STUDY OF FERMENTATION TIME OF CAFEIN, ETHANOL AND pH ROBUSTA COFFEE POWDER (Coffea canephora) ARGOPURO

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ABSTRACT

Robusta coffee (Coffea canefora) is a type of coffee that is widely cultivated in Indonesia. Fermentation affects the taste of the coffee that is formed, if it takes too long it will cause a distorted taste because it is over fermented, whereas if it is too fast it will cause a less formed taste. This study aims to determine the levels of caffeine, ethanol and pH of Robusta coffee (Coffea canephora) powder. This research method used a one-factor Completely Randomized Design (CRD) with a long fermentation time with 3 repetitions. This research was conducted at the Jember State Polytechnic Food Analysis Laboratory. The time used in the fermentation process is 7 different times, namely 0, 6, 12, 24, 36, 48, 54 hours with a temperature of 32-35°C. The data obtained will be analyzed descriptively, if there is an influence on the treatment then the Duncan test will be continued. The results of this study showed that the caffeine content produced a very significant difference in the length of time of fermentation with a value range of 1.98% - 3.47%. This shows that the higher the fermentation time, the lower the value of caffeine content. The ethanol content was significantly different in the length of time of fermentation with a value range of 0.2 -0.8 with a level of P<0.01. The results of the tests that have been carried out are classified as unfit for consumption at a fermentation time of 6 hours to 54 hours, it is necessary to carry out a further process to remove the ethanol content in coffee beans. pH test with significantly different results on the length of time of fermentation with a value range of 5.17-5.28. Based on the test results that have been carried out, Argopuro robusta coffee is classified as fit for consumption. Fermentation time affects the levels of caffeine, ethanol and pH in Argopuro Robusta coffee powder.

Keywords: Coffee Powder, Fermentation, Coffee, Robusta Coffee