

Pengaruh pH dan Waktu Inkubasi Berbeda Terhadap Pertumbuhan dan Produksi α -Glukan *Schizophyllum commune*

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Abstract	<p>The main purpose of this study are to determine the optimum value of pH and incubation time on <i>S. commune</i>'s growth, and also the optimum value of pH and incubation time on α-glucan production of <i>S. commune</i>. The research was conducted by experimental method of completely randomized factorial design (CRD factorial) with two factors carried out in three repetitions. The treatments provided included variations in pH (P) with three levels, namely pH 5 (P1), pH 6 (P2), and pH 7 (P3), and variations in incubation time (W) with three levels, namely incubation time of 20 days (W1), incubation time of 25 days (W2), and incubation time of 30 days (W3). Variables which used in this research independent and dependent variables. The independent variables were pH and incubation time, while the dependent variables were fungal mycelium growth and α-glucan production. The main parameter observed was α-glucan weight. The supporting parameters were dry biomass weight and the final pH medium. Data analysis was performed by Analysis of Variance (ANOVA) at 95% accuracy levels, followed by Duncan's test (Duncan Multiple Range Test). The results showed that pH and incubation time were significantly affected to the growth and production of α-glucan fungus <i>S. commune</i>. The value of pH 6 and incubation time of 25 days was the optimum pH and incubation time for the growth of <i>S. commune</i> fungus, and also pH 5 and incubation time of 25 days was the optimum pH and incubation time for α-glucan production of <i>S. commune</i>.</p>
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