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Isolation and identification of pathogenic species of Vibrio in river and sea fish in Azerbaijan

Naghiyeva S V, Huseynova A V and Agayeva G Q

Aqrokomplex Testing Laboratory, Azerbaijan

F ish is important food component as a source of protein and microelements necessary for the maintenance of healthy body. The greatest risk to human health occurs due to the consumption of raw, inadequately cooked or insufficiently processed fish and fish products. There are more than 100 individual species in the *Vibrio* genus, only some species cause foodborne infection. The main goal of this work is to identify pathogenic species of *Vibrio* in five species of fish (Caspian Carp, zander, Caspian kutum, Caspian sturgeon, salmon) from river and sea of Azerbaijan Republic and to study the dynamics of *Vibrio* infestation in fish depending on the season. To identify pathogenic forms of *Vibrio*, was used PCR Real Time method on the Dupont Bax System Q7, manufactured in the USA. The method allows identifying simultaneously three types of pathogenic forms of *Vibrio*; *V. parahaemolyticus*, *V. vulnificus* and *V. cholerae*. Studies were conducted from January 2017 to May 2019. During this period *Vibrio* were determined in 76 local fishes (Carp, zander, Caspian kutum) caught from river during May till September months, that pointed increasing the number of bacteria of this family during the summer season, when the temperature of water increase from +20 °C to +25 °C, contributing to significant irritation and the accumulation of *Vibrio* bacteria in fish. There were not detected any *Vibrio* bacteria in sea fish (Caspian sturgeon, salmon), that may explained by high water salinity in sea.

Biography

Sariya N.V. has completed her PhD at the age of 42 years from Azerbaijan Medical University. She is an Assistent at the General Hygiene and Ecologycal Department of Azerbaijan Medical University. Since 2014 works as the Head of Agrocomplex Testing Laboratory. She has published more than 25 papers in reputed journals.