

TEKNOLOGI MEDIA BIBIT JAMUR DARI LIMBAH SERBUK GERGAJIAN KAYU TERHADAP PERTUMBUHAN DAN PRODUKSI ANEKA JAMUR EDIBEL

RINGKASAN

Jamur merupakan komoditi pertanian yang prospektif untuk dikembangkan karena bernilai ekonomis, bernilai gizi, dan obat. Budidaya berbagai jenis jamur relatif mudah, waktu panennya cepat. Dalam kegiatan pertanian selain teknis budidaya, pembuatan bibit merupakan salah satu kegiatan sub budidaya yang menduduki posisi penting. Namun, dalam proses pembibitan berbagai jenis jamur banyak mengalami kendala dalam menentukan media yang tepat untuk pertumbuhan dari masing-masing jenis jamur itu sendiri, sehingga sering terjadi kegagalan dalam budidaya. Media tanam merupakan faktor utama dalam pertumbuhan berbagai jenis jamur. Penelitian ini bertujuan untuk 1) mengetahui pengaruh formulasi media tumbuh bibit jamur dari limbah serbuk gergajian kayu terhadap pertumbuhan dan produksi aneka jamur edibel, 2) mengetahui potensi pertumbuhan dan produksi aneka jamur edibel dengan menggunakan teknologi media tumbuh dari serbuk gergajian kayu, serta 3) mengembangkan teknologi pemanfaatan limbah serbuk gergajian kayu sebagai media tumbuh bibit jamur konsumsi yang bernilai ekonomi dan prospektif.

Penelitian ini dilaksanakan di Laboratorium Ilmu Tanah (Sumber Daya Lahan), Fakultas Pertanian, Universitas Jenderal Soedirman, Purwokerto. Persiapan dan pelaksanaan penelitian ini dilakukan pada bulan Juni 2015 sampai dengan Desember 2015. Penelitian menggunakan Rancangan Acak Lengkap (RAL) satu faktor. Faktor percobaan adalah sepuluh jenis jamur (jamur tiram putih, jamur tiram coklat, jamur tiram merah muda, jamur tiram ungu, jamur merang, jamur shiitake, jamur kuping, jamur enokitake, jamur nyoko, dan jamur ling zhi). Variabel yang diamati adalah waktu tumbuh jamur, bobot jamur segar, dan laju tumbuh jamur. Data dianalisis dengan analisis ragam, terhadap perlakuan yang berbeda nyata dilanjutkan dengan uji tengah Duncan ($P < 0,05$).

Hasil penelitian menunjukkan bahwa terdapat tujuh jenis jamur yang tumbuh pada media serbuk gergajian kayu (Jamur Tiram Putih, Jamur Tiram Merah Muda, Jamur Tiram Ungu, Jamur Merang, Jamur Shiitake, Jamur Kuping, dan Jamur Enokitake), dan terdapat tiga jenis jamur yang tidak tumbuh (Jamur Tiram Coklat, Jamur Nyoko, dan Jamur Ling Zhi). Hasil analisis sidik ragam menunjukkan media tumbuh berpengaruh nyata terhadap waktu tumbuh jamur serta tidak berpengaruh nyata terhadap bobot jamur segar, dan laju tumbuh jamur. Sedangkan jamur yang paling sesuai tumbuh pada media serbuk gergajian diantara ketujuh jamur tersebut yaitu Jamur Tiram Merah Muda dengan laju pertumbuhan paling besar yaitu 1,89 g/hari.

Mushrooms Seedling Media Technologies from Wood Sawdust Waste for The Growth and Production of Various Edible Mushrooms

SUMMARY

Mushroom is a agricultural commodities that prospective to developed because for economic value, nutritional value, and as a herbal medicine. Cultivation of different types of mushroom are also relatively easy, quick harvest time. In agricultural activities other than cultivation techniques, seedling production is one of sub-cultivation the most important. However, they experienced many obstacles determining the appropriate medium for growth of each type of mushroom in the process of breeding, so often there are failures in cultivation. Growth media is a major factor for the growth of various mushrooms. This research aims were to 1) determined the effect of formulation of mushrooms seedling media from wood sawdust waste to the growth and production of various edible mushrooms, 2) determined the potential growth and production of various edible mushrooms using technology media from wood sawdust waste, and 3) developed technology of wood sawdust waste as mushrooms seedling media which have economic and prospective values.

This research was conducted at the Laboratory of Soil Science (Land Resources), Faculty of Agriculture, Jenderal Soedirman University, Purwokerto. This research is prepared and conducted in June 2015 to December 2015. This research using Completely Randomized Design (CRD) with one factor. Trial factors were ten types of mushrooms (White Oyster Mushroom, Brown Oyster Mushroom, Pink Oyster Mushroom, Purple Oyster Mushroom, Straw Mushroom, Shiitake Mushroom, Cloud Ear Mushroom, Enokitake Mushroom, Nyoko Mushroom, and Ling Zhi Mushroom). The variables measured were growth time mushrooms, fresh weight mushrooms, and growth rate of the mushrooms. Data were analyzed using variance analysis towards the different treatment and continued with Duncan Multiple Range Test ($P < 0,05$).

The result showed that seven types of mushrooms grew on sawdust media (White Oyster Mushro, Pink Oyster Mushroom, Purple Oyster Mushroom, Straw Mushroom, Shiitake Mushroom, Cloud Ear Mushroom, and Enokitake Mushroom), and there are three types of mushrooms did not grew (Oyster Mushroom, Nyoko Mushroom, and Ling Zhi Mushroom). The result of analysis showed the growth media significantly affect the growth time of mushrooms, but did not significantly affect the fresh weight mushrooms, and that did not significantly affect to the growth rate of the mushrooms. Where the most appropriate species of mushrooms that grows on sawdust media is Pink Oyster Mushroom with highest growth rate of the mushroom is 1,89 grams/days