

### **Abstract**

Fruit softening is a limiting factor for the storage of 'Hayward' kiwifruit because over soft fruit (below 11.8 N penetrometer firmness) have to be rejected for export. Based on data collected over two years, it was identified that storage life of 'Hayward' kiwifruit was related to fruit Ca concentration as a sigmoid function. A dramatic increase in storage life was associated with an increase in Ca from 30 mmol kg<sup>-1</sup> DW to 40 mmol kg<sup>-1</sup> DW. Storage life responds very little to changes in Ca below or above this range. Variation in storage life not accounted for by Ca was related to dry matter content following a second order polynomial function. A dry matter content of 15-17% appeared favourable while a lower or higher DM was detrimental to storage life. Low temperatures prior to and during harvest may either improve storage life through temperature acclimation or reduce storage life due to latent damages.