



MES ASMABI COLLEGE  
P. VEMBALLUR

# NCIATRI 23 ABSTRACTS 20

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Lathif Penath, Mohammed Areej E. M. & Sheena P. A.**



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## **Influence of Chilled Storage on the Biochemical, Sensory and Microbial Quality of Frigate Tuna (*Auxis thazard*) Meat.**

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The biochemical , bacteriological and organoleptic changes in Frigate Tuna (*Auxis thazard* ) meat during chilled temperature storage have been studied. In this study tuna sample collected from Ponnani harbour in Malappuram district. There was a decrease in the proportion of soluble fractions of protein during storage. it was observed that the initial value of the TVBN in the meat was low, TVBN content increased on storage from an 0.75% to 1.85% ie, it does not increased acceptable limit. Moisture content of the white meat was 73.7% and moisture content of the red meat was 71.4%.The proportion of the crude protein in white meat 18.90% and red meat was 18.28%.the moisture content registered a steadily increase from 73.7% to 76.3% over 16 days. The initial bacterial load was  $1.23 \times 10$  cfu in iced condition the colony counts variation are obtained microbial parameters such as *V.cholerae* and *E.coli* was absent in storage condition. The overall organoleptic quality of the meat progressively deteriorated over the period of storage on the 16th day ,the meat had slightly fair in condition. However no bad odour was noticed during any stage of this study. Finally, storing tuna fish meat for up to 14 days exhibited no detrimental nutritional consequences and the safe for consumption.

**KEYWORDS:** Tuna, Frozen Storage, Soluble Proteins, Quality Changes.