**Title** Effects of hydrocooling and chitosan coating on browning and physiological changes in fresh-cut rose apple

**Authors** W. Worakeeratikul, V. Srilaong, A. Uthairatanakij, P. Jitareerat

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**Abstract**

Effects of chitosan coating on browning and physiological changes in fresh-cut rose apple were studied. Cooled fruit were cut into four sections and treated with chitosan (4°C) at concentrations of 0 (control), 0.05, 0.1 and 0.2% (v/v), wrapped with PVC film and stored at 5°C for 72 h. Chitosan retarded browning, maintained L value, total soluble solids, reducing sugar content and titratable acidity compared to untreated sections. Chitosan coating had no significant effects on the changes of flesh colour (b value), phenolic content, polyphenol oxidase (PPO) activity, flesh texture, and $CO_2$ and $O_2$ gas in the package. Chitosan coating increased $CO_2$ concentration in the section of fresh-cut rose apple.