

#### Abstract:

The shelf life of Cavendish bananas (*Musa acuminata* Colla cv. Williams) after ripening initiation is relatively short, causing problems for marketing of the fruit. To extend shelf life, short-term low oxygen treatments and 1-MCP treatments were applied after a 2 day ripening initiation period with ethylene. Short-term low oxygen (<1%) treatments applied at 22°C did not extend shelf life of bananas, but it induced serious skin injury that increased in severity with prolonged exposure from 6 to 24 hours. The shelf life of bananas was doubled by application of 300nL/L 1-MCP for 24 hours at 22°C directly after ripening initiation with ethylene, but 3nl/L had no effect and 30µL/L excessively slowed ripening. Eating quality parameters were not affected by this treatment. Further work is required on optimising 1-MCP treatments for commercial ripening and on consumer testing after 1-MCP gains legislative approval.