

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

Hernawati dan Any Aryani

Jurusan Pendidikan Biologi
FPMIPA Universitas Pendidikan Indonesia
Jl. Dr. Setiabudi No.229 Bandung 40154
Telp./Fax. 022-2001937
Email : hernawati_hidayat@yahoo.com

ABSTRACT

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

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