ABSTRACT

ARIE KURNIANTO. Growth Performance of Red Tilapia with Distillers Dried Grain with Solubles Feed at Cirata Lake, West Java. Supervised by MUHAMMAD AGUS SUPRAYUDI dan DEDY JANIHARTO.

Protein is prime source energy of fish. Protein source in fish provided from fish flour and soy bean meal, both of them still import and make the price of feed being expensive. Hence, it is necessary to find an alternative protein source to decrease feed price. The purpose this research was to observe growth of red tilapia with DDGS feed. This research was performed in March till July 2011 at Cirata lake, West Java and Fish Nutrition Laboratory, Department of Aquaculture, Fisheries and Marine Science Faculty, Bogor Agricultural University. The feed treatment were 30% DDGS (feed A), 40% DDGS (feed B), 50% DDGS (feed C), 0% DDGS (Grade A control feed), and 0% DDGS (Grade B control feed). The proximate analysis showed the testing protein feed were ranging 27.87-28.67%. The best result from testing was 50% DDGS feed with 278 g mean weight of fish, survival rate was 93.67 ± 2.51%, specific growth rate was 1.80 ± 0.04%, total consumption feed 36157 ± 4305 g, protein retention was 33.87 ± 2.69%, fat retention was 84.06 ± 2.50%, feed conversion ratio was 1.58 ± 0.02, and feed efficiency was 63.12 ± 0.86%. Finally, it can be concluded that the used 50% DDGS to feed can give good growth for fish.

Keyword: red tilapia, protein source, DDGS, growth