

Effected by Different Temperatures and Days on Fruit Quality After Ripe of ‘Taitung No.2’ Sugar Apple (*Annona squamosa* L.)

Shu-Wen Jiang¹ and Po-Song Lu²

Abstract

The purpose of this study was investigated the effect of ‘Taitung No.2’ sugar apple fruit stored at different temperatures and days. Sugar apple fruit placed in five treatments, including 6 °C, 9 °C, 12 °C, 15 °C, and 18 °C, and stored for 3 days, 6 days, and 9 days. The results showed that storage temperature on ripe days after storage, and the percentage of fruit stem browning had significantly different. Storage day treatments on the percentage of fruit loss weight and the percentage of fruit stem browning had significantly different also. But there were no interaction between two factors. Fruit pulp taste after ripe of summer sugar apple had significantly different among treatments, but fruit pulp taste after ripe of winter sugar apple had no significantly different among treatments. Soluble solids had no significantly different among treatments. Low temperature treatment (6 °C and 9 °C) of sugar apple could delay soft days after ripe, but the fruit skin were browning in 6 °C and 9 °C treatments. Temperature treatment of fruit skin was browning slightly in 12 °C treatment, and ripe days were similar in 15 °C and 18 °C treatments. Fruit skin were normal in 15 °C and 18 °C treatment, but fruit were quickly soft after ripe. When sugar apple fruit stored more long, the percentage of fruit stem browning had been trending up. The percentage of fruit stem browning which stored for 9 days were more than 60 % after fruit ripe. Sugar apple in summer fruit could store at 15 °C or 18 °C for 3 days, then fruit were ripe (25 °C) after 1 day and have good flavor. Sugar apple in winter fruit could store at 15 °C or 18 °C for 6 days, then fruit were ripe (25 °C) after 1-2 day and have good flavor.

Keywords: *Annona squamosa* L., Temperature, Ripe, Fruit quality, Browning

¹ Associate Researcher and Chief of Banchiu Branch Station.

² Researcher and Deputy Director of Taitung DARES, COA.