

ABSTRACT

A research was conducted on comparison of feeding African catfish *Clarias gariepinus* between live food (polychaete) and formulated food (starter pellet). The fishes measuring 5.77 ± 0.11 cm in total length were stocked into 9 tanks of 500 l at the rate of 35 fishes/tank.

After 7 weeks of rearing, fish fed diet D3 (polychaete + pellet) measuring 9.68 ± 0.30 cm total length and 6.67 ± 0.43 g weight were the largest than the other diets ($p < 0.05$). Fish fed diet D1 (polychaete) measuring 8.26 ± 0.13 cm total length and 4.16 ± 0.13 g weight were the smallest.

The highest survival rate given by the fish fed diet D3 followed by the fish fed diet D2 and D1 ($p > 0.05$). Fish fed diet D3 gave the highest protein and lipid increment. Fatty acid profile of polychaetes show the highest percentage of poly unsaturated fatty acid especially fatty acid 20:5w3 and 22:6w3.