

A comparative study on the effect of rainbow trout breeding on optional volatile bacteria around floating cages in the two regions (Clar Abad and Abbas Abad) in the southern Caspian Sea

Zahra Yaghoubzadeh^{1*}, Reza Safari², Sayed Mohammad Vahid Farabi³, Erfan Karimian⁴, Samira Dad⁵, Aliakbar Arab Ahmadi⁶

1,2, 3, 6- Iranian Fisheries Science Research Institute (IFSRI), Caspian Sea Ecology Research Center (CSERC), Agricultural Research, Education and Extension Organization (AREEO), P.O. Box 961, Sari

4: Marine Science and Technology University of Khorramshahr

5: Gonbad University of Agricultural Sciences and Natural Resources

*Corresponding Author e-mail: za_yaghoub@yahoo.com

Abstract

This research was carried out in two areas of Clarabad and Abbas-Abad, Mazandaran province, in the southern part of the Caspian Sea. The specimens were cultured in purpile TSA strain culture medium. Data analysis of variance analysis showed that there was no significant difference between cages and different geographic directions in each cage breeding center in each sampling period (except for August) ($P > 0.05$). Also, there was no significant difference between the two centers (Clarabad and Abbasabad) in sampling period in March ($P > 0.05$) compared to the average number of bacterial bacteria in sediment in the fish cage) and in other periods of sampling, this difference was significant ($P < 0.05$). This study showed that a significant increase in bacterial populations in August could be one of the reasons for a significant decrease in total organic matter in this month compared to other courses.

Keywords: Fish breeding in cages, rainbow trout, bacteria, Clarabad and Abbas Abad