Effect of calcium infiltration on ripening of avocados of different maturities

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Abstract

Mature but unripe Fuerte and Hass avocados harvested at 3 stages of maturity were vacuum-infiltrated with 4 and 8% calcium chloride (CaCl2) solutions and stored at 20°C. The fruit were assessed for ripening and injury development and analysed for Ca content. Postharvest application of Ca to fruit harvested 2 weeks before prime harvest elicited a greater delay in ripening and caused less fruit injury than application at prime harvest or 2 weeks after prime harvest. Fruit maturity did not have a significant effect on the amount of Ca taken up by fruit when infiltrated with each CaCl2 solution. Vacuum infiltration with 8% CaCl2 solution greatly enhanced the uptake of Ca by both Hass and Fuerte fruit but did not delay ripening further than 4% CaCl2 treatment.

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