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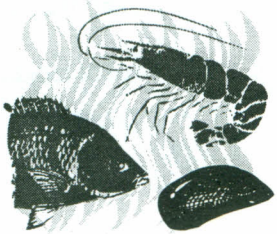

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Resumos / Abstracts

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THE INFLUENCE OF PHOTOPERIOD IN THE GROWTH AND WEIGHT GAIN IN NILE TILAPIA, *Oreochromis niloticus*, UNDER CONSTANT TEMPERATURE IN TWO SEASONS.

J.N. P. Lourenço*; M. L.M.Vicentini-Paulino[1] and H.C. Delicio[1]

*Embrapa Amazônia Ocidental. Cx. P. 319 - 69048-970, Manaus,- Am. Brasil nestor@cpaa.embrapa.br e nestor@internext.com.br 1Instituto de Biociências - Unesp - CEP 18600-000, Botucatu. SP. Brasil. apaulino@ fmb.unesp. br.

The objective of the work was to investigate the influence of photoperiod in the seasonal changes the gain of weight, and specific growth in the Nile tilapia (*Orechromis niloticus*), a tropical fish. Sixty-four fishes were used, divided in 2 groups, with 32 animals in each one. One group was studied in the summer and the other group in the winter, both during 30 days. In each season, the fishes were studied in 2 subgroups. The subgroup 14L:10D was submitted to 14 light:10 dark regime and the subgroup 10L:14D was submitted to 10 light:14 dark regime. The fishes were maintained, in number of 4, in glass aquarium with no visual or chemical communication among them. The water temperature was maintained at 25°C.. The variables were determined at the end of the experimental period as well. The mean of 30 days the gain of weight decreased in the winter but the differences were only significant in the group submitted to 10L:14D photoperiod. There was a significant difference in the specific growth of the fishes between the seasons and between photoperiod in the winter. In fact, there was a decrease in the specific growth of the animals submitted to 10L:14D in the winter when compared with the animals submitted to 14L:10D regime. There appear to be no differences either in protein absorption or in the morphology of the absorptive epithelium. The present data suggested that there were seasonal changes in food intake, weight gain and specific growth in the tilapia and that the photoperiod strongly implied in this response.