

International Conference on

# Nutritional Science and Food Technology

July 02-03, 2018 Rome, Italy

## Characteristic of chocolate candy produce from cocoa bean fermentation with *Lactobacillus Plantarum* HL-15 culture

Titiek Farianti Djaafar<sup>1</sup>, Laurentia Oktaviani Palupi<sup>2</sup>, Tri Marwati<sup>1</sup>, Tyas Utami<sup>2</sup> and Endang S. Rahayu<sup>2</sup>

<sup>1</sup>Assessment Institute for Agricultural Technology, Indonesia

<sup>2</sup>Gadjah Mada University, Indonesia

### Abstract

Chocolate candy is a food product that liked many people. The presence of mycotoxin producing fungi is a problem in chocolate product. The objective of this research is to observe the characteristic of chocolate candy produce from cocoa bean fermentation with *L. plantarum* HL-15 culture. The cocoa bean (47.5 kg) was fermented by adding *L. plantarum* HL-15 culture about 500 mL ( $10^{10}$  CFU/mL) in the new and old fermentation box and in the another new and old fermentationbox without adding culture. Chocolate candy processing is done based on standard processing of chocolate candy. The results shown that the addition of *L. plantarum* HL-15 culture in cocoa bean fermentation and use of the new fermentation box give lower fungi concentration on chocolate candy, reduce 1 log cycle from  $1.7 \times 10^3$  to  $< 10^2$  colony/g. While, the addition of *L. plantarum* HL-15 culture in the old fermentation box is not effect. The average aw value of chocolate candy is 0.64 and pH value is 6.7. Fat content of chocolate candy about 44.9 % - 46.2 %.

### Biography

Dr. Titiek Farianti Djaafar is currently working as a Researcher in Postharvest Department at Assessment Institute for Agricultural Technology Yogyakarta, Indonesia. She published many articles in reputed journals and attended international conferences.

email: titiekfd@yahoo.co.id