

Title Antitranspirants maintain freshness and improve storage life of rambutan (*Nephellium lappaceum* L.) fruit

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Abstract

Rambutan (*Nephellium lappaceum* L.) fruit cv. 'Rong-rein' harvested at export-ripeness stage (color stage 4-5 with light red peel and green spinterns) were dipped for 5 min in 0-15 μM abscissic acid (ABA) or 0-5 $\mu\text{L}\cdot\text{L}^{-1}$ salicylic acid (SA) and then stored at 13°C with 80-90% RH. Both ABA and SA delayed pericarp browning. ABA was most effective at 10 μM and SA at 0.5 $\mu\text{L}\cdot\text{L}^{-1}$. Lower or higher ABA or SA concentrations resulted in reduced browning inhibition. Browning scores compared well with fruit weight loss. ABA reduced the rates of respiration, losses in ascorbic acid and titratable acids, and increase in soluble solids. SA also induced these effects. In addition, SA retarded losses in anthocyanin contents. Both ABA and SA significantly prolonged fruit shelf life.