

Title Physical and mechanical properties of mango during growth and storage for determination of maturity
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Citation Journal of Food Engineering Volume 72, Issue 1, January 2006, Pages 73-76
Keyword Color values; Firmness; Maturity; Size; Sphericity; Total soluble solids

Abstract

The measurement of maturity is of paramount importance to harvest good quality mango. Changes in size, sphericity, total soluble solids (TSS) content, surface color and firmness of mango were studied during growth and storage at ambient temperature. Size and sphericity were measured using the standard methods. Surface color was determined using a HunterLab colorimeter and the firmness by texture analyzer. The size of the fruits increased gradually during growth and the sphericity remained in the range of 0.67–0.70. Size and sphericity decreased due to shrinkage during storage. The firmness of the fruits remained almost constant over the period of growth and it decreased after attaining the maturity, whereas yellowness of fruits increased during both growth and storage. Maturity of mango could be predicted by measuring size, color and firmness.