

**IMBANGAN GULA ASAM, SIFAT FISIK DAN TINGKAT KESUKAAN  
PERMEN LUNAK JAMBU BIJI (*Psidium guajava* L.) DENGAN  
VARIASI KONSENTRASI GULA DAN ASAM SITRAT**

**INTISARI**

Permen adalah makanan ringan yang disukai hampir semua orang. Buah jambu biji ditambahkan untuk meningkatkan mutu permen lunak karena mengandung vitamin C. Tujuan dari penelitian ini adalah untuk mengevaluasi pengaruh variasi konsentrasi gula dan asam sitrat terhadap imbalanced gula asam dan sifat fisik permen lunak jambu biji serta menentukan permen yang paling disukai.

Penelitian ini menggunakan rancangan acak lengkap (RAL) dua faktor. Faktor pertama merupakan variasi konsentrasi gula dengan taraf 200, 300 dan 400 g. Faktor kedua merupakan variasi penambahan asam sitrat dengan taraf 0 dan 0,5%. Analisis kimia permen lunak meliputi kadar air, vitamin C, gula total, total asam dan imbalanced gula asam. Analisis fisik permen lunak meliputi warna dan tekstur. Analisis sifat organoleptik permen lunak diuji berdasarkan tingkat kesukaan. Data yang diperoleh dianalisis statistik dengan tingkat kepercayaan 95% dan dilanjutkan dengan *Duncan Multiple Range Test* (DMRT) jika terdapat perbedaan nyata.

Hasil penelitian menunjukkan bahwa variasi konsentrasi gula dan asam sitrat meningkatkan imbalanced gula asam dan kelunakan permen lunak jambu biji. Permen lunak yang disukai adalah permen dengan konsentrasi gula 300 g dan asam sitrat 0,5% yang memiliki kadar air 7,53 %bb, vitamin C 51,54 mg/100 g, gula total 25,58%, total asam 1,55%, imbalanced gula asam 16,89, nilai L\* 52,18, nilai a\* 14,45, nilai b\* 14,72 dan nilai tekstur 1449,25 g.

Kata kunci: permen lunak, gula, asam sitrat, imbalanced gula asam

**SUGAR-ACID RATIO, PHYSICAL PROPERTIES AND PREFERENCE  
LEVEL OF GUAVA (*Psidium guajava* L.) SOFT CANDY MADE WITH  
VARIATION OF SUGAR CONCENTRATION AND CITRIC ACID**

**ABSTRACT**

Candy is a snack that everyone likes. Guava was added to enhanced the quality of soft candy because it contains vitamin C. This study aimed to determine the sugar and citric acid concentration on sugar-acid ratio and physical properties of guava soft candy as well as determine the most preferred candy.

This research was designed using a completely random design (CRD) with two factors: a variety of sugar concentrations 200, 300, and 400 g, and the second factor was the variety of citric acid addition 0 and 0,5%. Chemical analysis of soft candy includes moisture, vitamin C, total sugar, total acid, and sugar-acid ratio. Physical analysis of soft candy includes color and texture. Analysis of organoleptic properties of soft candy was tested based on the level of preference. The obtained data were tested statistical analysis at the 95% confidence interval and continued with Duncan Multiple Range Test (DMRT) if there was a significant difference.

The result showed that various concentrations of sugar and citric acid increased the sugar-acid ratio and softness of guava soft candy. The preferred soft candy is on the variation of 300 g sugar and 0,5% citric acid, which has 7,53 %wb moisture, 51,54 mg/100 g of vitamin C, 25,58% total sugar, 1,55% total acid, 16,89 of sugar-acid ratio, 52,18 of lightness, 14,45 red, 14,72 yellow with 1449,25 g texture.

Keywords: soft candy, sugar, citric acid, sugar-acid ratio