The lychee fruit (cv. Khom) were dipped in 0.5 and 1.0 M citric acid solution for 10 and 30 minutes and then stored at 5 °C, 90-95% RH. The result revealed that pericarp browning of lychee was effectively controlled by 1.0 M citric acid treatments. While fruit dipped in 1.0 M citric acid for 10 minutes showed the most effective of browning postponement, non-treated fruit (control) were arisen in peel browning quickly. The citric acid treatments, however, slightly affected on native color peel by turning color to pink-red. A decline of total phenolic compound content in peel of each treatment was related to inclines of pH and browning score. Water losses of fruit in all treatments were minimally increased whereas ethylene production obtained a trend of decrease except control. The storage life of treated fruit was 42 days.