

ACKNOWLEDGEMENT

Abstract

Common carp fish is suitable for farming because of their high ability to be aquaculture under varies situation in addition to their high yield coefficient. It was farmed successfully in Egypt. The aim of this study was to investigate some preservation and processing methods that may improve the market acceptability, keeping quality and utilization of farmed common carp and tuna fish. Therefore, the research was designed to investigate the effect of canning in different oils: olive oil, cotton seed oil and mixed oils (olive oil : cotton seed oil 1:1 v/v) with different packing solution (nisin, lemon juice and salt solution) sterilized at 110°C for 55 min and 121°C for 40 min stored at room temp for sex month. Varies treatment were subjected to chemical, physical, microbiological as well as organoleptic evaluation during subsequent storage. Collected were statistically analyzed throughout whole investigation period. This study was carried out in the Central Laboratory for Aquaculture Research (CLAR), Agriculture Research Center, Ministry of Agriculture Abbasa Abou-Hammad Sharkia governorate and cooperation with prodctiopn united food products Ismaelia industrial zoon.

Results indicated that, canned common carp and tuna fish samples which stored at room temperature for 6 months showed the higher quality for physico- chemical, chemical, microbiological and organoleptic changes and the best samples were canned with lemon juice and olive oil. The formation of free amino nitrogen (FAN), total volatile bases nitrogen (TVBN), tri methyl amine nitrogen (TMAN) and thiobarbituric acid (TBA) value could be used as chemical indicators for assessing the quality of canned common carp and tuna fish products.

Finally, I wish to express my sincerely warmest thanks to my wife Dr. Samah Abd El Hamied for her continuous mental guidance, encouragement and assistance during the whole course of this thesis.

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2-Use of antibiotic in canned foods.

3-Effect of canning and storage at different temperature on some physico-chemical and chemical changes of canned fish.

4-Effect of canning and storage on microbial changes of canned fish.

5-Effect of canning and storage on Sensory evaluations.

MATERIALS AND METHODS:

1- Sampling.

2-Treatments and storage.

3- Analytical procedures.

4- Microbiological evaluations.

4- Organoleptic evaluation.

RESULTS AND DISCUSSION:

I- Some physicochemical, chemical and microbiological properties of fresh and preheating samples of common carp and tuna fish.

II- Effect of storage period at room temperature on the changes of some physicochemical and chemical, properties of canned common carp and tuna fish.

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