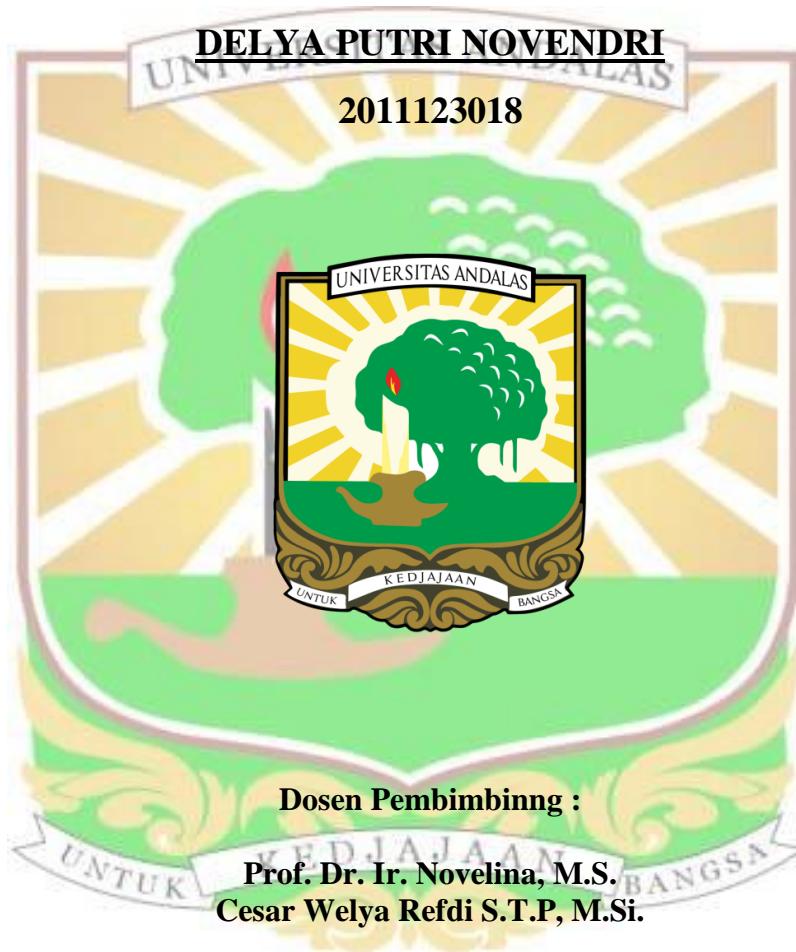


**PENGARUH PERBANDINGAN SUSU SAPI DAN SARI
DAUN KELOR (*Moringa oleifera* L.) TERHADAP
KARAKTERISTIK MUTU PERMEN SUSU**



**FAKULTAS TEKNOLOGI PERTANIAN
UNIVERSITAS ANDALAS
PADANG
2024**

**PENGARUH PERBANDINGAN SUSU SAPI DAN SARI
DAUN KELOR (*Moringa oleifera* L.) TERHADAP
KARAKTERISTIK MUTU PERMEN SUSU**



**FAKULTAS TEKNOLOGI PERTANIAN
UNIVERSITAS ANDALAS
PADANG
2024**

**PENGARUH PERBANDINGAN SUSU SAPI DAN SARI
DAUN KELOR (*Moringa oleifera* L.) TERHADAP
KARAKTERISTIK MUTU PERMEN SUSU**

DELYA PUTRI NOVENDRI

2011123018



**FAKULTAS TEKNOLOGI PERTANIAN
UNIVERSITAS ANDALAS
PADANG
2024**

T O

Pengaruh Perbandingan Susu Sapi dan Sari Daun Kelor *(Moringa oleifera L.) Terhadap Karakteristik Mutu Permen Susu*

Delya Putri Novendri, Novelina, Cesar Welya Refdi

ABSTRAK

Permen susu adalah jenis permen lunak non kristal yang dapat dikonsumsi dengan cara dikunyah dan tidak lengket di gigi. Penelitian ini bertujuan untuk mengetahui pengaruh perbandingan dari susu sapi dan sari daun kelor (*Moringa oleifera*) terhadap sifat kimia, fisik, mikrobiologi dan organoleptik terhadap permen susu. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dengan 5 perlakuan dan 3 ulangan. Data yang diperoleh dianalisis menggunakan ANOVA dan uji lanjut dengan DNMRT pada taraf nyata 5%. Perlakuan yang digunakan adalah perbandingan susu sapi dengan sari daun kelor yaitu : A (100% susu sapi : 0% sari daun kelor), B (95% susu sapi : 5% sari daun kelor), C (90% susu sapi : 10% sari daun kelor), D (85% susu sapi : 15% sari daun kelor) dan E (80% susu sapi : 20% sari daun kelor). Hasil penelitian menunjukkan bahwa perbandingan susu sapi dan sari daun kelor, secara signifikan berpengaruh nyata taraf 5% terhadap kadar air, gula reduksi, sakarosa, protein, lemak, aktivitas antioksidan, angka lempeng total, tidak berbeda nyata taraf 5% terhadap uji kadar abu dan uji organoleptik (aroma, rasa, warna, dan tekstur). Berdasarkan perlakuan terbaik dari uji kimia, fisik, mikrobiologi adalah perlakuan B (95% susu sapi : 5% sari daun kelor) dengan parameter rata-rata kadar air 7,43%, kadar abu 1,11%, gula reduksi 7,52%, sakarosa 65,43%, protein 9,79%, lemak 3,89%, aktivitas antioksidan 42,83%, analisis warna $74,08^{\circ}\text{HUE}$, 94,54 N/cm², angka lempeng total $4,3 \times 10^2$. Berdasarkan penerimaan organoleptik perlakuan terbaik adalah perlakuan C (90% susu sapi : 10% sari daun kelor) dengan parameter rata-rata kesukaan panelis terhadap warna 3,93 (suka), aroma 3,87 (suka), rasa 3,93 (suka), dan tekstur 3,73 (suka).

Kata kunci: susu sapi, sari daun kelor, karakteristik

T O

The Ratio Effect Of Cow Milk and Moringa Leaf Concentrate (*Moringa oleifera* L.) on the Characteristics of Milk Candy

Delya Putri Novendri, Novelina, Cesar Welya Refdi

ABSTRACT

Milk candy is a type of non-crystal soft candy that can be consumed by chewing and is not sticky to the teeth. This research aims to determine the comparative effect of cow's milk and *Moringa oleifera* leaf juice on the chemical, physical, microbiological and organoleptic properties of milk candy. This research used a Completely Randomized Design (CRD) with 5 treatments and 3 replications. The data obtained were analyzed using ANOVA and further testing with DNMRT at a significance level of 5%. The treatment used was the ratio of cow's milk to *Moringa* leaf juice, namely: A (100% cow's milk : 0% *Moringa* leaf juice), B (95% cow's milk : 5% *Moringa* leaf juice), C (90% cow's milk : 10% *moringa* leaf juice), D (85% cow's milk : 15% *moringa* leaf juice) and E (80% cow's milk : 20% *moringa* leaf juice). The results of the research showed that the comparison of cow's milk and *Moringa* leaf juice had a significant effect at the 5% level on water content, reducing sugar, saccharose, protein, fat, antioxidant activity, total plate number, and was not significantly different at the 5% level on the ash content test and organoleptic tests (aroma, taste, color and texture). Based on the best treatment based on chemical, physical and microbiological tests is treatment B (95% cow's milk : 5% *Moringa* leaf juice) with average parameters of water content 7.43%, ash content 1.11%, reducing sugar 7.52%, saccharose 65.43%, protein 9.79%, fat 3.89%, antioxidant activity 42.83%, color analysis 74.08 0HUE, 94.54 N/cm², total plate number 4.3x10². Based on organoleptic acceptance, the best treatment was treatment C (90% cow's milk : 10% *Moringa* leaf juice) with the panelists' average preference parameters for color 3.93 (like), aroma 3.87 (like), taste 3.93 (like), and texture 3.73 (like).

Keywords: cow's milk, moringa leaf concentrate, characteristics