

**Title** Efficacy of 1-MCP treatment in tomato fruit. 2. Effect of cultivar and ripening stage at harvest  
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**Citation** Postharvest Biology and Technology, Volume 42, Issue 3 , December 2006, Pages 235-242  
**Keywords** Colour; Ethylene; 1-MCP; Quality; Tomato; Ripening

#### **Abstract**

Four cultivars of tomato fruit ('Cherry', 'Daniela', 'Patrona' and 'Raf') were harvested at two ripening stages (S1 and S2), treated with  $0.5 \mu\text{l l}^{-1}$  of 1-methylcyclopropene (1-MCP) for 24 h and stored at 10 °C for 28 days. For all cultivars, control fruit deteriorated very rapidly (due to weight loss, softening, colour changes and decay) with an estimated shelf life of 7 days ('Cherry' and 'Patrona') and 14 days ('Daniela' and 'Raf'), independently of the ripening stage at harvest. All quality parameters for all cultivars were delayed and/or inhibited in treated fruit, the efficacy of 1-MCP being higher in tomatoes harvested at the S2 ripening stage. At this stage, the organoleptic properties had already developed in fruit on the plant and tomatoes could thus reach consumers with optimal postharvest quality.