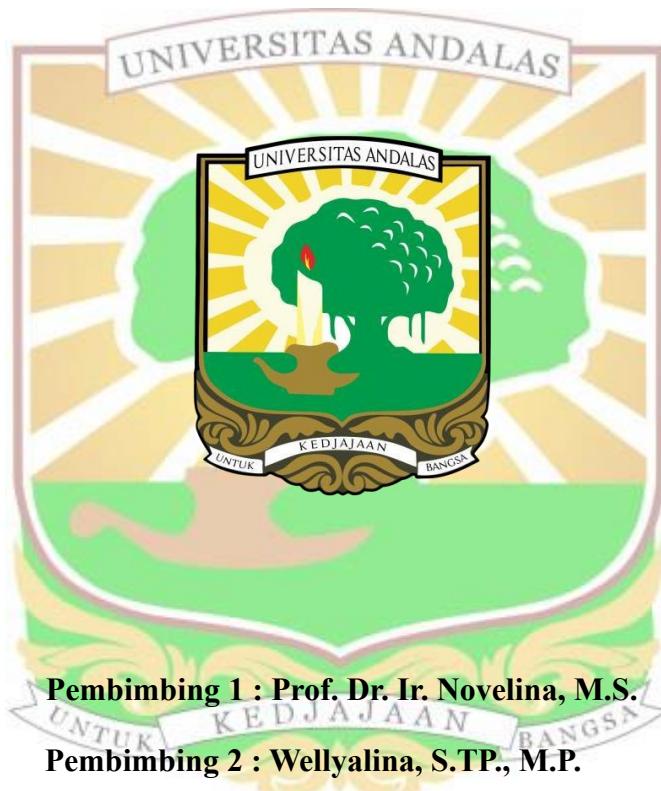


**PENGARUH PENAMBAHAN SARI JERUK NIPIS (*Citrus aurantifolia*) TERHADAP KARAKTERISTIK MANISAN BASAH KOLANG KALING (*Arenga pinnata L.*) DENGAN PEWARNA EKSTRAK BUNGA TELANG (*Clitoria ternatea L.*)**

**CHIKA ELVASON**

**2011123014**



**Pembimbing 1 : Prof. Dr. Ir. Novelina, M.S.**

**Pembimbing 2 : Wellyalina, S.TP., M.P.**

**FAKULTAS TEKNOLOGI PERTANIAN**

**UNIVERSITAS ANDALAS**

**PADANG**

**2024**

**PENGARUH PENAMBAHAN SARI JERUK NIPIS (*Citrus aurantifolia*) TERHADAP KARAKTERISTIK MANISAN BASAH KOLANG KALING (*Arenga pinnata L.*) DENGAN PEWARNA EKSTRAK BUNGA TELANG (*Clitoria ternatea L.*)**

**CHIKA ELVASON**

**2011123014**



**FAKULTAS TEKNOLOGI PERTANIAN**

**UNIVERSITAS ANDALAS**

**PADANG**

**2024**

# **Pengaruh Penambahan Sari Jeruk Nipis (*Citrus aurantifolia*) Terhadap Karakteristik Manisan Basah Kolang Kaling (*Arenga pinnata* L.) dengan Pewarna Ekstrak Bunga Telang (*Clitoria ternatea* L.)**

Chika Elvason, Novelina, Wellyalina

## **ABSTRAK**

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan sari jeruk nipis terhadap karakteristik manisan basah kolang kaling dengan pewarna ekstrak bunga telang. Rancangan yang digunakan pada penelitian ini yaitu Rancangan Acak Lengkap (RAL) dengan 5 perlakuan dan 3 ulangan. Perlakuan dalam penelitian ini yaitu perlakuan A (penambahan sari jeruk nipis 0,5%), perlakuan B (penambahan sari jeruk nipis 1,5%), perlakuan C (penambahan sari jeruk nipis 3,0%), perlakuan D (penambahan sari jeruk nipis 4,5%), dan perlakuan E (penambahan sari jeruk nipis 6,0%). Data penelitian dianalisis statistika secara ANOVA dan dilanjutkan dengan analisis Duncan's New Multiple Range (DNMRT) pada taraf 5%. Hasil penelitian menunjukkan bahwa penambahan sari jeruk nipis berpengaruh nyata terhadap analisis nilai pH, analisis warna, kadar air, kadar total gula, kadar serat kasar, aktivitas antioksidan, kadar antosianin, dan pengujian organoleptik pada warna dan rasa manisan basah. Tetapi berpengaruh tidak nyata terhadap analisis uji angka lempeng total dan tingkat kesukaan panelis terhadap aroma dan tekstur. Perlakuan terbaik berdasarkan analisis fisik, kimia, dan penerimaan organoleptik adalah manisan basah dengan perlakuan E pada penambahan sari jeruk nipis sebesar 6,0% dengan nilai rata-rata sebagai berikut: analisis nilai pH 3,19, analisis warna (340,88 °Hue) menghasilkan warna merah keunguan, kadar air (34,50%), kadar total gula (55,92%), kadar serat kasar (10,78%), aktivitas antioksidan (50,31), kadar antosianin (8,13mg/100ml), analisis uji angka lempeng total ( $0,43 \times 10^2$ CFU/gram) dan nilai penerimaan organoleptik dengan nilai warna 4,04 (suka), aroma 3,36 (biasa), rasa 4,16 (suka), dan tekstur 3,84 (suka).

*Kata kunci:* sari jeruk nipis, ekstrak bunga telang, karakteristik, kolang kaling, manisan basah

# **The Effect of Addition of Lime Juice (*Citrus aurantifolia*) on the Characteristics of Fermented Sugar Palm Fruit (*Arenga pinnata* L.) with Butterfly Pea Flower Extract (*Clitoria ternatea* L.)**

Chika Elvason, Novelina, Wellyalina

## **ABSTRACT**

This study aims to determine the effect of the addition of lime juice on the characteristics of fermented sugar palm fruit with butterfly pea flower extract. The design used in this study was a Complete Random Design (RAL) with 5 treatments and 3 replicates. The treatments in this study were treatment A (addition of lime juice 0,5%), treatment B (addition of lime juice 1,5%), treatment C (addition of lime juice 3,0%), treatment D (addition of lime juice 4,5%), and treatment E (addition of lime juice 6,0%). The research data was statistically analyzed by ANOVA and continued with Duncan's New Multiple Range (DNMRT) analysis at the level of 5%. The results showed that the addition of lime juice had a real effect on the analysis pH value, analysis of color test, moisture content, total sugar content, crude fiber content, antioxidant activity, anthocyanin content, and organoleptic testing on the color and taste of wet sweets. However, it had no real effect on the analysis of the total plate number test and the level of preference of the panelists for aroma and texture. The best treatment based on physical, chemical, and organoleptic analysis was wet candied with E treatment on the addition of lime juice of 6,0% with the following average values: analysis pH value (3,19), color analysis (340,88 °Hue) produced purplish-red color, moisture content (34,50%), total sugar content (55,92%), crude fiber content (10,78%), antioxidant activity (50,31), anthocyanin content (8,13mg/100ml), total plate number test analysis ( $0,43 \times 10^2$ CFU/gram) and organoleptic acceptance value with color value 4,04 (like), aroma 3,36 (normal), taste 4,16 (like), and texture 3,84 (like).

*Keywords:* lime juice, butterfly pea flower extract, characteristics, sugar palm fruit, fermented