**Title** Physical, mechanical, physiological and optical properties of Thai mango as related to maturity

**Author** Padungsak Wanitchang and Bundit Jarimopas

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**Abstract**

The objectives of this study were to investigate the physical, mechanical, physiological and optical properties that affected the maturity of two mango cultivars(Kiew- Savoey and Nam-Dokmai). Methodology included measurement of sizes, weight, specific weight, TA, TSS, firmness and colour. Results showed that the TA of Kiew-Savoey mango decreased and remained constant over the time of 95-105 days after fruit setting. TSS increased and remained constant over the period of 90-100 days after fruit setting while firmness started to decrease at 95 days. The yellow index was highest and decreased but the brightness was lowest and increased at 109 days after fruit setting. In case of Nam-dokmai mango the TA decreased and remained constant over the time of 105-110 days after fruit setting. TSS increased and remained constant over the period of 105-110 days after fruit setting while firmness started to decrease at 95 days. The yellow index was lowest and increased at 109 days after fruit setting while brightness was constant. The experiments showed that wax content affected harvesting date of Kiew- Savoey. The harvesting date would be 90-95 days for Kiew- Savoey and 95-105 days after fruit setting for Nam-Dokmai.