

<b>Title</b>	STUDY ON THE SOME PREHARVEST FACTORS TO POSTHARVEST QUALITY OF MANGO FRUITS cv. NAM DOK MAI SRI TONG.
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### ABSTRACT

Study on the some preharvest factors to postharvest quality of mango fruit cv. Nam Dok Mai Sri Tong divided into two experiments. Experiment 1 a study on effect of calcium and boron applications on fruit growth and quality of Mango fruit cv. Nam Dok Mai Sri Tong was conducted. The experiment was done with factorial in randomized complete block design (RCB). Factor 1 was the concentrations of calcium 22.5 % and boron 0.075 % (200 cc/ 200 liter) solution for 1, 2 and 3 time (1 day interval) applied at 60 and 90 days after anthesis. Factor 2 was the storage temperature at 15 and 27 °C. Fruit were harvested when mature of 80% (110 days after anthesis) and quality evaluation every 3 days. The results revealed that the spraying of calcium – boron solution at 2 and 3 times and stored at 15 °C were suitable treatment because they were lesser decay. In case of the chemical and physical quality revealed that the spraying of calcium – boron solution for 3 times had calcium concentrations fruit and leaves and fruit boron concentrations of fruits were highest. The spraying of calcium – boron solution for 2 and 3 times found boron concentrations of leave were highest. Moreover the spaying of calcium – boron solution for 2 times had respiration rates and weight loss lower than other treatments but L\* value higher than other treatments. the spraying of calcium – boron solution for 3 times had a\* and b\* value higher than other treatments. The mango fruits sprayed with calcium - boron solution for 1, 2, and 3 times and stored at 15 and

27°C had the titrable content higher than control. Experiment 2 Study on effect of bagging and storage on the quality of Mango fruits cv. Nam Dok Mai Sri Tong. The experiment was done with factorial in randomized complete block design (RCB). First factor was unbagging, bagging with newspaper bags and carbon bags. Second factor was the period of bagging at 60 and 67 days after anthesis. Third factor was the storage of mango fruits at 15 and 27 °C. Fruit were harvested when 110 days after anthesis and quality evaluation every 3 days. The results revealed that bagged fruits in carbon bags and stored at 15 °C were the suitable treatment. Bagged in carbon bags had the highest L\*, a\* soluble solid contents and respiration rates. There were no significance with firmness in all treatments except unbagged fruits. Weight loss of the both experiment revealed that Mango stored at 15°C had weight loss less than mango stored at 27°C. Therefore, bagged fruits with carbon bag and kept at 15° C can extend the shelf life longer than those stored at 27° C.