PENGARUH PERBEDAAN PENAMBAHAN SARI DAGING BUAH NAGA MERAH *(Hylocereus polyrhizus)* TERHADAP KARAKTERISTIK *MARSHMALLOW*

DESKALIA MIFTAHURRIZA

1511121020

Pembimbing :

1. **Prof. Dr. Ir. Fauzan Azima, MS**
2. **Ismed, S. Pt, M.Sc**

FAKULTAS TEKNOLOGI PERTANIAN
UNIVERSITAS ANDALAS
PADANG
2020

Pengaruh Perbedaan Penambahan Sari Daging Buah Naga Merah (*Hylocereus polyrhizus)* Terhadap Karakteristik *Marshmallow*

Deskalia Miftahurriza, Fauzan Azima, Ismed

ABSTRAK

Penelitian ini bertujuan untuk menentukan pengaruh dari perbedaan penambahan sari daging buah naga merah terhadap karakteristik *marshmallow* yang dihasilkan berdasarkan atas sifat fisik, kimia, dan tingkat kesukaan oleh panelis berdasarkan uji organoleptik. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dengan 5 perlakuan dan 3 ulangan. Data yang diperoleh dianalisis menggunakan Anova yang diikuti dengan uji Duncan pada taraf 5%. Perlakuan yang digunakan pada penelitian ini menggunakan perbedaan penambahan jumlah sari daging buah naga merah, yaitu A(3 gr), B(6 gr), C(9 gr), D(12 gr), dan E(15 gr). Berdasarkan penelitian, didapatkan pengaruh yang signifikan terhadap uji kekerasan, kadar abu, aktivitas antioksidan, betasianin, vitamin C dan tidak berpengaruh signifikan terhadap kadar air dan pH. Penelitian ini menunjukkan bahwa penambahan sari buah naga pada perlakuan C(9 gr) merupakan perlakuan terbaik dengan uji kekerasan 0,0516 N/cm^2, kadar air 53,58%, kadar abu 0,44%, pH 4,62, kadar gula reduksi 19,68%, kadar sukrosa 23,18%, aktivitas antioksidan IC_{50} 22,40 ppm, betasianin 3,0123 mg/100 gr, kadar vitamin C 3,13 mg/100 gr, dan nilai penerimaan organoleptik terhadap warna 4,32 (suka), aroma 3,84 (suka), rasa 4,32 (suka), dan tekstur 3,88 (suka).

Kata kunci : Antioksidan, Karakteristik, *Marshmallow*, Sari Buah Naga Merah

The Effect of Difference Addition of Red Dragon Fruit Juice (Hylocereus polyrhizus) for The Characteristic of Marshmallow

Deskalia Miftahurriza, Fauzan Azima, Ismed

ABSTRACT

This research was aims to determined the effect of difference addition of red dragon fruit juice for the characteristic of marshmallow based on physical, chemical properties and acceptability by panelist on the organoleptic test. This study used a completely randomized design (CRD) with 5 treatments and 3 repetitions. Data were analyzed by analysis of variance (ANOVA), followed by Duncan's New Multiple Ranged Test (DNMRT) at the 5% significance level. The treatment was used by the difference addition of red dragon fruit juice which is, A(3 gr), B(6 gr), C(9 gr), D(12 gr) and E(15 gr). Based on this research, the result was known that the difference addition of red dragon fruit juice has significance effect on hardness test, ash content, reducing sugar content, sucrose content, antioxidant activity, betasianin content, vitamin C and didn't has significance effect on moisture content and pH. This research showed that red dragon fruit juice marshmallow at concentration C(9 gr) was the best treatment with 0.0516 N/cm^{2}of hardness test, 53.58% of moisture content, 0.44% of ash content, 4.62 of pH values, 19.68% of reducing sugar content, 23.18% of sucrose content, 22.40 ppm of IC_{50} values, 3.0123 mg/100 gr of betasianin content, 3.13 mg/100 gr of vitamin C content and organoleptic acceptance with 4.32 colour, 3.84 smell, 4.32 flavour and 3.88 texture.

Keywords : Antioxidant, Characteristic, Marshmallow, Red Dragon Fruit Juice

UNIVERSITAS ANDALAS