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Studies on drying and rehydration characteristics of osmo-treated pineapple slices using different tray drying temperatures

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■ **ABSTRACT :** Drying is an essential process in the preservation of agricultural products. Various drying methods are employed to dry different agricultural products. Each method has its own advantages and limitations. Choosing the right drying system is thus important in the process of drying agricultural products. Care must be taken in choosing the drying system. Study comparing traditional drying and other drying methods for the reduction of the drying time and to a significant improvement of the product quality in terms of color texture and taste. Drying reduces the possibilities of the contamination by insects and micro-organisms so that product is prevented. An experimental study was performed to determine the drying characteristics of pineapple slices subjected to drying in cabinet tray dryer at 50^0C, 60^0C and 70^0C with osmotic treatment indicated that T_0 (Control), T_1(50^0Brix) and T_2 (60^0Brix). The entire drying process took place in the falling rate period. Drying curves were constructed using non-dimensional moisture ratio (MR) and time. Drying is the most widely used and a primary method for preservation. The result indicated that the cabinet tray dryer at 70^oC was found better drying and rehydration characteristics compare to other drying temperatures.

■ **KEY WORDS :** Pineapple slices, Osmotic dehydration, Tray drying, Rehydration, Moisture ratio

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