Study the effects of microalgae haematococcus (*Haematococcus pluvial*) powder in the diet on the Chemical composition of common carp (*Cyprinus carpio*) fillet

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Abstract

In the present study, the nutrition effects of Haematococcus microalgae powder (*Haematococcus pluvialis*) as a natural food and pharmaceutical on chemical compositions of common carp (Cyprinus carpio) fillet studied. For this purpose, 240 finger length common carp fish with average weight about 18.21 ± 1.15 grams have fed in four separate treatments includes of 0, 2, 3.33 and 5.33 grams algal powder of Haematococcus per each kilogram of diet with three repeat, for 60 days in 12 Polyethylene tanks with 300-liter capacity. In the medium and the end of the course, 30 samples of dry fish fillet from each treatment chosed randomly then sent to the lab to examine for chemical compositions such as protein, fat and ash. The results of chemical analysis for control treatments were 70.05, 18.54 and 5.26 and for 2 g/Kg treatment were 72.29, 17.18 and 6.05 for protein, fat and ash. Significant difference seen between these two treatments ($P \leq 0.05$). According to the results, the dose of 2 grams algal powder of Haematococcus per each kilogram of diet can recommend as effective dose.

Keywords: Common carp, Microalgae, Haematococcus, chemical composition.