

PRODUCTION OF GARLIC FLAVORED CHILI SHRIMP PASTE USING SHRIMP HEAD PARTS

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ABSTRACT

Shrimp processing industry is a one of the major seafood industries in the world. These Shrimp processing industries generate large quantities of wastes which are heads and body carapaces. These wastes are released to the environment without any treatment which caused to loss of valuable component and serious environmental problems. Removed head wastes are used to produce fermented shrimp pastes in Asian countries as their traditional food. Basically Tiger prawn heads, salt, lactic acid bacterial culture, red chili, shrimp paste, acid (food grade citric acid), sugar, salt, garlic were the selected ingredients for production of chili shrimp paste. One sample was kept as control without adding garlic and 4%, 8% and 16% of garlic were added into the other three equal portions of Chili Shrimp Paste respectively. Then it was ground using a blender for 10-15 seconds and stored in sterilized glass containers. First sensory evaluation was carried out for above samples. Second sensory evaluation was conducted for 14%, 16% and 18% of garlic added three samples of chili shrimp paste separately. A five point hedonic scale was used to assess sensory attributes such as appearance, colour, smell, taste and overall acceptability. Data obtained from Sensory evaluation were analyzed by Friedman rank test in MINITAB 15. According to the results of first and second sensory evaluations 16% garlic incorporated chili shrimp paste had higher ($P=0.000$) consumer preference in appearance, colour, smell, taste and overall acceptability compared to the other treatments Shelf life determination was done by analyzing pH, yeast and mould count, total plate count at one week of interval for 60 days. Results revealed that shelf life of chili shrimp paste was more than 60 days at room temperature. According to the cost analysis cost of 1kg of the product was Rs. 210.

Key Words – Chili Shrimp Paste, Lactic Acid, Sensory Evaluation, Total Plate Count, Shelf Life