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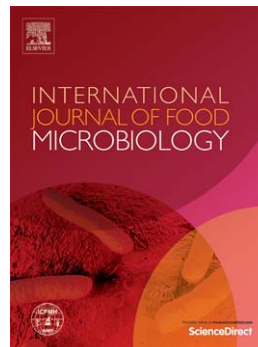
Efficacy of salicylic acid to reduce *Penicillium expansum* inoculum and preserve apple fruits

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**Efficacy of salicylic acid to reduce *Penicillium expansum* inoculum and preserve apple fruits**

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**Abstract**

Apples are among the most commonly consumed fruits worldwide. Blue mold (*Penicillium expansum*) is one of the major diseases in apples postharvest, leading to wide use of fungicides and the search for alternative products to control the pathogen. In this context, this study aimed to evaluate the potential of salicylic acid (SA) as an alternative product to control blue mold and to preserve the physicochemical characteristics of apple fruit postharvest. The antimicrobial effect of SA was determined both *in vitro* and *in situ*, by directly exposing conidia to solutions of different concentrations SA or by inoculating the fruit with *P. expansum* and treating them curatively, eradicatedly, or preventively with a 2.5 mM SA solution. The physiological effects of SA on fruit were determined by quantifying the weight loss, total soluble solids content, and titratable acidity. In addition, the accumulation of SA in the fruit was determined by HPLC. SA (2.5 mM) inhibited 100% of fungal

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