

Title Changes in vitamin C and flavour components of mandarin juice due to curing of fruits  
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### **Abstract**

Changes in vitamin C and flavour components of mandarin juice induced by previous curing (intermittent heat treatment at 38 °C and 97% relative humidity) of fruits were studied. Acetaldehyde and ethanol accumulation were enhanced by intermittent curing (IC) of fruits, though the final contents of both compounds in juice were below levels associated with off-flavour development. IC seems to have opposite effects in relation to limonene and linalool oxidation in fruits stored at 20 and 5 °C. Thus, IC produces a 20% reduction in limonene content at room temperature while it induces a 20–30% accumulation in cold-stored fruits. Quantification of the main terpene-oxidised compounds:  $\alpha$ -terpineol, carvone and *E*-carveol did not indicate any detrimental effect of IC on fruit aroma under the studied conditions. Non-significant differences were found either for main sugars or organic acids. Negative effects were found in relation to vitamin C retention, with a 30% greater loss in the juice of IC-treated fruits.