ABSTRACT

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

By

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Generally, balbisiana banana have many seeds and diploid. According Musita (2008), resistant starch content of balbisina banana higher than other types of bananas, amounting to 39.35% and containing fruktooligosakarida (FOS) which can be developed into prebiotic drinks (Musita, 2009). According Sunaryo (1985), if biscuit made from non wheat flour, biscuit making can only be done with formulation of some wheat flour with non wheat flour. The purpose of this research is to obtain formulation of balbisiana banana flour and wheat flour to produce biscuit that received by panelists with the best organoleptic score. This research are arranged in Random Complete Block Design (RCBD) non factorial with three replications. Single factor used is the formulation of stone banana flour and wheat consisting of six level which is 90 : 10 (F1), 85 : 15 (F2), 80 : 20 (F3), 75 : 25 (F4), 70 : 30 (F5) dan 65 : 35 (F6). Obtained data analyzed by using *Barlett* test to find similarity range furthermore the variety range tested with *Tuckey* test And the data analysis cor *Honest Significant Difference* test (LSD) at level 5%.

The results showed that treatment of the addition of balbisiana banana flour concentration has highly significant effect on color, texture, overall acceptance and commercialization potential, but it was not effected significantly on the taste. The best result is shown in treatment F2 (85:15) with water content of 1,42%, ash content of 2,57%, fat content of 20,71%, protein content 5,66%, carbihydrate content of 69,64%, glycemic index (GI) of 21,06%, total dietary fiber of 32,27% dan total phenol 2,83 ppm (mg/L). HPP biscuit of Rp 7.514,05/package and selling price of Rp 8.500/package, BEP of 33.097,18 packages or for 10,6 month, profit of Rp 36.914.000/year, PBP value for 6,5 month and B/C ratio of 1,13 (B/C ratio >1), so that this business is considered to be feasible to run.

Key words: formulation, biscuit, balbisiana banana