



Gorgan University of Agricultural
Sciences and Natural Resources

J. of Utilization and Cultivation of Aquatics, Vol. 8(4), 2020

<http://japu.gau.ac.ir>

DOI: 10.22069/japu.2020.15732.1466

The effect of changes in conical lift net mesh size on catch composition of Caspian Sea Sprat in Amirabad port

F. Karimi¹, *S. Gorgin², M. Babanezhad³ and H.A. Khoshbavar Rostami⁴

¹M.Sc. Graduate, Dept. of Aquatic Production and Exploitation, Gorgan University of Agricultural Sciences and Natural Resources, Gorgan, Iran,

²Assistant Prof., Dept. of Aquatic Production and Exploitation, Gorgan University of Agricultural Sciences and Natural Resources, Gorgan, Iran,

³Associate Prof., Dept. of Statistic, Faculty of Sciences, Golestan University, Gorgan, Iran,

⁴Fisheries Organization of Mazandaran Province, Babolsar, Iran

Received: 10.13.2018; Accepted: 12.21.2018

Abstract

In the past, *Clupeonella engrauliformis* was the most abundant catch in the Caspian Sea Sprats but due to collapse in sprats stocks, *Clupeonella cultriventris* has been the most dominant species recently. According to change in catch composition, it seems necessary to review the fishing gear. Therefore, a research was done to study the effect of mesh size on length frequency of catch fish in the Amirabad fishing port in July and August in 2017. Three conical lift net with mesh sizes of 5.5, 7 and 8.5 mm (knot to knot) were used to catch fishes in three night. Weight and length of 3000 specimens were measured in more than 10 fishing efforts in fishing depth of 40 m. The results showed that more than 99 percent of the fish caught was *Clupeonella cultriventris*. The lowest average length was caught in mesh size of 5.5 mm. The length comparison of the caught fish between mesh size of 7 and 8.5 mm and 7 and 5.5 mm showed a significant difference. It seems that caught from different fish populations is the main reason for the results.

Keywords: Caspian Sea, Clupeidae, Conical Lift net, Mesh