

ABSTRAK

Firawati 105951103121 Analisis Kandungan Unsur Hara Pada Pupuk Organik Cair (POC) Dengan Menggunakan Rumen Sapi Dan Kotoran Kambing. Skripsi. Program Studi Kehutanan Fakultas Pertanian Universitas Muhammadiyah Makassar. Dibimbing Oleh: **Sultan Dan Jauhar Mukti**.

Penelitian ini bertujuan untuk mengetahui kandungan unsur hara pupuk organik cair (POC) berbahan dasar rumen sapi dan kotoran kambing serta menilai kesesuaiannya dengan Standar Nasional Indonesia (SNI) 19-7030-2004. Penelitian dilaksanakan di Balai Perbenihan Tanaman Hutan Wilayah II Gowa untuk pembuatan POC dan di Laboratorium Badan Standardisasi Instrumen Pertanian Sulawesi Selatan untuk analisis laboratorium, pada Juni-Agustus 2025. Metode penelitian menggunakan analisis deskriptif kualitatif dengan pengujian laboratorium terhadap parameter pH, C-organik, N-total, P_2O_5 , K_2O , unsur mikro (Fe, Mn, Cu, Zn), serta logam berat (As, Hg, Pb, Cd, Cr, Ni). Hasil penelitian menunjukkan bahwa POC berbahan rumen sapi dan kotoran kambing belum memenuhi standar mutu nasional, sehingga diperlukan perbaikan formulasi bahan, optimasi fermentasi, dan pengendalian kontaminasi logam berat agar layak digunakan dalam budidaya tanaman.

Kata Kunci : Pupuk organik cair, rumen sapi, kotoran kambing, unsur hara, SNI

ABSTRACT

Firawati 105951103121 *Analysis of Nutrient Content In Liquid Organic Fertilizer (Poc) Using Cow Rumen and Goat Dungeon. Thesis. Forestry Study Program, Faculty Of Agriculture, Muhammadiyah University Of Makassar. Supervised By: Sultan And Jauhar Mukti.*

This study aims to determine the nutrient content of liquid organic fertilizer (LOF) made from cow rumen and goat manure and to evaluate its compliance with the Indonesian National Standard (SNI) 19-7030-2004. The research was conducted at the Forest Plant Seed Center Region II Gowa for LOF production and at the Laboratory of the Agricultural Instrument Standardization Agency of South Sulawesi for laboratory analysis, from June to August 2025. The research method employed qualitative descriptive analysis with laboratory testing of parameters including pH, organic carbon (C-organic), total nitrogen (N-total), phosphorus (P_2O_5), potassium (K_2O), micronutrients (Fe, Mn, Cu, Zn), and heavy metals (As, Hg, Pb, Cd, Cr, Ni). The results showed that LOF made from cow rumen and goat manure did not yet meet national quality standards, indicating the need for improved formulation, optimized fermentation, and better control of heavy metal contamination to make it suitable for crop cultivation.

Keywords : *Liquid organic fertilizer, cow rumen, goat manure, nutrient content, SNI*