

Title Postharvest behavior of *Highbush Blueberry Fruits* cv. ONeal cultivated with different organic fertilization treatments

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Abstract

Considering the increasing demand for organic products and the fact that Chile is far from export markets, fresh fruits of highbush blueberry (*Vaccinium corymbosum* L. x *Vaccinium darrowii* Camp) from organic fertilization were stored at 3 °C and 90% RH for 30 d in modified atmosphere (MA) and conventional atmosphere (CA) with the objective of studying the effect of organic fertilization treatments in postharvest behavior. The variables, water content, weight loss, diameter loss, soluble solids, titratable acidity, pH, and presence of pathogens were evaluated during three periods; with a divided plot factorial arrangement experimental design. Results were submitted to variance analysis, and Tukey test ($P \leq 0.05$) was applied when significant differences appeared. Most of the evaluated variables showed no differences between fruits treated with organic or conventional fertilization. Nevertheless, the greater presence of pathogens occurred in fruits treated with organic fertilization when they were stored in CA, being *Botrytis cinerea* the causal agent with greater incidence. The fruits stored in MA presented a better postharvest behavior than the fruits stored in CA, demonstrating less weight loss (2.3%), diameter loss (15.6%), incidence of microorganisms, less variation of soluble solids over time (14.6%), acidity (0.37% citric acid), and humidity (81%).