

**PENGARUH SUHU PENGGORENGAN HAMPA (*VACUUM FRYING*)  
TERHADAP KARAKTERISTIK KERIPIK TAPE UBI KAYU  
(*Mannihot esculenta*, Crantz)**

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# **Pengaruh Suhu Penggorengan Hampa (*Vacuum Frying*) Terhadap Karakteristik Keripik Tape Ubi Kayu (*Mannihot esculenta*, Crantz)**

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## **ABSTRAK**

Penelitian ini bertujuan untuk mengetahui pengaruh perbedaan suhu penggorengan hampa terhadap sifat fisik, kimia, dan organoleptik keripik tape ubi kayu, serta untuk mengetahui suhu penggorengan hampa yang optimum dalam pembuatan keripik tape ubi kayu. Metode yang digunakan dalam penelitian ini adalah Rancangan Acak Lengkap (RAL) dengan 5 perlakuan yaitu suhu penggorengan 75<sup>0</sup>C, 80<sup>0</sup>C, 85<sup>0</sup>C, 90<sup>0</sup>C, dan 95<sup>0</sup>C dengan 3 kali ulangan. Analisis data dilakukan menggunakan *Analysis of Variance* (ANOVA) dan kemudian dilanjutkan dengan *Duncan's New Multiple Range Test* (DNMRT) pada taraf 5%. Hasil penelitian menunjukkan bahwa perbedaan suhu penggorengan hampa memberikan pengaruh yang berbeda nyata terhadap nilai rendemen, kekerasan, waktu penggorengan, kadar air, kadar karbohidrat, kadar alkohol, serapan minyak, dan nilai organoleptik (rasa dan tekstur), tetapi tidak berpengaruh nyata terhadap warna dan organoleptik warna dan aroma. Produk yang paling disukai panelis berdasarkan uji organoleptik yaitu pada suhu penggorengan 90<sup>0</sup>C dengan criteria mutu nilai rata-rata kesukaan terhadap warna 3,48 (suka), aroma 3,88 (suka), rasa 4,28 (sangat suka), tekstur 3,84 (suka). Keripik tape ubi kayu dengan perlakuan tersebut memiliki rendemen 47,90%, kekerasan 13,23 N/cm<sup>2</sup>, kadar karbohidrat 86,93%, warna Hue 46,03 (*yellow`red*), waktu penggorengan 73 menit, kadar air 6,33%, serapan minyak 10,12%, total mikroba 1,9 x 10<sup>4</sup>, dan kadar alkohol 0,29%.

**Kata kunci**–*Karakteristik*, Tape Ubi Kayu, keripik, Suhu, Vacuum Frying.

# ***The Effect of Vacuum Frying Temperature on the Characteristics of Tape Ubi Kayu Chips (Mannihot esculenta, Crantz)***

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## **ABSTRACT**

The aim of the research was to identify the difference of Vacuum frying temperature on physical, chemical, and organoleptic characteristics of tape ubi kayu chips and to know the optimum temperature of frying in the production of tape ubi kayu chips. The research was conducted from November 2018 to Januari 2019. This research used Completely Randomized Design (CRD) analysis with treatments and 3 repetitions. The frying temperature were A (75<sup>0</sup>C), B (80<sup>0</sup>C), C (85<sup>0</sup>C), D (90<sup>0</sup>C), and E (95<sup>0</sup>C). Data were analyzed using Analysis of Variance (ANOVA) and then continue with Duncan's New Multiple Range Test (DNMRT). The result of the research shows that the different of Vacuum frying temperature gives significant effects to the yield, hardness, length of frying time, moisture contents, ash contents, carbohydrate contents, alcohol contents, oil absorption, color and taste based on organoleptic test. But it not significant different effect to color and odour based on organoleptic test. The best product based on panelis acceptance is treatment D (90<sup>0</sup>C) with color (3,48), odour (3,88), taste (4,28), texture (3,48), yield (47,90%), hardness (13,23 N/cm<sup>2</sup>), carbohydrate total (86,93%), color (46,03 Hue), length of frying time (73 minutes), moisture contents (6.33%), oil absorption (10,12%), microba total (1.9 x 10<sup>4</sup>), and alcohol kontens (0,29%).

**Keywords-Characteristics, Tape Ubi Kayu, Chips, Temperature, Vacuum Frying**