**Title** Antifungal activity of vanillin on fresh-cut tropical fruits

Author M. Ngarmsak

Citation ISHS Acta Horticulturae 746:409-416. 2007.

**Keywords** antifungal; vanillin; fresh-cut tropical fruits; MIC

## **Abstract**

The antifungal activity of vanillin against eighteen fungi isolated from stored fresh-cut mangoes, fresh-cut mangosteens and fresh-cut pineapples was verified in vitro in laboratory media. Minimum inhibitory concentrations were 5.0-15.8 mM indicating that all the tested species were sensitive to the antimicrobial effects of the compound. Fresh-cut mangoes, mangosteens and pineapples were sprayed with 40 and 80 mM of vanillin solutions before packing and stored at 5 and 10°C. It was found that using vanillin concentration at 80 mM significantly delayed the growth of fungi populations in the fresh-cut fruits.