

## DEVELOPMENT OF A FERMENTED FISH PRODUCT, *Jaadi* USING TILAPIA

(*Oreochromis niloticus*)

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Fish and fishery products are important to ensure protein requirement of low income groups. Sri Lanka produces roughly 230200 MT of fish from marine sector and 29 999 MT of fish from inland water bodies annually. Although Tilapia (*Oreochromis mossambicus*, *O. niloticus* and *Tilapia rendalli*) contribute 59.3% of total inland production, utilization of tilapia is restricted due to its muddy flavour and color. This study was aimed to develop *Jaadi*, a fermented fish product, using tilapia (*O. niloticus*) and to determine suitable salt and garcena combination for its preparation. Freshly caught de-skinned and de-headed fish were preliminary processed and preparation of *Jaadi* was done using garcena (*Garcinia gambodica*) and salt. First experiment was aimed at determining the suitable salt content for *Jaadi*. There were four treatments having salt contents of 200 g, 300 g, 400 g and 500 g per 1 kg of fish while keeping garcena content at 100 g. The most suitable salt content was determined according to sensory evaluation results, which in turn was used for second experiment, for the determination of suitable garcena content, the garcena content was changed as 100 g, 150 g, 200 g and 250 g per 1 kg of fish keeping the salt content constant. Each treatment had three replicates. The results of sensory evaluation indicated that colour, taste, odour, texture varied significantly among four treatments ( $\alpha \leq 0.05$ ) in first experiment. Sensory evaluation results for the first experiment indicated that the highest preference for sensory attributes was from combination of 500 g of salt with constant garcena per 1 kg of fish. Sensory evaluation results for second experiment indicated that there was a significant difference in taste, colour, odour, taste and texture for sensory attribute in combination of 100 g of garcena with 500 g salt per 1 kg of fish compared to other

treatments. The study clearly reached that 500 g of gardenia and 100 g of salt could be effectively used for the production of premium quality *Jaadi* with using 1 kg of fresh Tilapia.

*Key words:* Tilapia, *Jaadi*, Salt, Garcenia