

## **Abstract**

We have measured the susceptibility of carrots to the storage pathogen *Sclerotinia sclerotiorum* after roots were treated postharvest with a 0.2% (w/v) chitosan hydrolysate (number average degree of POLYMERISATION = 7) prepared using *Streptomyces* N-174 chitosanase. Whereas the hydrolysate did not affect radial growth of *S. sclerotiorum* colonies on potato dextrose agar plates, it reduced the frequency and size of rot compared to untreated controls when applied to carrots 3 days before inoculation with *S. sclerotiorum*. When carrots were treated at time zero with either chitosan hydrolysate or high molecular weight chitosan then inoculated at intervals over the next 5 days, there was a decline in *Sclerotinia* infection, with the hydrolysate showing a greater effect than the high molecular weight chitosan. Our results suggest that the chitosan treatments induced host resistance to the pathogens.