

ABSTRACT

Food loss and waste issues are escalated linearly with consumer's demand for food products variation. Indonesia becoming one of the largest contributors to food waste and loss issue attempts to solve this problem through food preservation. Despite being one of the valuable commodities in Indonesia, breadfruit is often underutilized and ended up as a food waste due to the low on preserving breadfruits. Osmotic dehydration and conventional dehydration are methods often performed onto other fruits or vegetables with the goal of preservation and increasing its shelf life. Samples that have been prepared were treated with 2% of ascorbic acid to prevent enzymatic browning. Osmotic dehydration was performed, followed by conventional dehydration to assess the effect of both methods of treatment toward the AW, weight loss/weight gain, moisture content, and color of breadfruit samples. Moreover, statistical analysis is done using IBM SPSS Statistics for Two-way ANOVA followed by Tukey's HSD post hoc analysis to further signify the results. Results show that osmotic dehydration is only effective in reducing moisture content and retaining the sample's color, however did not significantly affect AW and weight observations. On the other hand, conventional dehydration significantly lowered AW, moisture content, and weight of the breadfruit; supported by the kinetics of AW and weight observation. Osmotic dehydration therefore was not considered as a feasible method to overcome food waste problem, while conventional dehydration was deemed to be feasible.