

عنوان مقاله:

Enhancing shelf life and antioxidant capacity in nectarine fruit with threonine under low temperature

محل انتشار:

مجله فرآیند و کارکرد گیاهی، دوره 12، شماره 58 (سال: 1402)

تعداد صفحات اصل مقاله: 8

نویسندگان:

Sheida Ghazanfari - Department of Horticultural Sciences, Faculty of Agriculture, Shahid Bahonar University of Kerman, Kerman, Iran

Zahra Pakkish - Department of Horticultural Sciences, Faculty of Agriculture, Shahid Bahonar University of Kerman, Kerman, Iran

Soheila Mohammadreazakhani - Department of Horticultural Sciences, Faculty of Agriculture, Shahid Bahonar University of Kerman, Kerman, Iran

خلاصه مقاله:

Chilling injury limits the storage life of nectarine fruit at low temperatures. Therefore, increasing the resistance to chilling injury will provide long-term maintenance of nectarine fruit at low temperatures. In this research, the effect of threonine at ۲۵۰ and ۵۰۰ μM on chilling injury and fruit quality of nectarine during storage at ۱ °C with ۹۵% relative humidity for ۳۰ days was studied. The measured traits included chilling injury, hydrogen peroxide, lipid peroxidation, TSS, organic acids, antioxidant capacity and antioxidant enzyme activity. The results showed that chilling injury decreased hydrogen peroxide production and lipid peroxidation in treated fruits with threonine compared to control during storage. The amount of organic acids, TSS, antioxidant capacity and activity of antioxidant enzymes in treated fruits increased until the end of storage. In general, the ۵۰۰ μM threonine had the most significant effect on maintaining the quality of nectarine fruits during storage.

کلمات کلیدی:

Amino Acid, Decay, Quality, Storage, Stress, Amino Acid, Decay, Quality, Storage, Stress

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1916032>

