

**Title** Maturity index of Nam Dok Mai mango fruit for storage at 5°C  
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### **Abstract**

Mangoes are tropical fruit. Normally the fruit cannot be stored below 13°C because of its chilling injury. However, the previous result of our research presented that 'Nam Dok Mai Si Thong' mango fruit could be kept at 5 °C for 20 days without chilling injury symptom and ripped normally. The effects of maturity stage on low temperature storage of 'Nam Dok Mai Si Thong' mango fruits were studied in this research. The fruits were separated into 2 groups. The first group was mature green fruit. The fruits were harvested at 100, 107, 114 and 121 days after full bloom. The second group was harvested at commercial harvesting 107 days after full bloom and dipped in 2000 ppm of ethephon for 2 and 3 days and ripe fruit. The above fruit stages were compared with the stages which were separated by floating the fruit into water or 5% salt solution. The relationship of days after full bloom and fruit floating techniques was markedly observed in both cultivars. All fruit stage were stored at 5 °C for 5 weeks. Every week the postharvest quality change was analyzed. The results showed that the fruit at 107 days after full bloom was able to keep for 5 weeks with less chilling injury than other fruit stages. While chilling injury symptom of the fruits at 121 days after full bloom, ripe fruit and 100 days after full bloom were observed after stored for 2, 2 and 4 weeks, respectively. Thereafter, the mature green fruits were taken from storage room and kept at 25°C for ripening. It was found that the fruits harvested at 107 days after full bloom could normally ripe with the best quality when compared with other stage.