

PENGARUH LAMA PENYIMPANAN DAN INOKULASI *Limosilactobacillus fermentum* BN21 TERHADAP KUALITAS SILASE RUMPUT BLEMBEM REPACKING

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh lama penyimpanan dan inokulasi *Limosilactobacillus fermentum* BN21 terhadap kualitas silase *repacking* rumput blembem, serta menganalisis interaksi antara kedua faktor tersebut. Penelitian menggunakan Rancangan Acak Lengkap (RAL) pola factorial yang terdiri atas dua faktor perlakuan yaitu inokulasi (tanpa inokulasi dan dengan inokulasi) dan lama penyimpanan (0, 4, dan 8 minggu). Parameter yang diamati meliputi pH, asam laktat, amonia, bahan kering, bahan organik, protein kasar, serat kasar, dan lemak kasar. Hasil penelitian menunjukkan bahwa lama penyimpanan berpengaruh nyata terhadap pH, asam laktat, amonia, bahan kering, protein kasar, serat kasar, dan lemak kasar, tetapi tidak berpengaruh terhadap bahan organik. Inokulasi *Limosilactobacillus fermentum* BN21 berpengaruh terhadap kadar asam laktat dan serat kasar, namun tidak berpengaruh nyata terhadap parameter lainnya. Selain itu, terdapat interaksi antara lama penyimpanan dan inokulasi pada pH, asam laktat, amonia, dan serat kasar. Hasil penelitian ini menunjukkan bahwa teknologi *repacking* dengan penggunaan inokulum dapat digunakan sebagai metode pengawetan hijauan untuk mempertahankan kualitas silase rumput blembem selama penyimpanan.

(Kata kunci: Silase, *Repacking*, Kualitas silase, Inokulasi, Penyimpanan)

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ABSTRACT

This study aimed to determine the effect of storage duration and inoculation of *Limosilactobacillus fermentum* BN21 on the quality of repacked blembem grass silage and to analyze the interaction between these two factors. The experiment used Factorial Completely Randomized Design (CRD), consisting of two treatment factors, namely inoculation (without inoculation and with inoculation) and storage duration (0, 4, and 8 weeks). The observed parameters included pH, lactic acid, ammonia, dry matter, organic matter, crude protein, crude fiber, and crude fat. The results showed that storage duration significantly affected pH, lactic acid, ammonia, dry matter, crude protein, crude fiber, and crude fat, but had no significant effect on organic matter. Inoculation of *Limosilactobacillus fermentum* BN21 affected lactic acid and crude fiber contents but had no significant effect on the other parameters. In addition, there was an interaction between storage duration and inoculation on pH, lactic acid, ammonia, and crude fiber. These results indicate that the repacking technique with inoculum application can be used as a forage preservation method to maintain the quality of blembem grass silage during storage.

(Keyword: Silage, Repacking, Silage Quality, Inoculation, Storage)