ABSTRACT

Chitosan is a deacetylated derivative of chitin, consisting mainly of glucosamine units, commercially obtained from crustacean waste. This natural compound is biodegradable and nontoxic and has diverse applications in agriculture, among which highlights the control of fungal diseases in crops of agricultural interest. This review focuses on some basic studies about the mode of action and the effect of chitosan on different phytopathogens fungi. In general, it is known that molecules of this polymer can act on extracellular (plasma membrane) and intracellular level (penetration of chitosan into the fungal cell). The study of the effect of chitosan on different phytopathogens fungi evidence that the response is variable; in some investigations, it was found that the spores are more sensitive than hyphae to the application of chitosan. Even though the progress in understanding the mode of action of this polymer and the various effects that can cause damage are known, it is necessary to carry out more studies about the biological activity of these molecules to propose better control strategies of the phytopathogens fungi.

http://www.academicjournals.org/AJMR/abstracts/abstracts/abstracts2011/9Nov/Hern%C3%A1ndez-Lauzardo%20et%20al.htm

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