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## Effects of the $\beta$ -carotene on the growth performance and skin pigmentation of rainbow trout (*Oncorhynchus mykiss*, w. 1792)

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In this study, the effect of dietary supplementation of  $\beta$ -carotene (beta carotene) on growth and skin pigmentation of rainbow trout. Fish were fed with diets containing 30 and 70 mg  $\beta$ -carotene  $\text{kg}^{-1}$ , and without supplemented basal diet for 12 weeks. Weight gain (WG), specific growth rate (SGR) and survival rate (SUR) in the C group was significantly lower ( $p < 0.05$ ) than beta carotene supplemented diet groups. Feed conversion ratio (FCR) in the C was significantly lower ( $p < 0.05$ ) than  $\beta$ -carotene supplemented diet groups. But PER of fish did not differ among the diet groups ( $p > 0.05$ ). Crude protein value of fish meat was higher in beta-carotene supplemented diet groups ( $P < 0.05$ ) than control diet group. But, crude lipid and ash were not statistically different among the groups ( $p > 0.05$ ). The lowest carotenoid concentration levels in the lateral and tail regions of the fishes in the experimental groups have been obtained in the C (control) group (lateral region:  $0.263 \pm 0.021$   $\mu\text{g/g}$ ; tail region:  $0.009 \pm 0.002$   $\mu\text{g/g}$ ) while the highest cumulative values have been determined in the fishes of  $\beta 70$  groups (lateral region:  $0.643 \pm 0.46$   $\mu\text{g/g}$ ; tail region:  $0.124 \pm 0.015$   $\mu\text{g/g}$ ).

### Biography

Guluzar Tuna Kelestemur has completed her PhD from University of Firat, Faculty of Fisheries, Department of Fisheries, Elazig, Turkey. She has published more than 18 articles. She is a Editorial Board Member in International Journal of Natural Sciences (International Referee Journal).

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