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Influence of ultrasound and vacuum assisted drying on papaya quality parameters

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1 Influence of ultrasound and vacuum assisted drying on papaya quality parameters

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10
11 **ABSTRACT.** The aim of this study was to evaluate the combination of ultrasound
12 and vacuum on papaya drying kinetics and some quality parameters. Drying was
13 performed at 60 °C and four techniques were used: ultrasound and vacuum assisted
14 drying (USVD), vacuum drying (VD), ultrasound assisted drying (USD) and control
15 (without ultrasound and vacuum) drying (CD). Fresh and dried samples were evaluated
16 in terms of color, texture, total carotenoid and ascorbic acid contents. USVD papaya had
17 lower processing time, requiring 270 minutes to reach the dynamic equilibrium
18 condition, while CD papaya required 450 min. The samples that presented the lowest
19 loss of ascorbic acid (41.3 %) were those dried with the aid of ultrasound and vacuum,

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