Guideline of Bio-Fermented Cleaning Agents Development from Local Fruit with Bagasse: Case Study of Mango, Gooseberry and Bilimbi

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Abstract

The objective of this research were study the efficiency of cleaning agents and study the properties and physical of bio-fermented from local fruit with bagasse of mango, gooseberry and bilimbi. The results of the efficiency cleaning were very good that bio-fermented from the bilimbi, ratio 3:0.5:0.5, the experimental were opaque white sour aroma the efficiency was 90.85%, pH was 2.74 ± 0.43 and conductivity was 182.16 ± 3.57 µS/cm, followed by bio-fermented from the mango, ratio 3:1:0, the experimental was green-brown in color, sour aroma the efficiency was 61.75%, pH was 3.38 ± 0.38 and the conductivity was 90.00 ± 1.51 µS/cm, the gooseberry, ratio 3:0:1, it has efficiency of 57.30%, pH was 3.83 ± 0.33 and conductivity was 93.24 ± 0.89 µS/cm. However, when considering the efficiency of bio-fermented suitable for cleaning agent products, there should be the sufficient amount of sugaring in particular. The local fruit was highly acid.