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Effect of Storage Temperature on Ripening of Banana *(Musa spp)*

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Harvesting maturity of fruits is an important aspect in determining the final quality in the market. Both immature and overripe fruits end up with mechanical damage and poor sensory quality. Banana is a climacteric fruit which has a high respiration rate by increasing level of carbon dioxide during ripening and the production of ethylene dramatically increases. Ripening of banana is a biological process by the ripening hormone ethylene which is responsible for the changes in texture, softening and colour. When the banana ripens the peel colour changes, pulp softens, flavour develops , total soluble solids change, sugar content increases, starch content decreases, moisture and weight are lost. In a study to evaluate the effect of storage temperature on the ripening of Fair-trade bananas (*Musa spp*) in the United Kingdom, bananas were stored in three different temperatures (7 °C ,20 °C and 37 °C) for three weeks time and measurement of colour using CIElab colour scale, weight and pulp to peel ratio were carried out each week. There was a significant difference obtained for a* (greenness to redness) value ($p = 0.529$) and no significant difference was obtained for b* (blueness to yellowness) with time in different storage temperatures used. Among three different storage temperatures used, 20 °C was considered as a better ripening temperature in the United Kingdom in order to obtain a good yellow colour. Weight loss (2.57%) and increase in pulp to peel weight ratio (1.71%) were observed in the bananas stored at 20 °C with time. Pulp mass of the banana increases due to the movement of water from peel to pulp during ripening.

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