

OBSERVATION OF ENVIRONMENTAL EFFECTS OF SEA CAGES IN ORDU-PERŞEMBE

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This study was carried out to determine the causative factors of heavy mortality in rainbow trout and marine sea bass reared in net cages placed in off-shore floating cages in Perşembe district of Ordu.

The aims of this study were ;

- to observe of disease problems and heavy mortalities from microbiological point of view,

- to examine the problems of rearing techniques and effects of these problems on fish mortalities,

- to observe of some of the basic water parameters of the region and evaluation of their impact on fish mortalities.

This Project was implemented by the cooperation of Central Fisheries Research Institute, Agriculture Directorate of Ordu Province, Governorship of Ordu, and private companies in region.

During 18 months, samples of fish, feed, water and sediment were taken monthly from pre-determined sample points and analyzed in Institute's laboratories. Results of monthly studies were evaluated by authorities of private

companies and Agriculture Directorate of Province of Ordu and recommendations were given for necessary measurements.

As a result of the studies, there was no evidence related with the water temperature being the cause of mortalities, because it was in the tolerable limits. According to the lengthweight relationship, condition parameters and physical/chemical parameters of water were found in normal limits.

The main causes of the intense mortalities were determined as; fault in appropriate rearing techniques, microbiologically polluted ground, problems among companies, poor hygienic conditions, unconsciously usage of drugs, usage of unhealthy farm-made feed, insufficient distance between the facilities and cages, keeping different species and age group of fish side by side.

The mortality rate was decreased from 40% to 10% in sea bass and 21% to 1% in trout in farms where taken recommendations under consideration and taken necessary measures. One of the interesting findings was detecting of Yersiniosis frequently in sea bass which is normally characterized by fresh water trout.

