

Title Chlorophyll fluorescence and fruit quality change of mango fruit in modified atmosphere packaging

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Abstract

Chlorophyll fluorescence was investigated as a possible nondestructive tool to detect quality change in mangoes stored in modified atmosphere packaging. Mangoes packed in MTEC breathable film reached an equilibrium modified atmosphere after 7 days in storage at both temperatures. Chlorophyll fluorescence parameters (F_v/F_m and F_m) of mangoes stored at 15 °C were higher than those of mangoes stored at 25°C and these differences increased with storage time. Chlorophyll fluorescence declined in parallel with the decline of mango fruit quality during storage period. These results suggested that chlorophyll fluorescence may be useful in determining mango fruit quality change nondestructively.