

Eka Mauliddya. NPM 210331100077. Pengaruh Penambahan Ekstrak Cabe Jamu (*Piper retrofractum* Vahl.) Dan Proporsi Pemanis Terhadap Mutu *Soft Candy*. Di bawah Bimbingan **Dr. Supriyanto, S.TP., M.P.** dan **Mojiono, S.TP., M.Si.**

ABSTRAK

Soft candy merupakan permen lunak yang banyak disukai karena memiliki tekstur yang tidak keras. Produk ini dibuat dengan cara memasak glukosa, sukrosa dan air dengan suhu 115-120°C. *Soft candy* dapat menjadi produk fungsional yang memiliki manfaat kesehatan. Upaya peningkatan nilai fungsional *soft candy* adalah dengan memanfaatkan bahan alami yang kaya antioksidan, salah satunya adalah cabe jamu. Oleh karena itu, perlu dilakukan penelitian *soft candy* dengan menambahkan ekstrak cabe jamu dan proporsi pemanis untuk mengetahui mutu fisik, kimia dan sensoris *soft candy*. Tahapan metode penelitian dimulai dari studi literatur, penentuan formulasi *soft candy*, pengujian dan analisis data. Pengujian yang dilakukan yaitu uji waktu kelarutan, uji pH, uji warna, uji antioksidan, uji flavonoid dan uji sensoris. Data pengujian dianalisis dengan menggunakan ANOVA (*Analysis of Variance*) dan non parametrik friedman pada uji sensoris. Hasil penelitian menunjukkan bahwa penambahan ekstrak cabe jamu berpengaruh nyata terhadap mutu *soft candy* meliputi waktu kelarutan, warna (L, a, b, *chroma*), total flavonoid, inhibisi antioksidan, dan sensoris. Penambahan proporsi pemanis berpengaruh nyata terhadap pH *soft candy*. Hasil uji sensoris menunjukkan formula *soft candy* yang memenuhi preferensi mutu panelis terdapat pada perlakuan F4. Penentuan perlakuan terbaik dengan *Multiple Attribute Metode Zeleny* terdapat pada F4 yaitu *soft candy* dengan penambahan ekstrak cabe jamu 3 g dan proporsi pemanis glukosa dan sukrosa (50:50). *Soft candy* terbaik pada perlakuan F4 memiliki nilai waktu kelarutan sebesar 8,22 menit, pH 6,80, warna (*lightness* 53,85, *redness* 4,20, *yellowness* 26,90, *hue* 81,21 dan *chroma* 27,23), flavonoid 6,87 mg QE/g, inhibisi antioksidan 88,47%, dan sensoris keseluruhan 4,03.

Kata Kunci: Antioksidan, Ekstrak Cabe Jamu, Proporsi Pemanis, *Soft Candy*

Eka Mauliddya. NPM 210331100077. Effect of Adding Javanese Long Pepper (*Piper retrofractum* Vahl.) Extracts and Sweetener Proportion on Soft Candy Quality. Under the guidance of **Dr. Supriyanto, S.TP., M.P.** and **Mojiono, S.TP., M.Si.**

ABSTRACT

Soft candy is a soft candy that is widely liked because it has a texture that is not hard. This product is made by cooking glucose, sucrose and water at a temperature of 115-120°C. Soft candy can be a functional product that has health benefits. An effort to increase the functional value of soft candy is to utilize natural ingredients that are rich in antioxidants, one of which is javanese long pepper. Therefore, it is necessary to conduct soft candy research by adding javanese long pepper and sweetener proportion to determine the physical, chemical and sensory qualities of soft candy. The stages of the research method start from literature study, determination of soft candy formulation, testing and data analysis. The tests carried out were solubility time test, pH test, color test, antioxidant test, flavonoid test and sensory test. The test data was analyzed using ANOVA (Analysis of Variance) and non-parametric friedman on sensory tests. The results showed that the addition of javanese long pepper extract had a significant effect on the quality of soft candy including solubility time, colour (L, a, b, chroma), total flavonoids, antioxidant inhibition, and sensory. The addition of the sweetener proportion had a significant effect on the pH of soft candy. The results of the sensory test showed that the soft candy formula that met the quality preferences of the panelists was found in the F4 treatment. The determination of the best treatment with the Zeleny Method Multiple Attribute is found in F4, namely soft candy with the addition of 3 g of javanese long pepper extract and the proportion of glucose and sucrose sweetener (50:50). The best soft candy in the F4 treatment had a solubility time value of 8,22 minutes, pH 6,80, colour (lightness 53,85, redness 4,20, yellowness 26,90, hue 81,21 and chroma 27,23), flavonoids 6,87 mg QE/g, antioxidant inhibition 88,47%, and overall sensory 4,03.

Keyword: Antioxidants, Javanese long pepper, Sweetener proportion, Soft candy