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The effect of Application of corn and wheat processed wastes in grower diet of rainbow trout (Oncorhynchus mykiss)

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In this research the effect of application of wheat and corn wastes on Growth performance of rainbow trout were studied by replacement of these wastes in Grower diet (as carbohydrate source). Seven experimental diets were prepared. Amount of carbohydrate materials replacement in diets were: 1) 100% bread wastes 2) 50% bread wastes 3) 100% macaroni wastes 4) 50% macaroni wastes 5) 100% equal mix of bread and macaroni wastes and 6) 50% equal mix of bread and macaroni wastes. Blank diet was prepared the same as commercial common diet. 21 polyethylene net cages (1×1×1 m)were used for fish holding in a cement pond (30×3×1.2 m) with 10 l/s water flow. Each cage was stoked by 20 fish with initial average weight of 85±5 g. Farming period was 75 days and in this period water temperature, pH and dissolved oxygen were 14.5±2°c, 7.5-8.8 and 6.8-8.5 mg/l, respectively. The best growth performance belonged to diet 4, although the results of 2, 4, 6 diets, and blank had no differentce(p<0.05). In term of economic value of used diets, diets 2 had the best result. Carcass analysis in the end of experiment showed that carcass protein and ash contents in all of treatment were same but lipid content in 1, 3 and 5 treatments were lower than other treatments (p<0.05).

Keywords: Rainbow trout, Bread and macaroni wastes, Growth performance.

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