ABSTRACT

CHARACTERIZATION OF MOKAF FLOUR MODIFIED FROM CASSAVA PULP THROUGH FERMENTATION PROCESS

By

Iip Sugiharta

Mokaf flour can substitute for wheat flour in making of various types of food, because of the characteristics of flour mokaf approaching characteristics of wheat flour. Production of mokaf flour in this study is done by modifying the cassava pulp through fermentation process using the bacteria Lactobacillus plantarum. The fermentation process in production of flour mokaf have a variety of variables to find the optimum variables. The optimum variable is the amount of inoculum, time of fermentation, and the pH of the fermentation. mokaf flour produced from a variety of variables and wheat flour were characterized by means of measurements using Viscotester and Thermogravimetric Analysis (TGA). Measurement results that show the characteristics of flour mokaf approaching wheat flour is the use of the amount of inoculum of 15 ml, the pH of the fermentation at pH 4, and the fermentation time of 48 hours. Viscosity and "mass reduction" of mokaf flour in the amount of 542 mPas and 86.51% approaching wheat flour in the amount of 106 mPas and 85.72%. Measurements mass reduction on cassava flour and tapioca performed as a comparison in the amount of 89.24 and 91.58%, while the content of amylose of cassava flour, tapioca, mokaf, and wheat by 38.43; 21.54; 42.62; dan 45,22%. The higher content of amylose, the smaller mass reduction.

Keywords : amylose, fermentation, *Lactobacillus plantarum*, mokaf, Thermogravimetric Analysis (TGA), Viscotester.