

SOME STUDIES ON PHYSICAL AND CHEMICAL PROPERTIES OF TAMARIND AT DIFFERENT MOISTURE CONTENT

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Abstract: Tamarind (*Tamarindus indica* L) is an economically important fruit of India as well as Chhattisgarh. The knowledge about physical and chemical properties like size, weight, moisture content, protein content, carbohydrate content etc. of any biomaterial is essential to designing its equipment for processing, storage, transportation and for the value addition. In the present investigation, some studies on physical and chemical properties of tamarind at different moisture content were carried out. For the experiment physical and chemical properties were determined at three different moisture-Initial 22.0%(wb), After sun drying 17.90%(wb), After hot air drying 15.80% (wb). physical properties of Tamarind fruit like size, length, breadth, thickness and weight of fruit (pulp weight, seed weight, shell weight etc) followed a declining trend with decrease in moisture content of the tamarind fruit. The chemical properties like total soluble solids, protein content, carbohydrate content, fat and ash content followed an increasing trend but the titratable acidity is decrease with decreasing the moisture content of the fruits and the color of tamarind pulp was clearly observed that it became darker, redder and yellower than the initial and the total color (ΔE) difference at different treatments is 0, 5.807 and 6.458 under normal, sun dried and hot air dried condition respectively.

Keywords: Tamarind, Physical & chemical properties

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