ABSTRACT

Aliefio Nurdiansyah, Comparison of Resistant Starch Content in Kepok Banana Fruit (Musa paradisiaca L.) Using Filtration and Decantation Separation Methods Supervised by Mrs. Retno Ikayanti, S.Farm, M.Farm, Apt.

Resistant starch is starch that is not broken down by the α-amylase enzyme in the small intestine of humans. Resistant starch is very good for digestion, namely as a prebiotic. Kepok banana is a banana variety that grows in Indonesia and has high levels of resistant starch, namely 61-73%. So, Kepok bananas are a source of resistant starch that has great potential for further development into prebiotic products. Therefore, in the manufacture of starch products, an optimal separation method is needed to obtain resistant starch. The aim of this research is to determine the optimal separation method to obtain resistant starch in Kepok bananas. This research compared the levels of resistant starch using the filtration and decantation separation methods which were then tested statistically using the Independent Sample Test. The results of statistical testing obtained a sig(2-tailed) value of 0.190, which means there is no significant difference between the two separation methods. So in this research it can be concluded that the optimal separation method to obtain resistant starch is to use the decantation method, because this method does not require a long time and the tools used are simple, namely a glass beaker and a stirring rod.

Keywords: Comparison, Resistant Starch, Banana Kepok, Filtration and Decantation Methods