

## **Abstract**

Temperature management is critical for maintaining the quality of sweet cherries. Protocols for best practice temperature management are well documented from the time of harvest right through the sea freight export supply chain to the customer. However, less is known about the implications of ambient temperature conditions at the time of harvest on both initial fruit quality and shipping potential of sweet cherries. A series of trials over two years investigated the anecdotal theory that suggests fruit harvested during high ambient temperatures should not be included in sea freight consignments. Fruit of the cultivars Lapins and Stella were harvested at hourly intervals from 6:00am to 6:00pm. Ambient temperatures experienced during the trials ranged from 8°C to 36°C. Colour, firmness, flavour and pitting of the fruit along with stem colour and condition were assessed at the time of harvest and after storage at 2°C for up to 5 weeks. Prior to storage, fruit was either hydro-cooled directly after harvest or after 1.5 hours in the shade at ambient temperature. Results demonstrate the negative effects on fruit quality of harvesting cherries in the afternoon and on hot days, particularly relating to colour and condition of the stems. Most of the loss in fruit quality was attributable to the time between harvest and cooling. Fruit destined for export by sea freight should be harvested early in the morning and hydro-cooled quickly.