Effect of Different Dietary Protein Concentration on Hematological Parameters of Fingerling Sparidentex hasta

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Abstract

Sparidentex hasta is a beneficial and economical fish in the Persian Gulf that these years much attention has been paid to and is a good candidate for marine aquaculture in coastal zones of Iran.

Optimal levels of dietary components ensure optimum growth and health of fish. In this paper, feeding the Sparidentex hasta with different levels of protein and amino acid was carried out in order to investigate their effects on hematological parameters.

After adaptation in 2 weeks by a lipid-free diet, the fish of (30 to 35gr) were fed for 8 weeks by experimental diets in 300 L tanks (n=36). The fish were fed two times a day at 10:00 am and 17 pm with 4 protein levels (45%, 50%, 55% and 60%) that was repeated 3 times in 60 days.

At the end of the experiment, the blood samples were taken by heparinized syringes. Then RBC and WBC were counted. Hematocrit, Hemoglobin and blood indices showed no significant difference in different groups. The results of hematological parameters showed that the used diet was in optimal condition for culturing Sparidentex hasta.

Keywords: Dietary protein, Hematological parameters, Sparidentex hasta.