Fungicide Effect of Chitosan on Rhizopus stolonifer Fungus

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The objective of the study was to evaluate the effect of chitosan as a fungicidal. Will chitosan be effective as a fungicidal for Rhizopus stolonifer fungus? The proposed hypothesis was if chitosan is applied to Rhizopus stolonifer, then it will develop a fungicidal activity eliminating the Rhizopus stolonifer fungus. Chitosan was extracted from the chitin exoskeleton of Peneaus monodon and was applied to the fungus Rhizopus stolonifer. The experiment was developed using two groups, the control group and the experimental group. There were five Petri dishes with blood agar for each group. These were inoculated with Rhizopus stolonifer. Chitosan was applied to the experimental group for three days using the method of spraying, twice daily and both groups were observed during six days. Changes occurring in any group were recorded. The results obtained evidenced that the chitosan had a positive fungicide effect on the Rhizopus stolonifer fungus. On the sixth day the Petri dishes of the experimental group did not evidence the presence of the fungus compared to the control group which had a large presence of fungus. The observations and the analysis of the data demonstrated, indeed, that chitosan has a considerable fungicidal effect on Rhizopus stolonifer fungus. Therefore it is concluded that the hypothesis is true, based on the results obtained and analyzed.

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