ABSTRACT

The effect of chitosan was evaluated in three isolates of Rhizopus stolonifer from infected tomatoes that were harvested in different regions of the state of Morelos, México. Changes in the membrane integrity of spores, modifications in pH media and the proteins released were analysed in each isolate against three different molecular weights of chitosan at three fixed concentrations. There was an observed decline in the integrity of spores in the presence of chitosan at all the concentrations evaluated. The protein released was different depending on the isolate, kind of chitosan and used concentration. There was a significant difference in the pH changes on the growth media for all the tested isolates. Chitosan of high molecular weight showed the best results to inhibit the infection caused by R. stolonifer on the tomato fruits. The severity of symptoms of soft rot was not related with the molecular weight of chitosan.

http://www.tandfonline.com/doi/abs/10.1080/03235400903345190