PENGARUH PENAMBAHAN STARTER KOMERSIAL TERHADAP KUALITAS PUPUK ORGANIK CAIR URIN KELINCI DALAM KONDISI FAKULTATIF AEROB

Ondry Bernanto
09/285499/PT/05736

INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan berbagai jenis starter terhadap kualitas pupuk organik cair urin kelinci. Fermentasi urin kelinci dilakukan dengan memberikan bahan yaitu *molasses* 10%, empon - empon 10% dan starter 1% selama 12 hari. Pada penelitian ini terdapat lima perlakuan yaitu tanpa ditambah starter (kontrol), penambahan *Effective Microorganism*4 (EM-4) (P1), penambahan *Degra Simba* (P2), penambahan *Propunic* (P3) dan penambahan *Biotogrow Gold* (P4). Data yang diperoleh terdiri dari uji fisik meliputi suhu dan pH, uji kimia meliputi kadar C-organik, N total, P total dan K total. Data kualitas kimia yang diperoleh dianalisis dengan analisis variansi rancangan acak lengkap pola searah, dilanjutkan dengan *Duncan's New Multiple Range Test*. Hasil analisis kadar C-organik menunjukkan bahwa penambahan starter menunjukkan perbedaan yang nyata ($P<0,05$), dengan nilai masing-masing adalah 1,250; 3,433; 3,743; 3,586; 3,486. Kadar N total dan P total menunjukkan bahwa penambahan starter berbeda nyata ($P<0,05$), namun tidak berbeda nyata pada kadar K total. Uji fisik menunjukkan bahwa penambahan starter tidak memberikan pengaruh nyata ($P <0,05$) terhadap suhu dan pH. Berdasarkan hasil penelitian dapat disimpulkan penambahan starter meningkatkan kualitas kimia pupuk organik cair.

(Kata Kunci: Urin kelinci, Fermentasi, Starter, Kualitas kimia, Kualitas fisik)

EFFECT OF ADDITIONAL COMMERCIAL STARTER ON QUALITY OF LIQUID ORGANIC FERTILIZER RABBIT URINE IN AEROB FACULTATING CONDITIONS

Ondry Bernanto
09/285499/PT/05736

ABSTRACT

This research was aimed to determine the impact of adding several types of starters towards the quality of rabbit urine liquid organic fertilizer. The rabbit urine fermentation was done by adding molasses 10%, empon-empon (spices) 10% and starter 1% for 12 days. Five treatments were done in this research, they were no starter addition (control), Effective Microorganism4 (EM-4) addition (P1), Degra Simba addition (P2), Propunic addition (P3), and Biotogrow Gold addition (P4). The data obtained consisted of physical test of temperature and pH, chemical test of C-organic, N total, P total, and K total amounts. Chemical quality data were analyzed using completely randomized design analysis of variance, followed by Duncan's New Multiple Range Test. The result of C-organic analysis showed the C organic concentration significantly affected ($P<0.05$) by starter addition and the content were 1.250 (control); 3.433 (P1); 3.743 (P2); 3.586 (P3); 3.486 (P4). N total and P total content also significantly affected ($P<0.05$), by starter addition, however K total content did not affected by starter addition. Physical test showed that starter addition did not have any impacts ($P<0,05$) towards temperature and pH. Based on the research, it can be concluded that starter addition increases the quality of liquid organic fertilizer.

(Key Words: Rabbit urine, Fermentation, Starter, Chemical Quality, Physical Quality)