

ABSTRACT

Charlene Octavian (01034170043)

UTILIZATION OF PURIFIED *ILES-ILES* (*Amorphophallus muelleri* Blume) FLOUR AND YELLOW PUMPKIN (*Cucurbita pepo* L.) PUREE IN THE MAKING OF BAKED DOUGHNUTS

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Dependency towards imported raw materials like wheat has continuously increased with the high demand of wheat-flour based food products like doughnuts. At the same time, an increased concern to the healthy aspects of food products also occurs. *Iles-iles* and yellow pumpkin are two widely produced local ingredients with great nutritional benefit, especially in terms of fat and fiber, that have not been optimally used and studies show that they are potential to be utilized as a substitute to wheat flour and margarine. This research was aimed to utilize purified *iles-iles* flour and yellow pumpkin puree as a substitute for wheat flour and margarine to produce baked doughnut with acceptable organoleptic characteristics. The purified *iles-iles* flour was prepared from *iles-iles* tuber initially processed into flour that was further purified using multi-stage purification process to reduce its calcium oxalate content, while yellow pumpkin was utilized in form of puree. The research was done with a completely randomized two-factorial design with 5 variations of wheat flour: purified *iles-iles* flour ratio (100:0, 95:5, 90:10, 85:15, and 80:20) and 3 variations of margarine: yellow pumpkin puree ratio (100:0, 50:50, 0:100). The substitution ratio with the best organoleptic properties was baked doughnut with wheat flour: purified *iles-iles* flour ratio of 90:10 and margarine: yellow pumpkin puree ratio of 50:50, with an overall acceptance of 4.96 ± 0.89 , with lower hardness (1952.988 ± 80.652 g) and better nutritional composition than control, especially in terms of having lower fat ($7.84 \pm 0.03\%$) and higher dietary fiber ($13.57 \pm 0.14\%$).

Keywords : *Amorphophallus muelleri* Blume, baked doughnuts, yellow pumpkin puree

References : 64 references (1995-2020)