

PENGARUH PENAMBAHAN SUMBER MIKROBA BERBEDA PADA SILASE RUMPUT GAMA UMAMI DENGAN CAMPURAN KULIT NANAS TERHADAP KUALITAS FISIK DAN NUTRIEN

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INTISARI

Tujuan dilakukannya penelitian ini adalah untuk mengetahui pengaruh pemberian sumber mikroba yang berbeda terhadap kandungan nutrisi dan kualitas fisik pada silase rumput Gama Umami dengan campuran limbah kulit nanas. Penelitian dirancang dalam rancangan acak lengkap dengan empat perlakuan yaitu P0 = rumput GU 85% + Kulit Nanas 15% + molases 1% + (tanpa sumber mikroba); P1 = rumput GU 85% + Kulit Nanas 15% + molases 1% + *Limosilactobacillus fermentum* 1%; P2 = rumput GU 85% + Kulit Nanas 15% + molases 1% + EM4 1%; dan P3 = rumput GU 85% + Kulit Nanas 15% + molases 1% + SBP 1%. Setiap perlakuan direplikasi masing-masing tiga kali. Bahan silase diangin-anginkan, kemudian dicacah hingga berukuran 3-5 cm. Bahan silase dicampur menjadi satu, kemudian dimasukkan dan dipadatkan ke dalam kantong plastik ukuran 2 kg. Udara dikeluarkan dengan menggunakan *vacuum cleaner* dan diikat. Silo di-seal dengan menggunakan selotip hingga menutupi seluruh permukaan dan disimpan selama 21 hari. Data yang diperoleh yaitu karakteristik fisik, karakteristik fermentasi, dan kandungan nutrisi. Hasil penelitian menunjukkan bahwa perlakuan (P2) meningkatkan kandungan secara signifikan ($P < 0,05$) pada kandungan protein kasar (PK), dan lemak kasar (LK). Disimpulkan bahwa silase rumput Gama Umami dengan campuran limbah kulit nanas dan penambahan EM4 (1%) dapat meningkatkan kandungan protein kasar dan lemak kasar.

Kata kunci: Gama Umami, Kandungan nutrisi, Kulit nanas, dan Silase

THE EFFECT OF ADDING DIFFERENT MICROBIAL SOURCES TO GAMA UMAMI GRASS SILAGE WITH PINEAPPLE PEEL MIXTURE ON PHYSICAL AND NUTRITIONAL QUALITY

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ABSTRACT

The purpose of this study was to determine the effect of different microbial sources on the nutrient content and physical quality of Gama Umami grass silage mixed with pineapple peel waste. The study was designed as a completely randomized design with four treatments, namely P0 = 85% GU grass + 15% pineapple peel + 1% molasses + (no microbial source); P1 = 85% GU grass + 15% pineapple peel + 1% molasses + 1% *Limosilactobacillus fermentum*; P2 = 85% GU grass + 15% pineapple peel + 1% molasses + 1% EM4; and P3 = 85% GU grass + 15% pineapple peel + 1% molasses + 1% SBP. Each treatment was replicated three times. The silage material was aired, then chopped into 3-5 cm pieces. The silage material was mixed together, then put into 2 kg plastic bags and compacted. The air was removed using a vacuum cleaner and the bags were tied. The silo was sealed with tape to cover the entire surface and stored for 21 days. The data obtained included physical characteristics, fermentation characteristics, and nutrient content. The results showed that treatment (P2) significantly increased ($P < 0.05$) the crude protein (CP) and crude fat (CF) content. It was concluded that Gama Umami grass silage with pineapple peel mixture and the addition of EM4 (1%) can increase the content of crude protein and crude fat.

Keywords: Gama Umami grass, nutrient content, Pineapple peel, and Silage