

ABSTRAK

PENGARUH PENAMBAHAN LIMBAH TANDAN KOSONG KELAPA SAWIT(TKKS) BEKAS MEDIA TUMBUH JAMUR MERANG (*Volvariella volvacea* L) TERHADAP KARAKTERISTIK PUPUK ORGANONITROFOS

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Penelitian ini bertujuan untuk mengetahui pengaruh penambahan Limbah Tandan Kosong Kelapa Sawit (TKKS) bekas media tumbuh jamur merang (*Volvariella volvacea* L) terhadap karakteristik pupuk Organonitrofos. Penelitian ini menggunakan rancangan acak lengkap faktorial. Faktor pertama adalah bahan TKKS (U) yang terdiri dari tiga taraf yaitu cacahan ranting (U1), bonggol (U2), dan Utuh (U3). Faktor yang kedua adalah lama pengomposan yang terdiri dari tiga taraf yaitu dua hari (L1), enam hari (L2), dan delapan hari (L3). Masing-masing taraf diulang (P) sebanyak tiga kali sehingga didapat 27 unit percobaan.

Hasil penelitian menunjukkan bahwa pengaruh perlakuan cacahan TKKS media jamur dan lama pengomposan terhadap bobot lolos ayakan dan kadar abu kompos yang dihasilkan, tidak nyata pada taraf 5%. Pengaruh cacahan TKKS dan lama pengomposan terhadap kadar air pupuk kompos yang dihasilkan, nyata pada taraf 1%. Bahan organik atau padatan volatile rata-rata sebesar 79,69% dan pada

umumnya berwarna hitam. Hasil lolos ayakan tertinggi secara deskriptif yaitu perlakuan ukuran cacahan utuh dan lama pengomposan 8 hari. Dari hasil penelitian, diperoleh karakter fisik bobot ayakan sebesar 60,56%, kadar abu 20,63%, kadar air 60%, berwarna hitam dan kadar bahan organik 79,60%.

Kata Kunci : Cacahan TKKS, lama pengomposan, karakteristik pupuk Organonitrofos.

ABSTRACT

EFFECT OF STRAW MUSHROOM(*Volvariella volvacea*L)SPENT OIL PALM EMPTY FRUIT BUNCH (OPEFB)ADDITION ON CHARACTERISTICS OF ORGANONITROFOS FERTILIZER

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Aim of this research was to determine the effects of straw mushroom (*Volvariellavolvacea* L)spent oil palm empty fruit bunch (OPEFB) addition on the characteristics of Organonitrophos fertilizer. This experiment used Completely Randomized Design set in factorial arrangement. The first factor was the reduced sizes of OPEFB (U) which consisted of 3 levels: small/branches (U1), moderate/hump (U2), and Whole (U3). The second factor was the duration of growth medium fermentations which consisted of 3 levels: 2 days (L1), 6 days (L2), and 8 days (L3). There were three replicates for each treatment combination, totalling 27 experimental units.

The result of this research showed that the effect of reduced sizes of mushroom spent OPEFB and the duration of composting on the sieved compost weight and ash content were not significant at 5% level. The effects of reduced sizes of mushroom spent OPEFB and the duration of composting on the water content of

the resulted compost were significant at 1% level. The average organic or volatile solids was 79.69% and the color tended to be black. The results of the highest sieve pass descriptive treatment of the size of intact cuttings and the length of composting 8 days. From the result of research, we get the physical character of sieve weight of 60,56%, ash content 20,63%, water content 60%, black color and organic material content 79,60%

Keyword : Characteristics of organonitrophos fertilizer, composting duration, mushroom spent OPEFB