Title Seperation of Sweet Tamarind Pod by Image Property and Physical Characteristics

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Abstract

The purpose of this research was to determine physical characteristics and image property as related to shape of the sweet tamarind pod. The sweet tamarind of concern included two popular cultivars, i.e. Sitong and Srichompoo. The parameters of image property and physical characteristics characterizing shape were circumference ratio (C), stem angle (α), width and thickness of the pod. Experiment comprised an experimental machine vision system for sorting sweet tamarind. The system featured CCD camera modified to compatibly work with tv-card, sensor, microcontroller and microcomputer. Analysis was achieved by means of image processing technique. Results showed that C of the straight, the sword-like and the curved pod were 55%, 57-65% and 68%, respectively. The ratio of width to thickness for Sitong and Srichompoo was 1.25 and 1.02 respectively. The α of Sitong and Srichompoo was 152 and 125 degree respectively.