

The Study of Physical and Chemical Characteristics of Banana's Peel Flour as Result of Oven and Sun Drying

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ABSTRACT

Banana is one of fruit commodities which is consumed by Indonesian people. In industry, banana peels are considered litter and only little of part of them is used as fodder without the whipping process. The changing process banana peels into flour is a way to ward off the problem of heap, so that, it will be useful and economical. The aim of the research was to know the physical and chemical characteristics of banana peels flour which was derived from oven and sun drying processes. Three varieties of banana (tanduk, nangka and kepok) were used as research material. Oven drying process was done for 24 hours in a temperature of 80^oC, whereas sun drying process was done within 3-4 days in an average temperature of 28^oC with duration 6 days/hour. After the drying process, banana peels was refined by a blender to produce banana peels flour. The results of the research showed that the product of flour from three different varieties of bananas undergoing the oven and sun drying process didn't produce bitter taste. Generally, both of drying processes produced soft flour, except sun drying process on kepok banana that produced rough flour. Banana's peel flour derived from oven drying process was darker in color, and more aromatic than the flour which was produced using the sun drying process. The proximate results for chemical element i.e.: protein, fat, BETN, dietary fiber, ash, calcium and phosphor degree, from three different varieties of bananas did not show significant differences ($P>0.05$) between oven and sun drying process, except in particular water and energy degree. It could be concluded that the banana peels derived from oven and sun drying process have produced good flour of the same quality.

Key words: Banana' peel flour, tanduk banana, nangka banana, kepok banana, oven and sun drying processes