

SIFAT KIMIA, FISIK DAN TINGKAT KESUKAAN PERMEN LUNAK *Aloe vera* PADA BERBAGAI SUHU PENGERINGAN DAN UKURANNYA

INTISARI

Lidah buaya mengandung antioksidan yang bermanfaat bagi kesehatan. Namun gel dalam lidah buaya mudah rusak karena oksidasi sehingga perlu diolah secara lebih lanjut agar mudah dikonsumsi serta menjaga kandungan di dalamnya, oleh karena itu diolah menjadi permen lunak. Permen lunak adalah campuran dari gula, air, dan agar-agar yang dididihkan lalu dicetak dan dikeringkan. Penelitian ini bertujuan untuk mengetahui pengaruh variasi suhu pengeringan dan ukuran permen terhadap sifat kimia, fisik, dan tingkat kesukaan permen lunak lidah buaya.

Pada penelitian ini permen lunak yang ditambahkan gel lidah buaya akan diolah dengan 2 faktor, faktor yang pertama yaitu variasi suhu pengeringan 50; 60; dan 70°C dan faktor kedua variasi ukuran permen $2 \times 2 \times 1$ dan $2 \times 2 \times 2,5$ cm. Analisis yang dilakukan meliputi kadar air, aktivitas antioksidan, total asam, kadar gula total, uji warna, uji tekstur, dan uji tingkat kesukaan. Hasil data yang diperoleh akan dianalisis statistik menggunakan ANOVA (*Analysis of Variance*).

Hasil penelitian menunjukkan bahwa variasi ukuran permen dan suhu pengeringan berpengaruh terhadap sifat kimia, fisik dan tingkat kesukaan permen lunak lidah buaya. Permen yang paling disukai oleh panelis adalah permen dengan variasi ukuran permen $2 \times 2 \times 1$ cm dan suhu pengeringan 50°C yang memiliki kadar air 15%, aktivitas antioksidan 7,91% *Radical Scavenging Activity* (RSA), total asam 0,36, kadar gula total 30,55%, nilai *lightness* 59,25, nilai *redness* -1,85, nilai *yellowness* 20,21, nilai *hardness* 1393,25g.

Kata kunci: Lidah buaya, permen lunak, suhu pengeringan, ukuran permen

THE CHEMICAL, PSYCHICAL PROPERTIES AND PREFERENCE LEVEL
EFFECT OF ALOE VERA SOFT CANDY MADE WITH DIFFERENT
DRYING TEMPERATURE AND SIZEING

ABSTRACT

Aloe vera contains antioxidants that are beneficial for health. However, due to oxidation the gel in aloe vera is easily damaged so that further processing is needed to make it easy to be consumed and to maintain the content in it, therefore it is processed into soft candy. Soft candy is a mixture of sugar, water, and gelatin that is boiled, molded and dried. This study aimed to determine the effect of drying temperature variations and candy size on the chemical, physical, and level of preference of aloe vera soft candy.

In this study, soft candy were added with aloe vera gel and then processed through 2 factors, the first factor were drying temperature variations of 50; 60; and 70°C, the second factor were the candy size variations of $2 \times 2 \times 1$ and $2 \times 2 \times 2.5$ cm. The analysis that has been done included water content, antioxidant activity, total acid, total sugar content, color test, texture test, and preference level test. The data obtained were statistically analyzed using ANOVA (Analysis of Variance).

The results showed that candy size variations and drying temperature affected the chemical, physical, and level of preference of aloe vera soft candy. The candy that the panelists liked the most was the candy with size variation of $2 \times 2 \times 1$ cm while the drying temperature was 50°C which had a moisture content of 15%, antioxidant activity of 7.91% Radical Scavenging Activity (RSA), 0.36 of total acid, 30.55% of total sugar content, lightness value of 59.25, they were -1.85 of redness value, 20.21 of yellowness value, and 1393.25g of hardness value.

Keywords: Aloe vera, soft candy, drying temperature, candy size