

## **Investigation of Edible Starch – Based Coating for the Preservation of Breadfruit During Minimal Processing**

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### ***Abstract***

Breadfruit (*Artocarpus altilis*) is a tropical fruit and it is a nutrient dense fruit rich in carbohydrates, fiber, vitamins and minerals. Edible coating is a versatile tool in the food industry to improve food quality and extend shelf life. The aim of this study is to investigate the edible starch based edible coating for the preservation of breadfruit during minimal processing. The samples were cut and different starch based coated breadfruit samples were prepared. Furthermore, the coated breadfruit samples were stored refrigerated conditions (4 °C) and the qualities were determined once in two (02) days. Physical, physicochemical and textural properties and sensory attributes were determined. The data were analysed using SPSS Software and they were interpreted at the 0.05 significance level. The physical properties and physicochemical properties of the sample were significant difference. When comparing fresh sample, physical properties of storage samples are decreased and when comparing the salt content of fresh sample, the salt content of the storage sample is significantly lower. However, the textural properties of the sample were significantly not difference with fresh sample. There are no considerable changes in Hardness and springiness of all starch coated samples. The Corn coated breadfruit samples can be kept for a minimum 12 days without significantly changing their qualities.

***Keywords: Breadfruit, Edible – Starch Based Coating, Minimal Processing, Preservation***