

Pengaruh Penambahan **Sumber Karbohidrat: Mudah Larut**
Terhadap **Raalifcas Silas® Tepung Liafeal** Udang
Dengan **Starter Isolafc Bakteri Asam Laktat**
BALia

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INTISARI

Tujuan dari penelitian ini adalah untuk mengetahui pengaruh pemberian sumber karbohidrat mudah larut terhadap kualitas silase tepung limbah udang (TLU). Silase dibuat dari TLU yang diberi tambahan sumber karbohidrat mudah larut dan starter bakteri asam laktat {BMii₂). Penelitian ini dilakukan dengan satu kontrol (K) yang merupakan 100% TLU, dan tiga perlakuan dengan komposisi masing-masing perlakuan adalah TLU dan tepung cassava (P₁), TLU dan dedak halus (P₂), TLU dan tetes (P₃) dengan perbandingan antara TLU dan sumber karbohidrat 70:30 dan masing-masing dibagi tiga replikasi. Masing-masing perlakuan dan kontrol mendapat penambahan starter BAL_{3.2} sebanyak 10% dari berat kering (BK). Silase dibuat dengan kadar air total {KA_j) sebesar 60% dan dilakukan pemeragaan selama 14 hari, dalam fermenter secara anaerobik. Data diperoleh di analisis dengan *Complete Randomized Design (CRD)*, dilanjutkan dengan uji DMRT (*Duncan Multiple Range Test*) apabila hasil menunjukkan perbedaan nyata karena perlakuan. Hasil yang diperoleh menunjukkan bahwa penambahan sumber karbohidrat mudah larut memberikan hasil yang lebih baik pada kualitas silase tepung limbah udang. Pemberian sumber karbohidrat mudah larut berpengaruh secara nyata ($p < 0,05$) pada pH, kadar asam laktat, BO dan PK, sedangkan terhadap BK tidak memberikan efek yang nyata. Sumber karbohidrat yang terbaik pada penelitian ini adalah dedak padi. Penambahan dedak padi menunjukkan pencapaian kadar asam laktat, BK dan PK tertinggi, masing-masing: 3,81%, 47,34% dan 17,00%. Nilai pH sebesar 6,86; peningkatan kadar asam laktat, BK, BO dan PK masing - masing sebesar 3,65%, 7,34%, 4,73%, dan 2,14%.

Kata kunci: Silase, TLU, Sumber karbohidrat, Bakteri Asam laktat

**Effect of Supplementation Soluble Carbohydrate Sources
to the Quality of Shrimp-Waste Meal Silage with
Isolate Lactic Acid Bacteria BSIu Starter**

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ABSTRACT

The objective of the study was to determine the effect of supplementation soluble carbohydrate source to quality of shrimp-waste meal silage. Silage was made from shrimp-waste meal with supplementation soluble carbohydrate and lactic acid bacteria (LAB) starter. The treatment with one control (C) was 100% shrimp-waste meal and three treatment with each competition were shrimp-waste meal + cassava meal (P_1), shrimp-waste meal + rice bran (P_2) and shrimp-waste meal + molasses (P_3), composition for shrimp-waste meal and soluble carbohydrate source was 70:30. Each treatment and control added lactic acid bacteria as much as 10% from dry matter content of raw material. The silage was made with 60% water total number (WTN) and had have fermentation for 14 days in anaerobic ferment silo. Complete Randomized Design (CRD) was used in data analysis, if result had showed significant different, Duncan Multiple Range Test (DMRT) would have done. The result showed that supplementation soluble carbohydrate source gave better quality to the silage. It gave significant different ($p < 0,05$) effect on pH, lactic acid content, organic matter, and crude protein, but didn't on dry matter content. Rice bran was the best soluble carbohydrate source in this study. Rice bran supplementation showed the highest result on lactic acid content, dry matter content and crude protein content were 3,81%, 47,34% and 17,00% in number rotation. The number of pH was 6,86, Increase on lactic acid content, dry matter content, organic matter content and crude protein content were 3,65%, 7,34%, 4,73% and 2,14% in number rotation.

Key word: Silage, Shrimp-waste meal, Carbohydrate source, and Lactic acid bacteria