

**SUITABILITY OF MOSTLY CONSUMED
FISHES IN KOMMATHURAI AREA FOR
THE DEVELOPMENT OF FISH CRACKER**



BY

ANUJA THAMBIRAJAH



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FACULTY OF AGRICULTURE

EASTERN UNIVERSITY

SRI LANKA

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ABSTRACT

Fishes are major protein supplement and they play an important role in the meal planning of people living in Kommathurai area of the Batticaloa district. The study was carried out to prepare a fish cracker from the mostly consumed fishes in Kommathurai area. The mostly consumed fishes in Kommathurai area were selected by survey method using well structured questionnaires. The result of the survey indicated that most of the people (95%) were non vegetarian in kommaturai area. 70% of the people ate sea fishes, lagoon fishes and pond fishes. Most of the consumers (65%) bought fish from the market. Among the preference for fish product, 55.28% of the people preferred normal fish curry and 5% of the people preferred fish cracker. 50% of the people were adding fish as their food for taste purpose. The survey revealed that three mostly consumed sea, lagoon and pond fishes were Seela (*Sphyraena jello*), Thilapia (*Oreochromis mossambicus*) and Viral, (*Rachycentron canadum*).

Fish crackers prepared from the Seela, Thilapia and Viral were fried in vegetable oil. They were subjected to chemical and organoleptic evaluation. Fresh fishes were also chemically analyzed. Significant differences in chemical and organoleptic qualities were found among fish crackers. Crude protein content seemed to be highest value 12.28% in fish cracker of Thilapia, moderately high value 11.30% was present in fish cracker of Viral and lowest value 10.61% was present in fish cracker of Seela. The crude protein percentage of fish cracker ranged from 12.28% to 10.61% in fish cracker of Thilapia and fish cracker of Seela respectively. Crude fat seemed to be highest in fish cracker of Thilapia than others while fish cracker of Seela contained low crude fat percentage. The fish cracker of Seela exhibited highest pH value 6.74

while fish cracker of Thilapia exhibited lowest pH value 6.575. According to the organoleptic evaluation of fresh fish crackers results, fish cracker of Thilapia was considered superior to others while fish cracker of Viral received score next to it. Fish cracker of Seela gave lowest acceptance by panelist.

The fish crackers made from the Seela, Viral and Thilapia fishes were stored for one month in polyethelene packets. Chemical, organoleptic and microbial evaluation were conducted at weekly intervals for one month. Crude protein content of fish crackers was gradually decreased during storage periods, like wise crude fat was also decreased during storage periods but moisture content of the fish crackers was increased during the storage periods. The fish cracker of Viral was considered to be superior to other fish crackers by organoleptic test at 28 days of storage period due to highest overall eating quality next to fish cracker of Thilapia. During storage period, no any contaminations was found in fish crackers made from Viral and Thilapia. But a small amount of colonies of *Fusarium* spp was found in fish crackers made from Seela at 28th days of storage period. Therefore fish crackers of Viral, Thilapia were good up to one month storage but fish cracker of Seela could be stored only for 3weeks.

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