



RESEARCH ARTICLE.....

# Quality evaluation of extruded fishery products packed in normal and standard multilayer packaging under nitrogen infusion

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**ABSTRACT.....** Particular multilayer packaging material (consisting of LDPE, metalized polyester and polythene) and LDPE was selected and trials were performed and standardized on the property of the pouch to withstand the nitrogen pressure under gas infused packaging state containing the extruded fishery products. The thickness of the standard packaging material was measured to be 65 $\mu$ . The study interpreted a significant alteration in proximate composition ( $P>0.05$ ). On the contrary, moisture and ash content including overall sensory parameters did not vary significantly ( $P<0.05$ ). The product texture after storage for 3 months as stored in standard packaging material under nitrogen infusion revealed firmness 3904.2 $\pm$ 40.97g, toughness 19411.61 $\pm$ 583.91g.sec. was not altered significantly when tested by texture analyser at 15 Days regular intervals. But, in case of normal packaging, the materials showed drastic alteration in the moisture content, texture profile and sensory parameters. The microbiological analysis revealed no marked contamination and alteration of the extruded product quality when stored in standard packaging material under nitrogen infusion thereby favoring its consumer acceptance. In the present study, the storage study of the extruded fishery product revealed the shelf-life of the extruded fishery product up to 3 months.

**KEY WORDS.....** Extruded Products, Fish, Multilayer packaging, Shelf-life

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