## ABSTRACT

## THE EFFECT OF SUCROCE AND GLUCOSE ADDING IN GOAT MILK CARAMEL CANDY PROCESS TO CHEMICAL, MICROBIOLOGY, AND SENSORIC PROPERTIES

## By

## **RIFKY AFRIANANDA**

Caramel candy is a kind of toffe classified into of (soft candy and created usingthe basic ingredients of milk and sugar. The problems in caramel candies is the texture was hard, it's because the used of sucrose is too much, but if using too much glucose it is hard in cutting because the texture is too soft. The purpose of the research is to get the formulation between sucrose and glucose in making the caramel candies using goat's milk so that can produced a caramel candy with chemical, microbiological, and organoleptic properties according to standard quality of caramel candy SNI No. 3547.2 (2008).

The study was conducted in a single factor using Group Complete Randomized Design (RAKL) in three repeatation with sucrose versus glucose formulation, as follows F1 (100:0), F2 (75:25), F3 (50:50), F4 (25:75), and F5 (0:100). Similarity range of data was tested with Barlett test and tuckey test. The data observed in

chemical, microbiological, and organoleptic properties of goat's milk caramel candy made variance to determine wheter there is a difference between treatments. The data processed further with LSD 1% and 5% (Steel and Torrie, 1995).

The results showed that the addition of sucrose and glucose effect on the chemical properties, and oraganoleptic of goat's milk caramel candy, but no effect on the microbiological properties of goat's milk caramel candies. The best treatment of sucrose and glucose formulation is caramel candies with the addition of the 75% sucrose and glucose 25% (F2) with the criteria of the water content 1.56% w / w, ash content 1.17% w / w, reducing sugar content 3.85% w / w , total molds and yeasts  $3,5x10^2$  colonies/gram, a total of 3.7 X102 microbial colonies / gram,a light brown color, smooth texture, and flavor and overall acceptance of the preferred.

Keyword : Caramel candy, caramelization, sucrose, glucose, goat's milk