

**PENGARUH KONSENTRASI KOLANG-KALING
(*Arenga pinnata*, Merr.) TERHADAP KARAKTERISTIK MUTU
PERMEN *JELLY* BELIMBING WULUH (*Averrhoa bilimbi*, L.)
JAHE**

SKRIPSI



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**Pengaruh Konsentrasi Kolang-Kaling (*Arenga Pinnata*, Merr.)
terhadap Karakteristik Mutu Permen *Jelly* Belimbing Wuluh
(*Averrhoa Bilimbi*, L.) Jahe**

Ranti Rahmatilla, Novelina, Purnama Dini Hari

Abstrak

Penelitian ini bertujuan untuk mengetahui pengaruh konsentrasi kolang-kaling terhadap karakteristik mutu permen *jelly* belimbing wuluh jahe serta mengetahui konsentrasi kolang-kaling yang tepat sehingga diperoleh permen *jelly* yang bermutu baik sesuai dengan tingkat penerimaan panelis. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dengan 5 perlakuan dan 3 ulangan. Analisis data dilakukan *Analysis of Variance* (ANOVA) dan kemudian dilanjutkan dengan *Duncan's New Multiple Range Test* (DNMRT) pada taraf nyata 5%. Perlakuan pada penelitian ini adalah konsentrasi kolang-kaling 25% (perlakuan A), 30% (perlakuan B), 35% (perlakuan C), 40% (perlakuan D) dan 45% (perlakuan E). Hasil penelitian menunjukkan bahwa konsentrasi kolang-kaling memberikan pengaruh yang berbeda nyata terhadap kadar air, kadar abu, gula reduksi, sakarosa, pH, aktivitas antioksidan, kekerasan, vitamin C, serat kasar dan tekstur tetapi tidak memberikan pengaruh nyata terhadap warna, aroma dan rasa pada permen *jelly* belimbing wuluh-jahe yang dihasilkan. Produk yang paling disukai berdasarkan uji organoleptik adalah perlakuan D (konsentrasi kolang-kaling 40%) dengan nilai rata-rata kesukaan terhadap warna 3,73; aroma 3,73; rasa 4,00 dan tekstur 4,20. Permen *jelly* belimbing wuluh-jahe dengan perlakuan D tersebut memiliki nilai kadar air 13,39%; kadar abu 0,3105%; gula reduksi 13,73%; sakarosa 27,47%, pH 2,90, vitamin C 29,33 mg/100g, kekerasan 152,15 N/cm², aktivitas antioksidan 37,42%, serat kasar 1,50% dan angka lempeng total $1,8 \times 10^3$ CFU/mL.

Kata kunci – permen *jelly*, belimbing wuluh, kolang-kaling

**The Effect of Palm Fruit Concentration (*Arenga pinnata*, Merr.)
Variety to the Quality Characteristics of Bilimbi (*Averrhoa
bilimbi*, L.) Ginger Jelly Candy**

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Abstract

The purpose of the research was purposed to know the effect of palm fruit concentration on the quality characteristics of bilimbi-ginger jelly candy and to know the best concentration of palm fruit to obtain good quality jelly candies according to panelist acceptance levels. This study used Completely Randomized Design (CRD) with 5 treatments and 3 replications. Data were analyzed by Analysis of Variance (ANOVA) and then continued with Duncan's New Multiple Range Test (DNMRT) at 5% significant level. The treatments in this research were palm fruit concentration of 25% (A treatment), 30% (B treatment), 35% (C treatment), 40% (D treatment) and 45% (E treatment). The results showed that palm fruit concentration had significantly effect on water content, ash content, reducing sugar, saccharose, pH, antioxidant activity, hardness, vitamin C, crude fiber and texture but had no significantly on the color, flavor and taste of the jelly candy. The most preferred product based on the organoleptic test was D treatment (40% palm fruit concentration) with an average value of preference to color 3.73; aroma 3.73; taste 4.00 and texture 4.20. Bilimbi-ginger jelly candy of D treatment has water content of 13.39%; ash content of 0.3105%; reducing sugar of 13.73%; sucrose of 27.47%; pH of 2.90; vitamin C of 29.33 mg / 100g; hardness of 152.15 N / cm²; antioxidant activity of 37.42%; crude fiber of 1.50% and total plate count 1.8x10³ CFU / mL.

Keywords – jelly candy, bilimbi, palm fruit

