

Title Influence of intermittent warming on the quality of pomegranate fruit
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Abstract

The pomegranate (*Punica granatum* L.) has high value both as food and decorative plant. The quality of pomegranate will decline in the process of storage. This paper investigated the effect of intermittent warming (IW) treatment on nutrition and relative active oxygen metabolism of the variety of 'Da Qingpi' pomegranate. After curing, cycles of IW of 1 day at $20\pm 2^{\circ}\text{C}$ every two weeks at $6\pm 0.5^{\circ}\text{C}$ were used. After 150 days treatment, the results showed that the treatment of IW could postpone the production of O_2 , H_2O_2 , and MDA effectively, and the injury of membrane permeability decreased. The content of total sugar, total acid and soluble solid content (SSC) reduced, the content of ascorbic acid and anthocyanin increased at the end of the storage. Though more sugar and acid need to be consumed in the treatment of IW, it could reduce the chilling injury symptoms by the injury of membrane. IW may be a potential method used in maintaining pomegranate quality during storage.