PENGARUH VARIASI RASIO GULA DAN ASAM SITRAT TERHADAP SIFAT KIMIA, FISIK, TINGKAT KESUKAAN PERMEN LUNAK GEL LIDAH BUAYA (*Aloe vera*)

INTISARI

Lidah buaya merupakan tanaman yang mengandung zat bioaktif flavonoid yang bermanfaat bagi kesehatan. Gel lidah buaya yang dicampur pada permen lunak dengan variasi penambahan gula dan asam sitrat mempermudah dalam mengonsumsinya sebagai makanan. Tujuan penelitian ini adalah untuk mengetahui perbandingan gula dan asam sitrat terhadap sifat fisik, kimia dan tingkat kesukaan permen lunak gel lidah buaya yang dapat diterima.

Pada penelitian ini dibuat permen lunak dengan dua faktor, yaitu variasi penambahan gula dan variasi penambahan asam sitrat. Gula yang ditambahkan dalam permen lunak sebanyak 200 gram, 300 gram, dan 400 gram dan penambahan asam sitrat sebanyak 0% dan 0,5%. Permen lunak dengan variasi gula dan asam sitrat yang dihasilkan dilakukan uji kadar air, aktivitas antioksidan, bilangan asam, kadar gula total, warna, tekstur dan kesukaan. Data yang diperoleh di uji menggunakan uji statistik metode ANOVA (*Analysis Of Varience*) pada tingkat kepercayaan 95%.

Permen lunak gel lidah buaya yang dapat diterima yaitu pada variasi penambahan gula 300 gram dan konsentrasi asam sitrat 0,5%, yang memiliki kadar air 8,02%wb, aktivitas antioksidan 7,28%RSA, bilangan asam 2,08, kadar gula total 24,83%, imbangan gula asam 11,92, tekstur 1109,50 gram dan 58,73 mJ serta warna kecerahan 57,45, hijau -1,31 dan kuning 19,06.

Kata kunci : lidah buaya, permen lunak, gula, asam, imbangan gula asam

THE EFFECT OF SUGAR-CITRIC ACID RATIO ON THE CHEMICAL AND PHYSICAL AND PREFERENCE LEVEL OF ALOE VERA GEL-SOFT CANDY

ABSTRACT

Aloe vera is a plant that contains flavonoid bioactive substances which are beneficial for health. Aloe vera gel which is mixed in soft candy with various additions of sugar and citric acid makes it easy to consume. The purpose of this study was to determine the ratio of sugar and citric acid to the physical, chemical, and acceptable preference level of aloe vera gel soft candy.

In this study, soft candy was made with two factors, namely the variation of sugar addition and the variation of citric acid addition. The addition of sugar in soft candy are 200 grams, 300 grams, and 400 grams and the addition of citric acid are 0% and 0.5%. The outcome of soft candy with a variety of sugar and citric acid was tested for moisture, antioxidant activity, acid number, total sugar level, color, texture, and preferences. The obtained data were tested using the ANOVA (Analysis Of Variance) statistical test method at the 95% confidence interval.

The obtained aloe vera gel soft candy is on the variation of 300 grams of sugar addition and 0.5% of citric acid concentration, which has 8.02% wb of moisture, 7.28% RSA of antioxidant activity , 2.08 of acid number, 24.83% of total sugar level, 11.92 of the acid sugar balance, 1109.50 g texture and 58.73 mJ with 57.45 of brightness color, -1.31 green and 19.06 yellow.

Keywords : aloe vera, soft candy, sugar, acid, acid sugar balance