

**Title** Ripening of tomato (*Solanum lycopersicum* L.). Part I: 1-methylcyclopropene mediated delay at higher storage temperature

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#### **Abstract**

1-Methylcyclopropene (1-MCP) at a dose of  $0.3 \mu\text{l l}^{-1}$  for 24 h delayed the ripening of tomato (*Solanum lycopersicum* L.) at higher storage temperature ( $30.5 \pm 1 \text{ }^\circ\text{C}$ ). The dose was effective at green mature (stored at  $30.5 \pm 1 \text{ }^\circ\text{C}$ ) and breaker (stored at  $25 \pm 1 \text{ }^\circ\text{C}$ ) stages. There was a significant reduction in % ripening index and % red tomatoes due to this treatment on green mature tomatoes (stored at  $25 \pm 1 \text{ }^\circ\text{C}$ ). Depending on the variety, the rate of respiration was either reduced or remained unaffected by the treatment. Post-harvest life was enhanced in all the varieties due to the delay in red colour development and reduced rottage. The results imply prospects for the use of 1-MCP ( $0.3 \mu\text{l l}^{-1}$  for 24 h) for storage of tomato fruits at higher ambient temperatures of tropical and sub-tropical regions.

<http://www.springerlink.com/content/d173666154531671/fulltext.pdf>