

## ABSTRAK

### KUALITAS KIMIA KEJU SUSU SAPI DENGAN PEMAKAIAN ENZIM BROMELIN DARI BUAH NANAS (*Ananas comosus*)

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Penelitian ini bertujuan untuk mengetahui pengaruh dan dosis terbaik pemakaian enzim bromelin dari buah nanas (*Ananas comosus*) terhadap kualitas kimia (protein, lemak, dan kadar air) keju susu sapi. Penelitian ini dilaksanakan pada Maret 2023 di Laboratorium Produksi Ternak, Jurusan Peternakan, Fakultas Pertanian, Universitas Lampung dan Laboratorium Analisa Sifat Fisik dan Kimia Pangan, Jurusan Teknologi Hasil Pertanian, Politeknik Negeri Lampung. Rancangan percobaan yang digunakan adalah Rancangan Acak Lengkap (RAL) dengan 4 perlakuan pemakaian larutan enzim bromelin (P1: 5 ml, P2: 6 ml, P3: 7 ml, P4: 8 ml) dan 5 ulangan. Data yang diperoleh dianalisis menggunakan Analisis Ragam pada taraf nyata 5% dan dilanjutkan dengan uji Beda Nyata Terkecil (BNT). Hasil penelitian menunjukkan bahwa pemakaian enzim bromelin berpengaruh nyata ( $P < 0,05$ ) terhadap kadar protein, kadar lemak, dan kadar air keju susu sapi. Pemakaian dosis enzim bromelin sebanyak 7 ml dalam 1000 ml susu sapi dan 8 ml dalam 1000 ml susu sapi memberikan hasil yang terbaik terhadap kadar lemak, kadar protein dan kadar air keju susu sapi.

**Kata kunci:** Enzim bromelin, keju susu sapi, kadar protein, kadar lemak, kadar air

## ABSTRACT

### **Chemical Quality of Cows Milk Cheese using Bromelain Enzyme from Pineapple Fruit (*Ananas comosus*)**

By

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This study aims to determine the effect and the best dose of bromelain enzyme from pineapple fruit (*Ananas comosus*) on the chemical quality of cow's milk cheese. This research was conducted in March 2023 at the Livestock Production Laboratory, Department of Animal Husbandry, Faculty of Agriculture, University of Lampung and Analysis of Physical and Chemical Properties of Food Laboratory, Department of Technology of Agricultural Products, Polytechnic of Lampung State. The experimental design used was a completely randomized design (CRD) with 4 treatments using bromelain enzyme solution (P1: 5 ml, P2: 6 ml, P3: 7 ml, P4: 8 ml) and 5 applications. The data obtained were analyzed using Analysis of Variance with a significance level of 5% and continued with the Least Significant Difference (LSD) test. The results showed that bromelain enzyme had a significant effect ( $P < 0,05$ ) on the protein content, fat content, and moisture content of cow's milk cheese. Using bromelain enzyme in the dose of 7 ml per 1000 ml cow's milk and 8 ml per 1000 ml cow's milk gave the best results on fat content, protein content and water content of cow's milk cheese.

**Keywords :** Bromelain enzyme, cow's milk cheese, protein content, fat content, moisture content