

Title Induction of defense responses against *Alternaria* rot by different elicitors in harvested pear fruit

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Abstract

Pear fruit (*Pyrus pyrifolia* L. cv. Yali) treated by different elicitors, such as salicylic acid (SA), oxalic acid, calcium chloride, and antagonistic yeast *Cryptococcus laurentii*, were investigated to determine the induction of defense responses. The possible mechanism by which elicitors induced the resistance of pear fruit against postharvest disease was also evaluated. The results indicated that all the elicitors could significantly enhance defense-related enzyme activities, such as β -1,3-glucanase, phenylalanine ammonia lyase, peroxidase, and polyphenol oxidase activity, and reduce the disease incidence caused by *Alternaria alternata* in pear fruit ($P=0.05$). Among these different elicitors, SA treatment showed the best result in inducing the defense responses and reducing the decay in pear fruit.