

Air Cucian Beras Untuk Pembuatan Media Alternatif Pertumbuhan *Microsporium* sp.

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ABSTRAK

Pemanfaatan sumber limbah air cucian beras yang memiliki banyak nutrisi dapat digunakan sebagai media alternatif pertumbuhan mikroorganisme. Modifikasi media pertumbuhan *Microsporium* sp. menggunakan air cucian beras sebagai komposisi utama pengganti karbohidrat dari media SGA. Tujuan penelitian untuk mengetahui pertumbuhan jamur *Microsporium* sp. pada media alternatif air cucian beras dengan variasi konsentrasi 15%, 20%, 25%, dan 30%. Metode penelitian yang digunakan adalah eksperimen dengan penanaman jamur menggunakan metode *Single dot* dan pengulangan sebanyak enam kali. Pengamatan dilakukan selama tujuh hari dengan mengukur diameter koloni jamur menggunakan penggaris dalam satuan milimeter (mm). Hasil pengamatan bahwa rata-rata media alternatif air cucian beras konsentrasi 15% rata-rata 67 mm, konsentrasi 20% rata-rata 69 mm, konsentrasi 25% rata-rata 71 mm dan konsentrasi 30% rata-rata 72 mm. Sedangkan pertumbuhan diameter koloni pada media SGA adalah 69 mm. Hasil penelitian diperoleh bahwa pada setiap konsentrasi mengalami peningkatan diameter koloni sesuai konsentrasi air cucian beras yang digunakan dengan pertumbuhan miselium lebih tipis dibandingkan media kontrol. Hasil uji ANOVA terdapat perbedaan signifikan antara diameter koloni pertumbuhan *Microsporium* sp. terhadap variasi konsentrasi media air cucian beras dilanjut uji *Post Hoc Tukey*. Hasil uji menunjukkan perbedaan pada kelompok konsentrasi 15% dengan 25%, 30% serta 20% dengan 25%, 30%.

Kata kunci: Air Cucian Beras, Media Alternatif dan *Microsporium* sp.

Rice Washing Water for Making Alternative Media *Microsporum* sp. Growth

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ABSTRACT

Utilization source of waste rice water which has many nutrition can be used as alternative media in growth of microorganism. Modification of growth *Microsporum* sp. using rice washing water as the main composition of carbohydrate substitute from SGA media. The research aimed to know about mushroom growth of *Microsporum* sp. in variation concentration of 15%, 20%, 25% and 30%. The method of this research was experiment of planting mushroom using single dot method and six times repetition. The observation was conducted for seven days with measuring diameter of mushroom colonies using a ruler in millimeter (mm). The result of this observation was the average of alternative media rice washing water in the concentration of 15% was 67 mm, 20% was 69 mm, 25% was 71 mm and 30% was 72 mm. But, the growth of diameter mushroom colonies in SGA media was 69 mm. The result shows that in every concentration of rice was thinner than control media. ANOVA test results showed a significant difference between the diameter of the growth colonies of *Microsporum* sp. on variations in the concentration of rice washing media, the Post Hoc Tukey test continued. The test results showed differences in 15% concentration groups with 25%, 30% and 20% with 25% and 30%.

Keywords: Rice Washing Water, Alternative Media and *Microsporum* sp.