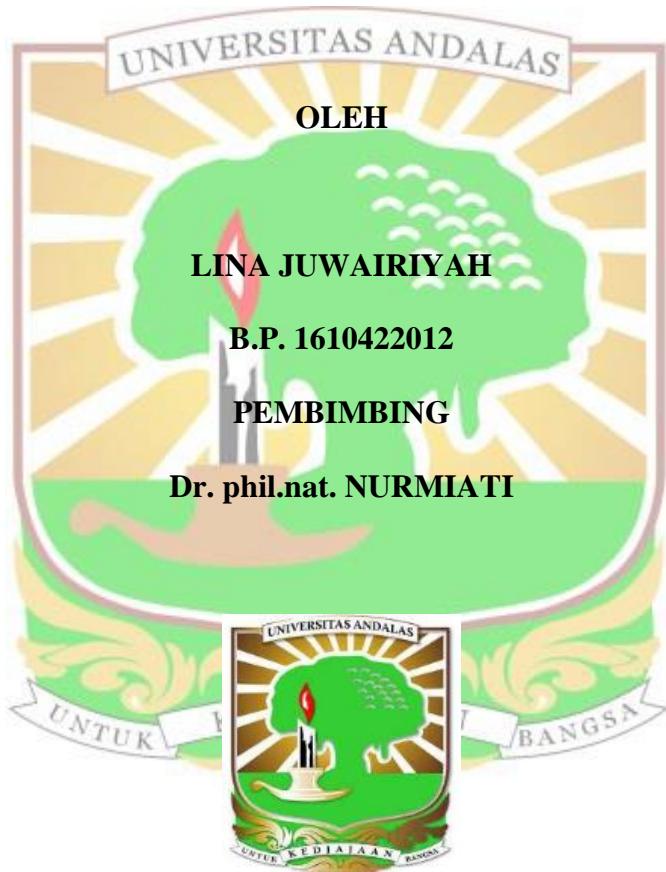


**KEBERADAAN BAKTERI BAKTERI ALAMI PENCERNA SUSU SEGAR
DARI BEBERAPA LOKASI PETERNAKAN SAPI PERAH DI SUMATERA
BARAT**

SKRIPSI SARJANA BIOLOGI

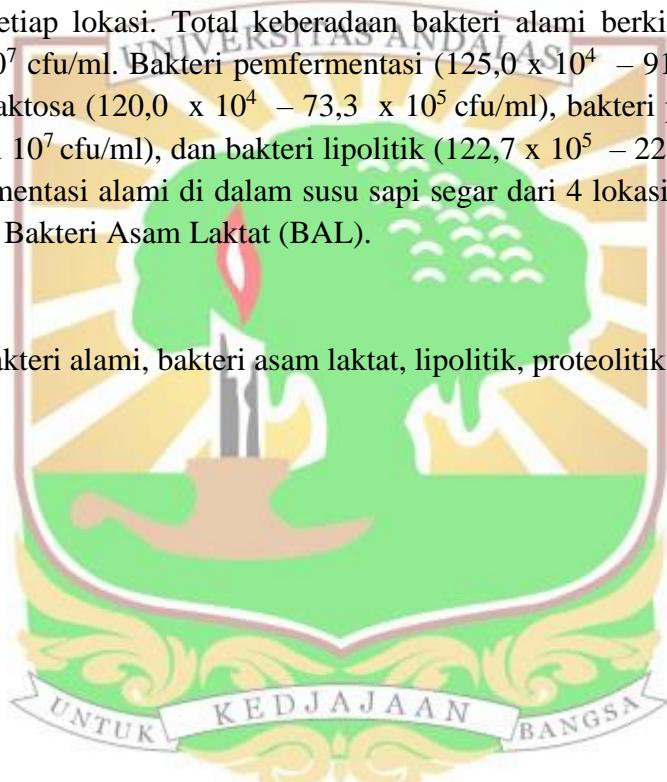


**JURUSAN BIOLOGI
FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM
UNIVERSITAS ANDALAS
PADANG, 2020**

ABSTRAK

Bakteri alami di dalam susu sapi segar dari 4 lokasi peternakan sapi perah di Sumatera Barat telah dibandingkan dan dianalisis. Penelitian ini bertujuan untuk menentukan keberadaan dan proporsional bakteri-bakteri alami, serta menentukan golongan bakteri pemfermentasi alami di dalam susu sapi segar dari beberapa peternakan sapi perah di Sumatera Barat. Penelitian ini dilakukan dengan metode survei dan data yang didapatkan dianalisis secara deskriptif. Hasil penelitian memperlihatkan di dalam sampel susu sapi segar dari 4 lokasi peternakan sapi perah di Sumatera Barat diperoleh berbagai jenis bakteri alami dengan jumlah yang berbeda pada setiap lokasi. Total keberadaan bakteri alami berkisar $280,0 \times 10^6$ hingga $68,5 \times 10^7$ cfu/ml. Bakteri pemfermentasi ($125,0 \times 10^4$ – $91,0 \times 10^5$ cfu/ml), bakteri pelisis laktosa ($120,0 \times 10^4$ – $73,3 \times 10^5$ cfu/ml), bakteri proteolitik ($200,0 \times 10^6$ – $48,1 \times 10^7$ cfu/ml), dan bakteri lipolitik ($122,7 \times 10^5$ – $222,0 \times 10^6$ cfu/ml). Bakteri pemfermentasi alami di dalam susu sapi segar dari 4 lokasi peternakan sapi perah tergolong Bakteri Asam Laktat (BAL).

Kata kunci : bakteri alami, bakteri asam laktat, lipolitik, proteolitik, susu sapi segar



ABSTRACT

Natural bacteria in raw cow's milk from four dairy farm locations in West Sumatra have been analyzed and compared. The aims of this study were to determine the presence and proportion of natural bacteria and to determine the group of natural fermenting bacteria in raw cow's milk from several dairy farms in West Sumatra. in raw cow's milk from several dairy farms in West Sumatra. This study used a survey method and the data obtained were analyzed descriptively. The results showed that in the samples of raw cow's milk from four dairy farm locations in West Sumatra, various types of natural bacteria were obtained with different numbers at each location. The total presence of natural bacteria ranged from $280,0 \cdot 10^6$ to $68,5 \cdot 10^7$ cfu / ml. Fermentative bacteria ($125,0 \cdot 10^4$ – $91,0 \cdot 10^5$ cfu / ml), lactose digesting bacteria ($120,0 \cdot 10^4$ – $73,3 \cdot 10^5$ cfu / ml), proteolytic bacteria ($200,0 \cdot 10^6$ - $48,1 \cdot 10^7$ cfu / ml), and lipolytic bacteria ($122,7 \cdot 10^5$ – $222,0 \cdot 10^6$ cfu / ml). Fermentative bacteria in raw cow's milk from four dairy farm locations were classified as Lactic Acid Bacteria (LAB).

Keywords : lactic acid bacteria, lipolytic, natural bacteria, proteolytic, raw cow's milk

