Investigation of the Variables Affecting the use of Charcoal to delay Fermentation in Wet Beans Slurry using Chemical and Physical Analysis.

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ABSTRACT

Fermentation is the conversion of monomeric sugars into ethanol and carbondioxide in the presence of microorganisms under anaerobic conditions.

In line with the aim and objective of this research project, which is to investigate into the variables affecting the use of charcoal to delay fermentation in wet beans slurry, some physical and chemical analysis were carried out on the wet beans slurry using a PH meter in which a thermometer is incorporated in it and a measuring cylinder was used for the foam level test.

About 250 grams of the ground beans slurry was divided into two portions for testing. The sample with charcoal was labeled sample “A” while the second sample without charcoal was labeled sample “B” subsequently.

The experiment lasted for a period of 41.15 hours (i.e fourty one hours and nine minutes). During the fourth proces,* both samples could not be tested as the laboratory had been saturated with foul odor and both samples were packed and sealed in polythene bag for disposal in the trash can.

It was generally observed that the sample with the charcoal lasted for a longer time before that without charcoal before total spoilage occurred.

Key words: Fermentation, monomeric sugars, beans slurry, charcoal, anaerobic conditions.