Pengaruh Penambahan *Plasticizer* Sorbitol Terhadap Karakteristik *Edible Film* dari Pati Talas Kimpul (*Xanthosoma sagittifolium,(*L.*)* Schott)

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PADANG
2017

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ABSTRAK

Penelitian ini bertujuan untuk mengetahui efek penambahan sorbitol terhadap karakteristik *edible film* berbahan dasar pati talas kimpul. Penelitian ini dilaksanakan dilaboratorium Teknologi Pertanian, Universitas Andalas, padang pada bulan Agustus sampai bulan September 2016. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dengan 5 perlakuan dan 3 kali ulangan. Analisa menggunakan *Analysis of Variant* (ANOVA), hasil yang berbeda nyata dilanjutkan dengan uji *Duncan's Multiple Range Test* (DNMRT) pada taraf 5%. Penelitian menggunakan penambahan sorbitol yaitu A(0,6%), B(1%), C(1,4%), D(1,8%) dan E(2,2%). Hasil penelitian menunujukan bahwa penambahan sorbitol pada *edible film* berbahan dasar pati talas kimpul berbeda nyata pada *tensile strength*, *elongasi*, ketebalan dan tekstur dan tidak berbeda nyata pada analisis warna, aroma, rasa dan laju transmisi uap air. Karakterisitik *edible film* terbaik adalah perlakuan E (2,2%) dengan nilai ketebalan 0,09mm, laju transmisi uap air 5,70g/m2.jam, *tensile strength* 23,54MPa, dan *elongasi* 7,82%, uji organoleptik warna 4,00, aroma 4,00, rasa 4,13, tekstur 4,03.

Kata kunci - ***edible film*, sorbitol, pati talas kimpul**

Effect of Plasticizer Addition To The Characteristics Sorbitol Edible Film From Taro Starch purse (Xanthosoma sagittifolium, (L.) Schott)

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ABSTRACT

This research aims to determine the effect of the addition of sorbitol to the characteristics of edible film made from taro starch purse. This research was conducted in laboratory of Agricultural Technology, Andalas University, from August to September 2016. This research used a Completely Randomized Design (CRD) with 5 treatments and 3 repetitions. The analysis used an Analysis of Variant (ANOVA), in which a significantly different result was continued by Duncan's Multiple Range Test (DNMRT) at 5% level. This research used an addition of sorbitol such as; A (0.6%), B (1%), C (1.4%), D (1.8%) and E (2.2%). The result showed that the addition of sorbitol at edible film of taro starchpurse was significantly different in tensile strength, elongation, thickness and texture, and it was not significant difference in the analysis of color, aroma, taste and water vapour transmission rate. The best characteristic of edible film was the treatment E (2.2%) with a thickness of 0,09mm, water vapour transmission rate at 5,70g / m^2.hour, 23,54MPa tensile strength, and 7.82% elongation, organoleptis 4,00 colour, 4.00 aroma, 4.13 flavour, and 4.03 texture.

***Keywords*- edible film, sorbitol, starch taro purse**