ABSTRACT

The purpose of this research is to study the effect of the concentration of the enzyme papain and fermentation temperature on the characteristics of the crackers.

This research used factorial experiment design 3x3 in randomized block design (RAK) with 3 times repetitions, where the factors include: concentration of the enzyme papain (E), which consists of 3 levels, that is e1 (0,5%), e2 (0,75%), e3 (1,0%) and fermentation temperature (S) which consist of 3 levels, that is s1 (34°C), s2 (37°C), s3 (40°C). The response in this research are chemical response that includes water content, protein content, and organoleptic response that includes sightings, aroma, crispness, and flavor.

The concentration of the enzyme papain significantly affected on water content and flavor. The fermentation temperature significantly affected on water content and protein content. The interaction between concentration of the enzyme papain and fermentation temperature significantly affected on sightings and water content.

Based on organoleptic tests referred that the selected treatment was on crackers is e3s1 with the concentration of the enzyme papain 1,0% and the fermentation temperature 34°C has a water content 4,35 %, protein content 13,00%.

Keywords: Enzyme papain, the fermentation temperature, cracker