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Maturity indices of Ampalavi mango according to the biochemical properties

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Mangoes of variety Ampalavi harvested at various developmental stages were obtained from Thirunelvely Area, Jaffna, for maturity determination. This study was carried out from April 2000 to January 2001. Time after full bloom stage, the colour of the skin, floating or sinking ability, pH, Total Soluble Solids (TSS), Titratable Acidity (TTA) and TTS/TTA could be used as indices of maturity for Ampalavi variety.

Most mature fruits sank in water. TSS, pH of the fruits increased rapidly whereas TTA decreased rapidly, towards maturity. Fruits harvested up to 95th day from full bloom stage, showed significant differences in the above mentioned values. Most fruits ripened on the tree at 97th to 98 days from full bloom stage. Fruits harvested after 99 to 100 days from full bloom stages were over ripened. These over ripened fruits were of pure quality, because of higher moisture content, higher susceptibility to pathogen attack, higher chances of spoilage and off flavour development.

Since a non destructive method reduces loss of yield, the study recommends the yellow colour patch on the green shoulder, is an acceptable maturity index, which appears on the 94th day from full bloom stage, for Ampalavi mango variety, harvested at Thirunelvely area Jaffna. According to the taste panel results these fruits reach acceptable eating quality after being ripened.

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