Effect of solar radiation and artificial sun drying on the physico-chemical parameters of Asian white radish (*Raphanus sativus* L.)

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Abstract

The present work was aimed to study effect of solar radiation as compared to artificial sun drying on the physicochemical properties of Asian white radish. Use of sustainable energy by using solar energy which have potential to dry the fruits and vegetables. Many kind of solar dryer already developed so far by using forced air convection to dry agricultural produce. Pre-treatment before drying were used to enhance drying rate and reduce drying time. Osmotic dehydration by using salt were take place to dry Asian white radish. It enhanced the physicochemical parameters and drying characteristics. The effect of drying condition on the physicochemical properties and nutritional composition of dried radish were investigated. The determination of water activity and moisture content were examined to increased shelf life of product. Sensory evaluation were also determined for rehydrated sample suggested that artificial sun dried sample found as good as commercial sample. This results underlined the influence of the physico-chemical parameters of sample.

Keywords: White radish, Drying characteristics, Food color, Moisture content, Textural properties,

Way 10

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