

**PENGARUH PENAMBAHAN EKSTRAK BUNGA ROSELLA  
(*Hibiscus sabdariffa*, L.) TERHADAP KARAKTERISTIK  
EDIBLE FILM DARI PATI BIJI ALPUKAT (*Persea americana*  
Mill.)**



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**ABSTRAK**

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan ekstrak bunga rosella terhadap karakteristik kimia, fisik, mikrobiologi dan organoleptik *edible film* dari pati biji alpukat. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dengan 5 perlakuan dan 3 ulangan. Perlakuan pada penelitian ini adalah penambahan ekstrak bunga rosella 0% (perlakuan A), penambahan ekstrak bunga rosella 0,5% (perlakuan B), penambahan ekstrak bunga rosella 1% (perlakuan C), penambahan ekstrak bunga rosella 1,5% (perlakuan D) dan penambahan ekstrak bunga rosella 2% (perlakuan E). Hasil penelitian menunjukkan bahwa penambahan ekstrak bunga rosella memberikan pengaruh nyata terhadap karakteristik kimia (kadar air, kadar abu, pH, aktivitas antioksidan), fisik (warna, ketebalan, kuat tarik, laju uap air, persen kelarutan), mikrobiologi (angka lempeng total) dan organoleptik warna. Akan tetapi tidak memberikan pengaruh nyata terhadap organoleptik aroma, rasa dan tekstur. Produk yang paling disukai secara organoleptik adalah penambahan ekstrak rosella 2% dengan nilai kadar air 17,47%, kadar abu 3,47%, pH 5,6, aktivitas antioksidan 39,43%, <sup>0</sup>Hue dengan warna kuning merah sebesar 82,45, ketebalan 0,38 mm, kuat tarik 11,58 N/mm<sup>2</sup>, laju transmisi uap air 0,27 mg/jam, persen kelarutan 20,32%, angka lempeng total 2,6x10<sup>2</sup>.

Kata Kunci : *Edible Film*, Ekstrak Bunga Rosella, Pati Biji Alpukat, Karakteristik Produk, Sifat Organoleptik



**THE EFFECT OF ROSELLA FLOWER EXTRACT (*Hibiscus sabdariffa*, L.) ADDITION TO THE CHARACTERISTICS OF EDIBLE FILM FROM AVOCADO SEED STARCH (*Persea americana* Mill.)**

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**ABSTRACT**

This research aimed to determine the effects of rosella flower extract addition to the chemical, physical, microbial and organoleptic characteristics of edible film made from avocado seed starch. This study used a completely randomized design (CRD) with 5 treatments and 3 replications. The treatments in this study were addition 0% of rosella flower extract (treatment A), addition 0.5% of rosella flower extract (treatment B), addition 1% of rosella flower extract (treatment C), addition 1.5% of rosella flower extract (treatment D) and addition 2% of rosella flower extract (treatment E). The results showed that addition of rosella flower extract was significantly affected to the chemical characteristics (water content, ash content, pH, antioxidant activity), physical characteristics (colour, thickness, tensile strength, water vapor transmission rate, solubility percentage), microbial (total plate number) and colour organoleptic. Yet, it was not significantly affected to the aroma, taste and texture. The most appropriate product in organoleptics was the addition 2% of rosella flower extract with water content 17.47%, ash content 3.47%, pH 5.6, antioxidant activity 39.43%, <sup>0</sup>Hue 82,45 as yellow red, thickness 0.38mm, tensile strength 11.58 N/mm<sup>2</sup>, water vapor transmission rate 0.27 mg/hour, solubility percentage 20.32% and total plate number 2.6x10<sup>2</sup>.

Key words: **Edible Film, Rosella Flower Extract, Avocado Seed Starch, Product Characteristics, Organoleptics Characteristics.**

