

**SKRIPSI**

**PENGARUH PERBEDAAN PENAMBAHAN KONSENTRASI SARI DAUN  
KELOR (*Moringa oleifera*) TERHADAP KARAKTERISTIK PERMEN  
KERAS**

**GILANG MARIO SAMUDRA**

**1511122034**



Dosen Pembimbing:

1. Prof. Dr. Ir. Rina Yenrina, MS
2. Tuty Anggraini, S.TP, MP, PhD

**FAKULTAS TEKNOLOGI PERTANIAN**

**UNIVERSITAS ANDALAS**

**PADANG**

**2019**

# **Pengaruh Perbedaan Konsentrasi Sari Daun Kelor (*Moringa oleifera*) terhadap Karakteristik Permen Keras**

Gilang Mario Samudra, Rina Yenrina, Tuty Anggraini

## **ABSTRAK**

Penelitian ini bertujuan untuk mengetahui pengaruh perbedaan konsentrasi sari daun kelor terhadap karakteristik permen keras dan untuk menentukan konsentrasi daun kelor terbaik berdasarkan analisis kimia, analisis fisika dan analisis sensorik terhadap penerimaan permen keras. Desain eksperimental yang digunakan adalah Rancangan Acak Lengkap (RAL) dengan 5 perlakuan dan 3 ulangan. Data dianalisis secara statistik oleh ANOVA dan jika berbeda secara signifikan akan diikuti oleh New Multiple Range Test (DNMRT) duncan dengan signifikansi 5%. Perlakuan pada penelitian ini adalah penambahan sari daun kelor 4%, 8%, 12%, 16% dan 20%. Dua produk terbaik ditentukan berdasarkan uji organoleptik dan kemudian dilakukan analisis sakarosa, gula reduksi, energi, kalsium dan aktivitas antioksidan. Hasil penelitian menunjukkan bahwa penambahan sari daun kelor secara signifikan berpengaruh terhadap sifat kimia, fisik dan sensorik permen keras. Berdasarkan karakteristik kimia, fisik dan sensorik pada penerimaan produk permen keras, yang terbaik adalah permen keras dengan penambahan 16% sari daun kelor dengan nilai analisis kimia meliputi pH 6,1, kadar air 4,07%, kadar abu 0,1%, kadar abu 0,1 %, pengurangan kadar gula 11,80%, sakarosa 63,47%, energi 3681,97 kal / gram, kalsium 39,9 mg / 100 gram, aktivitas antioksidan 44,24%, kekerasan 5,67 N / cm<sup>2</sup>, analisis sensorik adalah warna 3,4 (normal) , aroma 3,4 (normal), rasa 3,7 (suka) dan tekstur 3,6 (suka).

**Kata kunci – permen keras, sari daun kelor, karakteristik permen keras**

# ***The Effect of different concentrations of Moringa leaf Concentrat on Hard Candy Characteristics***

Gilang Mario Samudra, Rina Yenrina, Tuty Anggraini

## **ABSTRACT**

The research aims to determine the effect of different concentrations of Moringa leaf concentrat on hard candy characteristics and to determine the best concentration of moringa leaf based on the chemical analysis, physics analysis and sensory analysis to acceptance of hard candy. The experimental design used was Completely Randomized Design (CRD) with 5 treatments and 3 replications. The data were analyzed statistically by ANOVA and if significantly different it will followed by duncan's New Multiple Range Test (DNMRT) at signficance of 5%. The treatment in this research is the addition of 4%, 8%, 12%, 16% and 20% moringa leaf concentrate. The two best products are determined based on organoleptic test and then carried out analyzed of saccharose, reducing sugars, energy, calcium and antioxidant activity. The results showed that the addition of moringa leaf concentrate significantly effected the chemical and physical properties of hard candy. Based on the chemical, physical and sensory characteritics on the receipt of the hard candy product, the best is hard candy with the addition of 16% moringa leaf concentrate with chemical analysis value include pH 6.1, moisture content of 4.07%, ash content of 0.1%, sugar content reduction of 11.80%, saccharose of 63.47%, energy 3681,97 cal/gram, calsium 39.9 mg/100 gram, antioxidant activity of 44.24%, violence of 5.67 N/cm<sup>2</sup>, sensory analysis are color 3.4 (normal), aroma 3.4 (normal), taste 3.7 (like) and texture 3.6 (like).

**Key words – hard candy, moringa leaf concentrate, characteristics hard candy**