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## Evaluation of catch and stocks of common kilka *Clupeonella cultriventris caspia* in the Iranian coastal of the Caspian Sea (2018-19)

A.A. Janbaz<sup>\*1</sup>, H. Fazli<sup>2</sup>, M.A. Afraei Bandpei<sup>3</sup>, F. Bagherzadeh Afroozi<sup>4</sup>,  
Gh.R. Razeghian<sup>4</sup> and K. Khedmati<sup>5</sup>

<sup>1</sup>M.Sc., Agricultural Research Education and Extension Organization, Iranian Fisheries Science Research Institute, Caspian Sea Ecology Research Center, Sari, Iran,

<sup>2</sup>Associate Prof., Agricultural Research Education and Extension Organization, Iranian Fisheries Science Research Institute, Caspian Sea Ecology Research Center, Sari, Iran,

<sup>3</sup>Assistant Prof., Agricultural Research Education and Extension Organization, Iranian Fisheries Science Research Institute, Caspian Sea Ecology Research Center, Sari, Iran,

<sup>4</sup>Expert, Agricultural Research Education and Extension Organization, Iranian Fisheries Science Research Institute, Caspian Sea Ecology Research Center, Sari, Iran,

<sup>5</sup>M.Sc., Agricultural Research Education and Extension Organization, Iranian Fisheries Science Research Institute, Inland Waters Aquaculture Research, Anzali, Iran

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### Abstract

The main objectives of the present study were to estimate of catch age structure, biomass and maximum sustainable yield of common kilka in Iranian waters of the Caspian Sea. The result shown that catch of kilka in Iranian coastal in 2018 decreased from 26153 ton to 24586 ton in 2019. The mean length was  $104.3 \pm 10.6$  at the same time and the minimum and maximum fork lengths were 52.5 and 137.5 mm and always fishes with 3 and 4 year olds had the highest frequency 78.1% and 80.6%, respectively. The biomass of common kilka was estimated 76922.9 and 74342.7 ton, respectively. In these years, the three years old fish had the highest amount of reserves (respectively 24677.6 and 24254.8 ton) and the lowest reserves for 6-year-old fish, respectively. The breeders biomass of this species is 39557.4 and 36939.4 tons, respectively and the ratio of biomass of broodstocks to the whole was 51.4% and 49.6%, respectively. Acceptable Biological Catch was estimated 19500 tons, with a very cautious approach. The fishing mortality was more than reference points of common kilka at  $F_{0.1}$  and  $F_{40\%}$  (0.92 and 0.80), in fact overfishing has occurred. Proper exploiting leads to continuous harvest and long-term stability of storage.

**Keywords:** Acceptable Biological Catch, Biomass, Caspian Sea, Kilka fishes

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\*Corresponding author: [aliasgharjanbaz@yahoo.com](mailto:aliasgharjanbaz@yahoo.com)