

Title Effect of controlled atmosphere on prolong storage life and quality of lime

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Abstract

The effects of controlled atmosphere (5% O₂ and 1%, 5% CO₂) on the quality of lime was determined. Low level of O₂ (5%) alone treatment showed prolonging storage life of lime to 8 weeks. Low concentration of O₂ (5% O₂) combination with high CO₂ (1 % and 5% CO₂) had storage life 7 and 4 weeks, respectively while under air condition at 10°C had storage life for 5 weeks. Exposure low O₂ and high CO₂ did not effect on tritrate acidity (TA) and soluble solid (SS) contents. Color L value tends to increase in association with turning to yellow of lime during storage by exposure to 5% O₂ alone condition delayed L value increasing and Hue decreasing than other treatments. Vitamin C content of all treatments had no changed in 5 weeks during storage but after that vitamin C content had rapidly decreased in 5% O₂ alone and 1% CO₂ combination with 5% O₂ treatment.