

**PENGARUH PENAMBAHAN SARI BUAH JERUK NIPIS
(*Citrus aurantifolia* S.) TERHADAP KARAKTERISTIK SIRUP
BUAH NAGA MERAH (*Hylocereus polyrhizus*)**

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Pengaruh Penambahan Sari Buah Jeruk Nipis (*Citrus aurantifolia* S.) Terhadap Karakteristik Sirup Buah Naga Merah (*Hylocereus polyrhizus*)

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ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan jeruk nipis terhadap karakteristik sirup buah naga merah berdasarkan fisik, kimia dan mikrobiologi serta mengetahui tingkat penerimaan panelis terbaik pada uji organoleptik. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dengan 5 perlakuan dan 3 ulangan yaitu penambahan sari jeruk nipis dengan konsentrasi 0%, 5%, 10%, 15%, dan 20%. Data yang diperoleh dianalisis menggunakan Anova yang diikuti dengan uji Duncan pada taraf 5%. Hasil penelitian menunjukkan bahwa penambahan jeruk nipis berpengaruh nyata terhadap pH, vitamin C, viskositas, total padatan terlarut, aktivitas antioksidan, rasa, aroma, dan kekentalan. Berdasarkan uji organoleptik perlakuan terbaik terdapat pada sirup penambahan jeruk nipis 15% dengan nilai rata-rata warna 4,3; aroma 4,0; rasa 4,1 dan kekentalan 3,4. Sirup buah naga merah tersebut memiliki nilai pH 4,7, vitamin C 20,53 mg/100g, aktivitas antioksidan 29,40%, kadar betasianin 3,77 mg/100g, total gula 65,86%, total padatan terlarut 64°brix, ambang batas kemanisan 18,70%, angka lempeng total $2,87 \times 10^2$ CFU/g, analisis warna 348,4°Hue (*red purple*) dan viskositas 581,67 cP.

Kata kunci: Betasianin, Buah Naga Merah, Jeruk Nipis, Sirup, Vitamin C.

The Effect of Lime Fruit Juice (*Citrus aurantifolia* S.) Addition to The Characteristic of Red Dragon Fruit Syrup (*Hylocereus polyrhizus*)

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ABSTRACT

This study aimed to determine the effect of and lime to the characteristic of Syrup based on physical, chemical and microbiology, also to know the level of best panelist acceptance in Organoleptic test. This method of this research was Complete Random Design (CRD) with 5 treatments and 3 repetitions, namely the addition of lime juice with a concentration of 0%, 5%, 10%, 15%, and 20%. The data were analyzed by using analysis of variance Anova followed by Duncan test at the level of 5%. The result showed that addition of lime juice gave the real different effect to pH, vitamin C, viscosity, the amount of total dissolved solid, antioxidant activity, taste, aroma and thickness. The best treatment based on organoleptic analysis is syrup lime addition 15% with an average color value of 4,3; 4,0 aroma; 4,1 taste and thickness 3,4. The red dragon fruit syrup had pH 4,7, vitamin C 20,53 mg/100g, antioxidant activity 29,40%, betacyanin levels of 3,77 mg/100g, the amount of total sugar 65,86%, the amount of total dissolved solid 64°brix, terminal threshold of sweetness 18,70%, plate number total $2,87 \times 10^2$ CFU/g, color analysis 348,4°Hue (red purple) and viscosity of syrup 581,67 cP.

Keywords: Betacyanin, Red Dragon Fruit, Lime, Syrup, Vitamin C