

# 1. “Development of Fish Ham and Patty and its storage stability with Natural Antioxidant Extracts”

**Duration:** April 2011 – March 2013

Technology developed for ready to eat fish products Fish ham, patties, sausages, incorporated with natural anti-oxidants extracted from horticulture wastes substituted for synthetic antioxidant such as BHA for enhancing the shelf life.

- Pomegranate peel and orange peel obtained from by-product of fruit processing industry can be used as a natural antioxidant substituted for synthetic antioxidant such as BHA for enhancing the shelf life of fish and fishery products.
- Fish patties prepared using button mushrooms contained with natural preservatives ( $\beta$ -glucan, vitamin B groups, D and other useful nutrients along with good antioxidant and antimicrobial properties) enhances the flavour and texture of the product. Addition of orange and pomegranate peel extract at 2000  $\mu\text{g/mL}$  concentration to the fish ham enhance the shelf life by 12 days under refrigerated condition.



Pomegranate and Orange peel extract



Fish Ham in synthetic and cellulose casing



Button mushroom



Ready to eat Fish Patties