PEMANFAATAN LIMBAH BAGLOG JAMUR BERBAHAN ISI RUMEN DAN ECENG GONDOK SEBAGAI KOMPOS MEDIA TANAM SERTA PENGARUHNYA TERHADAP PRODUKTIVITAS TANAMAN SELADA MERAH

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INTISARI

Penelitian ini bertujuan untuk mengetahui pemanfaatan limbah baglog jamur dengan berbagai komposisi bahan penyusun untuk diolah menjadi kompos sebagai media tanam selada merah. Penelitian dilakukan dengan menggunakan 3 jenis limbah baglog yaitu limbah baglog komersial, limbah baglog berbahan isi rumen, serta limbah baglog berbahan isi rumen dan eceng gondok. Limbah baglog jamur komersial diperoleh dari Griya Jamur Mitra Miselium yang berlokasi di Kecamatan Sewon, Bantul, sementara limbah baglog lainnya diperoleh dari hasil penelitian sebelumnya yang dilakukan di kumbung jamur Fakultas Peternakan UGM. Penelitian dilaksanakan secara bertahap, yaitu mulai dari tahap pengomposan limbah baglog, tahap penanaman selada merah, tahap pengamatan produktivitas tanaman selada merah, dan analisis kandungan unsur hara limbah baglog sebelum dan sesudah pengomposan. Media kompos dibuat dengan empat variabel perlakuan yang dibedakan berdasarkan komposisi bahan baglog, meliputi kompos limbah baglog komersial (P_0), kompos limbah baglog isi rumen (P_1), kompos limbah baglog isi rumen dan eceng gondok (P_2), serta kompos limbah baglog isi rumen dan eceng gondok dengan kombinasi penambahan 50% bokashi (P_3). Parameter analisis kimia yang dilakukan meliputi, kadar air, bahan organik, C-organik, nitrogen total, raiso C/N, fosfor, dan kalium. Variabel yang diamati pada produktivitas tanaman selada merah meliputi, jumlah helai daun, panjang dan lebar daun, tinggi tanaman, serta berat panen. Analisis statistik yang digunakan adalah analisis Rancangan Acak Lengkap (RAL) pola searah, kemudian apabila didapatkan data yang berbeda nyata, maka akan dilanjutkan dengan uji *Duncan's new Multiple Range Test* (DMRT). Hasil penelitian menunjukkan bahwa perbedaan komposisi limbah baglog jamur memberikan pengaruh yang berbeda nyata terhadap kandungan unsur hara kompos dan produktivitas tanaman selada merah.

Kata kunci : isi rumen, eceng gondok, limbah baglog, kompos, selada merah

THE UTILIZATION OF MUSHROOM BAGLOG WASTE WITH RUMENT CONTENTS AND HOWEY WATER AS A MEDIA COMPOS AND ITS EFFECT ON PRODUCTIVITY OF RED LETTUCE

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ABSTRACT

This research aims to determine the utilization of mushroom baglog waste with various compositions of constituent materials to be processed into compost as a medium for growing red lettuce. The research was conducted using 3 types of baglog waste, namely commercial baglog waste, baglog waste made from rumen contents, and baglog waste made from rumen contents and water hyacinth. Commercial mushroom baglog waste was obtained from the Griya Jamur Mitra Miselium, which is located in Kecamatan Sewon, Bantul, while other baglog waste was obtained from the results of previous research conducted at the mushroom kumbung, Faculty of Animal Science UGM. The research was carried out in stages, starting from the stage of analyzing the nutrient content of compost media, planting red lettuce, and observing the productivity of red lettuce plants. Compost media is made with four treatment variables that are differentiated based on the composition of the baglog material, including commercial baglog waste compost (P0), rumen-filled baglog waste compost (P1), rumen-filled baglog waste compost and water hyacinth (P2), as well as rumen-filled baglog waste compost. and water hyacinth with a combination of adding 50% bokashi (P3). The chemical analysis parameters carried out included moisture content, organic matter, C-organic, total nitrogen, C / N raiso, phosphorus, and potassium. The variables observed in the productivity of red lettuce included the number of leaves, length and width of the leaves, plant height, and harvest weight. The statistical analysis used was a unidirectional completely randomized design (CRD) analysis, then if data were significantly different, it would be continued with Duncan's new Multiple Range Test (DMRT). The results showed that differences in the composition of the mushroom baglog waste had a significant effect on the nutrient content of compost and the productivity of red lettuce.

Key words: rumen contents, water hyacinth, baglog waste, compost, red lettuce