ABSTRAK

Tujuan penelitian ini adalah untuk mendapatkan konsentrasi karagenan dan gula stevia yang tepat terhadap karakteristik serbuk *jelly black mulberry*. Manfaat penelitian ini adalah untuk meningkatkan keanekaragaman produk olahan buah *black mulberry*, untuk meningkatkan nilai fungsional buah black mulberry dengan penambahan karagenan dan gula stevia agar dapat diterima oleh konsumen.

Penelitian ini menggunakan Rancangan Acak Kelompok (RAK) dengan pola faktorial (3x3) dengan 3 kali ulangan. Rancangan perlakuan yang dilakukan pada penelitian ini terdiri dari dua faktor, yaitu faktor pertama konsentrasi karagenan (a) terdiri dari tiga taraf, yaitu a1 (2%), a2 (3%) dan a3 (4%). Faktor kedua konsentrasi gula stevia (b) terdiri dari tiga taraf, yaitu b1 (0,5%), b2 (0,6%), b3 (0,7%).

Respon yang diukur dalam penelitian ini adalah organoleptik terhadap warna, aroma, dan tekstur. Respon kimia meliputi analisis kadar air, vitamin C, colorimetri, dan pH. Respon fisik meliputi viskositas. Penelitian sampel terpilih dilakukan analisis gula total. Hasil penelitian menunjukan bahwa sampel a2b3 (karagenan 3% dan gula stevia 0,7%) merupakan produk serbuk *jelly black mulberry* terpilih dengan hasil analisis kadar vitamin C 32,21 mg/100gram, kadar air 3,33%, pH 2,67, viskositas 213 mpas, dan notasi b* 10,93. Serta terhadap atribut warna 4,933, aroma 4,999 dan tekstur 5,067.

Kata kunci: Serbuk *Jelly*, Karagenan, Gula Stevia, *Black Mulberry*

ABSTRACT

The purpose of this research was to know the impact of the carrageenan concentration and stevia sugar to the characteristic of black mulberry jelly powder. The benefits of this research were to increase the diversification of black mulberry processed product, the benefits for this research were to increase the functional value of black mulberry with the addition of carrageenan and stevia sugar to make the product acceptable for consumers.

Main research used Randomized Block Design (RBD) with factorial pattern (3x3) with 3 repetitions. Treatment design in this study was consisted of two factors. The first factor was carrageenan concentration (a) consist of a1 (2%), a2 (3%), a3 (4%) the second factor was stevia sugar concentration (b) consist of b1 (0.5%), b2 (0.6%), b3 (0.7%).

The response measured in this study was organoleptic to color, scent and texture. Chemical response including analysis of water content, vitamin C, colorimetry and pH. Physical response was viscosity. Selected sample research was done by total sugar anaylsis. The result of the research showed that the best treatment sample was a2b3 (carrageenan 3% and stevia sugar 0,7%) were selected black mulberry jelly powder with the result analysis 32,21 mg/100gr of vitamin C, 3,33% of water content, 2,67 of pH, 213 mpas of viscosity, and 10,93 of b notation And also 4,933 of color, 4,999 of scent and 5,067of texture.*

Keywords: Jelly Powder, Carrageenan, Stevia Sugar, Black Mulberry