

**PENGARUH KONSENTRASI EKSTRAK BUNGA TELANG (*Clitoria ternatea* L.) TERHADAP KARAKTERISTIK *JELLY DRINK* BUAH NIPAH (*Nypa fruticans*) DAN BUAH SIRSAK (*Annona muricata* L.)**

**MUHAMAD FIKRI FERDIANTORO**

**2011122022**



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Muhamad Fikri Ferdiantoro, Tuty Anggraini, Cesar Welya Refdi

**ABSTRAK**

Penelitian ini bertujuan untuk mengetahui pengaruh konsentrasi ekstrak bunga telang terhadap karakteristik *jelly drink* buah nipah dan buah sirsak, serta untuk mengetahui formulasi pembuatan *jelly drink* buah nipah dan buah sirsak terbaik dengan penambahan ekstrak bunga telang. Rancangan penelitian yang digunakan adalah Rancangan Acak Lengkap (RAL) dengan 5 perlakuan dan 3 kali ulangan. Data penelitian dianalisis secara statistik menggunakan *Analysis Of Varians* (ANOVA) dan jika data menunjukkan perbedaan yang nyata dilanjutkan dengan analisis *Duncan's New Multiple Range Test* (DNMRT) pada taraf nyata 5%. Perlakuan pada penelitian ini adalah konsentrasi ekstrak bunga telang A (Tanpa penambahan), B (5%), C (10%), D (15%), dan E (20%). Hasil penelitian menunjukkan bahwa berpengaruh nyata terhadap aktivitas antioksidan (IC<sub>50</sub>), kadar antosianin, total polifenol, uji warna, angka lempeng total (ALT), dan organoleptik penerimaan warna dan rasa. Tetapi berpengaruh tidak nyata terhadap total padatan terlarut, derajat keasaman (pH), sineresis dan organoleptik penerimaan aroma dan tekstur. Perlakuan terbaik berdasarkan analisis kimia, fisik, mikrobiologi, dan penerimaan organoleptik adalah perlakuan D (konsentrasi ekstrak bunga telang 15%) dengan nilai rata-rata: total padatan terlarut 4,93, aktivitas antioksidan (IC<sub>50</sub>) 148,82 ppm, kadar antosianin 0,78 mg/L, total polifenol 98,42 mg GAE/g, derajat keasaman (pH) 4,43, sineresis pada 24 jam; 48 jam; dan 72 jam 1,64%; 2,46%; 5,88%, uji warna 287,48 °Hue (biru-keunguan), angka lempeng total (ALT) 5,8x10<sup>3</sup> CFU/g, organoleptik penerimaan warna 3,80 (suka), aroma 3,27 (biasa), rasa 3,20 (biasa), dan tekstur 3,57 (suka).

**Kata Kunci :** *Jelly Drink*, Buah Nipah, Ekstrak Bunga Telang, Karakteristik, Antioksidan

***THE EFFECT OF BUTTERFLY PEA FLOWER (*Clitoria ternatea* L.) EXTRACT CONCENTRATION ON THE CHARACTERISTICS OF JELLY DRINK FROM NIPAH (*Nypa fruticans*) AND SOURSOP (*Annona muricata* L.)***

Muhamad Fikri Ferdiantoro, Tuty Anggraini, Cesar Welya Refdi

**ABSTRACT**

This research aimed to determine the effect of butterfly pea flower extract concentration on the characteristics of nipah fruit and soursop fruit jelly drinks, and to find out the best formulation for making nipah fruit and soursop fruit jelly drinks with the addition of butterfly pea flower extract. The research design used was a Completely Randomized Design (CRD) with 5 treatments and 3 replications. The research data were analyzed statistically using Analysis of Variance (ANOVA) and if the data showed a significant difference, it was continued with Duncan's New Multiple Range Test (DNMRT) analysis at a significance level of 5%. The treatments in this research were butterfly pea flower extract concentrations A (Without addition 0%), B (5%), C (10%), D (15%), and E (20%). The results showed that it had a significant effect on antioxidant activity (IC<sub>50</sub>), anthocyanin content, total polyphenols, color test, total plate count (alt), and organoleptics acceptance of color and taste. However, it had no significant effect on total dissolved solids, acidity (pH), syneresis and organoleptics acceptance of aroma and texture. The best treatment based on chemical, physical, microbiological, and organoleptic acceptance was treatment D (15% butterfly pea flower extract concentration) with average values: total dissolved solids 4.93, antioxidant activity (IC<sub>50</sub>) 148.82 ppm, anthocyanin content 0.78 mg/L, total polyphenols 98.42 mg GAE/g, acidity level (pH) 4.43, syneresis at 24 hours; 48 hours; and 72 hours 1.64%; 2.46%; 5.88%, color test 287.48 °Hue (blue-purple), total plate count (ALT) 5.8x10<sup>3</sup> CFU/g, organoleptic acceptance of color 3.80 (like), aroma 3.27 (netral), taste 3.20 (netral), and texture 3.57 (like).

**Keywords:** Jelly Drink, Nipah Fruit, Butterfly Pea Flower Extract, Characteristics, Antioxidants