

Abstract:

The effect of 10% and 15% CO₂ on the storage life of mangosteen fruits at 13°C was determined. Both CO₂ levels were effective in reducing ethylene production and calyx chlorophyll loss but the 10% CO₂ was more effective than 15% CO₂ in delaying peel color and firmness changes and decreasing weight loss and respiration rates. Consequently, fruits kept longer at 10% CO₂ (28 days) and had higher soluble solids and lower titratable acid contents than at 15% CO₂ (24 days), which also induced fermented flavor. Fruits stored in air lasted for 16 days.