Title	Coating citrus (*Murcott tangor*) fruit with low molecular weight chitosan increases postharvest quality and shelf life
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Abstract

This study investigates the effects of coating with low molecular weight chitosan (LMWC, Mw = 15 kDa) and high molecular weight chitosan (HMWC, Mw = 357 kDa) on the decay of *Murcott tangor* and the maintenance of its quality. A 0.1% LMWC coating substantially slowed the decay of *Murcott tangor* stored at 15 °C in relation to a control sample and reduced decay by over 20% as compared to the fungicide TBZ. A concentration of 0.2% LMWC was more effective in controlling the growth of fungus on citrus fruits caused by *Penicillium digitatum* and *Penicillium italicum*, exhibiting effective antifungal activity. LMWC coating improved firmness, titratable acidity, ascorbic acidity and the water content for *Murcott tangor* stored at 15 °C for 56 days. Consequently, *Murcott tangor* coated with LMWC exhibited greater antifungal resistance than TBZ and its quality was maintained for longer.