

**PENGARUH PENAMBAHAN SARI KULIT BUAH NAGA  
MERAH (*Hylocereus polyrhizus*) TERHADAP  
KARAKTERISTIK MUTU SIRUP JAHE GAJAH (*Zingiber  
officinale* Rosc.)**

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# **Pengaruh Penambahan Sari Kulit Buah Naga Merah (*Hylocereus polyrhizus*) Terhadap Karakteristik Mutu Sirup Jahe Gajah (*Zingiber officinale* Rosc.)**

## **ABSTRAK**

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan sari kulit buah naga terhadap karakteristik kimia dan fisik sirup jahe dan untuk mengetahui formulasi dari sirup jahe dengan penambahan sari kulit buah naga. Penelitian ini menggunakan Rancangan Acak Lengkap dengan 5 perlakuan dan 3 kali ulangan. Perlakuan yang digunakan adalah penambahan sari kulit buah naga sebanyak A (0%), perlakuan B (15%), perlakuan C (20%), perlakuan D (25%), dan perlakuan E (30%). Data yang diperoleh dianalisis secara statistika dengan ANOVA (Analysis of Variance) dan jika berbeda nyata maka analisis data dilanjutkan dengan uji DNMRT (Duncan's New Multiple Range Test) pada taraf nyata 5%. Hasil penelitian menunjukan bahwa perbedaan penambahan sari kulit buah naga berpengaruh nyata terhadap Uji Viskositas, Uji Total Padatan, Uji Warna, Analisis Nilai pH, Analisis Total Gula, Analisis Total Asam, Analisis Vitamin C, Uji Aktivitas Antioksidan, Uji Betasanin, Analisis Angka Lempeng Total dan Uji Organoleptik Sirup Jahe. Perlakuan terbaik diperoleh berdasarkan uji organoleptik pada perlakuan E (penambahan sari kulit buah naga 30%) dengan nilai rata-rata warna dengan tingkat kesukaan 4,63 (sangat suka), rasa dengan tingkat kesukaan 4,20 (sangat suka), aroma dengan tingkat kesukaan 4,63 (sangat suka), pH 4,33, vitamin C 0,10 mg/100g, total asam 0,24%, aktivitas antioksidan 41,35%, viskositas 3,20 dPas, total gula 71,59%, uji warna 19,94, betasanin 0,68mg/100g, total padatan terlarut 75,47% dan angka lempeng total  $4,7 \times 10^2$  CFU/g.

Kata kunci: jahe gajah, kulit buah naga, sirup, karakteristik, kimia, fisik

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## **ABSTRACT**

This study aims to determine the effect of the addition of dragon fruit peel juice on the chemical and physical characteristics of ginger syrup and to determine the formulation of ginger syrup with the addition of dragon fruit peel juice. This study used a completely randomized design with 5 treatments and 3 replications. The treatments used were the addition of dragon fruit peel extract as much as A (0%), treatment B (15%), treatment C (20%), treatment D (25%), and treatment E (30%). The data obtained were analyzed statistically with ANOVA (Analysis of Variance) and if significantly different, the data analysis was continued with the DNMRT (Duncan's New Multiple Range Test) test at the 5% real level. The results showed that the difference in the addition of dragon fruit peel juice had a significant effect on the Viscosity Test, Total Solids Test, Color Test, pH Value Analysis, Total Sugar Analysis, Total Acid Analysis, Vitamin C Analysis, Antioxidant Activity Test, Betasianin Test, Total Plate Sheet Analysis, and Ginger Syrup Organoleptic Test. The best treatment was obtained based on the organoleptic test in treatment E (addition of 30% dragon fruit peel juice) with an average color value with a preference level of 4.63 (really like), taste with a preference level of 4.20 (really like), aroma with a preference level of 4.63 (really like), pH 4, 33, vitamin C 0.10 mg / 100g, total acid 0.24%, antioxidant activity 41.35%, viscosity 3.20 dPas, total sugar 71.59%, color test 19.94, betasianin 0.68mg / 100g , total dissolved solids 75.47% and a total plate number of  $4.7 \times 10^2$  CFU / g.

Key words: zingiber officinale rosc, dragon fruit peel, syrup, characteristics, chemical, physical