

The Growth Response of *Clarias gariepinus* Hatchlings to Different Dry Feeds

Ikililu Abdulaheem¹, S. O. Otubusin¹, O. T. Agbebi¹, O. O. Ojofe², Wilfred O. Alegbeleye¹, W. O. Abdul¹,
Khadijat Adeyemi², Samuel S. Ashley-Dejo¹ & Bamidele Nathaniel¹

¹Department of Aquaculture and Fisheries Management, Federal University of Agriculture, Abeokuta, Nigeria

²Department of Animal breeding and Genetics, Federal University of Agriculture, Abeokuta, Nigeria

Correspondence: Ikililu Abdulaheem, Department of Aquaculture and Fisheries Management, Federal University of Agriculture, Abeokuta, Nigeria. Tel: 234-803-564-3663. E-mail: aikililu@yahoo.com

Received: May 21, 2012 Accepted: June 6, 2012 Online Published: August 24, 2012

doi: 10.5539/jas.v4n10p75

URL: <http://dx.doi.org/10.5539/jas.v4n10p75>

Abstract

The hatchery facilities of a reputable fish farm in Abeokuta were used to carry out studies on the effects of different diets on the survival of African catfish *Clarias gariepinus* hatchlings. The larvae (1.8mg each) were distributed into the twelve feeding experiment apartments (1.7 m x 0.7 m x 0.5 m each) at 1,500 larvae/apartment. On the fourth day, feeding commenced with the experimental diets. The diets were fish meal (Danish) of 72% Crude Protein; baker's yeast (VAHINE); compounded feed (50% Crude Protein) and hen egg yolk. Each treatment was replicated thrice and feed fed to the larvae at 30% body weight twice daily for 30 days. All the experimental diets had no significant effects on the growth of the larvae to fingerling at $P > 0.05$. The mean fingerlings final weight (mg) was 1523.2 ± 295 , 1700.8 ± 686 , 367.9 ± 118 and 1675.9 ± 1167 for fish meal, yeast, compounded feed and hen egg yolk respectively. The specific and relative growth rates of the larvae under all the treatments were also not significant ($P > 0.05$). Considering the growth parameters, the best performance was observed in fish fed diet 2 (yeast), closely followed by diet 4 (hen egg yolk), then diet 1 (fish meal) and least in fish fed diet 3 (compounded feed). The low survival rate observed in all the diets, Compounded feed (10%) > hen egg yolk (4.1%) > Fish meal (3.5%) > yeast (1.7%) could be attributed to the lack of sorting exercise carried out in the experiment.

Keywords: growth response, catfish, fingerlings and dry feeds