

## **ABSTRAK**

### **UPAYA PENINGKATAN KUALITAS JAMUR MERANG (*Volvariella volvaceae*) MEDIA TANDAN KOSONG KELAPA SAWIT (TKKS)**

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Jamur merang (*Volvariella volvaceae*) merupakan jenis jamur pelapuk putih yang mengandung banyak mineral, karena jamur merang termasuk organism heterotof yang memperoleh nutrisi dari media tumbuhnya. Kualitas jamur yang baik akan meningkatkan harga, kualitas fisik, dan kandungan gizi. Tujuan penelitian ini adalah untuk mengetahui interaksi pengaruh ukuran TKKS dan lama pengomposan serta interaksi penambahan pupuk organik dan anorganik. Media yang digunakan adalah tandan kosong kelapa sawit yang mengandung selulosa, hemiselulosa, dan lignin yang tinggi. Untuk meningkatkan kualitas jamur yaitu dengan mengolah media tanam jamur hingga menambahkan pupuk.

Penelitian ini dilakukan dua tahap, yaitu tahap pertama pencacahan media dan pengomposan. Sedangkan tahap kedua yaitu penambahan pupuk dengan jenis dan dosis yang berbeda. Penelitian ini dilaksanakan pada bulan Oktober 2017 – Januari 2018, di Laboratorium Terpadu, Jurusan Teknik Pertanian, Fakultas Pertanian Universitas Lampung. Rancangan penelitian yang digunakan adalah metode Rancangan Acak Kelompok (RAK) Faktorial. Tahap pertama yaitu ukuran cacahan (cacahan kecil, sedang, utuh) dan lama pengomposan (2, 5, dan 8

hari), sedangkan tahap kedua yaitu penambahan pupuk anorganik ( 25, 50, and 75 g/bed) dan pupuk organik ( 5, 10, and 15 mL/bed).

Data yang diperoleh dianalisis dengan uji LSD. Hasil penelitian menunjukkan bahwa penambahan pupuk meningkatkan kualitas atau kandungan jamur. Tabel 7. Menunjukkan Kadar protein meningkat sebesar 11,3% dan kadar serat meningkat sebesar 8,4%, akan tetapi kadar kabohidrat menurun sebesar 17,8%, sedangkan kadar air, kadar abu, dan kadar lemak tidak berpengaruh.

Kata Kunci : ukuran cacahan, lama pengomposan, penambahan pupuk, TKKS, kualitas jamur merang.

## **ABSTRACT**

### **EFFORT TO IMPROVE STRAW MUSHROOMS (*Volvariella volvaceae*) QUALITY CULTIVATED ON OIL PALM EMPTY FRUIT BUNCH (OPEFB) MEDIUM**

**By**

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Straw mushroom (*Volvariella volvaceae*) is one of white fungus that contains many minerals, because mushrooms are heterotrophic organisms that obtain nutrients from organic media. Good mushroom quality will increase the price, physical quality, and nutritional content. The purpose of this research is to know the interaction influence of TKKS size and length of composting and interaction of addition of organic and inorganic fertilizer. The medium used in this research was oil palm empty fruit bunches (OPEFB) that contains high cellulose, hemicellulose, and lignin.

This research was conducted in two stages. The first stage was to investigate effects of size reductions and fermentation durations of the OPEFB medium on the mushroom production. The second stage was to investigate the effects of organic and inorganic fertilizer addition on the mushroom quality. This research was conducted in October 2017 - January 2018, at The Integrated Field Laboratory, Faculty of Agriculture, University of Lampung. The experiment used Randomized Complete Block (RCB) with factorial arrangement both for the first and the second stages. In the first stage, there were two factors: size reduction

(small, moderate, and a whole OPEFB) and fermentation duration of OPEFB (2, 5, and 8 days). In the second stage, there were two factors: addition of inorganic fertilizer ( 25, 50, and 75 g/bed) and addition of organic fertilizer (5, 10, and 15 mL/bed). Each treatment combination consisted of two replicates. Parameters observed included crude protein, crude fiber, fat, carbohydrate, ash, and water content.

Data sets were analyzed by using ANOVA and followed by LSD multiple using comparisons at 5% level. The results showed that the addition of fertilizers could increase protein content by 11.3%, fiber content by 8.4%, while carbohydrate decreased by 17.8%, While water content, ash content, and fat content have no effect.

**Keywords:** reduced size, fermentation duration, OPEFB, mushroom quality.