

## **ABSTRAK**

M YUNUS SYAHPUTRA. Tujuan penelitian untuk mengetahui pengaruh dari kombinasi susu kambing dan susu sapi pada kefir terhadap pH dan kadar asam laktat. Penelitian dilakukan dalam enam perlakuan, yaitu 100% susu kambing (P1), 80% susu kambing 20% susu sapi (P2), 60% susu kambing 40% susu sapi (P3), 40% susu kambing 60% susu sapi (P4), 20% susu kambing 80% susu sapi (P5), dan 100% susu sapi (P6). Metode penelitian yang digunakan adalah eksperimen, dengan Rancangan Acak Lengkap (RAL), dan 3 kali ulangan. Data dianalisis dengan analisis variansi dilanjutkan dengan Uji Beda Nyata Jujur (BNJ). Hasil penelitian menunjukkan bahwa perlakuan kombinasi 100% susu kambing (P1), 80% susu kambing 20% susu sapi (P2), 60% susu kambing 40% susu sapi (P3), 40% susu kambing dan 60% susu sapi (P4), 20% susu kambing dan 80% susu sapi (P5), serta 100% susu sapi (P6) berpengaruh sangat nyata ( $P < 0,01$ ) terhadap asam laktat, sedangkan pengukuran nilai pH berpengaruh tidak nyata ( $P > 0,05$ ). Kesimpulan, komposisi susu sapi yang tinggi pada kombinasi bahan baku kefir cenderung menurunkan nilai pH kefir, kadar asam laktat pada kefir semakin naik dengan penambahan susu kambing pada kombinasi bahan baku kefir, hasil perlakuan yang paling baik berdasarkan pH dan kadar asam laktat kefir yaitu 100% susu sapi.

Kata kunci :susu sapi, susu kambing, kefir, asam laktat, pH

## ABSTRACT

M YUNUS SYAHPUTRA. The purpose of this study is to know the effects were taken from the goat's milk and cow's milk combination in kefir on pH and lactic acid. This research was conducted in six treatments, there are 100% goat's milk (P1), 80% goat's milk 20% cow's milk (P2), 60% goat's milk 40% cow's milk (P3), 40% goat's milk and 60% cow's milk (P4), 20% goat's milk and 80% cow's milk (P5), and 100% cow's milk (P6). The research method used was experiment, with a Completely Randomized Design (CRD), and 3 replications. Data that has been analyzed continued with the Honestly Significant Difference Test (BNJ). The results showed that the average lactic acid in kefir given each treatment combination of 100% goat's milk (P1), 80% goat's milk 20% cow's milk (P2), 60% goat's milk 40% cow's milk (P3), 40% goat's milk and 60% cow's milk (P4), 20% goat's milk and 80% cow's milk (P5), and 100% cow's milk (P6) has a very significant effect ( $P < 0.01$ ) to lactic acid, while the measurement of pH values showed that it has not significant results ( $P > 0.05$ ). The conclusion, High composition of cow's milk in the combination of kefir raw materials reduces the pH value of kefir, the levels of lactic acid in kefir are higher with the combination of goat milk in the combination of kefir raw materials, the best combination results are based on the pH and levels of kefir lactic acid which is 100% cow's milk.

Keywords: cow's milk, goat's milk, kefir, lactic acid, pH