

KUALITAS MIKROBIOLOGIS, FISIK DAN SENSORIS KEJU YANG DIPERAM DENGAN *Lactobacillus paracasei* M104 DAN *Pediococcus pentosaceus* M103

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INTISARI

Penelitian ini bertujuan untuk mengetahui kualitas mikrobiologis, fisik dan sensoris keju yang diperam selama 30 hari. Keju dibuat menjadi 3 perlakuan yaitu keju tanpa penambahan starter, keju dengan starter *Lactobacillus paracasei* M104 dan keju dengan starter *Pediococcus pentosaceus* M103. Keju diperam dalam refrigerator suhu 10°C dan pada hari ke-0, 15 dan 30 dianalisis kualitas mikrobiologis (total bakteri asam laktat) dan kualitas fisiknya (total solid dan tekstur) dan sifat sensorisnya diamati pada hari ke-0 meliputi warna, rasa, aroma, tekstur dan daya terima. Hasil penelitian menunjukkan tidak ada pengaruh nyata perbedaan starter terhadap total BAL, total solid dan tekstur keju ($P > 0,05$). Namun terdapat hubungan penyimpanan terhadap total solid keju. Rerata jumlah total bakteri asam laktat keju tanpa penambahan starter, keju dengan penambahan *Lactobacillus paracasei* M104 dan keju dengan penambahan *Pediococcus pentosaceus* M103 adalah $8,45 \pm 1,09$ log cfu/ml. Total solid keju paling tinggi terdapat pada keju yang disimpan pada hari ke-30 yaitu $57,17 \pm 5,08\%$. Rerata tekstur keju adalah $4,06 \pm 1,33N$. *Lactobacillus paracasei* M104 dan *Pediococcus pentosaceus* M103 tidak mempengaruhi warna dan aroma keju ($P > 0,05$) tetapi mempengaruhi rasa, tekstur dan daya terima keju ($P < 0,05$). Sifat sensoris keju terbaik pada keju tanpa penambahan starter. Rerata keju memiliki skor warna $2,44 \pm 0,84$ (putih), rasa $3,15 \pm 1,31$ (agak asin), aroma $2,62 \pm 0,93$ (agak bau susu kambing), tekstur $3,28 \pm 1,01$ (cukup lembut), dan daya terima $2,95 \pm 0,90$ (tidak suka).

Kata kunci : Keju, Mikrobiologis, Fisik, Sensoris, *Lactobacillus paracasei* M104, *Pediococcus pentosaceus* M103.

MICROBIOLOGY, PHYSICAL AND SENSORY QUALITY OF CHEESE THAT RIPENED WITH *Lactobacillus paracasei* M104 AND *Pediococcus pentosaceus* M103

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ABSTRACT

The aim of the research was to know quality of microbiology, physical and sensory cheese that ripened for 30 days. There were 3 treatments for the cheese in this research; cheese without starter added, cheese with starter *Lactobacillus paracasei* M104 and cheese with starter *Pediococcus pentosaceus* M103. Cheese was ripened in refrigerator at 10°C and analyzed in day 0, 15 and 30 for microbiology (total lactic acid bacteria) and physical (total solid and texture) quality. Sensory quality (color, taste, flavour, texture and acceptability) was analyzed in day 0. The reaserch showed that there was not significant effect on different starter towards total BAL, total solid and cheese texture ($P>0,05$). However, there was correlation between ripening and total solid cheese. Average of total LAB in cheese without starter added, cheese with *Lactobacillus paracasei* M104 and cheese with *Pediococcus pentosaceus* M103 was $8,45\pm 1,09$ log cfu/ml. Cheese that ripenend in day 30 had the highest score of total solid, $57,17\pm 5,08\%$. Avarage of cheese texture was $4,06\pm 1,33N$. *Lactobacillus paracasei* M104 and *Pediococcus pentosaceus* M103 were added to the cheese, did not give any effect on color and flavour of cheese ($P>0,05$), however gave effect on taste, texture and acceptability of cheese ($P<0,05$). The best quality of cheese was cheese without starter added. Average of cheese had score of color $2,44\pm 0,84$ (white), score of taste $3,15\pm 1,31$ (rather salty), score of flavour $2,62\pm 0,93$ (rather goaty), score of texture $3,28\pm 1,01$ (rather soft) and score of acceptability $2,95\pm 0,90$ (dislike).

Key word : Cheese, Microbiology, Physical, Sensory, *Lactobacillus paracasei* M104, *Pediococcus pentosaceus* M103.