

Effect of cassava varieties on the sorption isotherm of tapioca grits

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Abstract

Cassava (*Manihot esculenta* Cranz) deteriorates rapidly. Hence it is processed into various products within 2 to 3 days after harvesting. For this work, tapioca was produced from three different varieties of cassava. They are Odongbo, Okoiyawo and TMS30572. The sorption isotherm for the tapioca grits from three different varieties of cassava at temperatures 25, 32 and 45 °C were determined experimentally and modelled using five different models. Using analysis of variance at 0.01 level, it was shown that the experimental sorption isotherms of the tapioca from the various cassava varieties are not significantly different from each other. However, the Guggenheim (1966), Anderson (1946) & de Boer (1953) (GAB) model gave the best fit for sorption isotherm of tapioca from either the Odongbo or Okoiyawo varieties, while the exponential model was the best for that from TMS30572 variety.