ABSTRACT

THE PRODUCTION AND PHYSICAL CHARACTERISTICS TEST OF ANALOG RICE MADE FROM CASSAVA FLOUR ENRICHED WITH TUNA PROTEIN

By

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Rice demand has been increased, but the production is relatively constant. Analog rice is an alternative food made from cassava flour enriched with tuna protein needed for human. The purpose of this study was to create and evaluate the physical characteristics of the analog rice which includes water content, water absorption, bulk density, color, and uniformity analog rice grains. This research was conducted at 5 treatments based on the comparison between the mass of cassava flour and tuna flour as follows 95:5, 92,5:7,5, 90:10, 87,5:12,5, and 85:15. The results showed that the water content of analog rice 11.87 to 13.19%. Water absorption of analog rice is ranging from 206.6 to 267.9%. Bulk density values are from 0.6 to 0.64 g / cm³. Colors in the treatment of cassava flour mixture are between 95% and 5% tuna flour tend to be brighter because less of proportion of tuna flour. In the manufacture of analog rice, mix treatment between 92.5% cassava flour and 7.5% tuna flour produces the expected analog rice grains (1.7 to 4.7 mm) more.

Key word : analog rice, cassava flour, granulator