

Quality of fresh raspberry (*Rubus idaeus L.*) fruit as affected by Ultraviyolelet-C treatment

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Ultraviolet-C (UV-C) light treatment is a nonthermal process that can be used to inactivate microorganisms on the surface of fresh fruits and vegetables after harvest. Fresh raspberries (*Rubus idaeus L.*) are highly perishable fruit, but have excellent nutritional and health benefits for consumers. The effects of UV-C treatment on pH, color (L, a, b value), total bacterial count and total yeast-mold count of fresh raspberries was studied. UV-C light treatment was applied to the fruits at different doses of 33, 66 and 100 kJ/m² each delivered at two different dose rates (low and high). The quality parameters were evaluated immediately after the UV-C treatment and also after 2 days of refrigerated storage. The UV-C treatment of 100 kJ/m² dose at low dose rate resulted in higher pH of the berries. The UV-C treatment at the high dose rate caused significantly higher L, a and b values in the samples compared to the treatment at low dose rate. All UV-C light treatments at high dose rate resulted nearly 2 log reduction in total bacterial count and also 0,4-0,6 log reduction in total yeast-mold count compared to untreated fruits.

Keywords: quality, raspberry, ultraviolet light