

## **ABSTRAK**

### **PENGARUH PENAMBAHAN MINERAL MIKROORGANIK DAN SILASE DAUN SINGKONG TERHADAP TDN (*Total Digestible Nutrient*) DAN ENERGI TERCERNA RANSUM BERBASIS LIMBAH KELAPA SAWIT PADA SAPI POTONG CALON INDUKAN**

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Penelitian ini bertujuan untuk mengetahui pengaruh penambahan mineral mikroorganik dan silase daun singkong terhadap TDN (*Total Digestible Nutrient*) dan energi tercerna ransum berbasis limbah kelapa sawit pada sapi potong calon indukan. Penelitian dilakukan pada April - September 2018 di Laboratorium Nutrisi dan Makanan Ternak, Jurusan Peternakan, Fakultas pertanian, Universitas Lampung. Materi penelitian ini menggunakan Sapi Peranakan Ongole berjumlah 9 ekor dan pengelompokkan berdasarkan bobot badan. Penelitian ini menggunakan Rancangan Acak Kelompok dengan 3 perlakuan dan 3 ulangan. Perlakuan penelitian terdiri atas R0 (Ransum control ), R1 (R0 + mineral organik (Zn 40 ppm, Cu 10 ppm, Cr 0,30 ppm, dan Se 0,10 ppm) dan R3 (R1 + 15% daun singkong (sumber asam amino bercabang / *brand chain amino acid*). Hasil penelitian menunjukkan bahwa Pemberian ransum berbasis limbah kelapa sawit berpengaruh sangat nyata terhadap TDN (*Total Digestible Nutrient*) dan tidak berpengaruh nyata terhadap energi tercerna; Ransum berbasis limbah kelapa sawit terfermentasi (R2) menghasilkan rata-rata TDN yang tertinggi dan optimum yaitu 72,11%; Ransum berbasis limbah kelapa sawit terfermentasi (R2) menghasilkan rata-rata energi tercerna yang tertinggi dan optimum yaitu 15381,57 Kkal/ekor/hari.

Kata kunci: Energi Tercerna, Limbah Kelapa Sawit, Mineral mikro organic, Silase Daun Singkong, Total digestible nutrient.

## **ABSTRACT**

### **THE EFFECT OF DIETARY ORGANIC MICRO MINERAL AND CASSAVA LEAF SILAGE TO TDN (*Total Digestible Nutrient*) AND DIGESTIBLE ENERGY BASED ON PALM OIL WASTE ON HEIFER**

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This study aims to determine the effect of adding microorganic mineral and Silage of cassava leaves to TDN (*Total Digestible Nutrient*) and digestible energy based on palm oil waste on heifer. The study was conducted in April – September 2018 at the Animal Nutrition and feed Laboratory, Department of Animal Husbandry, Faculty of Agriculture, University of Lampung. The material of this study using 9 Ongole cattle grade and grouping based on body weight. This study used a randomized block design with 3 treatments and 3 replications. The research treatment consisted of R0 (ration control), R1 (R0 + organic minerals (Zn 40 ppm, Cu 10 ppm, Cr 0.30 ppm, and Se 0.10 ppm) and R3 (R1 + 15% daunsingkong (branched amino acid source / brand chain amino acid) The results showed that: The provision of rations based on oil palm waste significantly affected TDN (*Total Digestible Nutrient*) and did not significantly affect digestible energy in the Ongole Breeders cow, fermented waste palm oil rations (R2) produced the highest and optimum TDN average is 72.11%, the ration based on fermented palm oil (R2) produces the highest and optimum digestible energy average of 15381.57Kcal / head / day.

**Keyword:** Digestible energy, Palm oil waste, Organic micro minerals, Silage of cassava leaves, Total digestible nutrient