

Abstrak

Penelitian ini merupakan penelitian kuantitatif yang bertujuan menguji hipotesa dari data-data yang telah dikumpulkan sesuai dengan teori dan konsep sebelumnya, penelitian ini menggunakan rancangan Acak Lengkap (RAL), dengan 4 perlakuan dengan masing-masing 3 ulangan. Penempatan tempat uji dilakukan secara acak. Perlakuan yang dilakukan adalah sebagai berikut: perlakuan PO = 1000 gram kulit kopi, Perlakuan 1: Kulit Kopi 500 gram + limbah Daun 125 gram + sekam padi 125 gram + kotoran ternak 250 gram. Perlakuan 2: 500 gram kompos Kulit Kopi + 125 Limbah daun + 250 gram sekam padi + 125 gram kotoran ternak, perlakuan 3: 500 gram Kulit Kopi + 250 gram limbah daun + 125 gram sekam padi + 125 gram kotoran ternak. dan 3 ulangan, parameter yang diukur Nitrogen (N), Phospor (P), dan Kalium (K), sampel sebanyak 20 dengan berat masing-masing 300 gram, difermentasi selama 30 hari dianalisis di Laboratorium Kimia Universitas Muhammadiyah Malang. Bioremediator *Pumakkal* mampu mendegradasi kompos kulit kopi dan limbah organik dari parameter Carbon aktif, Nitrogen, Phospor, Kalium.. Perlakuan yan terbaik pada penelitian ini yaitu P3 (Perlakuan 3) terdapat pengaruh.

Kata kunci: *bakteri indigen Pumakkal, kulit kopi variasi limbah organik, kadar hara*
Abstract

This research is a quantitative research that aims to test the hypothesis of the data that has been collected in accordance with the previous theory and concept. This study uses a completely randomized design (CRD), with 4 treatments with 3 replications each. The placement of the test site was done randomly. The treatments carried out were as follows: PO treatment = 1000 grams of coffee husks, P1 = 500 grams of coffee husks + 125 grams of manure + 125 grams of husks + 250 grams of leaves, P2 = 500 grams + 125 grams of manure + 250 grams of husks + 125 grams of leaves, P3 = 500 grams of coffee husks + 250 grams of manure + 125 grams of husks + 125 grams of leaves and 3 replications, parameters measured are Nitrogen (N), Phospor (P), and Potassium (K), as many as 20 samples with weight 300 grams each, fermented for 30 days were analyzed in the Chemistry Laboratory of the University of Muhammadiyah Malang. *Pumakkal* bioremediator is able to degrade coffee husk compost and organic waste from parameters of activated carbon, nitrogen, phosphorus, and potassium.

Key words: *Pumakkal indigen bacteria, coffee skin variations of organic waste, nutrient content.*