

**Title** Combination of cassia oil with magnesium sulphate for control of postharvest storage rots of cherry tomatoes

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#### **Abstract**

The inhibitory effects of cassia oil alone or in combination with magnesium sulphate ( $\text{MgSO}_4$ ) against *Alternaria alternata* *in vitro* and *in vivo* were tested. Magnesium sulphate (0.25–3%) enhanced the inhibitory effects of  $200 \mu\text{l l}^{-1}$  cassia oil *in vitro*. Cassia oil at  $500 \mu\text{l l}^{-1}$ , in combination with 0.25%  $\text{MgSO}_4$ , showed a significant inhibition effect on *A. alternata* of cherry tomatoes stored at 20 °C for 3 days. The experiments on reducing natural decay development of cherry tomatoes gave similar results. None of the treatments affected quality parameters of cherry tomatoes. Thus combining cassia oil with  $\text{MgSO}_4$  provided a more effective control of postharvest disease than using cassia oil or the other chemicals alone.