%, 10%, 20%, and 30% DDGS. The fish were feed the experimental diet at satiation. Giant gouramy be used in this research have weight 4.72±0.78 g. Culture of fish conducted during 40 days in the aquarium sized 50x40x35 cm. Test of growth from DDGS up to 30% showed no significant difference (P>0.05) in daily growth rate (2.82 to 2.91%), survival rate (100%), feed consumptions (139.07-159.22 g), and feed efficiency (64.52-71.05%). Whereas, protein retention (16.29 to 25.02%), lipid retention (31.36 to 53.52%) are significantly different with control. It is conclude that the use of DDGS as the source of vegetable protein with various concentration on the feed of giant gouramy until 30% didn’t affect the daily growth rate, survival rate, and feed consumptions. The highest feed efficiency of DDGS treatment is 20%.

Key word: DDGS, vegetable protein, feed, giant gouramy