Physical Characteristics Of Porang Glucomannan Flour Edible Film And Applications As A Packaging For White Bread And Semprong Supervisor : Dr. Yossi Wibisono, S.TP., M.P.

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ABSTRACT

Edible film is a layer in the form of thin sheets that can be used as primary packaging for products and can be consumed. One of the main ingredients in making edible film is glucomannan. Glucomannan is an ingredient contained in porang tubers which has biodegradable properties so it can be used as the main raw material in making edible films. The purpose of this study was to determine the effect of the concentration of porang glucomannan flour on the characteristics of edible films and the application of edible films to tefa bakery products (white bread and semprong). In this study, variations in the concentration of glucomannan flour used were 1%, 2% and 3% (b/v). The data obtained were analyzed using SPSS version 26 with the ANOVA method. The results of the research conducted showed that the greater the concentration of glucomannan flour added, the effect was significantly different (p<0,01) on the characteristics of thickness, tensile strength, percent elongation and solubility of edible film. The resulting edible film was applied to bread and semprong. The application to the two products showed significantly different effects (p<0,01) on the moisture content of the products during the storage time at room temperature.

Keywords : Physical Characteristics of Edible Films, Glucomannan, Packaging