

Title The influence of 1-MCP on shelf-life quality of highbush blueberry.
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Abstract

To determine if postharvest treatments of 1-methylcyclopropene (1-MCP) retard the senescence of highbush blueberries (*Vaccinium corymbosum*) removed from storage, 'Burlington' (early) and 'Coville' (late) fruit were harvested from four experimental sites and treated for 24 hours at 20 deg C with 0 (control), 25 (low), 100 (medium), or 400 (high) nL.L-1 of 1-MCP. All fruits were then stored in a controlled atmosphere of 10-15 kPa O₂ and 10 kPa CO₂ at -1 to 1 deg C for 4, 8, and 12 weeks, followed by a 20 deg C shelf-life of up to 20 days. During the shelf-life period immediately after harvest and those following each storage removal, percent marketable fruits (PMF) were calculated daily as: [fruit in good condition]/[total berry number] x 100. Changes in PMF were not affected by 1-MCP treatment. Hence, we conclude that 1-MCP at rates up to 400 nL.L-1 does not alter the shelf-life quality of the highbush blueberry cultivars tested.