

PEMANFAATAN BAHAN ALTERNATIF PENGUMPAL NABATI PADA INDUSTRI KEJU KAMBING BLIGON TERHADAP KUALITAS DAN SENSORIS KEJU KAMBING

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INTISARI

Penelitian ini bertujuan untuk mengetahui kualitas dan sensoris keju susu kambing Bligon dengan pengumpal nabati, tin dan papain. Kontrol yang digunakan adalah keju koagulan rennet komersial mikrobia. Keju diperam dan diamati perubahan fisika-kimia pada penyimpanan bulan ke-0, 1, 2 dan 3. Parameter yang diamati adalah rendemen (bulan ke-0), kadar air, kadar abu, kadar lemak, kadar protein keju, kadar protein *whey*, pH, tekstur dan cita rasa keju. Data hasil penelitian dianalisis dengan analisis variansi rancang acak lengkap pola faktorial dan perbedaan rata-rata diuji dengan *Duncan's New Multiple Range Test* (DMRT). Hasil penelitian menunjukkan persentase rendemen keju tertinggi adalah keju tin 57,16%, sedangkan keju papain 45,92% dan kontrol 39,48%. Kadar air meningkat selama pemeraman, tertinggi pada keju tin yaitu $69,85 \pm 3,23$, keju kontrol $65,08 \pm 9,55$ dan keju papain $50,54 \pm 3,10$. Kadar abu keju turun selama penyimpanan, tertinggi keju tin $2,15 \pm 0,18\%$, diikuti keju kontrol $1,93 \pm 0,25\%$ dan keju papain $1,92 \pm 0,63\%$. Kadar lemak keju meningkat selama penyimpanan, tertinggi keju papain $20 \pm 7,23\%$, keju komersial $13 \pm 3,21\%$ dan keju tin $8,63 \pm 2,97\%$. Kadar protein keju naik selama penyimpanan, tertinggi keju papain $18,5 \pm 3,45\%$ diikuti keju kontrol $16,06 \pm 1,82\%$ dan keju tin $11,5 \pm 1,05\%$. Kadar protein *whey* turun selama penyimpanan, tertinggi keju papain $37,82 \pm 28,8$ mg/g diikuti keju kontrol $29,15 \pm 22,25$ mg/g dan keju tin $14,83 \pm 11,55$ mg/g. Nilai pH keju turun selama penyimpanan, tertinggi keju kontrol $5,02 \pm 0,78$ diikuti keju papain $4,5 \pm 0,29$ dan keju tin $4,21 \pm 0,27\%$. Keju dengan cita rasa terbaik adalah keju kontrol diikuti keju papain dan keju tin

Kata kunci: Susu kambing, Keju vegetal, Fisika-kimia, Cita rasa

**UTILIZATION OF ALTERNATIVE VEGETAL CLOTTING AGENT IN
GOAT CHEESE INDUSTRY ON QUALITY AND
SENSORIS OF GOAT'S CHEESE**

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ABSTRACT

This research aimed to determine the quality and sensory of cheese made from bligon goat's milk with vegetable clot, tin and papain. The control used microbial coagulant cheese. Cheese was ripened to observe the physico-chemical changes at storage months 0, 1, 2 and 3. The parameters that were observed are rendemen (month 0), water content, ash content, fat content, cheese protein content, whey protein content, pH, texture and cheese flavor. The data were analyzed with factorial analysis of variance and the average difference was tested by Duncan's New Multiple Range Test (DMRT). The results showed the highest percentage of cheese cheese was tin cheese 57.16%, papain cheese 45.92% and control 39.48%. Water content increased during ripening, highest in tin cheese was $69,85 \pm 3,23\%$, control cheese $65,08 \pm 9,55\%$ and papain cheese $50,54 \pm 3,10\%$. Ash content of cheese fell during ripening, the highest was tin cheese $2.15 \pm 0.18\%$, followed by control cheese $1.93 \pm 0.25\%$ and papain cheese $1.92 \pm 0.63\%$. Cheese fat content increased during ripening, the highest was papain cheese $20 \pm 7.23\%$, control cheese $13 \pm 3.21\%$ and tin cheese $8.63 \pm 2.97\%$. Levels of protein cheese rose during ripening, the highest was papain cheese $18.5 \pm 3.45\%$ followed by control cheese $16.06 \pm 1.82\%$ and tin cheese $11.5 \pm 1.05\%$. Whey protein content decreased during ripening, the highest was papain cheese $37,82 \pm 28,8$ mg/g followed by control cheese $29,15 \pm 22,25$ mg/g and tin cheese $14,83 \pm 11,55$ mg/g. The pH value of cheese decreased during ripening, the highest was control cheese 5.02 ± 0.78 followed by papain cheese 4.5 ± 0.29 and tin cheese $4.21 \pm 0.27\%$. Cheese with the best taste is cheese control followed by papain cheese and cheese tin

Keywords: Goat milk, Vegetal cheese, Physic-chemical, Flavor