

O-47 (33)**POSTHARVEST APPLICATION OF UVB AND UVC RADIATION ON QUALITY IMPROVEMENT OF PEACH FRUIT**

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Quick postharvest decay is the limiting factor for storage of peach fruits. UV radiation is a relatively new method that by putting fruits and vegetables to low amount of ultraviolet light has some biological positive effects such as increased resistance to rot and storage ability. In order to study the impact of UV treatment on postharvest life of peach (*Prunus persica* cv Alberta) fruits, two types of ultraviolet rays (UV-C and UV-B) with two exposure durations (10 and 20 minutes) as separate and combined treatments were applied on peach fruit and the fruits were stored for 25 days at 4°C. Treated fruits were evaluated every five days by various aspects such as fruit weight loss, fruit firmness, fruit decay percentage and total phenol content. Results show that fruit treatment with UV has beneficial effects on physicochemical characteristics during storage. Increasing UV exposure duration improved the studied features compared to control. Fruits treated with combined UV-C + UV-B treatment for 20 minutes had the best result. The lowest fruit decay (10.64 %), fruit weight loss (9.19%) was obtained in fruit treated with UV-C + UV-B treatment for 20 minutes as compare to untreated. The highest fruit firmness and total phenol content () was observed in fruit treated with UV-C + UV-B treatment for 20 minutes as compare to control. So, application of postharvest UV-C + UV-B is useful treatments for improvement of peach fruit quality.

Keywords: Fruit Percentage Decay, total phenol content, fruit firmness, weight loss.