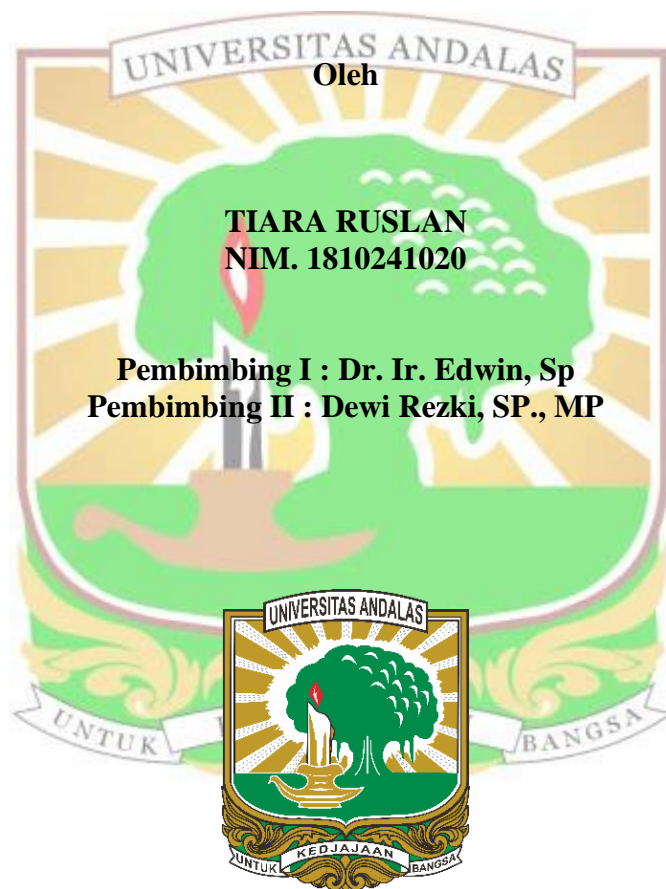


**UJI KUALITAS KOMPOS KOMBINASI CAMPURAN ABU  
TANDAN KOSONG KELAPA SAWIT DAN GUANO  
KELELAWAR MENGGUNAKAN  
MIKROORGANISME LOKAL  
(MOL) SERASAH DAUN**

**SKRIPSI**



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**FAKULTAS PERTANIAN  
UNIVERSITAS ANDALAS  
DHARMASRAYA  
2023**

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**Abstrak**

Penggunaan pupuk organik mempunyai beberapa keunggulan diantaranya menambah unsur hara tanah dan dapat berfungsi sebagai pembenah tanah yang akan meningkatkan kesuburan tanah. Salah satu pupuk organik yang dapat digunakan yaitu campuran abu tandan kosong kelapa sawit dan guano kelelawar. Penelitian ini bertujuan untuk mengetahui kualitas kompos kombinasi campuran abu tandan kosong kelapa sawit dan guano kelelawar yang menggunakan mikroorganisme lokal serasah daun. Penelitian ini dilaksanakan pada bulan Februari-Maret 2023. Metode yang digunakan adalah menguji beberapa taraf perlakuan kombinasi bahan dasar kompos (komposisi guano kelelawar dan abu tandan kosong), percobaan pembuatan kompos dilakukan berdasarkan Rancangan Acak Lengkap (RAL) yang terdiri atas 4 taraf perlakuan yang masing-masing perlakuan diulang sebanyak 3 kali. Perlakuan yang digunakan yaitu 100% ATKKS, 25% ATKKS + 75% GK, 50% ATKKS + 50% GK, serta 75% ATKKS + 25% GK. Data dianalisis ragam dan uji lanjut *Duncan's New Multiple Range Test* (DNMRT) pada taraf 5%. Hasil penelitian menunjukkan hasil analisis kualitas fisik kompos berwarna coklat – kehitaman, berbau tanah, kadar air kurang dari 50% telah memenuhi standar kriteria kompos menurut SK Kementan tahun 2019. Hasil uji dengan menggunakan seperangkat alat uji kompos menunjukkan kandungan pH untuk kompos kombinasi abu tandan kosong kelapa sawit dan guano kelelawar yang dibuat berada pada kisaran 6,87-7,17, C-Organik 20,50-23,77%, N 0,97-1,38%, C/N Ratio 16,32%-21,25%, K 1,20-1,45%, dan P 0,31-0,38%. Hasil penelitian menunjukkan perlakuan terbaik yaitu pada dosis kombinasi 25 % abu tandan kosong kelapa sawit + 75% guano kelelawar. Dengan demikian campuran abu tandan kosong kelapa sawit dan guano kelelawar berpotensi dijadikan sebagai sumber pupuk alami.

Kata kunci : pupuk, organik, teknologi, bakteri

**COMPOST QUALITY TEST OF A COMBINATION OF OIL PALM EMPTY  
FRUIT BUNCH ASH AND BAT GUANO MIXTURE USING LOCAL  
MICROORGANISMS (MOL) LEAF LITTER**

***Abstract***

*The use of organic fertilizers has several advantages including adding soil nutrients and can function as soil improvers that will increase soil fertility. One of the organic fertilizers that can be used is a mixture of oil palm empty fruit bunch ash and bat guano. This study aims to determine the quality of compost combination of ash mixture of oil palm empty fruit bunches and bat guano using local leaf litter microorganisms. This research was conducted in February-March 2023. The method used was to test several levels of treatment of a combination of compost base materials (composition of bat guano and empty fruit bunch ash), composting experiments were carried out based on a completely randomized design (CRD) consisting of 4 levels of treatment, each treatment repeated 3 times. The treatments used were 100% ATKKS, 25% ATKKS + 75% GK, 50% ATKKS + 50% GK, and 75% ATKKS + 25% GK. Data were analyzed for variance and Duncan's New Multiple Range Test (DNMRT) at the 5% level. The results showed that the results of the analysis of the physical quality of compost were brown-black in color, smelled of soil, and the moisture content was less than 50%, which met the standard criteria for compost according to the Decree of the Ministry of Agriculture in 2019. The test results using a set of compost test equipment showed the pH content for the compost combination of oil palm empty fruit bunch ash and bat guano made in the range of 6.87-7.17, C-Organic 20.50-23.77%, N 0.97-1.38%, C/N Ratio 16.32%-21.25%, K 1.20-1.45%, and P 0.31-0.38%. The results showed that the best treatment was at a combination dose of 25% oil palm empty fruit bunch ash + 75% bat guano. Thus, the mixture of empty palm fruit bunch ash and bat guano has the potential to be used as a natural fertilizer source.*

*Keywords: fertilizer, organic, technology, bacteria.*