Physical Properties of Two Banana Cultivars Grown in Andhra Pradesh

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ABSTRACT

Physical properties of banana are necessary to design handling, packaging equipments and for safe transportation. Some physical properties of commercially grown banana cultivars namely Dwarf Cavendish and *Chakkerkeli* were investigated. The physical axial dimensions of fingers, volume, peel to pulp weight, coefficient of friction on different surfaces such as galvanized steel, plastic and wood were measured for the above two cultivars. The calculated attributes were geometric mean diameter, sphericity, surface area, true density and bulk density. The mean length of the banana cultivars Dwarf Cavendish and *Chakkerkeli* were 12.72 and 13.91 cm; mean width values were 3.348 and 3.581 cm; and mean thickness values were 3.376 and 3.38 cm, respectively. The mean values of individual fruit weight and volume of the two cultivars were 69.9 g and 70.5cc; 71.9 g and 73.3 cc. The peel and pulp weight for *Chakkerkeli* were found to be higher than Dwarf Cavendish. The geometric mean diameter of Dwarf Cavendish and *Chakkerkeli* were 4.43 and 4.65 cm. The sphericity values for the two varieties of Dwarf Cavendish and *Chakkerkeli* were 0.348 and 0.33 respectively. The true density and bulk density of Dwarf Cavendish were 0.99 and 0.53 g/cc and the values for Chakkerkerli were 0.98 and 0.49 g/cc respectively. The coefficient of static friction for Dwarf Cavendish on galvanized steel, plastic and wooden surface were 0.28, 0.32 and 0.34 respectively; for *Chakkerkeli* the values on galvanized steel, plastic and wooden surface were found to be 0.32, 0.35 and 0.40 respectively.

Key words : Bulk density, *Chakkerkeli*, Coefficient of friction, Dwarf Cavendish,Physical properties.