ABSTRAK

Variasi Penambahan Jenis Pengenyal Pada Pembuatan Permen Jelly Rumput Laut (*Eucheuma cottonii*). Tim 'anah, 720320049; 2024; 89 halaman; Program Studi Teknologi Hasil Pertanian Fakultas Pertanian Universitas Wirajaraja.

Permen adalah produk olahan yang terbuat dari gula (sukrosa) dan kemudian ditambahkan dengan air. Secara umum, permen dibagi menjadi dua bagian, yaitu permen lunak/jelly dan permen keras. *Rumput laut Eucheuma cottonii* belum dimanfaatkan secara optimal, pemanfaatan rumput laut hanya terbatas pada pengolahan rumput laut kering dan pengolahan produk makanan dan minuman lokal, sehingga perlu adanya penelitian untuk dapat menghasilkan produk lain yang memiliki nilai ekonomis tinggi, salah satunya permen jelly. Permen jelly merupakan makanan semi basah yang memiliki tekstur kenyal yang sedikit lembut hingga hampir keras. Untuk meningkatkan tekstur permen jelly, diperlukan bahan tambahan makanan seperti gelatin, gum arab dan gelatin. Penelitian ini bertujuan untuk mengetahui pengaruh penambahan variasi jenis pengenyal pada pembuatan permen jelly rumput laut. Metode penelitian menggunakan Rancangan Acak Lengkap (RAL) 1 faktor dengan masing-masing 4 taraf, yaitu formulasi pengenyal 0%, 5%, 8%, 11%. Analisis uji organoleptik dianalisis menggunakan uji Kruskal Wallis. Hasil uji organoleptik yang diperoleh panelis lebih menyukai permen jelly rumput laut G2 (gelatin 8%), A1 (gelatin 5%) dan U1 (gum arab 5%). Analisis kadar air, gula reduksi dan *Salmonella* dianalisis menggunakan metode Analysis of Variance (ANOVA). Hasil analisis kadar air G2 (34,81%), A1 (33,60%) dan U1 (34,17%), kadar gula reduksi G2 (17,18%), A1 (12,42%), dan U1 (10,72%), sedangkan untuk *uji cemaran bakteri Salmonella* dinyatakan bahwa sampel permen jelly adalah bakteri Salmonella "negatif" (-). Permen jelly dengan penambahan variasi jenis pengenyal berpengaruh nyata terhadap organoleptik, kadar air, gula reduksi dan *Salmonella*.

Kata kunci: *Eucheuma cottonii, gelatin, gum arab*

ABSTRACT

Variations in the Addition of Chewy Types in the Making of Seaweed Jelly Candy (*Eucheuma cottonii*). Tim 'anah, 720320049; 2024; 89 yard; Agricultural Product Technology Study Program, Faculty of Agriculture, Wirajaraja University.

Candy is a processed product made from sugar (sucrose) and then added with water. In general, candy is divided into two parts, namely soft candy/jelly and hard candy. *Eucheuma cottonii seaweed* has not been utilized optimally, the use of seaweed is only limited to the processing of dried seaweed and the processing of local food and beverage products, so there is a need for research to be able to produce other products that have high economic value, one of which is jelly candy. Jelly candy is a semi-wet food that has a chewy texture that is slightly soft to almost hard. To improve the texture of jelly candy, food additives such as gelatin, gum arabic and gelatin are needed. This study aims to determine the effect of adding a variety of chewy types on the manufacture of seaweed jelly candy. The research method uses a 1-factor Complete Random Design (RAL) with 4 levels each, namely 0%, 5%, 8%, 11% chewy formulations. The analysis of organoleptic tests was analyzed using the Kruskal Wallis test. The results of the organoleptic test obtained by the panelists preferred seaweed jelly candy G2 (8% gelatin), A1 (5% gelatin) and U1 (5% gum arabic). The analysis of moisture content, reduced sugar and *Salmonella* was analyzed using the Analysis of Variance (ANOVA) method. The results of the analysis of the moisture content of G2 (34.81%), A1 (33.60%) and U1 (34.17%), reduced sugar content of G2 (17.18%), A1 (12.42%), and U1 (10.72%), while for the *Salmonella bacteria contamination test*, it was stated that the jelly candy sample was "negative" Salmonella bacteria (-). Jelly candies with the addition of a variety of chewy types had a significant effect on organoleptics, moisture content, reduced sugars and *Salmonella*.

Keywords: *Eucheuma cottonii, gelatin, gum arabic*