Preliminary Assessment of the Status of Commercially Prepared Salted and Sun Dried Fish *Scomberoides Commersonianus* (Lacepede, 1802)

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Abstract: The present research work was carried out to evaluate the status of commercially prepared salted and sun dried fish, Scomberoides commersonianus from the most popular dried fish preparation site Velanai in Jaffna district from January 2011 to June 2011. Salting and sun drying is a simple, ancient and traditional method to preserve fish in Sri Lanka. By the traditional method fish are dried on the ground or coconut leaves at the sandy shore where direct contact to insects and dirt is possible. The quality of salted and sun dried fish can be affected by microorganisms. Giving importance to consumer's health, the hygienic condition of dried fish was tested by two different methods, organoleptic and microbiological analysis. Organoleptic assessment was done by a panel consisting of 10 people using score method. Microbial qualities of dried fish were determined by using total bacteria count, total coliform count and methylene blue reduction test. Sodium chloride content of the samples was also determined. The mean scores obtained for organoleptic assessment which emphasizes colour, flavor, texture and odour, showed that all the characteristics of the products were fairly liked. The results indicated that the mean total bacterial count in that preparation site was (32.43±0.1013)×10⁸ cells.g-1, the average number of total coliforms was 19±11 cells.g-1 and the average time taken to methylene blue reduction test was 7 hrs 41 min. Mean sodium chloride content was found to be 29.2±0.2%. From the present study it can be concluded that the commercially prepared dry fish samples in Velanai, Jaffna are not suitable for human consumption based on the organoleptic and microbial quality. Therefore it is essential to improve the traditional dry fish preparation techniques especially by utilizing clean utensils and water, drying the fish in ventilated wooden racks or in the solar drying systems with even hot air flow and paying more attention to the hygienic condition of people who are involved in the preparation of dried fish.

Keywords: Salting, Sun drying, Organoleptic, Microbiological analysis, Scomberoides commersonianus