EFFECTS OF DIFFERENT BRINE CONCENTRATIONS ON THE DRYING CHARACTERISTICS OF MILKFISH (Chanos chanos)

An Undergraduate Thesis
Submitted to the Faculty of the
Department of Teacher Education
Cavite State University-Cavite College of Arts and Trades Campus

Rosario, Cavite

In partial fulfillment of the requirements for the degree Bachelor of Science in Industrial Education

CRISANTA J. CANON CATHERINE A. SALES June 2018

BIOGRAPHICAL DATA

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Crisanta J. Canon is the eldest among the three children of Mr. Sonny J. Canon Sr. and Mrs. Christine Marie J. Canon. She was born on August 29, 1997 in Rosario, Cavite. She has two siblings namely: Sonny Canon Jr. and Mark Joseph J. Canon. She resides in Tejeros Convention, Rosario, Cavite.

She finished elementary at Tejeros Convention Elementary School in Rosario, Cavite in 2009 and finished high school at Cavite State University-Rosario Campus in Rosario, Cavite in 2013.

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BIOGRAPHICAL DATA

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Catherine A. Sales is the eldest among the five children of Mr. Antonio B. Sales and Mrs. Sally P. Azaña. She was born on June 26, 1996 in Rosario, Cavite. She has four siblings, namely: Ivan P. Azaña, Jericho A. Sales, Antonio Sales Jr. and Aljur A. Sales. She lives in Muzon II, Rosario, Cavite.

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CRISANTA J. CANON

CATHERINE A. SALES

ABSTRACT

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CANON, CRISANTA J., SALES, CATHERINE A. Effects of Different Brine Concentration on the Drying Characteristics of Milkfish (*Chanos chanos*). Undergraduate Thesis. Department of Teacher Education. Cavite State University-Cavite College of Arts and Trades Campus, Rosario, Cavite. June 2018. Adviser: Engr. Gee Jay C. Bartolome.

The study was conducted from September 2015 to November 2016 to determine the effects of different brine concentrations on the drying characteristics of milkfish (*Chanos chanos*). Specifically, the study aimed to: 1) establish the relationship between brine concentration, brining time and drying characteristics of milkfish; 2) compare the final moisture content of the fish samples after the drying experiment; 3) conduct a water activity analysis for the fish samples; and 4) perform a sensory evaluation among the fish samples subjected to different brine concentrations.

The brine concentration and the brining time were used as independent variables, each having four levels. The brine concentrations used in the study contained 10, 15, 20, and 25 percent salt content and the brining time were set at 0.5, 1, 1.5 and 2 hours. A cabinet type solar dryer was used in to dry the fish samples subjected to these treatments.

The results of the statistical analysis of data revealed that brine concentration and brining time does not have a significant effect on the drying characteristics of milkfish. The sensory evaluation showed that it all the products were liked moderately by the consumers. Furthermore, the water activity of all products passed the minimum requirement of the Philippine National Standards for dried and salted fish.

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