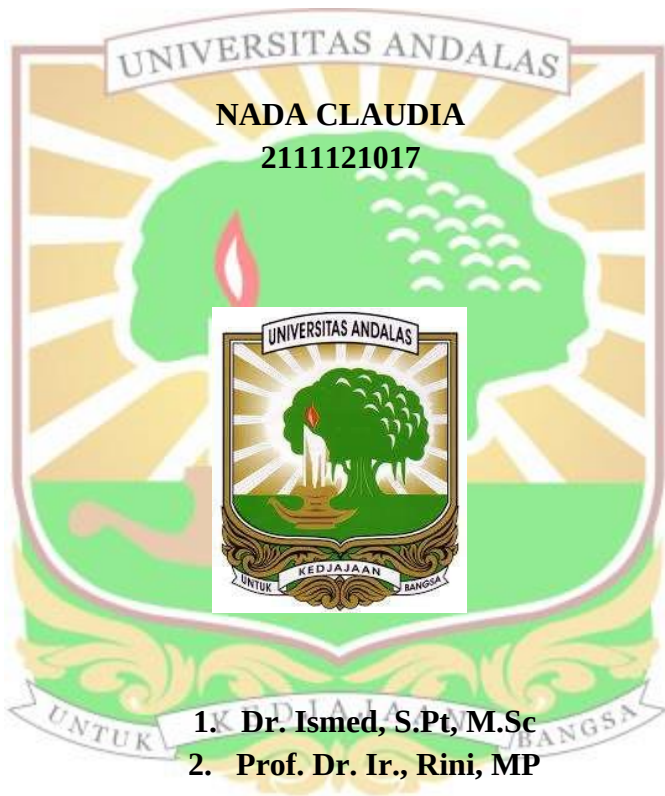


**PENGARUH PENAMBAHAN EKSTRAK
STROBERI (*Fragaria ananassa*) TERHADAP
KARAKTERISTIK FISIKOKIMIA DAN
ORGANOLEPTIK KEJU MOZZARELLA**



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PENGARUH PENAMBAHAN EKSTRAK STROBERI (*Fragaria ananassa*) TERHADAP KARAKTERISTIK FISIKOKIMIA DAN ORGANOLEPTIK KEJU MOZZARELLA

Nada Claudia, Ismed, Rini

ABSTRAK

Penelitian ini bertujuan untuk menganalisis pengaruh penambahan ekstrak stroberi (*Fragaria ananassa*) serta menentukan konsentrasi ekstrak stroberi terbaik terhadap karakteristik fisikokimia dan organoleptik keju mozzarella. Penelitian menggunakan rancangan acak lengkap dengan lima perlakuan konsentrasi ekstrak stroberi (0%, 3%, 6%, 9%, dan 12%) dan tiga ulangan. Data penelitian dianalisis secara statistik menggunakan Analysis of Variance (ANOVA) dan dilanjutkan dengan analisis Duncan's New Multiple Range Test (DNMRT) pada taraf 5%. Hasil penelitian menunjukkan bahwa penambahan ekstrak stroberi memberikan pengaruh nyata terhadap kemuluran, warna, rendemen, kadar air, kadar lemak, pH, aktivitas antioksidan, angka lempeng total, serta organoleptik warna, aroma, dan rasa. Namun tidak berpengaruh nyata terhadap kadar protein, dan tekstur organoleptik keju mozzarella. Perlakuan terbaik berdasarkan analisis fisik, organoleptik, dan mikrobiologi keju mozzarella yang didapatkan pada penelitian ini adalah perlakuan E (penambahan 12% ekstrak stroberi) dengan nilai rata-rata kemuluran 22,83%, warna 50,767 °Hue, rendemen 9,66%, penerimaan organoleptik dengan skor warna 4,36 (suka), aroma 4,40 (suka), rasa 4,28 (suka), dan tekstur 3,88 (biasa), serta angka lempeng total (ALT) $1,65 \times 10^3$ CFU/g. Perlakuan ini menghasilkan keju mozzarella dengan karakteristik kimia berupa kadar air 51,52%, kadar protein 24,71%, kadar lemak 13,54%, pH 5,13, dan aktivitas antioksidan 45,27%.

Kata Kunci: antioksidan; ekstrak stroberi; keju mozzarella

THE EFFECT OF STRAWBERRY (*Fragaria ananassa*) EXTRACT ADDITION ON THE PHYSICOCHEMICAL AND ORGANOLEPTIC CHARACTERISTICS OF MOZZARELLA CHEESE

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ABSTRACT

This study aims to analyze the effect of adding strawberry extract (*Fragaria ananassa*) and determine the best concentration of strawberry extract on the physicochemical and organoleptic characteristics of mozzarella cheese. The study applied a completely randomized design with five treatments of strawberry extract concentration (0%, 3%, 6%, 9%, and 12%) and three replications. The research data were analyzed statistically using Analysis of Variance (ANOVA) and continued with Duncan's New Multiple Range Test (DNMRT) analysis at the 5% level. The results showed that the addition of strawberry extract had a significant effect on elongation, color, yield, water content, fat content, pH, antioxidant activity, total plate count, and organoleptic color, aroma, and taste. However, it did not significantly affect protein content and organoleptic texture of mozzarella cheese. The best treatment based on physical, organoleptic, and microbiological analysis of mozzarella cheese obtained in this study was treatment E (addition of 12% strawberry extract) with an average value of elongation of 22.83%, color of 50.767 °Hue, yield of 9.66%, organoleptic acceptance with a color score of 4.36 (like), aroma of 4.40 (like), taste of 4.28 (like), and texture of 3.88 (neither), as well as a total plate count (ALT) of 1.65×10^3 CFU/g. This treatment produced mozzarella cheese with chemical characteristics in the form of water content of 51.52%, protein content of 24.71%, fat content of 13.54%, pH of 5.13, and antioxidant activity of 45.27%.

Keywords: antioxidant; mozzarella cheese; strawberry extract