

**PENGARUH PENAMBAHAN SARI BUAH NAGA MERAH
(*Hylocereus polyrhizus*) TERHADAP KARAKTERISTIK SIRUP
BELIMBING WULUH (*Averrhoa bilimbi*, L.)**



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Pengaruh Penambahan Sari Buah Naga Merah (*Hylocereus polyrhizus*) Terhadap Karakteristik Sirup Belimbing Wuluh (*Averrhoa bilimbi*, L.)

Retno Gusti Devi, Rina Yenrina, Diana Silvy

ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan sari buah naga merah terhadap karakteristik dan organoleptik sirup belimbing wuluh. Rancangan percobaan yang digunakan pada penelitian ini yaitu rancangan acak lengkap (RAL) dengan 5 perlakuan dan 3 ulangan. Perlakuan yang dilakukan pada penelitian yaitu penambahan sari buah naga merah dengan konsentrasi 0%, 5%, 10, 15% dan 20%. Data yang didapatkan pada penelitian dilakukan analisis statistik secara ANOVA kemudian dilanjutkan analisis *Duncan's New Multiple Range Test* (DNMRT) pada taraf 5%. Hasil penelitian menunjukkan bahwa penambahan sari buah naga merah memberikan pengaruh nyata terhadap uji fisik (warna), uji kimia (pH, kadar gula total, vitamin C, total asam, aktivitas antioksidan, kadar betasanin), dan uji organoleptik (warna dan rasa), dan tidak memberikan pengaruh nyata terhadap uji organoleptik (aroma). Perlakuan terbaik berdasarkan sifat fisik, kimia, mikrobiologi dan organoleptik adalah perlakuan dengan penambahan sari buah naga merah dengan konsentrasi 20% dengan hasil dari uji warna ($17,87^{\circ}$ Hue), pH (3,67), kadar gula total (73,99%), vitamin C (16,19mg/100g), total asam (1,11%), aktivitas antioksidan (44,65%), kadar betasanin (1,63%), angka lempeng total ($2,46 \times 10^2$ CFU/g), dan analisis organoleptik warna 4,20 (suka), aroma 3,55 (suka), dan rasa 3,85 (suka).

Kata kunci – belimbing wuluh, buah naga merah, karakteristik, sirup

The Effect of Red Dragon Fruit Juice Addition on Characteristics of Belimbing Wuluh Syrup

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ABSTRACT

This research aimed to determine the effect of red dragon fruit juices to the characteristics of belimbing wuluh syrup and to find out which product are organoleptically preferred. The design used in this study was completely randomized design (CRD) with 5 treatments and 3 replications. The treatments in this study was the addition of red dragon fruit juice with a concentration of 0%, 5%, 10, 15% dan 20%. The research data was statistically analyzed by ANOVA and continued with Duncan's New Multiple Range Test (DNMRT) analysis at the 5% level. The result showed that the addition of red dragon fruit juices had a significant effect on color test, pH value, sugar content, vitamin C, total acid, antioxidant activity, betacyanin levels, and organoleptic (color and taste), it had no significant effect on organoleptic (aroma). The best treatment based on the analysis of physical, chemical, microbiology and organoleptic properties was syrup with the addition of 20% red dragon fruit juices with following average values: color test ($17,87^{\circ}\text{Hue}$), pH value (3,67), sugar content (73,99%), vitamin C (16,19mg/100g), total acid (1,11%), antioxidant activity (44,65%), betacyanin levels (1,63%), total plate number ($2,46 \times 10^2$ CFU/g), and organoleptic acceptance value with color value 4,20 (like), aroma 3,55 (like), and taste 3,85 (like).

Keyword – belimbing wuluh, red dragon fruit juice, characteristics, syrup.