

Thesis Title	Effects of Relative Humidity and Surface Coating on Quality and Storage Life of 'Rong-rien' Rambutan (<i>Nephelium lappaceum</i> Linn.)
Thesis Credits	12
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Abstract

'Rong-rein' rambutan were stored in 75, 85 and 95% relative humidity (RHs) and treated with aqueous solutions of 3 types of surface coating : Chitosan, Starfresh and Sucrose fatty acid (M-1695) and then stored at 13 °C to investigate the prolonging of storage life. Rambutan stored in 75, 85 and 95% relative humidity (RHs) had storage life of 6 days 12 days and 20 days respectively and stored in 95%RH was better than others RH to reduced weight loss delayed changed of contents of total phenolics, ascorbic acid and browning. The development of browning was positively correlated to weight loss ($r = 0.9906$) but negatively correlated to total phenolics ($r = 0.9703$) during storage. The effects of surface coating; fruit coated with surface coating had stored life 14-16 days, delayed changed of contents of total phenolics, ascorbic acid, respiration rate and browning. Fruits coated with Starfresh were better than Chitosan and sucrose fatty acid to reduced weight loss. However, increasing the concentration of starfresh coating did not significantly reduced weight loss. Most effective concentration of chitosan and sucrose fatty acid were 0.75% and 0.5% respectively.