Effects of Pretreatment With Nitric Oxide On Kiwifrut Storage At Low Temperature

Mohammad saadatian, Shayan ahmadiyan, Mohammad akbari, and Zahra balouchi

ABSTRACT:

The effect of different concentrations of exogenous nitric oxide (NO) on increasing postharvest life and delaying senescence of kiwifruit was investigated. The fruits were immersed for 2 min with NO (0, 0.5, 1 and 1.5 %) then stored at 1°C and RH 95%. Changes in weight loss, total soluble solids (TSS), titratable acidity (TA), vitamin C, total phenolics and antioxidant activity (%DPPHsc) were evaluated periodically with 7 days intervals during storage. The results showed that treatment with 1% NO significantly delayed the increase of soluble solids and decrease weight and maintained a high vitamin C, total phenol content, antioxidant capacity and TA of kiwifruit during storage. Thus application of NO may be a promising method for extending shelf-life and maintaining quality of kiwifruit.