

**Title** Changes in ethylene production, respiration and polyphenol oxidase of fresh-cut apple  
**Authors** W.Z. Hu, K. Pang, A.L. Jiang, M.X. Tian  
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#### **Abstract**

The physiological and biochemical changes in respiration rate, ethylene production, polyphenol oxides and browning of fresh-cut 'Fuji' apple were investigated. Soluble solids content and Hunter color index  $L^*$  were also determined. Ethylene production increased sharply to reach a peak after cutting and then decreased gradually, especially at 20°C. Respiration rate followed a similar pattern. Wounding also induced the increase of PPO activity and resulted in a decrease of  $L^*$  value due to the browning surface of fresh-cut apple. Wounding induced physio-biochemical reactions and these were markedly affected by temperature. It was important to maintain a constant low temperature for keeping better quality of fresh-cut apple.