

ABSTRAK

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Judul : Pengaruh Aplikasi *Edible Coating* Berbasis Pati Kulit Kentang (*Solanum tuberosum*. L) pada Mutu Jamur Tiram Putih (*Pleurotus ostreatus*) selama Penyimpanan
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Kehilangan dan kerusakan jamur tiram putih setelah panen cukup besar yaitu antara 25% - 30% yang disebabkan oleh faktor fisik, mekanik, kimia, dan biologis. Pemanfaatan limbah kulit kentang sebagai sumber pati untuk bahan pembuatan *edible coating* perlu dikembangkan. Penelitian ini bertujuan untuk mendapatkan informasi aplikasi *edible coating* berbasis pati kulit kentang yang dapat mempertahankan kesegaran jamur tiram putih selama penyimpanan dingin (7°C). Rancangan penelitian menggunakan Rancangan Acak Kelompok (RAK) pola faktorial AxB (3x5). Faktor A adalah aplikasi *edible coating* yang terdiri atas 3 taraf, yaitu a₁ = tanpa *edible coating*, a₂ = *edible coating* konsentrasi pati 3% dan a₃ = *edible coating* konsentrasi pati 5%. Faktor B adalah waktu penyimpanan dingin yang terdiri atas 5 taraf, yaitu b₁ = 0 jam; b₂ = 24 jam; b₃ = 48 jam; b₄ = 72 jam; dan b₅ = 96 jam; dengan jumlah ulangan dua kali. Analisis yang dilakukan meliputi analisis kualitatif terhadap warna dan tekstur jamur tiram putih, analisis kadar air, susut bobot dan analisis laju respirasi jamur tiram putih. Aplikasi *edible coating* berbasis pati kulit kentang pada jamur tiram putih dapat mempertahankan kualitas jamur tiram putih baik secara kualitatif maupun kuantitatif hingga 24 jam dengan konsentrasi pati kulit kentang terpilih sebesar 3%. Jamur tiram putih hasil perlakuan terbaik tersebut memiliki nilai kadar air 84,69%, susut bobot 5,64% dan laju respirasi 91,42 mg CO₂/kg.jam pada penyimpanan dingin selama 24 jam.

Kata kunci: Pati Kulit Kentang, *Edible Coating*, Jamur Tiram Putih

ABSTRACT

Loss and damage of post-harvest white oyster mushroom commodity is quite large, between 25% - 30% caused by physical, mechanical, chemical, and biological factors. Utilization of potato peel waste as a source of starch for edible coatings needs to be developed. The objective was to get information on the application of edible coating potato peel starch based that can keep the freshness of white oyster mushrooms during cold storage (7 °C). The research used a randomized block design (RAK) with factorial AxB (3x5) pattern. Factor A the application of edible coating which consists of 3 levels, they are a_1 = without edible coating, a_2 = edible coating with 3% starch concentration and a_3 = edible coating with 5% starch concentration. Factor B was cold storage time which consists of 5 levels, they are b_1 = 0 hours; b_2 = 24 hours; b_3 = 48 hours; b_4 = 72 hours; and b_5 = 96 hours; with two repetitions. The analysis were included qualitative analysis of the color and texture of white oyster mushrooms, analysis of water content, weight loss and analysis of the respiration rate of white oyster mushrooms. The application of potato peel starch-based edible coating on white oyster mushrooms could maintain the quality of white oyster mushrooms both qualitatively and quantitatively for up to 24 hours with 3% potato skin starch concentration. The white oyster mushroom from the best treatment had a moisture content of 84.69%, a weight loss of 5.64% and a respiration rate of 91.42 mg CO₂/kg.hour on cold storage for 24 hours.

Kata Kunci: *Potato Skin Starch, Edible Coating, White Oyster Mushroom.*