

**Title** Effect of fruit heat treatments in three mango varieties on incidence of postharvest fungal diseases [*Mangifera indica* L.; Egypt]

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#### **Abstract**

*Alternaria alternata*, *Botryodiplodia theobromae* and *Botrytis cinerea* were isolated from rotted fruits of mango cultivars Keitt, Kent and Tommy Atkins and proved to be highly pathogenic to all these varieties. Preliminary tests showed that dipping fruits in hot water (HW) at 50 deg C for 5 min or holding in hot air (HA) for 4 h at 40 deg C did not damage the fruit. Combination of HA for 4 h followed by HW for 5 min (HA + HW) was the most effective treatment for retarding postharvest diseases without peel blackening and fruit damage. These heat treatments, especially HA + HW, increased the shelf life of inoculated and non-inoculated fruits. The quality characteristics of non-inoculated fruits of the three varieties including total soluble solids, titratable acidity and vitamin C contents were not significantly affected by these heat treatments.