Project Title:
The use of Harvista™ (pre-harvest 1-MCP) application to prevent green colour loss and reduce blush of ‘Granny Smith’ apples.

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Objectives and Rationale

Many ‘Granny Smith’ apples are harvested at a maturity not suitable for export market due to loss in green colour (White ‘Granny Smith’!). This is due to other, more lucrative cultivars such as ‘Fuji’ and ‘Braeburn’ apples reaching optimum harvest maturity at the same time that ‘Granny Smith’ apples need to be harvested to satisfy the market need, or to seasons of high yield resulting in delayed harvest. Other seasonal and geographic factors may also play a role in loss of green skin colour in ‘Granny Smith’ apples, and the exact causative factors are not still fully understood and require further investigation. Certain ‘Granny Smith’ orchards may also experience pink blush on the fruit resulting in reduced export pack out.

The aim of this project is to determine if the use of pre-harvest Harvista™ sprays (1-MCP) can prevent green colour loss and pink blush on ‘Granny Smith’ apples.

Methods

A ‘Granny Smith’ orchard in the Koue Bokkeveld region was subjected to a 1x and 2x Harvista™ application 28, 14 and 3 days before spray application. Maturity and efficacy samples were harvested at each spray application and 7, 14 and 21 days after commercial harvest. Untreated control fruit and fruit sprayed with 1x Harvista™ 28 days before commercial harvest were harvested to obtain commercial pack out data.

Key Results

All sprays were done successfully. Maturity and efficacy samples were harvested as planned. Commercial pack out data still needs to be obtained. Storage samples from the untreated control and from the treatment where 1x Harvista™ was applied 28 days prior to harvest still needs to be assessed.

Conclusion and Discussion

This interim report is to inform the workgroup of the status of the project. Feedback and discussion of this project will address possible amendments for the following season.