This experiment aimed to evaluate the antioxidants effect in respiratory rate and ethylene production of lychee fruits 'Bengal' stored under refrigeration. The treatments (immersion for 3 minutes) applied were: T1: distilled water (control); T2: 4-hexylresorcinol (300 mg L-1) solution; T3: ascorbic acid (300 mg L-1) solution; T4: citric acid (300 mg L-1) solution; and T5: citric acid + ascorbic acid (300 mg L-1) solution. Completely randomized experimental design, with factorial 5 x 6 (antioxidant x time) were utilized. The fruits were placed in 580 mL glass flasks, wrapped in 14¿m thick polyvinyl chloride (PVC) film, and were evaluated every day for 15 days of storage at 5ºC (±1ºC) and 90% RH (± 5% RH). Respiratory rate and ethylene production were determined. The used of antioxidants altered the fruit respiration, and the treatments that contained citric acid presented inferior respiratory rate to the control.

Keywords

Litchi chinensis Sonn, refrigeration, non-climacteric fruit