RESEARCH   PAPER

Effect of storage of surimi from the fish croacker on the organoleptic quality of surimi-based products

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● **ABSTRACT** ●

To know the effect of storage of surimi on the organoleptic quality of surimi-based products, the meat of fish,croaker was used. In the preparation of surimi, the meet to water ratio used for washing was 1:2. Again the washing process was repeated for two times and 30mM MgCl2 was used in washing. Then these samples were mixed with cryoprotectants, frozen at –40⁰C for 4 hrs and stored at –20⁰C. After 1 day, it was removed from the freeze, thawed and the different surimi-based products were prepared with respective amount of ingredients. Setting was done at +400C for 3 hr. These surimi - based products were analyzed at each storage period up to six months for organoleptic quality by subjecting them to sensory evaluation tests. Among all the products, chikuwa provided more value for all attributes as the meat had the best value of protein.

KEY WORDS : Surimi, Storage, Organoleptic quality, Croaker

● **INTRODUCTION** ●

Surimi is a washed minced meat with cryoprotectants added for longer frozen shelf-life. Surimi-based products are prepared by extruding the surimi paste, prepared with other added ingredients into various shapes. The products may resemble shell fish meat such as crab, lobster, scallop or shrimp (Lee,1984). It is hoped, development of quality surimi-based products from fishes of India, will enable their effective utilization for direct human consumption. This will, not only pave the path for elimination of protein malnutrition, but also increase foreign earnings from export by entrepreneurship development in production of surimi and surimi-based product and provide better returns to poor fishermen. The results may also be useful to any unemployed person to establish fast food center in the suitable area to enhance his socio-economic condition.

Organoleptic characteristics perhaps constitute the most important aspect of quality evaluation of surimi- based products especially from consumers point of view. In the present study, the different products in different storage periods were compared to organoleptic qualities on the basis of sensory attributes like appearance, texture, flavour and overall liking by panel tests.

● **MATERIALS AND METHODS** ●

Marine fish, croaker (*Johinus dussumieri)* was used in the present study. In laboratory the fishes were washed and dressed by removing scales, skin, viscera and head. After washing and dressing, the meat was picked by meat picking machine and the picked meat was minced by mincer. For the preparation of surimi, the minced meat of each species was then washed with chilled potable water. Meat to water ratio used for washing was 1:2. In order to enhance the desired functional properties from protein foods, $MgCl_2$ was used in washing as a treatment.

Then both these control and treated samples were mixed with cryoprotectants like sugar(4%), sorbitol(4%) and polyphosphate(0.2%) by silent cutter, packed in polythene and frozen at –40⁰C for 4 hrs (Suzuki,1981). Then stored at –20⁰C. After 1 day it was removed from the freeze, thawed and the different surimi-based products were prepared with respective amount of ingredients. Setting was done at selected temperature and time as

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