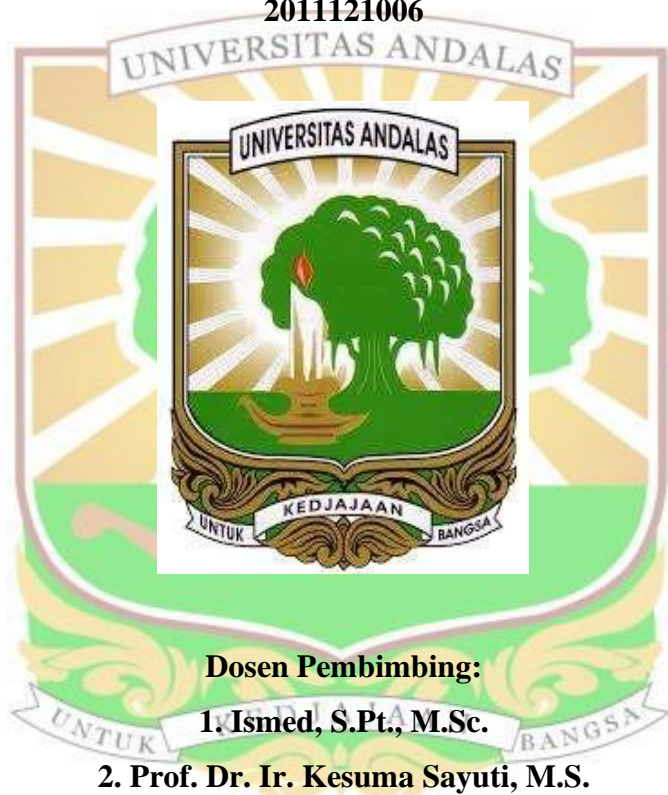


**PENGARUH SUHU PENGERINGAN TERHADAP  
KARAKTERISTIK BUAH KERING PEPAYA (*Carica papaya*  
L.) MENGGUNAKAN  
METODE *TRAY DRYING***

**ARISKA ANANDRA**

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**Dosen Pembimbing:**

**1. Ismed, S.Pt., M.Sc.**

**2. Prof. Dr. Ir. Kesuma Sayuti, M.S.**

**FAKULTAS TEKNOLOGI PERTANIAN**

**UNIVERSITAS ANDALAS**

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# Pengaruh Suhu Pengeringan Terhadap Karakteristik Buah Kering Pepaya (*Carica Papaya L.*) Menggunakan Metode *Tray Drying*

Ariska Anandra, Ismed, Kesuma Sayuti

## ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh suhu pengeringan terhadap karakteristik buah kering pepaya menggunakan metode *tray drying* serta memperoleh suhu pengeringan yang optimum. Rancangan percobaan yang digunakan pada penelitian ini adalah rancangan acak lengkap (RAL) dengan 5 perlakuan dan 3 ulangan. Perlakuan pada penelitian ini adalah buah kering dengan perlakuan A (suhu pengeringan 50°C), B (suhu pengeringan 55°C), C (suhu pengeringan 60°C), D (suhu pengeringan 65°C), E (suhu pengeringan 70°C). Data yang diperoleh kemudian dianalisis dengan ANOVA dan jika berbeda nyata dilanjutkan dengan uji *Duncan's New Multiple Range Test* (DNMRT). Hasil penelitian menunjukkan bahwa perbedaan suhu pengeringan berpengaruh nyata terhadap rendemen, kekerasan, kadar air, kadar abu, nilai pH, total karotenoid, dan organoleptik tekstur serta berpengaruh tidak nyata terhadap warna, aktivitas antioksidan, organoleptik rasa, organoleptik warna dan organoleptik aroma. Perlakuan terbaik berdasarkan pengamatan fisik, kimia, dan organoleptik adalah buah kering pepaya pada perlakuan B (suhu pengeringan 55°C) selama 9 jam dengan hasil nilai rata-rata kesukaan terhadap warna 3,80 (suka), rasa 3,80 (suka), aroma 3,04 (suka), tekstur 3,32 (suka), rendemen (13,28%), kekerasan (88,71 N/cm<sup>2</sup>), nilai °Hue 47,38 dengan warna (merah), kadar air (15,53%), kadar abu (3,32%), nilai pH (5,61), aktivitas antioksidan (39,19%), total karotenoid (0,14 mg/100g) dan angka lempeng total (9,0 x 10<sup>4</sup> CFU/g).

**Kata kunci:** pepaya, suhu pengeringan, *tray drying*, buah kering.

# The Effect of Drying Temperature on the Characteristics of Papaya (*Carica Papaya* L.) Dried Fruit Using Tray Drying Method

Ariska Anandra, Ismed, Kesuma Sayuti

## ABSTRACT

This study aimed to determine the effect of drying temperature on the characteristics of papaya dried fruit using tray drying method and obtain the optimum drying temperature. The experimental design used in this research is a complete randomized design (CRD) with 5 treatments and 3 replicates. The treatment in this study was dried fruit with treatment A (drying temperature 50°C), B (drying temperature 55°C), C (drying temperature 60°C), D (drying temperature 65°C), E (drying temperature 70°C). The data obtained was then analyzed with ANOVA and if significantly different, it was continued with Duncan's New Multiple Range Test (DNMRT). The results showed that different drying temperatures had a very significant effect on yield, hardness, water content, ash content, pH value, total carotenoids, organoleptic texture, and had no significant effect on color, antioxidant activity, organoleptic taste, organoleptic color, and organoleptic aroma. The best treatment based on physical, chemical, and organoleptic observations was papaya dried fruit in treatment B (drying temperature 55°C) for 9 hours with results average value of liking for color 3.80 (like), taste 3.80 (like), aroma 3.04 (like), texture 3.32 (like), yield (13.28%), hardness (88.71 N/cm<sup>2</sup>), °Hue value 47.38 with (red color), water content (15,53%), ash content (3,32%), pH value (5.61), antioxidant activity (39.19%), total carotenoids (0.14 mg/100g) and total plate count (9,0 x 10<sup>4</sup> CFU/g).

**Keywords:** papaya, drying temperature, *tray drying*, dried fruit.