ABSTRACT

WULANDARI. Optimization of Brownies Formula Based on Banten Taro Flour (Xanthosoma undipes K. Koch) as A Source of Dietary Fiber. Under direction of BUDI SETIAWAN and WINDA HALIZA.

The aim of the study was formula optimization of brownies made of banten taro (Xanthosoma undipes K. Koch) and commercial corn starch using simplex lattice mixture design of Response Surface Methodology (RSM). This formulation used Design Expert 8.0.4 Trial. The range of the components are 70-100% banten taro flour and 0-30% commercial corn starch. Results showed that the optimum formula was obtained from 86% banten taro flour and 14% commercial corn starch. The chemical composition of this brownies have high value of dietary fiber (16.04% of ALG for each serving size). The overall sensory properties were good acceptance from the panelists, scored 6.7 out of 9.0.

Key word: optimization, banten taro flour, corn starch, dietary fiber