

**Title** Effect of 1-methylcyclopropene on storage life of green beans  
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#### **Abstract**

Two cultivars (cv 'Thoroughbred' and cv 'Carlo') of fresh green beans untreated or treated with 0.5 ppm 1-methylcyclopropene (1-MCP) for 24h, were stored at 7°C. The 1-MCP treatment prolonged storage life as indicated by delayed weight loss and loss of firmness, color change, brown spot development and water soaking in two cultivars. Treatment with 1-MCP slightly delayed yellowing of beans; at day 20 the hue angle of 1-MCP treated pods were 119° and 118° compared to 116° and 115° for the control in cv 'Thoroughbred' and cv 'Carlo' respectively. Brown spot development on beans were delayed by 1-MCP treatment for 5 days in cv 'Thoroughbred', for 3 days in cv 'Carlo' compared with non-treated controls. Compared with control beans, pods treated with 1-MCP had less water soaking (31%) than 64% for controls in cv 'Carlo'. Green beans treated with 1-MCP had a lower respiration rate than untreated controls. 1-MCP had significant positive effect on the shelf life of green beans cv. 'Thoroughbred' and cv 'Carlo'