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DRYING CHARACTERISTICS OF PAPAYA (*CARICA PAPAYA* L.) DURING MICROWAVE-VACUUM TREATMENT

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ABSTRACT

Microwave-vacuum drying is of increased interest among food researchers. The microwave power and system pressure plays an important part to ensure that the product quality is improved. The aim of this project is to study the effect of power intensities and system pressures during microwave-vacuum treatment on drying characteristics of Carica papaya L. Samples of papaya were treated in microwave-vacuum drying equipment at different power levels (110, 380 and 750 W) and pressures (200, 450 and 700 mmHg) to achieve 90% reduction of moisture content. The drying rate increased with increasing power intensity, while system pressure showed no significant effect to the reduction of moisture content. Higher microwave power level resulted in shorter drying time of papaya. The entire drying process for the samples occurred in the range of falling rate period.

Keywords: *microwave-vacuum, drying characteristics, moisture content, papaya.*

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