

ABSTRACT

THE STUDY OF BALBISIANA BANANA (*Musa balbisiana* Colla) FLOUR AND WHEAT FLOUR IN MAKING BROWNIES

By

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Balbisiana banana (*Musa balbisiana* Colla) is one of wild banana types growing in Indonesia, has potentials as carbohydrate sources and opportunities to develop as material in making flour and processed product. Looking at the potentials, it needs to define the physicochemical properties of balbisiana banana to be able to develop and use it for the food availability and industrial raw material. One of alternatives in food processing to improve acceptance and banana shelf life is by processing the balbisiana banana in flour that is able to apply in food product making such as brownies. The objective of this research is to analyze the physicochemical properties of balbisiana banana, to obtain balbisiana banana flour and wheat flour formula that is able to produce brownies with best organoleptic properties with minimum properties that equals to commercial brownies and to study the financial aspect of the product. The research uses descriptive method with three repetitions in a single treatment consisting of six levels of mixture between balbisiana banana flour and wheat flour (10:90, 20:80, 30:70, 40:60, 50:50 and 60:40). Obtained data are analyzed descriptively and presented in forms of charts and tables.

The result obtained the balbisiana banana flour with physicochemical properties having 37,5% water absorption and 23,5% oil absorption. The best result is shown in F3 (30:70) treatment with water content of 25,26%, ash content of 1,55%, fat content of 19,63%, protein content of 6,04%, carbohydrate content (*by difference*) of 47,52%, total dietary fiber of 23,73%, and Glycemic Index (GI) of 20,53%. The calculation of financial feasibility shows HPP of Rp 12.406,223/package with selling price of Rp 13.500/package, BEP of 38.119,92 packages, PBP of 0,51 year and B/C ratio of 1,2 so that this business is considered to be feasible to run.

Keywords : balbisiana banana, balbisiana banana flour, brownies