

# Inhibition of browning in longkong fruit by short term exposure to nitrous oxide (N<sub>2</sub>O)

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## Abstract

Longkong (*Aglaia dookkoo* Griff), a famous tropical fruit of Southeast Asia, has a very short postharvest life due to rapid peel-browning. The effect of nitrous oxide (N<sub>2</sub>O) treatment on peel browning of fruit after harvest was investigated. Longkong fruit was exposed to 90% N<sub>2</sub>O for 0 (control), 3 and 6 h and then stored at 13°C and 90% RH. The results showed that exposure to N<sub>2</sub>O delayed the onset of peel browning. Treatment with N<sub>2</sub>O for 3 and 6 h significantly delayed the increase in browning index comparing to the control. This result correlated with the higher L value (lightness index) of treated fruit than that of untreated control. Peel pH of treated and untreated fruit did not significantly differ. Among the treatments, 90% N<sub>2</sub>O for 3 h was the most effective against browning.