



Menoufia University  
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# The effect of drying on quality properties of onion by using microwave oven and solar dryer

By

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## **ABSTRACT**

The experiments were carried out at Agriculture and Biosystems Engineering Department, Faculty of Agriculture Menoufia University and the center laboratory of Agricultural Research Institute, Agricultural Research center, Dokki, Giza, Egypt to study effect of drying on quality properties of onion using microwave and solar dryer at 2018. The experimental treatments included three different levels of microwave power (320, 480, and 640 Watt), three different onion slices thickness (2, 4, and 6 mm). Direct solar drying includes three different levels of onion thickness (2, 4 and 6 mm). The best treatment were found for microwave dryer was identified at treatment of 640W (6mm), where, ( $H^{\circ}$ ) value was  $19^{\circ}$ , considered the best method of drying onion because it was given the lowest value of total color change.

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