

RINGKASAN

Perkembangan ilmu pengetahuan membuat masyarakat menjadi lebih pandai mengontrol makanan yang berlemak dan menambah jumlah protein, oleh karena itu diperlukan pengembangan pangan yang berprotein tinggi namun rendah lemak. Pengembangan keju *cottage* dari susu kedelai menjadi pilihan bagi mereka yang kurang menyukai susu hewani dan bagi mereka yang alergi dengan susu sapi. Penelitian ini bertujuan untuk mengetahui pengaruh kombinasi susu sapi dan susu kedelai terhadap beberapa parameter mutu keju *cottage* selama penyimpanan, dan mengetahui kombinasi susu sapi dan susu kedelai terbaik dalam mempertahankan kualitas keju *cottage* selama penyimpanan.

Penelitian dilaksanakan di Laboratorium Teknik Sistem Termal dan Energi Terbarukan, Fakultas Pertanian, Universitas Jenderal Soedirman, pada bulan November sampai bulan Desember 2015. Penelitian ini dianalisa menggunakan perhitungan kinetika reaksi. Perlakuan yang digunakan pada penelitian ini adalah kombinasi susu sapi dan susu kedelai 30%:70%; 50%:50%; 70%: 30% dengan lama penyimpanan 0 hari, 3 hari dan 6 hari. Variabel yang diamati adalah pH, warna, kadar air, protein, asam laktat, dan uji organoleptik aroma, tekstur dan kesukaan.

Hasil penelitian menunjukkan bahwa perlakuan kombinasi susu sapi dan susu kedelai 50%:50% memiliki laju penurunan kadar air, pH, warna untuk nilai derajat putih paling rendah dan prosentase asam laktat paling tinggi. Perlakuan kombinasi susu sapi dan susu kedelai 30%:70% paling disukai panelis dan memiliki kadar protein paling tinggi sebesar 19,41%. Sedangkan untuk uji organoleptik perlakuan kombinasi susu sapi dan susu kedelai 70%:30% mampu mempertahankan aroma dan tektur.

Kata kunci: keju *cottage*, susu sapi, susu kedelai, waktu penyimpanan.

SUMMARY

The development of science make the society become more clever to control fatty food and adding amount of protein, so need the food development with high protein content but low of fat. The development cottage cheese of soybean milk be an option for those who did not particularly like the animal milk and those who allergic with cow milk. This research aims to know the combined effect of cow milk and soy milk for some parameters quality cottage cheese during storage, and know the combination of cow milk and soy milk best in defending the quality of cottage cheese during storage.

The research was conducted in the Laboratory of Thermal Systems Engineering and Renewable Energy, Faculty of Agriculture, Jenderal Soedirman University, from November to December 2015. The study was analyzed using calculations of kinetic reaction. The treatments used in this study were a combination of cow's milk and soy milk 30%:70%; 50%:50%; 70%:30% with storage time 0 day, 3 days and 6 days. The variables measured were pH, color, moisture, protein content, lactic acid, and organoleptic test of aroma, texture and fondness.

The research results was showed that treatment combination cow milk and soybean milk 50%:50 % have a rate of decrease water levels, pH, color to value degrees white the lowest, and percentage of lactic acid the highest. The treatment combination of cow's milk and soy milk 30%:70% most favored by panel and have highest level of a protein content for 19.41%. Whereas for organoleptic test treatment combination of cow's milk and soy milk 70%;30% are able to maintain the aroma and texture.

Keywords: cottage cheese, cow's milk, soy milk, storage time.