DETERMINATION OF ECONOMIC BEGINNING WEIGHT OF RAINBOW TROUT (*Oncorhynchus mykiss*) WAS REARED IN SEA CAGES

Project Leader: **Bilal AKBULUT**
Researchers: **Dr. Temel ŞAHİN, Adnan ERTEKEN, Muharrem AKSUNGUR, Nilgün GÜNDOĞAN**

- Ministry of Agriculture and Rural Affairs, Central Fisheries Research Institute

In this project, Rainbow trout's (***Oncorynchus mykiss***, Walbaum 1792) differences on feeding and growing evaluations have been observed, by this way, preferable fish size during stocking to the sea cages and most profitable way of using during feeding season at limited temperatures and for obtaining desirable harvested fish weights, the initial fish weights and montly growing rates establishments have been aimed.

This study done by using Trabzon Fisheries Research Institute's possibilities; sea cages which belong to Institute at Yomra Port in 1995-1996 and 1-2 aged fish in different weights were used as study material. The project was been supported by Ministry of Agriculture and Rural Affairs, General Directorate of Agricultural Research.

In this study, five different beginning weight (52, 81, 117, 148, 190 g) groups of Rainbow trout raised same stock density (2.3 kg/m3) in sea cages, were fed at libitium by hand in Black Sea condition (16-17 %o, salinity) between October and June. It was taken samples from each cages randomly and weighted for determining the growth and food conversation rate monthly Mortality was also recorded daily. The water temperature ranged 8-21°C during experiment period.

At the end of the experiment for five groups, body weights reached to 507, 711, 884, 930 and 926 g, calculated specific growth rates 1.10, 1.05, 0.98, 1.03 and 0.90; feed C rates 1.63, 1.58, 1.76, 1.40 and 1.53; AWI 455, 630, 767, 781 and 736; PWI 875, 778, 656, 528 and 387 respectively. Survival rate was quite high all groups 0.92, 0.84, 0.88, 0.87 and 0.80 respectively.

In all groups, statistical difference SGR and FCR has been found unimportant ($P>0.05$) but PGR and weight gain as biomass has been important ($P<0.01$).

These results indicate that small fish are more economic then big fish cultured in sea cages.