

## AN ASSESSMENT OF THE EFFECTIVENESS OF CLEANING AND SANITATION PRACTICES ADOPTED BY FIVE FISH PROCESSING ESTABLISHMENTS IN SRI LANKA

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There has been an increasing focus on food safety in the international trade in seafood products. Food-borne hazards are still of great concern for human health and in particular the risks connected with shellfish and seafood consumption continue to be important both in developing and developed countries despite the advances in technology, changes in food processing and packaging. In this context it is required to ensure the maintenance of an acceptable level of plant sanitation which will facilitate consistent production of clean, safe, and wholesome fishery products. To test the effectiveness of cleaning and sanitation practices adopted in fish processing establishments, swab samples were taken from different places and utensils of five fish processing factories. Tables used for receiving of fish and processing of fish, cutting boards, crates, knives, processing floors, workers' hands and gloves were used for sampling. Samples were tested for various microorganisms namely Aerobic Plate Count (APC), Coliforms, *Escherichia coli*, *Salmonella* sp. and *Listeria monocytogenes*. Two hundred and thirty four samples were tested for APC and counts were ranging from  $< \log 1 - 4.2 \text{CFU/cm}^2$ . Highest counts were observed in processing floor (3.39, 2.30, 2.11, 2.84), knives (3.93, 3.69, 3.46), table used for trimming (2.48, 3.08) buckets (2.67, 3.66) cutting boards (2.90, 3.46) and crates (2.90, 2.69). One hundred and seventy one samples were tested for coliforms and *E.coli*. Coliforms were detected in seven instances and counts were varied from 1.7-18MPN/cm<sup>2</sup> in crates knives, processing floor, trimming table and packing table. *E.coli* was observed in one occasion (knife 18MPN/cm<sup>2</sup>). Out of 127 swabs tested *L. monocytogenes* was found in two occasions in freezer trucks which were used to transport fish. *Salmonella* were absent in all swab samples (128) tested. This study showed that cleaning and sanitation condition is effective in fish processing establishments with the exception of few instances.

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