

**PRODUCTION OF COOKIES USING
JACKFRUIT (*Artocarpus heterophyllus*)
SEED**

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ABSTRACT

Substitution of wheat flour with jackfruit seed flour at 25% and 50% were examined on their effects towards sensory and physical properties of cookies. In this case, control sample of cookie was prepared by using the jackfruit seed flour. QDA was carried out for 3 sessions and follow by a hedonic test to obtain overall acceptability of the cookies. Cookies with 25% and 50% of jackfruit seed flour and control cookies were tested in first QDA whereas only 25% jackfruit seed flour formulation cookies were tested in 2nd and 3rd QDA. Cookies were baked at 160°C and 180°C for 15, 20 and 25 minutes. There were significant differences ($p < 0.05$) found in the first QDA for all the attributes except sweetness whereas significant differences ($p < 0.05$) found in second QDA for all attributes except sweetness and moisture absorption. From the third QDA, there were significant differences ($p < 0.05$) found for hardness and tooth packing attributes. One formulation each from second and third QDA was selected for consumer acceptance test based on the QDA result. However, there were no significant differences ($p > 0.05$) between the formulated cookies and commercial cookies for all the attributes on hedonic test except appearance. Overall, cookie with 25% jackfruit seed flour obtained the highest preference rate in terms of all attributes (appearance, texture, flavour and overall acceptability) except aroma. In addition, it was also more preferred by the panelists compared to the commercial cookie. Cookies with 25% jackfruit seed flour and control cookies baked at 180°C for 15 minutes were continued to physical analysis. In all physical analysis, both cookies had shown no significant differences ($p > 0.05$) except ash content of cookies with 25% jackfruit seed flour which is significantly higher than the control cookies. Therefore, cookies with the substitution of 25% jackfruit seed flour may have the potential to be commercialized in the market due to its high liking rate for most of the attribute on hedonic test and also preference test.

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