DEVELOPMENT OF SALTED MINCED PRODUCT USING CATLA *(Catla catla)* MINCES

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By

NAYANI THAKSHILA WARNAKULA

Aquatic Resources Technology Degree Programme

Faculty of Animal Science and Export Agriculture

Uva Wellassa University, Sri Lanka

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ABSTRACT

Innovation of fish products is a way to increase the usage of low demand fish varieties in market. Catla has comparatively low demand due to low consumer preference and higher production during the seasons. Objectives of the present study were to develop a novel salted mince product and evaluate the shelf life and nutritional value of the product. In this study, frozen Catla mince (-40±1 °C) and salt were used to develop the product. Salt (Sodium chloride) Catla mince was mixed with mince in ratios as 5:100, 10:100, 15:100, 20:100, 30:100, 50:100 and 100:100 or 1:1 and those treatments stored for five days in room temperature (35±1 °C) and refrigerator (1±1 °C) separately for determination of salt to mince ratio that gives good binding properties. Refrigerated treatments contained salt percentages of 5, 10, 15 and 20 were selected according to the results of folding and biting tests. Further, salt and mince were mixed in ratios within selected range as 5:100, 7.5:100, 10%:100 12.5:100, 15:100, 17.5:100, 20:100, 22.5:100 and 25:100 to find optimum ratio. According to the results of biting and folding tests 7.5:100 or 7.5% was selected as optimal ratio and used for product development. The amount of salt, protein, moisture, ash and water activity of the end product were 5.75±0.34%, 18.23±0.4%, 75.57±0.43%, 5.43%±0.08 and 0.98±0.002 respectively. There were no significant differences recorded in protein, moisture, water activity and sensory qualities of product. TVB –N level increased significantly from 13.2 mg/100g up to 22.05 mg/100 g. The optimum condition for desalting of 100 g of product was dipping it in 1 liter of water in room temperature for 2 hours reduced the salt content to 2.85±0.05%. The product was safe for consumption due to absence of *Listeria monocytergenus* and *Staphylococcus putrefaciens*.

Key words – Product development, Shelf life, Desalting, mince