ABSTRACT

Milkfish (*Chanos chanos*) is one of the cultivated fish that many people like, making it one of the leading marine cultivation commodities in Indonesia. Feed is one of the factors that determines the success of a cultivation business. The high price of feed is an obstacle in the cultivation process, therefore materials are needed that can reduce production costs but do not reduce the nutrient content of the feed. One material that is cheap and easy to obtain is cassava peel waste *(Manihot esculenta* Cranz). This research aims to determine the best combination of the effect of substituting cassava peel flour with fish meal in feed formulation on the growth of milkfish (*Chanos chanos*) seeds. This research was carried out from 15 August 2023 to 14 September 2023 at the Hatchery and Cultivation Technology Laboratory, Aquaculture Study Program, Faculty of Agriculture, Malikussaleh University. This research used a non-factorial Completely Randomized Design (CRD) consisting of 4 treatments and 3 replications, namely treatment A: feed using commercial feed (control), treatment B: 8% using cassava peel flour, treatment C: 10% using cassava peel flour and treatment D: 12% using cassava peel flour. Based on the F test analysis (ANOVA), the results showed a significant effect on length increase, weight gain, FCR, fish response, color and aroma of feed with a F_{count} value > F_{table}, and a Sig value < 0.05 then the results have no real effect on survival rates with a F_{count} value < F_{table} and a Sig value > 0.05. Apart from that, descriptive analysis was also carried out on proximate observations of protein and crude fiber. The best research results were in treatment B 8% cassava skin flour, the lowest results were in treatment D 12% cassava skin flour.

Keywords: Milkfish, survival rate, fish feed, growth, cassava peel flour