

#### Abstract:

A disorder characterised by purple coloured tissue has been observed on kiwifruit (*Actinidia deliciosa* 'Hayward') during storage and subsequent shelf-life tests. This disorder can result in up to 25% fruit loss in some packed trays after long term storage. The patches are mainly observed on distal shoulder of some fruit, particularly those with a hue angle less than 78 degrees, high calcium and low potassium and phosphorus concentrations. Affected tissue had significantly higher nitrogen, phosphorus, calcium and magnesium concentrations but lower potassium concentration compared with adjacent healthy tissues on the same fruit. This indicates that the disorder is different from pitting which is associated with lower Ca, high K and P contents. Possible causes of the disorder are discussed and segregation of at-risk fruit by fruit colour is recommended.