

Research Title :	Growth performance, morphological and chemical characteristics of red tilapia fed diets supplemented with <i>dunaliella salina</i>.
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Abstract: The aims of the present study were to investigate growth performances, morphological and chemical body characteristics, blood profiles of Red Tilapia upon dietary *Dunaliella salina* (D. salina) supplementation. Control and D. salina diets were formulated isonitrogenous and isoenergetic (339.99 ± 0.02 g/kg & 4.5 ± 0.0028 Kcal/g, respectively) and fed during the study. The formulated diets were control diet and D. salina diets supplemented with 33.0, 66.0 and 100% and fed thrice a day to fish (14.37 ± 0.15 g g) for fourteen weeks in 16 tanks containing 30 fish in each. Body weight gain, feed efficiency and morphological and chemical body characteristics of treated D. salina fish were determined in addition to changes in flesh color and blood profiles (red blood cells, hematocrit, glucose and total protein) compared to control one. The results indicated that replacement of fish meal with 33.0% D. salina resulted in comparable results with control diet concerning body weight gain, feed efficiency, morphological and chemical body composition and blood profiles. Diet containing 33% of D. salina had no significant effect in protein productive value when compared to control diet versus 66 and 100% D. salina diets, which decreased the parameter. Productive value of energy was not differed ($P > 0.05$) between control and D. salina treated groups. On the other hand, the high levels of D. salina (66.0 & 100%) were mostly decreased all the recorded parameters compared to control and 33.0% D. salina diets except body fat content and flesh color, which were significantly ($P < 0.05$) improved. In conclusion, replacement of fish meal with 33.0% D. salina could be promising of Red Tilapia growth performances, feed efficiency and chemical characteristics.

