Pengaruh Jumlah Penambahan Enzim Laktase terhadap Total Rendemen dan Karakteristik Kimia Keju Mozzarella
The Effect of the Amount of Lactase Enzyme Added on the Total Yield and Chemical Characteristics of Mozzarella Cheese
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ABSTRACT

Mozzarella cheese is a type of cheese with high demand and potential for continued growth. Efforts to increase production capacity by increasing yields can help boost producers' incomes. One method for the milk coagulation process in the mozzarella cheese production process is the use of lactic acid bacteria (LAB). This study aims to determine the effect of using the lactase enzyme for the LAB fermentation process in mozzarella cheese production. The treatment of this study was the amount of lactase enzyme used (percentage per amount of lactose) including 0; 0,15; 0,3; 0,45; and 0,6%. The results showed that the use of the lactase enzyme in mozzarella cheese production had a significant effect (P<0,05) on the parameters of curd yield, cheese yield, hydrolyzed lactose, and fat content in dry weight. Meanwhile, the protein content and the cheese pH resulted insignificantly different values between treatments. The use of the lowest lactase enzyme concentration (0,15%) significantly increased curd yield, cheese yield, and fat content in dry weight compared to the use of 0% lactase enzyme concentration. However, increasing the lactase enzyme concentration did not significantly increase the values of these parameters. The curd yield and cheese yield produced in the treatment of using lactase enzyme with concentrations of 0; 0,15; 0,3; 0,45; and 0,6% respectively included 9,473; 10,933; 10,824; 11,615; and 11,310% for curd yield and 8,754; 10,082; 10,117; 10,835; and 10,690% for cheese yield.

Key words: *curd, lactase enzyme, lactic acid bacteria, milk, mozzarella cheese, yield,.*