

Harvest maturity determination for export mango (*Mangifera indica* L. 'Nam Dok Mai')

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Abstract

Harvesting 'Nam Dok Mai' mango fruit destined for export markets requires a maturity stage that ensures minimum risk of ripening during refrigerated transport and acceptable potential for subsequent ripening. Fruit maturity was indexed in terms of near infrared spectroscopy (NIR) values and compared this with peel and flesh color, dry matter content (DMC), total soluble solids (TSS), titratable acidity (TA), visual score for export fruit and sensory taste. Sixty fruit lots picked 84-119 days after fruit set (DAFS) were used. Results showed that NIR values compared well with DMC and TSS values which increased with increasing stage of maturity. The optimum maturity stage for harvesting fruit for export was 105-112 DAFS; fruit had comparably higher NIR values, DMC, TSS, VSE and taste values than fruit harvested at earlier stage of maturity.