

Title *Thymus capitatus* essential oil reducing citrus fruit decay

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Abstract

Thymus capitatus essential oil was employed as vapour in postharvest to reduce *Botrytis cinerea* grey mould in mandarin fruits. The latter were sprayed with 10^5 spores/ml suspension, placed in 15-litre desiccators at 25°C and fumigated under vacuum conditions at varying concentrations of thyme oil. The desiccators were kept for 24 h and then the fruit rinse water was plated in Petri dishes to test spore viability. The results showed that the untreated control rinse water exhibited a high rate of fungus growth whereas the water from the treated fruit registered a significant reduction of fungal growth. SEM observations indicated that the thyme oil injured fungus hyphae.