Title Alleviation of Chilling Injury in Litchi Fruit by ABA Application

Author Hu Weirong, Liu Shunzhi, Pang Xuequn, Jiang Yueming, Ji Zuoliang and Zhang Zhaoqi

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Abstract

The effect of exogenous abscisic acid (ABA) treatment on chilling injury and related physiological responses of litchi fruit (cv. Guiwei) stored at 0°C wee studied. Results showed that treatment with 100 µmol·L ABA effectively retarded the development of pericarp browning, the main chilling injury symptom of litchi fruit, and delayed color change and the decrease of anthocyanin content of pericarp. ABA treatment had no marked effect on respiration rate and ethylene release of the fruit. In addition, ABA treatment retarded the increase of cell membrane permeability and reduced the activity of polyphenol oxidase (PPO) in pericarp.