

Research Title Physico-Chemical Changes During Ripening of Mangoes  
(Mangifera indica L.) cv. Nam Docmai Nang Klangwun  
and Rad

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### **Abstract**

Physico-chemical and eating quality changes after harvest and during ripening of mangoes were studied for the optimum eating quality of ripe mangoes. Mature green mangoes cv. Nam Docmai, Nang Klangwun and Rad were harvested and ripened at 25°C. At daily intervals following first detectable softening, fruit samples were removed for physico-chemical analysis and taste panel evaluation for 8-10 days.

Nam Docmai and Rad mangoes started to soften 7 days after harvest, while Nang Klangwun started to soften after 6 days. The peel color changed from green to yellow and the flesh color changed from white to yellow. During ripening of these mangoes total soluble solids (TSS), TSS/TA ratio, pH, vitamin C content and weight loss increased, whereas total titratable acidity (TA), total solids (TS) and firmness decreased. Taste panel assessment on eating quality and flavour of mango fruits showed highest scores at 5 days after the commencement of softening in Nam Docmai and Nang Klangwun and after 3 days in Rad. It was suggested that Nam Docmai Nang Klangwun and Rad cultivars should be consumed 5, 5 and after 3 days after softening or 12, 11 and 10 days after harvest respectively. These timing criteria can be used for the optimum eating of the ripe stage of these 3 mango cultivars.