

**PENGARUH PENAMBAHAN GUM ARAB TERHADAP  
KARAKTERISTIK *FRUIT LEATHER* DARI SIRSAK (*Annona  
muricata* L) DAN BUNGA TELANG (*Clitoria ternatea*)**



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*Sebagai Salah Satu Syarat Untuk Memperoleh  
Gelar Sarjana Teknologi Pertanian*

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Intan Masyuri, Aisman, Cesar Welya Refdi

**ABSTRAK**

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan gum arab terhadap karakteristik *fruit leather* dari sirsak dan bunga telang. Rancangan pada penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dengan 5 perlakuan dan 3 ulangan. Perlakuan yang digunakan pada penelitian ini adalah A (Tanpa penambahan gum arab), B (penambahan gum arab 0,25%), C (penambahan gum arab 0,5%), D (penambahan gum arab 0,75%), dan E (penambahan gum arab 1,0%). Data yang diperoleh dianalisis dengan *Analysis of Variance* (ANOVA) kemudian dilanjutkan dengan analisis *Duncan's New Multiple Range Test* (DNMRT) pada taraf 5%. Hasil penelitian menunjukkan bahwa perbedaan penambahan gum arab berpengaruh nyata terhadap tekstur (kekerasan), kadar air, kadar abu, nilai pH,  $A_w$  (*activity water*), serat kasar, vitamin C, antosianin, aktivitas antioksidan dan kadar sukrosa. Perlakuan terbaik berdasarkan sifat kimia, fisik, dan organoleptik adalah perlakuan D (penambahan gum arab 0,75%) dengan nilai tekstur (kekerasan) 129,18 N/cm<sup>2</sup>, kadar air 17,09%, kadar abu 1,33%, nilai pH 3,55,  $A_w$  0,48, serat kasar 2,83%, vitamin C 19,13 mg/100 g, antosianin 2,62 mg/L, aktivitas antioksidan 74,34%, kadar sukrosa 33,57%, angka lempeng total  $6,4 \times 10^2$  CFU/g, hasil organoleptik warna 4,05 (suka), aroma 3,75 (suka), tekstur 3,85 (suka), dan rasa 3,90 (suka).

**Kata Kunci :** buah sirsak, bunga telang, gum arab, *fruit leather*, karakteristik

# **The Effect of the Addition of Gum Arabic on the Characteristics *Fruit Leather* from Soursop (*Annona muricata* L) and Butterfly Pea (*Clitoria ternatea*)**

Intan Masyuri, Aisman, Cesar Welya Refdi

## **ABSTRACT**

This research was aimed to know the effect of the addition of gum arabic on the characteristics of *fruit leather* from soursop and butterfly pea. The design in this study used a completely randomized design (CRD) with 5 treatments and 3 replications. The treatments used in this study were A (without the addition of gum arabic), B (addition of gum arabic 0.25%), C (addition of gum arabic 0.5%), D (addition of gum arabic 0.75%), and E (addition of gum arabic 1.0%). The data obtained were analyzed using Analysis of Variance (ANOVA) and then continued with Duncan's New Multiple Range Test (DNMRT) analysis at the 5% level. The results showed that the difference in the addition of gum arabic had a significant effect on the analysis of texture (hardness), moisture content, ash content, pH value,  $A_w$  (activity water), crude fiber, vitamin C, anthocyanin, antioxidant activity, and sucrose content. The best treatment based on chemical, physical, and organoleptic properties was treatment D (addition of gum arabic 0.75%) with a texture (hardness) value of 129.18 N/cm<sup>2</sup>, water content 17.09%, ash content 1.33%, pH value 3.55,  $A_w$  0.48, crude fiber 2.83%, vitamin C 19.13 mg/100 g, anthocyanin 2.62 mg/L, antioxidant activity 74.34%, sucrose content 33.57%, total plate count  $6.4 \times 10^2$  CFU/g, color sensory results 4.05 (like), aroma 3.75 (like), texture 3.85 (like), and taste 3.90 (like).

**Keyword :** soursop fruit, butterfly pea, arabic gum, *fruit leather*, characteristics