

**PERFORMANCE AND NUTRIENT UTILIZATION OF  
BRACKISH WATER CATFISH (*CHRYSICHTHYS WALKERI*)  
FED GRADED DIETARY PROTEIN AND CALORIE  
LEVELS INDOOR IN PLASTIC TANKS**

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**ABSTRACT**

A 70 – day growth trial was conducted on the brackish water catfish *Chrysichthys walkeri* (mean weight  $0.68 \pm 0.026\text{g}$ ) in a 3x3 factorial experiment. The protein levels were 36%, 39% and 42% while the calorie levels were 2,800, 3000 and 3200 Kcal Metabolization energy/kg diet making up 9 diets fed to the fish to satiation. At the end of the trail, fish on diet with 3000 kcal ME/kg were best of the nine diets in performance with diet 5 (39% crude protein and 3000Kcal Me/kg) performing significantly better ( $P < 0.05$ ) in mean with 3000 Kcal ME/ka were best of the nine diets in performance with diet weight gain (1.32 g), feed conversion ratio (FCR) (3.79) and specific growth rate (SGR) (1.07% /day). Likewise, nutrient utilization parameters like protein efficiency ratio (PER) and apparent net protein utilization (App-NPU) measured showed similar trend but the highest PER and App-NPU values of 0.69 and 17.89 respectively in diet PC2 (36% crude protein and 3000 Kcal ME) were not significantly better ( $P > 0.05$ ) than 0.68 and 17.60 PER and App-NPU respectively.

**Keywords:** Brackish water, Catfish, Protein, Calorie.