

## Evaluation of Postharvest Quality and Organoleptic Characteristics of Strawberry with application of *Aloe vera* Gel, Acetic Acid and UV-B Irradiation

M. Hosseini Farahi\*, M. Radi, F. Bagheri and E. Jamshidi<sup>1</sup>

In order to improve post-harvest life and increase the quality of post-harvest quality of strawberry cv. Selva, a completely randomized design with three replications was carried out. The treatments consisted of immersion of fruits in *Aloe vera* gel at two levels of zero (control) and 100% for 10 minutes, acetic acid 0 and 1%, and UV-B radiation for 0 and 10 minutes. The results showed that treated fruits with *Aloe vera* + UVB radiation showed the lowest weight loss during storage compared to other treatments. Fruits treated with *Aloe vera* + Acetic acid + UV-B radiation showed the highest amount of tissue firmness at the end of the experiment. Low levels of decay were observed in fruits treated with acetic acid and combined treatments of *Aloe vera* + acetic acid + UV-B radiation. *Aloe vera* + Acetic Acid + UVB could maintained the amount of anthocyanin, total phenol, and vitamin C at the end of the storage period. Finally, the post-harvest application of *Aloe vera* gel, along with acetic acid and UVB, can be useful in improving the post-harvest quality of strawberry fruit.

**Keywords:** Anthocyanin, Decay percentage, Fruit firmness, Weight loss percentage.

1. Assistant Professor, Department of Horticultural Science, Yasooj Branch, Islamic Azad University, Yasooj, Iran. Assistant Professor, Department of Food Science, Yasooj Branch, Islamic Azad University, Yasooj, Iran and Former M.Sc. Student of Food Science, Yasooj Branch, Islamic Azad University, Yasooj, Iran., respectively.

\* Corresponding author, Email: (m.h.farahi@iauyasooj.ac.ir).