

ABSTRAK

Sebagian besar sampah organik di Universitas Diponegoro didominasi oleh sampah daun kering. Sampah daun kering merupakan salah satu bahan yang dapat untuk dijadikan kompos. Penambahan bahan organik lain diperlukan untuk meningkatkan kandungan unsur hara kompos. Tujuan dari penelitian ini adalah untuk menganalisis pengaruh dan menentukan variasi optimum penambahan pupuk organik kotoran sapi terhadap kualitas kompos dari sampah daun kering di TPST Undip. Pengomposan dilakukan secara aerobik dengan waktu pengomposan selama 28 hari. Pengomposan dilakukan dengan activator EM4. Variabel penelitian dengan menambahkan pupuk organik kotoran sapi (sampah daun : pupuk organik kotoran sapi) dengan variasi kontrol (1 : 0), P1 (4 : 1), P2 (7:3), P3 (3 : 2). Berdasarkan penelitian menunjukkan bahwa penambahan pupuk organik kotoran sapi memberikan pengaruh pada hasil kualitas pengomposan, bahwa kualitas kompos yang dihasilkan lebih baik, dengan kompos yang paling optimum pada variasi P2 dengan rasio C/N 10,10%, C-organik 26,73%, N-total 2,64%, P-total 0,60%, K-total 0,44%.

Kata kunci : Sampah organik, kompos, pengomposan, kotoran sapi

ABSTRACT

(The Effect of Cow Manure Organic Fertilizer Addition To The Quality Compost From Dried Leaf Litter at TPST Undip). Most of the organic waste at Diponegoro University is dominated by dry leaf litter. The dry leaf litter is one of the materials that can be composted. The addition of another organic materials need to increase the nutrient content in the compost. The purpose of this study is to analyze the effect and determining the optimum variation of addition organic fertilizer of cow manure to the quality of compost from dry leaf litter at TPST Undip. The composting is an aerobic process with composting time during 28 days. The composting was conducted by using EM4 activator. Variables of this study were the organic fertilizer of cow manure addition (leaf litter : organic fertilizer of cow manure) with variation of control (1:0), P1 (4:1), P2 (7:3), P3 (3:2). Based on the result of this study showed that the addition of organic fertilizer cow manure had an effect on the quality of composting, that the quality of the compost produced is better result, with the most optimal compost was P2 variation, with result C/N ratio 10.10%, C organic 26.73%, N-total 2.64%, P-total 0.60%, K-total 0.44% .

Keywords: *Organic waste, compost, composting, cow manure*