Title The effect of calcium applications on kiwifruit quality preservation during storage

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Abstract

It is well known that calcium increases storage life of many fruits. This study investigated the effect of vine calcium application, as well as postharvest application on storage behaviour of 'Hayward' kiwifruit. Three applications of 0.03% $CaCl_2$ or CaO were made in June, July and September. After harvest half of the fruit from sprayed vines were dipped in a solution of 2% CaCl2; the other fruit were untreated. All fruit were then stored at 0ºC and relative humidity of about 90–95%. Results for fruit of the size range 85–105 g are discussed. Kiwifruit dipped in 2% CaCl2 postharvest maintained higher firmness through storage than undipped fruit, but soluble solids content was only slightly lower after storage. This suggests that postharvest dipping of kiwifruit in 2% CaCl2 benefits storage life. The concentrations of 0.03% $CaCl_2$ (Antistip) or 0.03% CaO (Chelal) used in vine applications seem to be too low and higher concentrations should be tried.