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Abstract

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THE DIFFERENCES IN LOCAL MICROORGANISM (MOL) OF PINEAPPLE ON THE TIME OF THE COMPOUNDING PROCESS IN PT.BETON ELEMINDO PERKASA 2020

viii + 92 pages + 19 tables + 3 pictures + 3 attachments

In Law Number 18 Year 2008 concerning Solid Waste Management, waste is the remains of human daily activities and / or natural processes in solid form. One way to reduce the generation of organic waste is by means of aerobic composting, composting with the addition of pineapple local microorganisms (MOL) in order to speed up the composting process, where organic matter undergoes biological decomposition, especially by microbes that utilize organic materials as an energy source. This study aims to determine the most effective dose of pineapple local microorganism (MOL) dosages with a dose of 30 ml 40 ml and 50 ml against the length of the composting process at PT. Beton Elemindo Perkasa 2020. The type of research used is the true experimental design. This research was conducted with 3 treatments, each of which was repeated 6 times. The sampling technique was purposive sampling. The population in this study is organic waste produced by PT. Beton Elemenindo Perkasa with a sample of 38 kg. Data analysis in this study was carried out by using the Shapiro Wilk univariate test first and the next analysis carried out was Mann-Whitney. The results showed that there were differences in the dosage of local microorganisms (MOL) of pineapple on the length of composting time. The results of the study showed that the length of composting the waste was and the following conclusions: variations of pineapple moles 30 ml 14-15 days, variations of pineapple moles 40 ml 14-15 days, and variations of pineapple moles 50 ml 13-14 days, and in Control for 37 days it was found that the most effective variations in composting days were 50 ml pineapple mole variation. In the results of the study, the average value of C / N ratio at a dose of 30 ml of pineapple moles was 28.55. The average value of C / N ratio at a dose of 40 ml mole of pineapple was 26.95 and the average value of C / N ratio at a dose of 50 ml mole of pineapple was 27.71 from the three variations that did not meet the quality standard quality standars in accordance with SNI 7763 : 2018.

REFERENCES: 29 (2005-2019)

KEY WORDS: Variation of dosage, MOL of pineapple, length of timeHealth

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Abstrak

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PERBEDAAN DOSIS MIKROORGANISME LOKAL (MOL) NANAS TERHADAP LAMA WAKTU PROSES PENGOMPOSAN DI PT.BETON ELEMINDO PERKASA 2020

viii + 92 halaman + 19 tabel + 3 gambar + 3 lampiran

Dalam undang-undang Nomor 18 Tahun 2008 tentang Pengelolaan Sampah, sampah adalah sisa kegiatan sehari-hari manusia dan atau proses alam yang berbentuk padat. Salah satu cara untuk mengurangi timbulan sampah organik yaitu dengan cara pengomposan aerob, Pengomposan dengan penambahan mikroorganisme lokal (MOL) nanas agar mempercepat proses pengomposan, dimana bahan organik mengalami penguraian secara biologis, khususnya oleh mikroba-mikroba yang memanfaatkan bahan organik sebagai sumber energi. Penelitian ini bertujuan untuk mengetahui dosis Paling efektif dosis mikroorganisme lokal (MOL) nanas dengan dosis 30 ml 40 ml dan 50 ml terhadap lama proses pengomposan di PT. Beton elemindo perkasa 2020. Jenis penelitian yang digunakan yaitu Rancangan eksperimen sesungguhnya (True eksperimental Design). Penelitian ini dilakukan dengan 3 perlakuan, masing masing diulang sebanyak 6 kali. Teknik pengambilan sampel yaitu *purposive sampling.* Populasi dalam penelitian ini adalah sampah organik yang dihasilkan PT. Beton Elemenindo Perkasa dengan sampel sebanyak 38 kg. Analisis data pada penelitian ini dilakukan dengan uji univariat *shapiro Wilk* terlebih dahulu dan analisis selanjutnya yang dilakukan adalah *mann-Whitney*. Hasil penelitian menunjukan terdapat perbedaan dosis mikroorganisme lokal (MOL) nanas terhadap lama waktu pengomposan. hasil penelitian didapatkan hasil lama pengomposan sampah dengan hasil dan kesimpulan sebagai berikut : variasi mol nanas 30 ml 14-15 hari, variasi mol nanas 40 ml 14-15 hari, dan variasi mol nanas 50 ml 13-14 hari, dan pada kontrol selama 37 hari di dapatkan bahwa variasi paling efektif dalam hari pengomposan yaitu variasi mol nanas 50 ml. Pada hasil penelitian nilai rata-rata C/N rasio pada dosis 30 ml mol nanas sebesar 28,55. nilai rata-rata C/N rasio pada dosis 40 ml mol nanas sebesar 26,95 dan nilai rata-rata C/N rasio pada dosis 50 ml mol nanas sebesar 27,71 dari ketiga variasi belum memenuhi standar baku mutu sesuai dengan SNI 7763: 2018.

DAFTAR PUSTAKA : 29 (2005-2019)

KATA KUNCI : Variasi dosis, MOL nanas, lama waktu