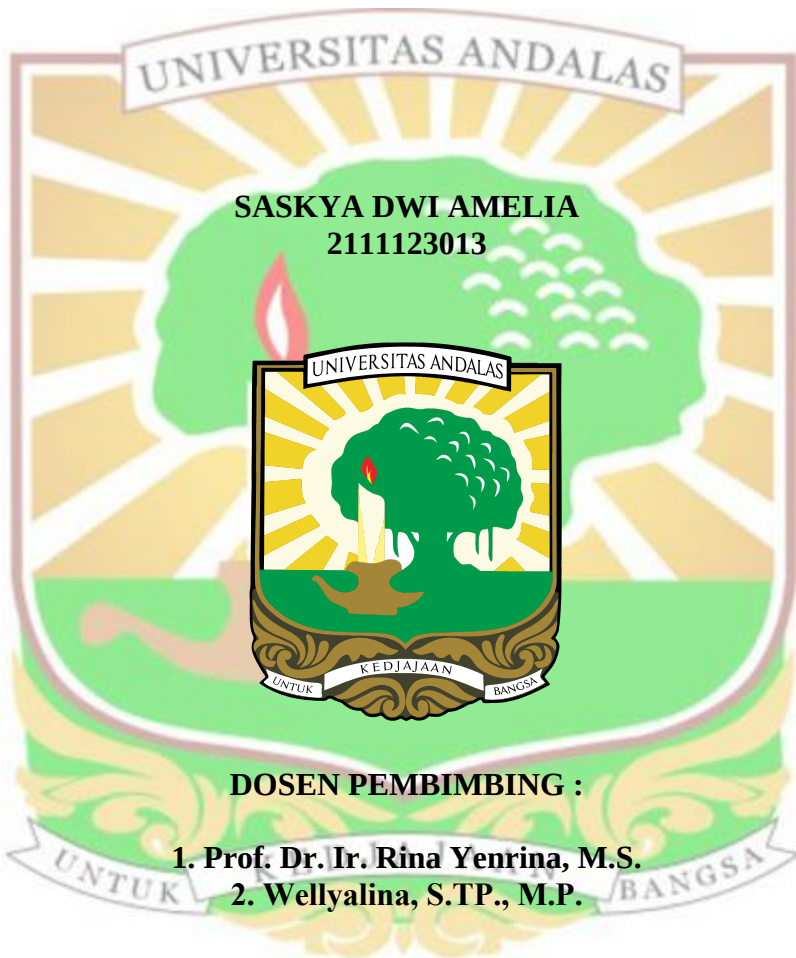


**PENGARUH PERBANDINGAN EKSTRAK LIDAH
BUAYA (*Aloe vera*) DAN EKSTRAK PISANG
KEPOK (*Musa paradisiaca*) TERHADAP
KARAKTERISTIK FISIKOKIMIA DAN
SENSORIS PERMEN JELLY**



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ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh perbandingan ekstrak lidah buaya (*Aloe vera*) dan ekstrak pisang kepok (*Musa paradisiaca*) terhadap karakteristik fisikokimia dan sensoris permen jelly. Penelitian menggunakan Rancangan Acak Lengkap (RAL) dengan lima perlakuan formulasi, yaitu A (100%:0%), B (90%:10%), C (80%:20%), D (70%:30%), dan E (60%:40%), masing-masing dengan tiga kali ulangan. Parameter yang diamati meliputi kadar air, kadar abu, kadar gula reduksi, kadar sukrosa, aktivitas antioksidan, pH, aktivitas air (A_w), kekerasan, serta uji organoleptik (warna, aroma, rasa, dan tekstur). Hasil penelitian menunjukkan bahwa penambahan ekstrak pisang kepok memberikan pengaruh nyata terhadap kadar air, gula reduksi, sukrosa, pH, A_w , dan kekerasan, namun tidak berpengaruh nyata terhadap kadar abu. Semakin tinggi penambahan ekstrak pisang kepok, kadar gula reduksi dan aktivitas antioksidan cenderung meningkat, sedangkan kadar sukrosa mengalami fluktuasi akibat proses inversi gula selama pemanasan. Nilai pH produk berkisar antara 4,5–5,0 dan A_w berkisar 0,71–0,74, masih sesuai untuk produk jelly. Perlakuan terbaik diperoleh pada formulasi D (70% lidah buaya : 30% pisang kepok) dengan mutu fisikokimia dan sensoris yang paling baik, meskipun belum sepenuhnya memenuhi standar SNI 3547.02:2008.

Kata kunci: lidah buaya ; pisang kepok ; permen jelly ; fisikokimia ; sensoris

THE EFFECT OF COMPARISON OF ALOE VERA EXTRACT AND KEPOK BANANA EXTRACT (*Musa paradisiaca*) ON THE PHYSICOCHEMICAL AND SENSORY CHARACTERISTICS OF JELLY

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ABSTRACT

This study aimed to determine the effect of different ratios of aloe vera (*Aloe vera*) extract and kepok banana (*Musa paradisiaca*) extract on the physicochemical and sensory characteristics of jelly candy. The experiment used a Completely Randomized Design (CRD) with five treatments: A (100%:0%), B (90%:10%), C (80%:20%), D (70%:30%), and E (60%:40%), each with three replications. The parameters observed were moisture content, ash content, reducing sugar, sucrose, antioxidant activity, pH, water activity (A_w), hardness, and sensory evaluation (color, aroma, taste, and texture). The results showed that the addition of banana extract significantly affected moisture, reducing sugar, sucrose, pH, A_w , and hardness, but had no significant effects on ash content. Increasing the proportion of banana extract tended to increase reducing sugar and antioxidant activity, while sucrose fluctuated due to sugar inversion during heating. The pH values ranged from 4.5–5.0 and A_w values from 0.71–0.74, both within acceptable limits for jelly products. The best treatment of jelly candy was D (70% aloe vera : 30% banana), that had the best physicochemical and sensory qualities, although it has not fully met the quality standards of jelly candy according to SNI 3547.02:2008.

Keywords: aloevera ; kepok banana ; jelly candy ; physicochemical ; sensor