

Title Artificial ripening of Shiraz persimmon (*Diospyrous kaki* Thunb.cv.Shiraz) prior to marketing
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Abstract

Even though persimmon is a native fruit of Iran, its cultivation is very limited with production of about 7320 tons per year. Its cultivation and fruit consumption is decreasing due to the astringency of the Iranian cultivars. On the other hand, producers and handlers lack of knowledge in removing it's astringency before sending to market has greatly influenced this issue. In order to recommend a simple and economical method for removing a local cultivars astringency this study was carried out. Fruits of a commercial cultivar (cv. Shiraz) in Fars province, Iran were harvested at the commercial maturity stage of local pickers (breaker stage). The fruits were dipped in ethanol (20, 35 and 50%), acetic acid (3, 6 and 10%), commercial vinegar, hot water (50 °C) and tap water as control for 30 min. Some qualitative characteristics such as total soluble solids, vitamin C, total acid, pH and tannic acid of the treated fruits were measured in 4 day intervals after storage in common local stores. Results indicate that vitamin C and total soluble solids were highest in the ethanol 20%, 35% and hot water treatments respectively. Total acid was highest in 10% and 6% acetic acid treatments. Tannins were highest in the control treatment and lowest in the ethanol 20% and 35% followed by hot water. Fruit juice pH was also highest in ethanol 20%, 35% and hot water respectively. Although tannic acid and total acid reduced during storage, but fruit juice pH and total soluble solids increased. Weight loss was lowest in the hot water and ethanol 35% treatments respectively. Results suggest the use of hot water treatment of Shiraz persimmon before short storage and supply to markets.