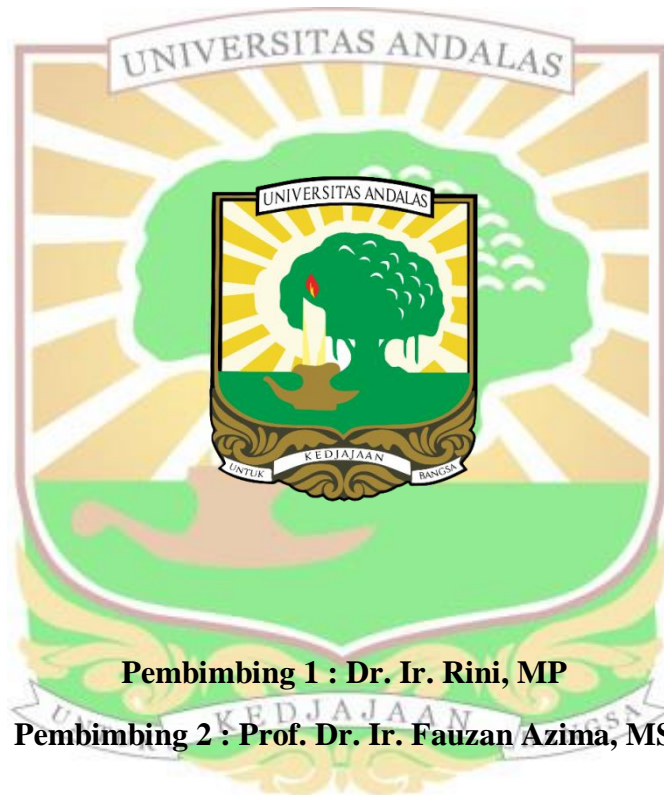


**PENGARUH PENAMBAHAN EKSTRAK DAUN MANGGA  
TERHADAP KARAKTERISTIK DAN NILAI SPF LOTION  
TABIR SURYA BERBAHAN BAKU VCO**

**DEBI RISKA FADILLA**

**181121016**



**Pembimbing 1 : Dr. Ir. Rini, MP**

**Pembimbing 2 : Prof. Dr. Ir. Fauzan Azima, MS**

**FAKULTAS TEKNOLOGI PERTANIAN  
UNIVERSITAS ANDALAS  
PADANG**

**2022**

**PENGARUH PENAMBAHAN EKSTRAK DAUN  
MANGGA TERHADAP KARAKTERISTIK DAN NILAI SPF  
LOTION TABIR SURYA BERBAHAN BAKU VCO**

**DEBI RISKA FADILLA**

**1811121016**



**FAKULTAS TEKNOLOGI PERTANIAN  
UNIVERSITAS ANDALAS  
PADANG  
2022**

# **Pengaruh Penambahan Ekstrak Daun Mangga Terhadap Karakteristik dan Nilai SPF Lotion Tabir Surya Berbahan Baku VCO**

Debi Riska Fadilla, Rini, Fauzan Azima

## **ABSTRAK**

Ekstrak daun mangga mengandung antioksidan dari senyawa polifenol yaitu diantaranya flavonoid, mangiferin, asam galat dan beberapa flavonoid lainnya (katekin, epikatekin, kuersetin) serta *benzofenon* yang dapat melindungi kulit dari sinar ultraviolet. Penelitian ini bertujuan mengetahui penambahan ekstrak daun mangga terhadap karakteristik dan nilai SPF lotion tabir surya dan untuk mengetahui konsentrasi ekstrak daun mangga terbaik untuk lotion tabir surya. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dengan 5 perlakuan dan 3 ulangan. Perlakuan dalam penelitian ini adalah penambahan ekstrak daun mangga 0%, 2%, 3%, 4% dan 5%. Analisis data menggunakan ANOVA dan dilanjutkan dengan Duncan's New Multiple Range Test (DNMRT) pada taraf signifikan 5%. Hasilnya menunjukkan bahwa penambahan ekstrak daun mangga pada lotion berpengaruh nyata taraf 5% untuk pH, nilai SPF, aktivitas antioksidan, viskositas, daya sebar, stabilitas emulsi dan uji sensori (warna) tetapi tidak berpengaruh nyata pada aroma, daya serap dan kelengketan serta uji iritasi. Perlakuan terbaik berdasarkan analisis kimia, analisis fisik dan uji sensori adalah penambahan ekstrak daun mangga 4% dengan nilai pH (7,2), nilai SPF (25,09), aktivitas antioksidan (50,28%), viskositas (12800 cPs), daya sebar (5,03 cm), stabilitas emulsi (91,67%), nilai indeks iritasi (0) dan kesukaan panelis terhadap warna 3,19 (biasa), aroma 3 (biasa), daya serap 3,12 (biasa) dan kelengketan 3,58 (suka)

**Kata kunci** : ekstrak daun mangga, antioksidan, lotion, nilai SPF, karakteristik

# Effect of Addition of Mango Leaf Extract on the Characteristic and SPF Lotion from VCO

Debi Riska Fadilla, Rini, Fauzan Azima

## ABSTRACT

Mango leaf extract contains antioxidants of polyphenolic compounds including flavonoids, mangiferin, gallic acid and several other flavonoids (catechins, epicatechins, quercetin) as well as benzophenones that can protect the skin from ultraviolet rays. This study aims to determine the addition of mango leaf extract to the characteristic and SPF value of sunscreen lotions and to determine the best concentration of mango leaf extract for sunscreen lotions. This study used a completely randomized design (CRD) with 5 treatments and 3 replications. The treatments in this study were the addition of mango leaf extract A (0%), B (2%), C (3%), D (4%) and E (5%). Data analysis used ANOVA and continued with Duncan's New Multiple Range Test (DNMRT) at a significant level of 5%. The results showed that the addition of mango leaf extract to the lotion significantly affected the 5% level on analysis of pH, SPF value, antioxidant activity, viscosity, spreadability, emulsion stability and sensory test color but had no significant effect on aroma, absorption and stickiness. The best treatment based on chemical analysis, physical analysis and organoleptic test was addition of 4% mango leaf extract with pH value (7,2), SPF value (25,09), antioxidant activity (50,28%), viscosity (12800 cPs), spreadability (5,03 cm), emulsion stability (91,67%), irritation index value (0) and panelist preference for color 3.19 (netral), aroma 3 (netral), absorption 3,12 (netral) and stickiness 3,58 (like)

**Keywords :** Mango leaf extract, antioxidants, lotions, SPF, characteristic