

Abstract:

'Feizixiao' is one of the high quality mid-season cultivars, which has been expanded rapidly in Guangdong Province during recent years. It is generally accepted that 80% of maturation is appropriate for its harvest and good for storage. At this maturity, the fruit has highest TSS, protein content and lower water loss rate under ambient temperature. During cold storage, total acids both in pericarp homogenate and in juice decreased with the increase of pH value, while both the contents of ascorbic acid in pericarp and total phenol in juice decreased. Bound phenolic content in the pericarp increased constantly, while free phenolic content increased initially and decreased in the later stage. Ascorbic acid in juice displayed inconsistent changes. After storage for 13 days, the pericarp browning index and the subsequent fruit-rotting index increased rapidly. There was a significant positive correlation between these two indices ($p < 0.01$), which were negatively correlated to the content of total ascorbic acid.