

# **Determination of environmental pollutant in detergent in appropriate places for cage establishment in the southern Caspian Sea region**

Hooria Younesipur<sup>1\*</sup>, Hassan Nasrollahzadeh Saravi<sup>2</sup>, Mohammad Ali Afraei Bandpei<sup>3</sup>, Shaaban Najafpour<sup>4</sup>, Ahmad Ahmadinejad<sup>5</sup>

1,2,3,4,5- Caspian Sea Ecology Research Center (CSERC), Iranian Fisheries Science Research Institute (IFSRI), Agricultural Research, Education and Extension Organization (AREEO), P.O. Box: 961, Sari

\*Corresponding author e-mail: younesipourh @ yahoo.com

## **Abstract**

Detergents are organic carbon chain compounds that have two hydrophilic and lipophilic poles. According to researches, concentrations of these pollutants in the river inlet to the Caspian Sea are much higher due to the presence of villages and settlements on the river's margin. The results of the study in the southern part of the Caspian Sea showed that the maximum amount of detergents in the spring and summer was related to the southeast and southwest of the Caspian Sea. The average concentration of detergents showed annually, the maximum concentration in the Anzali (West region) region was 55 µg / ml. The study of environmental pollutants has shown that in the present conditions, suitable aquaculture is suitable. In the distance from the coast, water qualitative conditions for fish breeding in cages are more suitable.

**Keyword:** Caspian Sea, Fish Breeding , Cage, Detergents