

PENGARUH PERBEDAAN JENIS SUSU DAN GARAM KALSIMUM TERHADAP KARAKTERISTIK TEKSTUR DAN SENSORI KEJU SEGAR

Ilda Febriyana
20/459695/PT/08521

INTISARI

Keju merupakan produk pangan sumber protein dan mineral (Ca) asal hewani. Penelitian ini dilakukan untuk mengetahui pengaruh perbedaan jenis susu dan garam kalsium terhadap karakteristik tekstur dan sensori keju segar. Perlakuan yang diberikan yaitu dua jenis susu (susu Sapi Friesian Holstein dan susu Kambing Kacang), dua jenis garam kalsium (kalsium klorida dan kalsium karbonat) dan konsentrasi garam kalsium (0, 10, 20 mg/100ml susu). Data hasil uji tekstur keju segar dianalisis menggunakan *two way* ANOVA dan apabila terdapat perbedaan yang signifikan akan dilanjutkan menggunakan *Duncan's Multiple Range Test* (DMRT) dengan taraf signifikansi 5%. Data hasil uji sensori keju segar dianalisis menggunakan uji nonparametrik Kruskal-Wallis. Hasil penelitian menunjukkan bahwa jenis susu berpengaruh nyata ($p < 0,05$) terhadap kekerasan (*hardness*), daya rekat (*adhesiveness*), ketahanan (*resilience*), kekompakan (*cohesion*), dan kekenyalan (*springiness* dan *chewiness*) serta sensori keju meliputi penampilan eksternal keju, bau, rasa, tekstur, dan *after taste*. Perbedaan jenis garam kalsium yang ditambahkan dalam pembuatan keju berpengaruh nyata ($p < 0,05$) terhadap kekerasan (*hardness*) keju segar. Perbedaan konsentrasi garam kalsium yang ditambahkan dalam pembuatan keju berpengaruh nyata nyata ($p < 0,05$) terhadap karakteristik tekstur keju segar meliputi kekerasan (*hardness*), daya rekat (*adhesiveness*), kekenyalan (*springiness* dan *chewiness*). Kesimpulan yang didapatkan dari penelitian ini adalah tekstur keju segar yang diperoleh dari susu Kambing Kacang dengan jenis garam kalsium klorida (CaCl_2) pada penambahan konsentrasi 20mg/100ml memiliki karakteristik tekstur yang paling baik. Sensori keju segar yang diperoleh dari susu Kambing Kacang memiliki karakteristik sensori yang paling baik.

Kata kunci: Keju segar, Susu Sapi Friesian Holstein, Susu Kambing Kacang, Garam kalsium, Tekstur keju, Karakteristik sensori.

EFFECTS OF DIFFERENT MILK TYPES AND CALCIUM SALTS ON THE CHARACTERISTIC TEXTURE AND SENSORY OF FRESH CHEESE

Ilda Febriyana
20/459696/PT/08521

ABSTRACT

Cheese is a source of animal protein and mineral (Ca) for human food. This research was developed to study the effects of different types of milk and calcium salts on the textural and sensory characteristics of fresh cheese. The treatments included two types of milk (Holstein Friesian cow's milk and Kacang goat's milk), two types of calcium salts (calcium chloride and calcium carbonate), and concentrations of calcium salts (0, 10, 20 mg/100ml of milk). The data from the texture analysis were analyzed using Analysis of Variance (ANOVA), followed by Duncan's Multiple Range Test (DMRT) at a significance level of 5% if significant differences were found. The sensory data were analyzed using the non-parametric Kruskal-Wallis test. The results have showed that the type of milk significantly affected ($p < 0.05$) hardness, adhesiveness, resilience, cohesion, springiness, chewiness, as well as sensory attributes such as external appearance, aroma, taste, and aftertaste of fresh cheese. The type of calcium salt added during cheese production significantly affected ($p < 0.05$) the hardness of fresh cheese. The concentration of calcium salts added during cheese production significantly affected ($p < 0.05$) textural characteristics including hardness, adhesiveness, springiness, and chewiness of fresh cheese. The conclusion this research was that the texture of fresh cheese obtained from Kacang Goat milk with calcium chloride (CaCl_2) salt at a concentration of 20mg/100ml had the best texture characteristics. The sensory attributes of fresh cheese obtained from Kacang Goat milk exhibited the best sensory characteristics.

Keywords: Fresh cheese, Holstein Friesian cow's milk, Kacang goat's milk, Calcium salts, Cheese texture, Sensory characteristic.