

ABSTRACT

FORMULATION OF MODIFIED CASSAVA STARCH AND FLOUR IN SWEET BREAD PROCESSING

By

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Lampung is cassava biggest source in Indonesia. As a potential raw material, tapioca is expected to be an alternative way in substituting flour. Nevertheless, tapioca has some weaknesses. In order to recover this basic weaknesses of tapioca, it is needed to modify the substance of tapioca by using yeast (fermipan). In this research, modified tapioca will be formulated with flour and be applied in producing sweet bread.

The aim of this research is to obtain the formulation of modified cassava starch and flour that can maximize product of sweet bread physically, chemically and organoleptically.

This experiment was arranged in a Complete Randomized Design with single factor which consists of five steps, namely the formulation between modified cassava starch and flour (0 : 100), (10 : 90), (20 : 80), (30 : 70), and (40 : 60) with three replications. Homogeneity of the data was tested with Bartlett Test and additivity was tested using Tuckey Test model. Then the data were further tested analyzed using HSD (Honest Significant Different) test 5%.

The result shows that, the modified of cassava starch can able to substitute of flour until 30% in producing of sweet bread. From the chemically, and organoleptically, sweet bread in the formulation F2 (10:100), F3 (20:80), F4 (30:70) is in the sweet bread with the characteristics approaching the characteristics of sweet bread in the formulation F1 (0:100), but looked from the degree of dough improvement that is just the formulation F2 (10:90) was similar formulation F1 (0:100). Therefore, the best results is the formulation of the modified cassava starch and flour is in the formulation F2 (10:90) with 516,667 % degree of dough improvement, 24,467 % of water, 1,113 % of ash, 10,108 % of fat, 6,867 % of protein, and 57,612 % of carbohydrate. The sequence of the characteristics in a row is golden colour, having soft texture, sweet flavour, and typical smell of bread, and for overall acceptance was F2 (10:90) that was like.

Key word : Sweet Bread, Modified Cassava Starch, Flour.