

**Title** Postharvest issues in blueberry and cranberry and methods to improve market-life  
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### **Abstract**

Maximizing quality and extending market life of fresh blueberries and cranberries adds value to the fruit by enabling access to new markets. Fruit quality loss during postharvest handling is primarily the result of decay, physiological breakdown, physical abuse, and dehydration. Fruit must be of high initial quality to maximize storage life. Initial quality is dependent on many factors including cultivar, cultural practices, growing environment and harvest practices. Following harvest, blueberry fruit must be cooled and held near 0°C for maximum market life. However, the optimum storage temperature for cranberry fruit is less clearly defined and may range from 0 to 7°C. Maintaining a high relative humidity of 95% or greater minimizes weight loss and shrivel of blueberries, but can result in increased decay and physiological breakdown in cranberries. A RH of about 80% is recommended to maximize cranberry storage life. Controlled or modified atmospheres reduce decay of blueberries with optimum concentrations of CO<sub>2</sub> ranging from 10% to 12%. Reduced O<sub>2</sub> concentrations of 1% to 2% have been recommended but there is little evidence that O<sub>2</sub> reduction is beneficial. Unlike blueberries, the storage life of cranberries does not benefit from modification of CO<sub>2</sub> or O<sub>2</sub> concentrations. Many other postharvest treatments have been attempted to extend the storage life of blueberry and cranberry fruit including heat, UV light, ozone and fumigation with various antimicrobial compounds. However, the benefit of most of these treatments has been limited and often inconsistent. The use of postharvest technologies to optimize marketing of high quality fresh fruit is discussed.