

Harvest time affects quality and storability of kiwifruit (*Actinidia* spp.): Cultivars during long-term cool storage

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Abstract

In this study, the possibility of prolonging the freshness of kiwifruit cultivars for the purpose of even distribution in time and place has been investigated. Green 'Hayward', gold 'Haegeum' and red 'Hongyang' kiwifruit cultivars were harvested at 160, 170 and 180 days after full bloom (DAFB) and stored at 0 °C until 4 months. Firmness and firmness related parameters, biochemical parameters, physiological parameters, decay percentage and overall sensory evaluation were observed during the study. On the basis of harvesting time, the order of storability of all the three cultivars could be 160 DAFB > 170 DAFB > 180 DAFB, respectively. The study revealed that kiwifruit harvested at 160 DAFB were stored up to 4 months without affecting major quality indices during storage. However, overall sensory quality evaluation showed that kiwifruits harvested at 160 DAFB attained good eating quality after 3 months of storage in green and red kiwi cultivars, and after one month storage in gold kiwi cultivar. Hence, in order to ensure good sensory quality and to fulfill consumer's preference during distribution, further ripening studies like exogenous ethylene treatment are necessary immediately after harvest or at any time during the storage period