Histamine Profile of Dried-Salted Fish Sold in the Local Supermarkets of Samar, Philippines

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Abstract

The Food Safety Act of the Philippines strengthens the welfare of consumer's health by protecting the public from foodborne illnesses such as scombroid fish poisoning due to unusually high levels of histamine. The present study investigated the formation of histamine substance in driedsalted fish products that were sold in different local supermarkets of Samar. A total of fifty samples of dried-salted fish samples were used to analyze the histamine substance. Results of the analysis revealed that 81.3% are detected beyond the regulatory limits of 200.0mg/kg by the Bureau of Food and Drugs-Philippine National Standard. Based on the Box-whisper plot, the species with the highest concentration of histamine are Bolinao (Stolephorus sp.), Hasa-hasa (Rastrelliger sp.), Lambiao (Selar boops), and Tamban (Sardinella sp). In the non-linear regression model, a low r2 found out that histamine concentration in the products generally increased through time as sold in the local supermarkets.

Keywords: histamine; dried fish; scombroid poisoning; supermarkets; Samar; Philippines

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