Title Effect of ultraviolet-C irradiation on quality and natural microflora of asparagus spears

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Abstract

The use of ultraviolet-C (UV-C) light on the quality and natural microflora of asparagus spears stored at 7°C was investigated. Exposing asparagus spears to UV-C light at different dose (0, 1.2, 2.4, and 3.6 kJ/m²) delayed ethylene production rate and vitamin C degradation but it increased the respiration rate of asparagus spears. UV-C irradiation did not show inhibition effect on natural microflora (total microbial counts, coliforms and fungi) growths of asparagus spears as compared to control. The overall quality (color and crispness) of asparagus spear was not adversely affected by UV-C treatments.