

**Title** Effect of pre- and postharvest salicylic acid treatment on ethylene production, fungal decay and overall quality of Selva strawberry fruit

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#### **Abstract**

The effect of salicylic acid (SA) treatment at different concentrations and growth stages of strawberry (*Fragaria ananassa* cv. Selva) fruit on postharvest ethylene production, fungal decay and overall quality index was studied. SA at all concentrations effectively reduced fruit ethylene production and fungal decay and retained overall quality. Treatment of plants at vegetative stage and fruit development stage followed by postharvest treatment of fruits with 1 and 2 mmol L<sup>-1</sup> was the most effective strategy, whilst with decrease in treatment time the effects of treatment decreased. Single stage treatment strategy of fruits with 2 mmol L<sup>-1</sup> SA at postharvest stage was most effective. Postharvest treatment with 4 mmol L<sup>-1</sup> SA slightly damaged the fruits and was less effective than 2 mmol L<sup>-1</sup> in retaining fruit quality.