

New Variety Evaluation

Premier Star Maturity and Storage Evaluation



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Report to Premier Orchards, Greg & Stephanie Buck.

INTRODUCTION

Premier Star is a chance sport discovered at Premier Orchard by Greg and Stephanie Buck. Fruit from trees on M26 rootstock using grafting material from this chance sport was analysed for harvest maturity and storage during the 2005 (2nd leaf) and 2006 season.

The report is based on samples collected by Greg Dryden and analysed by Fruition staff at the Nelson and Hasting's Fruition Maturity Lab's.

METHODS

The fruit for this evaluation was collected from the dwarf trees starting two weeks prior to the anticipated 1st harvest date. Fruit was also collected at estimated optimum maturity and stored at 1°C in a conventional air coolstore. In hindsight the fruit for the storage samples collected in 2005 was approximately 1 week beyond optimum harvest date.

RESULTS AND DISCUSSION

Maturity Samples

This section presents and discusses the results of a series of maturity and storage samples conducted in 2005, 2006 and 2007.

Figure One. Maturity indices 2005, 2006 and 2007 harvest.

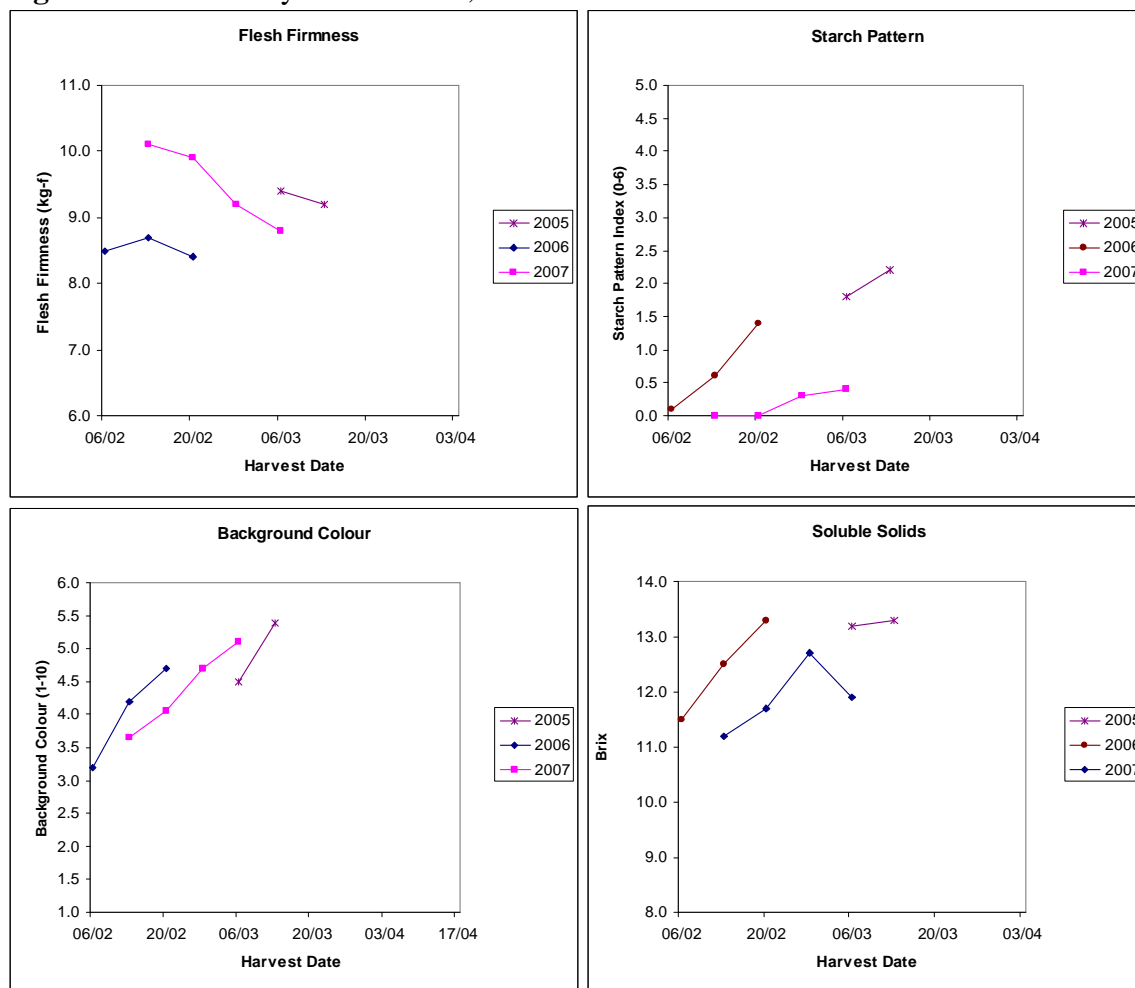


Table one. Premier Star Maturity indices 2005.

2005	BG Colour	SPI	FF	S/S
06-Mar	4.5	1.8	9.4	13.2
13-Mar	5.4	2.2	9.2	13.3

Table two. Premier Star Maturity indices 2006.

2006	BG Colour	SPI	FF	S/S
06-Feb	3.2	0.1	8.5	11.5
13-Feb	4.2	0.6	8.7	12.5
20-Feb	4.7	1.4	8.4	13.3

Table three. Royal Gala Maturity indices 2006 (same orchard)

2006	B/Col	SPI	FF	SS
08/02/2006	4.0	0.5	8.5	10.3
14/02/2006	4.3	0.8	8.5	10.7
21/02/2006	4.2	2.3	8.5	11.7

Table four. Premier Star Maturity indices 2007.

2007	BG Colour	SPI	FF	S/S
13-Feb	3.65	0	10.1	11.2
20-Feb	4.05	0	9.9	11.7
27-Feb	4.7	0.3	9.2	12.7
06-Mar	5.1	0.4	8.79	11.9

Table five. Royal Gala Maturity indices 2007 (same orchard)

2007	BG Colour	SPI	FF	S/S
06-Feb	2.8	0	9.71	9.4
13-Feb	3.5	0.3	8.84	9.8
20-Feb	4.2	0.9	8.8	10.7
27-Feb	4.85	1.9	8.25	11.4
06-Mar	5.15	1.9	8.21	11.8

Figure one, Table one, two and four show the results of the maturity and harvest samples. Table three and five give comparative Royal Gala information from the same orchard for 2006 and 2007.

Storage Samples

Table six. Premier Star Storage samples 2005.

2005	Sample type	B/C	FF	SS
19-Apr-05	30 Days	9.6	7.9	14.8
26-Apr-05	30 Days +7	8.9	7.5	14.9
19-May-05	60 Days	9.4	8.0	14.5
26-May-05	60 Days +7	9.9	7.2	15.1

Table seven. Premier Star Storage samples 2006.

2006	Sample type	B/C	FF	SS
12-Apr	50 days	5.4	7.8	14.1
19-Apr	50 days + 7 Days	6.0	7.5	14.9
02-May	70 Days	7.0	8.0	14.2
09-May	70 days + 7 Days	9.7	7.5	14.6

Table eight. Premier Star Storage samples 2007.

2007	Sample type	B/C	FF	SS
12-Apr	100 days	5.5	7.7	15
19-Apr	100 days + 7 Days	6.9	7.0	14.5
02-May	150 Days	7.3	7.3	14.5
09-May	150 days + 7 Days	8.1	6.7	14.5

Table six to eight show the storage sample results for 2005 to 2007.

Photos



10/03/2006



2/05/2006



8/06/2007