

## Evaluating the Effects of Microwaves and Polymers on the Quality of Some Iranian Export Products

**Authors :** Reza Sadeghi

**Abstract :** Storage pests with quantitative, qualitative, and hygienic losses to storage products lead to heavy damage to these products. One of the best methods of controlling storage pests is microwave heating, which is an environmentally friendly method and can be used to replace chemical methods to control storage pests. Pistachios and almonds are the most important dried fruit items in Iran, which account for a significant part of Iran's exports every year. In this study, which along with Pistachio and almond samples were exposed to microwave radiation at 320, 720, 900 watts with times of 10, 20, 30 seconds. Qualitative evaluation of product changes due to the above treatments was performed in the form of changes in colorimetric factors and organoleptic properties of the product. The results showed that in microwave treatment, power, and time factors had a significant effect on the taste and overall acceptance of pistachio product, polymer and power interaction, polymer and time, time and power had no significant effect on pistachio product quality. In almond products, the factors of polymer, time, power, interaction of polymer and power, polymer and time, and power had no significant effect on almond quality.

**Keywords :** microwave, qualitative, pistachio, almond

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