

**Title** Ethanol vapour treatment alleviates postharvest decay and maintains fruit quality in Chinese bayberry

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#### **Abstract**

The effect of ethanol vapour treatment on controlling fruit decay was studied on Chinese bayberry (*Myrica rubra* Sieb. & Zucc.) stored at different temperatures over two seasons. Ethanol vapour at a concentration of 1000  $\mu\text{L/L}$ , generated from pre-saturated filter paper sheets using either a 10 mL/L ethanol stock solution at 20 °C or a 40 mL/L ethanol stock solution at 0 °C, proved to be the most effective for controlling postharvest decay of bayberry fruit. The ethanol treatment reduced the decay rate of fruit from 28.7 to 15.8% after 3 days storage at 20 °C and from 27.8 to 16.6% after 5 days storage at 0 °C and 1 day shelf-life at 20 °C. The ethanol treatment did not have any deleterious effects on fruit quality, but resulted in an increase in the accumulation of anthocyanins in the fruit.