

### **Abstract**

Pink Lady apple fruit were selected from 12 orchards in the Goulburn Valley region in Victoria, during two harvest seasons. Harvested fruit were during two harvest seasons. Harvested fruit were stored at 0 °C, then treated with 1-methylcyclopropene (1-MCP) for 24 hours, 1 week after harvest. They were then stored in controlled atmosphere (CA) storage (2.5%O<sub>2</sub>: 1%CO<sub>2</sub>) for 15 weeks before being exported with a regular commercial shipment to the UK. They were then assessed for firmness and internal browning (IB) disorder on arrival. This occurred for both years. All fruit treated with 1-MCP were significantly firmer than fruit not treated with 1-MCP (control) , irrespective of season. In 2002 fruit treated with 1-MCP were 1.4 – 2.4 kgf firmer than control fruit. In 2003 fruit treated with 1-MCP were 0.4-0.9 kgf firmer than control fruit . Internal browning was only evident in season 2002. It did not occur in the sample fruit assessed in season 2003. The incidence of IB in season 2002 varied substantially between the orchards. Three orchards had less than 5% of fruit affected, five orchards had 10-20% three orchards had 20-40% and one orchard had 70% incidence of internal browning. Treatment with 1-MCP had no significant effect on the incidence of internal browning. In this study, 1-MCP significantly increased the firmness of Pink Lady apple fruit selected for export to the UK.