

ABSTRACT

Purnomo, Heri. 2012. **Thesis. The addition of Rice Straw Assessment (*Oryza sativa*) At Composition Media Plant (Bag Log) on growth of White Oyster Mushroom (*Pleurotus ostreatus*)**. Supervisor: Sandi Evika Savitri, M.P, Dr. Ahmad Barizi, M.A. Bioogi Programs Faculty of Science and Technology of the State Islamic University (UIN) Maulana Malik Ibrahim Malang.

Keywords: Rice Straw, White Oyster Mushroom Production

In the Qur'an says that "many of the earth that we grow a variety of plants that either" (Surat ash-Syu'araa 'Verse 7). White oyster mushroom is heterotrophic plants, can be grown in a wide range of waste containing lignin, carbohydrates (glucose and cellulose), protein, nitrogen, fiber, and vitamins. The numerous benefits White Oyster Mushroom (*Pleurotus ostreatus*), and increasing farmers White Oyster Mushroom (*Pleurotus ostreatus*) the availability of wood sawdust for oyster mushroom cultivation main ingredient today is hard to come by because it competes with other uses. Rice straw is a good alternative as a companion or replacement of wood with sawdust availability considerations. Average rice straw containing 45% dry matter, the ash content of 35.25% fat 3.14% 25.17% crude fiber, 7.80% crude protein extract materials without nitrogen 28.74% of the dry matter

This study aimed to determine the effect of the addition and the best percentage of rice straw on the composition of the growing media (Bag log) to the length of the mycelium and the production of White Oyster Mushroom (*Pleurotus ostreatus*). This study is experimental. The design used in percobaa is completely randomized design (CRD) with five replications. The treatments were given rice straw (0%, 15%, 20%, 25%, 30%). Parameters measured were length of mycelium, time of primordia, the number of fruiting bodies, mushrooms hood diameter, and fresh weight of mushrooms harvested first.

The results showed that treatment of J3 on the length of the mycelium and White Oyster Mushroom production was not significantly different from J1 treatment (control). The observation time of the appearance of primordia showed that treatment J3 shows the fastest time of the emergence of primordia differ significantly by treatment with J5, but not significantly different from the treatment of J1 and J2. In observation of the number of fruit bodies showed that the treatment J3 gives the number of fruit bodies are significantly different from the treatment of many J4 and J5, but not significantly different from the treatment of J1 and J2. In observation of a large number of fruit bodies J3 treatment gives the number of fruit bodies a lot, J5 significantly different treatment, but not significantly different from the treatment of J1, J2 and J4. Observations with the criteria of the number of medium-sized body treatments (J3) gives the number of fruit bodies that many but not significantly different from the treatment of J1, J2, J4 and J5. In the parameter number of small-sized fruit bodies, J2 and J3 treatment produces a small amount of fruit bodies diameter that many but not significantly different from J1 treatment (control), J4 and J5. Observations wet weight white oyster mushroom showed that treatment J3 fresh weight of mushrooms produced most significantly different by treatment J2, J4 and J5 but not significantly different from J1 treatment (control).