

**Title** Responses to treatments with ethylene and 1-methyl cyclopropene in apricot var. 'Mauricio'  
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#### **Abstract**

The aim of this work was to evaluate the effect of 1-methylcyclopropene (1-MCP), following application of ethylene at different doses, on the post-harvest conduct of apricot var. 'Mauricio'. The 1-MCP caused a delay in ripening when compared to the control fruits. Accumulation of the ethylene biosynthetic enzymes ACC oxidase and ACC synthase was delayed and inhibited by 1-MCP. This fact may indicate a lower production of ACC together with a decrease in ethylene transformation. All the treatments with 1-MCP reduced the ethylene production and the respiratory rate. Regarding the reversibility of the action of 1-MCP, the effect of the ethylene application after applying 1-MCP was dose-dependent only up to 5 ppm; for higher concentrations, no differences were found. On the basis of these results, we can conclude that the slowdown effect on the ethylene emission in all treatments with 1-MCP depended on the storage period. 1-MCP will protect apricot fruits of var. 'Mauricio' from exogenous sources of ethylene up to doses of 5 ppm.