

Title 1-Methylcyclopropene delays softening in tomato slices
Author Pangaribuan, D. H., Irving, D. E. and O'Hare, T. J.
Citation Australian postharvest horticulture conference, Brisbane, Australia, 1-3 October, 2003; 169-170

Abstract

1-Methylcyclopropene (1-MCP) has the potential in tomato to reduce ethylene-associated changes in texture. Tomato cv. Revolution was harvested at the 'pink' maturity stage and whole fruits were treated with 0, 0.1, 1.0 or 10.0 micro l 1-MCP/litre at 20 deg C for 12 h. Slices of 7-mm thickness were cut using a commercial slicer, and the slices stored in vertical stacks in plastic containers at 5 deg C for 7 days. The application of 1-MCP reduced both ethylene production and respiration rate of slices and resulted in firmer pericarp firmness. Ethylene production was 24, 40 and 62% lower following treatments with 0.1, 1.0, 10.0 micro l 1-MCP/litre, respectively, compared with the controls; moreover, respiration rate was reduced by 6, 10 and 20% upon 1-MCP treatments. Fruits treated with 1-MCP had 20, 34 and 24% higher pericarp firmness, respectively, than fruits not treated with 1-MCP.