



INTISARI

Sampah organik yang dihasilkan Agroeduwisata Lestari Mulya yang berpotensi sebagai bahan pembuatan pupuk organik cair (POC) yaitu batang pisang (BP) dan air limbah kolam ikan lele (ALKIL). Tujuan penelitian ini adalah pengeloaan kedua bahan agar memberikan nilai tambah bagi Agroeduwisata Lestari Mulya.

Adapun metode percobaan yang digunakan berupa rancangan acak lengkap (RAL) dengan perlakuan tiga formula: F1 (250 g BP + 500 mL air + 0 mL ALKIL + 2 mL EM4 + 50 mL molase); F2 (250 g BP + 250 mL air + 250 mL ALKIL + 2 mL EM4 + 50 mL molase); dan F3 (250 g BP + 0 mL air + 500 mL ALKIL + 2 mL EM4 + 50 mL molase) dengan tiga lama waktu fermentasi (W1 = 0 hari, W2 = 6 hari, dan W3 = 12 hari) dengan tiga ulangan. Parameter yang dikaji terdiri atas C-organik, N total, C/N *ratio*, fosfor, kalium, dan pH.

Hasil terbaik diperoleh pada percobaan F3W2 dengan nilai C-organik (6,24%), N total (0,31%), C/N *ratio* (20,14), fosfor (0,03%), kalium (0,20%), dan pH (4). Terdapat 3 parameter (N-total, fosfor, dan kalium) yang belum memenuhi Permentan No. 70/2011. POC yang dihasilkan memiliki harga pokok produksi senilai Rp9.500,00.

Kata kunci: Pupuk Organik Cair (POC), sampah organik, batang pisang, air limbah kolam ikan lele, standar mutu



ABSTRACT

The study aimed to utilize organic waste from Agroeduwisata Lestari Mulya, particularly banana stems (BS) and catfish pond wastewater (CPW). It to create liquid organic fertilizer (LOF) with added value.

The experiment followed a completely randomized design (CRD) with three treatments: F1 (250 g BS + 500 mL water + 0 mL CPW + 2 mL EM4 + 50 mL molasses); F2 (250 g BS + 250 mL water + 250 mL CPW + 2 mL EM4 + 50 mL molasses); and F3 (250 g BS + 0 mL water + 500 mL CPW + 2 mL EM4 + 50 mL molasses) over three fermentation periods (W1 = 0 days, W2 = 6 days, and W3 = 12 days), each replicated three times. The parameters examined included organic carbon, total nitrogen, C/N ratio, phosphorus, potassium, and pH.

The best results were obtained from experiment F3W2, with values of organic carbon (6.24%), total nitrogen (0.31%), C/N ratio (20.14), phosphorus (0.03%), potassium (0.20%), and pH (4). Three parameters (total nitrogen, phosphorus, and potassium) did not meet the requirements of Permentan No. 70/2011. The production cost of the LOF was Rp9,500.

Keywords: Liquid Organic Fertilizer (LOF), organic waste, banana stems, catfish pond water, quality standards