

# BLACK SEA TROUT (*Salmo trutta labrax* PALLAS, 1811) CULTURE and USAGE for RELEASING of HATCHERY-REARED FISH

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In this study, culture performance, and supporting decreasing stocks of the Black Sea trout (*Salmo trutta labrax*) living in the Eastern Black Sea Region have been planned.

Relative fecundity of marina and fario ecotypes of Black Sea trout ranged 771 -6263 and 1020-3199 eggs/kg, respectively. Hatching of eggs were completed 477-489 degree-days at 11.5°C.

In beginning of March, occurrence of parr markers of transferred of the juveniles in the beginning of November was observed to determination of smoltification size, and it was observed that, fish of over 50% reached smoltification size in 11.3-11.5 cm length.

Blood plasma sodium level increased in three days, and than it stopped normal level from seventh day in the Black Sea salinity. While same variation observed in chlorine, decreasing of potassium level reached normal level after 17th day. Blood plasma ion levels of

fish transferred ‰30 salinity reached normal levels after 14th day.

Mean larva lengths were measured in hatched and swim up stages  $14,45 \pm 0,44$  and  $22,85 \pm 0,58$  mm,  $14,80 \pm 0,35$  and  $23,20 \pm 0,67$  mm, and  $14,80 \pm 0,59$  and  $23,95 \pm 1,14$  mm in 4,7, 5,1, and 5,5 mm egg size groups, respectively. Yolk conversion efficiency were calculated from hatching to swim up stage as 0,649, 0,688, and 0.606 in 4,7, 5,1, and 5.5 mm egg size groups, respectively.

Growth performance between hatchery and captured Black Sea trout broodstock larvae fed artificial diet, live food, and their mixed showed no significant.

End of trial, weight of fish were calculated as  $59,20 \pm 1,477$ ,  $63,89 \pm 1,638$  and  $61,36 \pm 1,019$  g fed with 50/18, 48/18 and 48/16 (protein% / oil%) diets, respectively. The best growth performance of the juvenile fish was determined fed with 48/18.



marina ecotypes

lacustris ecotypes

fario ecotypes





