

## Abstract

This research was conducted to determine the effect of red bean flour substitution on the physical quality, chemical quality and sensory quality of steamed sponge cake. There were five treatments with three repetitions. Red bean flour substitution rate is 0%; 10%; 20%; 30%; 40% in steamed sponge. The results showed that the steamed sponge had a very significant effect at  $\alpha = 0.01$  on the swelling power, there was a significant effect ( $\alpha=0.05$ ) on the chemical test parameters, namely fat content and there was a very significant effect ( $\alpha=0.01$ ) on the parameters. chemical test, namely the ash content. Steamed sponge had a very significant effect on  $\alpha = 0.01$  organoleptic quality (hedonic texture, taste, color, and aroma). However, there was no significant effect at  $\alpha = 0.05$  on physical quality (hardness), no significant effect ( $\alpha = 0.05$ ) on chemical test parameters, namely water content, protein content, and carbohydrate content. The steamed sponge cake with good results and still acceptable to the panelists was the substitution of 30% red bean flour with the parameters of the steamed sponge cake being a bit hard (score 3.9), the taste of the steamed sponge was slightly sweet (score 3.8), the smell of the steamed sponge was rather strong (score 3.7) and the color of the brown steamed sponge (score 3.4) with a hardness level of 367.10 gf and a swelling power of 106.67%, water content (22.04%), ash content (0.68%), protein content (6.46%), fat content (1.97%), carbohydrate content (68.87%) and dietary fiber content (5.71%). Keyword: steamed sponge cake, wheat flour, and red bean flour