Effect of Various Levels of Dietary Protein on Bioenergetics' Parameters of Snow Trout (Shizothorax zarudnyi) Juveniles

Khammar, Rahimeh¹; Gharaei, Ahmad^{2*}; Ghaffari, Mostafa³; Rahdari, Abdolali⁴

 Department of Fishery, Natural Resources Faculty, University of Zabol, Zabol, Iran. E-mail: rahimeh_khamar@yahoo.com
Department of Fishery, Natural Resources Faculty and Hamoun International Wetland Research Institute, Iran. Email: agharaei551@gmail.com
Department of Fishery, Chabahar Maritime University, Chabahar, Iran. E-mail: mostafaghaffari@gmail.com

4- Department of Fishery, Hamoun International Wetland Research Institute, University of Zabol, Zabol, Iran. E-mail: rahdari57@yahoo.com

Received Date: June 10, 2014

*Corresponding Author

Accepted Date: June 15, 2015

© 2015 Oceanography. All rights reserved.

Abstract

The study investigates the effect of dietary proteins on growth of Snow trout juveniles (*Shizothorax zarudnyi*) fingerlings. Triplicate groups of fish (average weight±SD, 13.44±1.97g) were fed for eight weeks four isolipid and isoenergetic experimental diets ($7.57\pm0.35\%$ crude lipid, 3.18 ± 0.14 kcal.g-1 dry matter, respectively) containing 25, 30, 35 or 40% crude proteins. The results showed growth rate of fish fed with 25% protein diet was higher than that of fish fed with 30, 35 and 40% protein diets, but differences were not significant (P>0.05). Proximate analysis indicated that the lipid, protein and ash components of whole body were affected by the diets (P<0.05), whereas the moisture content of whole body was unaffected by the increase in dietary protein content (P>0.05). The study showed that a dietary protein level of 25 % was optimal for the species for proper growth and feed conversion.

Keywords: Nutrition, Feed conversion ratio, Protein dietary, Snow trout (Shizothorax zarudnyi).