Effects of *Aloe vera* gel and MAP on bioactive compounds and quality attributes of cherry laurel fruit during cold storage

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Abstract

This study was conducted to determine the effects of *Aloe vera* (AV) and modified atmosphere packaging (MAP) on physiological and chemical quality attributes of cherry laurel (*Prunus laurocerasus* L.) fruit during the cold storage at 0 ± 0.5 °C and $90 \pm 5\%$ RH. Throughout the storage, fruit weight and firmness losses were delayed with AV and MAP treatments. At the end of storage, the respiration rate of fruit treated with MAP was lower than the control and AV-treated fruit. Similarly, ethylene production of MAP and AV-treated fruit was lower than the control. At the end of storage, the highest hue angle was obtained from the control, whereas the lowest hue angle was measured in AV + MAP. Decay rate of AV and MAP-treated fruit was lower than the control. Vitamin C, total flavonoids, total monomeric anthocyanin and antioxidant activity of fruit treated with AV and MAP was higher than the control. The astringency of AV and AV + MAP-treated fruit was higher than the control at the end of storage. This study revealed that AV gel and MAP treatments were effective in maintaining quality and bioactive compounds of cherry laurel fruit.