Analysis Of The Physicochemical Properties Of Red Bean Flour (Phaseolus vulgaris L.) Local Variety With Germination as Functional Food Raw Materials

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ABSTRACT

This research aims to examine the differences in the analysis of the physical and chemical properties of red bean flour without germination and red bean sprout flour (Phaseolus vulgaris L.) local varieties as functional food raw materials. The research method uses a laboratory experiment with two treatments, namely red bean flour and red bean sprout flour. The analyzed parameters include physical properties (kamba density, color, yield, solubility) as well as chemical properties (water content, ash content, fat content, protein content, carbohydrate content, amylose, amylopectin, food fiber). Each treatment is done as many as three repetitions. The data was analyzed using normality and homogeneity tests, then continued using the Independent Sample t-test for normally distributed data, and continued using the Mann-Whitney test for abnormally distributed data. The results of the analysis showed that there was no significant difference between the two treatments on the parameters of kamba density, color, yield, water content, protein, and fat. And the results of the analysis showed a significant difference in the parameters of carbohydrates, amylose, amylopectin and dietary fiber. The germination process tends to increase yield, water content, ash content, protein, and dietary fiber. As well as lowering the value of kamba density, color, fat content, carbohydrates, amylose, amylopectin.

Keywords: red beans, germination, red bean sprout flour, physicochemical properties, functional food