

ABSTRACT

THE EFFECTS OF CASSAVA VARIETIES AND COOKING OIL ON OIL THE CONTENT AND THE ORGANOLEPTIC QUALITY OF KELANTING CRACKER

By

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Cassava is the main raw material of kelanting cracker making. The high starch content is assumed to influence a plenty of oil absorption when kelanting cracker is fried. Besides this, palm oil used in frying kelanting cracker becomes one of important factors of oil content for kelanting cracker. In common, fatty acid and smoke point are the main components of oil that affect the oil quality.

This research objective was to find out the cassava variety and the cooking oil that were able to produce kelanting cracker with relative lower oil content and best organoleptic quality. The research design used completely randomized design consisting of two treatment factors with three replications. The first factor was cassava variety consisting of three kinds; Manalagi cassava (S1), Thailand cassava (S2), and Kasesart cassava (S3). The second factor was the brands of palm oil; Bulan Sabit (M1), Madina (M2), and Sania (M3). The homogeneity was tested by homogeneity test and data addition was tested by additivity test. The analysis of variance test was used to predict error variance and to find out the differences amongst treatments. Then, data were analyzed by using Orthogobal comparison in 5% and 1 % levels. The observed parameters were water, ash, fat, protein, carbohydrate, starch contents and the smoke point of the palm oil. The organoleptic test includes color, crunchiness, taste, and acceptance as a whole.

The results showed that treatments of variety of cassava and the cooking oil were significantly influenced the oil content, color, crunchiness, taste and acceptance as a whole of kelanting cracker. There were interactions of varities of cassava and cooking oil to the parameters of fat content and color of kelanting cracker. The best kelanting based on oil content and organoleptic quality were derived from the treatments from Manalagi cassava and Sania palm oil (S1M3), and Kasesat cassava and Sania palm oil (S3M3). These kelanting crackers had 8%-8.3% oil content, white in color (score 3.62 – 3.65), crunchiness texture (score 3.12), savory taste (score 3.13 - 3.2), and had more acceptance as a whole by panelist (score 3.07 – 3.2).

Keywords: kelanting, cassava, cooking oil, oil content, organoleptic quality