

Abstract:

Fruit physio-biochemical changes during cold storage of 2 kiwifruit cultivars (*Actinidia deliciosa*) were studied. The results showed that fruit firmness decreased rapidly after harvest with 2 obvious decrease periods during cold storage (0°C). Firmness decreased faster in the first period than in the second period. Total soluble solids increased gradually until the fruits were fully ripe. Cold storage markedly reduced ethylene production rate which was very low and stable. The maximum activity of superoxide dismutase (SOD), catalase (CAT) and peroxidase (POD) occurred at the later stage of softening. They were probably induced enzymes and not the key specific enzymes necessary for the initiation of softening of kiwifruit. Cold storage(0°C) may minimise activity of these induced enzymes at a low level so that the fruits can detect damage caused by active oxygen, and thus delay fruit senescence. Vitamin C (VC is another means by which fruit cells eliminate active oxygen species