

Study on Some Growth Parameters of Common Kilka (*Clupeonella cultriventris*) in South Part of Caspian Sea

Mohammad Hossein Gorjian Arabi^{1*}

Mohammad Rahmani²

Hossein Ali Unesi³

1. Research Center for the Caspian Region, Mazandaran University, Babolsar, Iran

2. Department of Environmental Sciences, Faculty of Basic Sciences, University of Mazandaran, Babolsar, Iran

3. M.Sc. Student in Marine Biology, Mazandaran University, Faculty of Marine and Oceanic Sciences, Babolsar, Iran

*Corresponding author:

h.gorjian@umz.ac.ir

Received date: 2020.01.16

Reception date: 2020.03.05

Abstract

In this study, the growth parameters of Common Kilka (*Clupeonella cultriventris*) in the Caspian Sea were studied in one season and, three stations of Babolsar, Bandar Amirabad and Bandar Anzali. A total number of samples, 300 fish were randomly caught by conical nets in the study areas and analyzed. Overall, the average total length of the three stations 11.65 ± 1.17 cm and 9.64 ± 2.58 g total weight. The average total length at Babolsar, Bandar Amirabad, and Bandar Anzali stations were 11.64 ± 0.99 , 12.48 ± 0.97 and 10.81 ± 0.91 cm, respectively. The average weight at Babolsar, Bandar Amirabad, and Bandar Anzali stations was 10.07 ± 2.41 , 11.11 ± 2.20 and 7.73 ± 1.84 , respectively. The logarithmic relationship between length and weight of Babolsar, Bandar Amirabad, and Bandar Anzali stations, respectively, $W = 2.2642 TL - 3.2663$, $W = 2.31 TL - 3.4378$ and $W = 2.3331 TL - 3.5275$. The amount of b in the Babolsar, Bandar Amirabad and Bandar Anzali zone, were 2.26, 2.31 and 2.33, respectively. the growth pattern of fish in three stations is negative allometric ($b < 3$). Factor conditions of common Kilka fish at Babolsar, Bandar Amirabad and Bandar Anzali stations were 3.88, 3.25 and 2.98, respectively. It showed that Common Kilka fish were better in weight in the Behshahr station. The results showed that the living status was more suitable for common Kilka fish at Bandar Amirabad station than Babolsar and Bandar Anzali stations in the sampled season.

Keywords: Clupeidae, Common Kilka (*Clupeonella cultriventris*), Allometric growth, conditions Factor, Caspian Sea