Chutima Manothum 2006: Product Development of Kanom Sali from Wheat Flour and Fragrance Rice Flour. Master of Science (Agro-Industrial Product Development), Major Field: Agro-Industrial Product Development, Department of Product Development. Thesis Advisor: Assistant Professor

Thongchai Suwansichon, Ph.D. 142 pages.

ISBN 974-16-2396-8

The value added rice flour, especially for wheat substitution, is one of approaches to reduce the number of import goods. The main objective of this study was to develop the optimum formula and process of Kanom Sali from fragrance rice flour. Result of consumer survey using 200 consumers indicated that more than 60% of them tended to purchase this product. Result of this study shown that only 20% of fragrance rice flour could be substituted for wheat flour. The optimum formula of developed product consisted of 25.37% wheat flour, 6.34% fragrance rice flour, 28.17% egg, 31.70% sugar, 0.73% baking powder, 0.82% S.P., 1.37% green coloring and 5.50 % pandan flavor. The optimum process was consisted of 1) beating the egg using electric mixer with high speed and then adding sugar, S.P. 2) further mixing together for 7 minutes, 3) adding flour and mixing until it combined for 3 minutes, 4) pouring and spreading batter into the prepared tray and 5) finally steaming this batter for 20 minutes. Color qualities of the developed product had L*, a* and b* values 76.87, -5.44 and 34.41, respectively. Its textural qualities consisted of hardness 4.60 N, cohesiveness 0.61, springiness index 0.83 and chewiness 25.09 N.mm. Its chemical compositions in 100 gram consisted of 28.29% moisture, 12.38% protein, 1.92% fat, 1.00% ash, 0.58% crude fiber and 55.83% carbohydrate. Result of affective test using 100 consumers indicated that they moderately liked and 78% of them accepted this developed product.

Chatima Momothum.

Student's signature

Thesis Advisor's signature