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The results and conclusions in this report are based on an investigation conducted over one year. The conditions under which the experiment was carried out and the results obtained have been reported with detail and accuracy. However because of the biological nature of the work it must be borne in mind that different circumstances and conditions could produce different results. Therefore, care must be taken with interpretation of the results especially if they are used as the basis for commercial product recommendations.

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1. INTRODUCTION

All APRC funded trials are now located at the Bradbourne trials site at East Malling. In line with policy determined by the Breeding and Variety Development Advisory Committee recording of trials has been confined to three replicates in established trials and only three replicates have been used in those trials planted in 2002. Residual trees in the older trials are now available, as required, for framework grafting to allow rapid preliminary assessment of new varieties, which might be received. A policy of succinct annual summary reports, with fuller reports on each individual trial being submitted at the end of the trial, was requested by the Breeding and Variety Development Advisory Committee. This annual report follows this format.

2. APPLE VARIETY TRIALS

2.1 APPLE VARIETY TRIAL 39

Maiden trees on M9 rootstock were planted in a completely randomised block design, field experiment at Bradbourne, East Malling in March 1998. The trees are spaced at 4m between the rows and 2m within the row in single, tree plots, with 5 plots per variety. Additional trees of each variety are planted in the guard plots. From the 2002 crop onwards data was collected from three replicates only.

Varieties:

- | | | |
|--------------------|-----------------|--------------|
| 1. Queen Cox | 2. Fiesta | 3. Smoothee |
| 4. Royal Gala | 5. Chevadel | 6. Jubile |
| 7. E271/40 | 8. E234/23 | 9. Cybele |
| 10. Amororossa | 11. Arkcharm | 12. Bierna |
| 13. Zlatka | 14. Bohem | 15. Delorgue |
| 16. Cameo (Caudle) | 17. Fukunishiki | 18. Karina |
| 19. Merlyn | 20. Shamrock | 21. Shinsei |
| 22. Tukka | 23. Vanda | |

Results:

Trees have established well in this trial and the first crop was recorded in 1999. There was insufficient fruit of each variety to give meaningful grading data or storage assessments from the 1999 crop. Fruit was harvested for the fourth season from this trial. Some varieties have a high yield potential.

Table: Crop Yield 2002/2003.

Variety	Yield kg/tree					Pick Date 2002
	1999	2000	2001	2002	Total	
QUEEN COX	2.3	5.62	4.3	2.26	12.22	11-Sep
FIESTA	3.8	6.04	10.4	15.32	20.24	12-Sep
SMOOTHEE	5.7	6.61	8.34	14.5	20.65	23-Sep
ROYAL GALA	2.1	4.2	8.54	11.69	14.84	01-Oct
CHEVADEL	2.9	7.7	6.3	11.6	16.9	01-Oct
JUBILE	4.4	6.96	5.5	11.18	16.86	01-Oct
E271/40	3.8	3.66	3.4	7.13	10.86	12-Sep
E234/23			3.66	3.66	3.66	12-Sep
CYBELE	4.3	2.04	7.9	11.07	14.24	28-Aug
AMOROROSSA	1.8	4.9	1.33	4.68	8.03	27-Aug
ARKCHARM	0.25	3.4	1.58	3.41	5.23	19-Aug
BIERNA	1.2	5.48	3.96	7.3	10.64	01-Oct
ZLATKA	6.1	2.16	8	12.13	16.26	12-Sep
BOHEM	2.1	7	9.9	14.45	19	12-Sep
DELORGUE	3.7	4.16	7.32	11.25	15.18	30-Aug
CAMEO	5.5	6.48	12.85	18.84	24.83	15-Oct
FUKUNISHIKI	3.2	7.55	13.45	18.83	24.2	28-Oct
KARINA	3	3.26	9.27	12.4	15.53	19-Aug
MERLYN	7	5.78	8.05	14.44	20.83	12-Sep
SHAMROCK	6.9	5.94	12.8	19.22	25.64	01-Oct
SHINSEI	5.5	3.64	10.6	15.17	19.74	09-Sep
TUKKA	3.7	3.86	7.14	10.92	14.7	09-Sep
VANDA	5.9	4.84		10.74	10.74	10-Sep

Cameo has produced fruit with a distinctive appearance and good eating quality as well as having a yield potential higher than Smoothee. Both Shamrock and Shensei also gave good crops, both have fruit green/yellow in colour. The fruit of Cybele is attractive with a pinkish blush and good yield. The Japanese variety Fukunishiki has a very late season, similar to Fuji.

Recommendations:

Performance to date from this trial indicates some potentially useful varieties. Cameo appears to be confirming its promise in terms of agronomic characteristics. Many of the early season varieties produce fruit with soft texture, which are prone to bruising.

Variety	Timing	FROM STORE						AFTER 7 DAYS FROM STORE				
		Refract-ometer	Firm kg	Ripe ness	Eating Quality	Juic-iness	Texture	Firm kg	Ripe ness	Eating Quality	Juic-iness	Texture
Queen Cox	Mid Dec.	14.3	5.6	6	6	7	7	5.4	7	6	6	7
	Mid Jan.	14.1	5.8	5.5	7	7	7	5.1	7	5	6	7
	Early Feb	14.0	5.6	5.5	7	7	7	5.0	9	3	3	7
Fiesta	Mid Dec.	14.2	7.8	4	7.5	7.5	3.5	7.3	5	8	8	7
	Mid Jan.	12.8	7.6	4.5	7	7	3	7.3	5	8	8	5
	Early Feb	12.9	7.8	5	8	8	5	7.2	5	8	8	7
Smoothee	Mid Dec.	13.4	5.2	5	8	8	7	5.0	6	7	8	7
	Mid Jan.	13.0	5.4	5.5	7	8	7	5.2	5.5	7.5	8	7
	Early Feb	12.2	5.5	5	8	8	7	4.7	7	5	7	7
Royal Gala	Mid Dec.	12.9	7.1	4.5	8	8	3	6.2	5	8	8	4
	Mid Jan.	12.6	6.8	5	7	8	3	6.1	5	7	8	7
	Early Feb	12.5	7.0	4.5	7	8	4	5.7	5.5	7	8	5
Chevadel	Mid Dec.	14.1	5.7	5.5	8	6	7	5.2	5.5	7	6	7
	Mid Jan.	13.9	5.3	6	5	6	7	5.0	6	5	6	7
	Early Feb	14.8	5.5	5.5	7	7	7	4.7	6	7	7	7
Jubile	Mid Dec.	13.7	5.5	5.5	7	8	7	4.9	6	8	6	7
	Mid Jan.	13.7	5.4	5.5	7	8	7	5.0	6	7	8	7
	Early Feb	13.8	5.4	5.5	8	8	7	4.7	6.5	7	7	7
E 271/40	Mid Dec.	12.2	6.6	5	8	8	4	5.7	5	8	8	7
	Mid Jan.	12.4	6.4	4.5	7	7	4	6.4	4.5	8	7	4
	Early Feb	11.6	5.9	5	7	7	7	5.6	6	6	6	5
E 234/23	Mid Dec.	15.9	6.0	5	7.5	7	5	6.9	7	6	5	7
	Mid Jan.	Z										
Bierna	Mid Jan.	14.4	7.2	7	4	5	7	6.7	9	3	3	7
	Early Feb	Z										
Zlatka	Mid Jan.	16.4	6.4	5.5	7	8	7	5.8	5.5	7	8	7
	Early Feb	Z										
Bohem	Mid Dec.	14.3	5.4	5.5	5	7	7	5.4	5.5	6	7	7
	Mid Jan.	13.1	5.7	5.5	7	7	7	5.4	5.5	7	7	7
	Early Feb	13.5	6.0	5.5	7	8	7	5.5	7	6	7	7
Cameo	Mid Dec.	16.1	8.4	4	8	8	3	7.4	4	8	8	3
	Mid Jan.	15.9	7.7	4	7	8	4	7.4	5	8	8	7
	Early Feb	16.4	7.9	3.5	8	8	3	7.1	4.5	8	8	4
Fukunish	Mid Dec.	15.2	8.8	3	5	7.5	5	6.7	5	8	8	4
	Mid Jan.	15.0	7.1	5	7	8	7	7.0	5	8	8	7
	Early Feb	15.0	7.2	4.5	8	8	3	6.6	5	8	8	7
Merlyn	Mid Dec.	13.4	8.0	5	7	7	7	7.0	9	8	6	7
	Mid Jan.	12.6	7.2	5	7	8	7	6.6	5.5	7	7	7
	Early Feb	12.6	7.1	5.5	7	7	7	5.9	6	7	7	7
Shamrock	Mid Dec.	13.6	7.1	5	8	7	5	5.5	5	8	8	7
	Mid Jan.	13.5	6.9	5	8	8	7	6.3	5	8	8	7
	Early Feb	13.6	6.4	5	8	8	5	5.7	5.5	8	7	5
Shinsei	Mid Dec.	13.7	6.0	5	8	8	5	5.7	6	7	7	7
	Mid Jan.	Z										
Tukka	Mid Dec.	14.8	5.5	5.5	5	7	7	5.1	9	3	6	7
	Mid Jan.	Z										
Vanda	Mid Dec.	12.6	4.4	7	4	7	5	4.1	9	3	7	7
	Mid Jan.	12.2	4.9	9	4	7	7		9			
	Early Feb	11.8	5.0	5.5	7	8	7		9			

2.2 APPLE VARIETY TRIAL 40

Maiden trees of four selections were planted in March 1998 at a spacing of 4m x 2m in a complete randomised block design with 5 replicates per variety. Additional trees of each selection were planted in guard plots. From the 2002 crop onwards data was collected from three replicates only.

Varieties:

1. Queen Cox
2. Jonagold
3. Royal Gala
4. Smoothee
5. E277/55
6. E303/15
7. E305/3
8. E286/3

Results:

Trees established well following initial pruning and carried their first crop in 1999.

Table: Crop Yield 1999 to 2002

Variety	Yield kg/tree					Pick Date 2002
	1999	2000	2001	2002	Total	
QUEEN COX	1.2	4.03	8.15	7.53	13.38	19-Sep
JONAGOLD	4.1	10.86	18.52	20.5	33.48	04-Oct
ROYAL GALA	1.9	2.93	8.64	10.7	13.47	23-Sep
SMOOTHEE	3.2	7.22	10.25	21.1	20.67	11-Oct
E277/55	2.8	6.36	6.23	16.6	15.39	07-Oct
E303/15	0.9	3.58	8.78	12.2	13.26	26-Sep
E305/3	1.9	5.68	12.43	9.23	20.01	26-Sep
E286/3	3.8	3.15	12.03		18.98	

The varieties in this trial, all from HRI East Malling breeding programme, are later than Cox in harvest date. They are predominantly bicoloured apples with E305/3 offering the highest yield potential. Tree death in E286/3 has curtailed its evaluation in this study.

Recommendations:

Following the 2003 crop it will be possible to begin making recommendations on the future of varieties in this trial.

Table: Storage Assessments 2002/2003

Variety	Timing	FROM STORE						AFTER 7 DAYS FROM STORE				
		Refract-ometer	Firm kg	Ripe ness	Eating Quality	Juic-iness	Texture	Firm kg	Ripe ness	Eating Quality	Juic-iness	Texture
Queen Cox	Mid Dec.	15.9	6.1	6	7	7	7	5.6	6.5	7	6	8
	Mid Jan.	15.6	5.5	6	6	7	7	5.3	6.5	6	6	7
	Early Feb	14.8	5.5	5.5	7	7	7	5.0	7	6	7	7
Jonagold	Mid Dec.	14.9	6.6	5	8	8	4	5.5	6	8	8	7
	Mid Jan.	14.3	6.4	5	8	8	8	6.0	5	8	8	7
	Early Feb	14.4	6.3	5	7	7	7	5.9	5	8	7	7
Royal Gala	Mid Dec.	13.0	7.8	5	7	8	3	6.9	5	8	8	4
	Mid Jan.	12.6	7.5	5	7	7	3	6.4	5	8	8	5
	Early Feb	12.4	7.3	5	8	8	5	6.4	5	7.5	7.5	5
Smoothie	Mid Dec.	13.2	5.6	5	8	8	7	5.0	5.5	7	7	7
	Mid Jan.	12.7	5.5	5	7	8	7	4.8	6	7	7	7
	Early Feb	12.3	5.4	5	8	8	7	5.3	6	7	7	7
E 277/55	Mid Dec.	15.8	9.0	3	7	7	3	7.6	5	8	8	7
	Mid Jan.	14.4	6.8	4.5	7	8	3	6.4	5	8	8	7
	Early Feb	15.4	7.8	4.5	7	8	5	7.1	5	8	8	5
E 303/15	Mid Dec.	15.5	8.5	3	7	7	3	8.6	4	8	7	3
	Mid Jan.	15.4	8.7	3.5	7	7	3	8.3	4	7	7	4
	Early Feb	16.4	8.6	4	7	8	3	8.3	4	7	8	3
E 305/3	Mid Dec.	14.3	10.0	1	3	7	2	9.1	1	3	7	3
	Mid Jan.	13.7	8.9	3	5	7	7	8.7	4	5	7	7
	Early Feb	14.2	9.4	2	6	8	4	8.7	3	6	8	4
Cybele	Mid Dec.	13.5	5.1	6.5	6	7	7		9			
	Mid Jan.	Z										
Bohem	Mid Dec.	14.3	7.9	4	7	8	3	7.1	5	8	8	5
	Mid Jan.	13.1	7.9	4	7	8	4	6.7	9	8	8	5
	Early Feb	Z										

2.3 APPLE VARIETY TRIAL 41

Planted in March 2000 on M9 rootstock with five single tree plots in a complete randomised block experiment. The first crop was recorded in 2002 when data from only three replicates was utilised.

Varieties:

- | | | |
|--------------|-------------|---------------|
| 1. Queen Cox | 2. Fiesta | 3. Royal Gala |
| 4. Jonagold | 5. Smoothee | 6. E303-20 |
| 7. E303-47 | 8. E409-47 | 9. E273-55 |
| 10. E250-3 | 11. E303-71 | 12. E403-21 |
| 13. E394-5 | | |

Results:

The first crop was recorded in 2002 following successful establishment of trees.

Table: Crop Yield 2002

Variety	Yield kg/tree		Mean
	2002	Total	Pick
QueenCox	3.57	3.57	12-Sep
Fiesta	5.33	5.33	19-Sep
Royal Gala	5.5	5.5	23-Sep
Jonagold	10.2	10.2	04-Oct
Smoothee	10.8	10.8	08-Oct
E303-20	8.03	8.03	11-Oct
E303-47	5.87	5.87	26-Sep
E409-7	10.03	10.03	23-Sep
E273-55	5.87	5.87	20-Sep
E250-3	1.3	1.3	11-Oct
E303-71	6.47	6.47	11-Oct
E403-21	7.07	7.07	26-Sep

Recommendations:

Trees have grown well and this first seasons crop suggests some varieties of high yield potential are contained in this trial.

Table: Storage Assessments 2002/2003.

Variety	Timing	FROM STORE						AFTER 7 DAYS FROM STORE				
		Refract-ometer	Firm kg	Ripe ness	Eating Quality (Taste)	Juic-iness	Texture	Firm kg	Ripe ness	Eating Quality (Taste)	Juic-iness	Texture
Fiesta	Mid Dec.	13.2	7.8	3.5	7	8	3	7.5	4.5	8	8	4
	Mid Jan.	13.6	8.3	4.5	8	8	3	7.0	5	8	8	4
	Early Feb	Z										
Royal Gala	Mid Dec.	13.0	8.0	4	7	8	3	6.8	5.5	8	7	7
	Mid Jan.	14.0	7.5	5	7	7	7	6.9	5	7	7	7
	Early Feb	12.9	7.5	5	8	8	7	6.6	5.5	7	7	7
Jonagold	Mid Dec.	14.7	6.0	5	8	8	4	5.7	5.5	8	8	7
	Mid Jan.	15.1	6.3	5	8	8	3	6.2	5.5	8	8	8
	Early Feb	15.0	7.0	5	8	8	7	6.4	5.5	8	8	7
Smoother	Mid Dec.	13.7	5.7	5	7	7	7	5.3	5	8	8	7
	Mid Jan.	13.2	5.3	5.5	7	7	7	5.5	6	7	7	7
	Early Feb	13.2	5.9	5	7	7	7	5.5	6	7	7	7
E 303/20	Mid Dec.	15.6	6.8	5	8	8	7	5.9	6	6	6	7
	Mid Jan.	15.4	6.7	6	5	8	7	5.7	7	5	5	7
	Early Feb	Z										
E 303/47	Mid Dec.	14.6	9.9	2.5	5	8	2	9.7	3	5	8	2
	Mid Jan.	14.7	9.7	3	5	7	2	9.5	3	6	7	2
	Early Feb	14.6	10.2	2	7	8	2	9.5	3	7	8	3
E 409/7	Mid Dec.	14.4	5.4	5	8	7	3	5.3	6	7	6	7
	Mid Jan.	15.4	5.6	5.5	8	7	7	5.5	5.5	8	7	7
	Early Feb	14.4	5.8	5	8	7	7	5.2	7	6	6	7
E 273/55	Mid Dec.	13.9	7.6	4	7	8	3	7.1	4.5	7	8	3
	Mid Jan.	13.7	7.3	4	7	8	3	6.6	4.5	7	8	3
	Early Feb	14.6	7.5	3.5	6	7	3	7.1	4.5	7	8	3
E 250/3	Mid Dec.	18.3	11.4	3	5	4	3	9.5	3	5	5	3
	Mid Jan.	Z										
E 303/71	Mid Dec.	16.0	8.8	4.5	8	8	3	7.9	5	8	8	7
	Mid Jan.	15.7	8.1	4	7	7	3	8.3	4.5	7.5	7	5
	Early Feb	15.6	8.1	3	6	7	3	8.5	4.5	7	7	4
E 403/21	Mid Dec.	14.5	5.8	5	7	7	5	5.4	5.5	7	7	5
	Mid Jan.	15.4	5.8	5.5	7	7	7	5.2	7	7	7	7
	Early Feb	14.5	5.3	5	8	7	6	4.7	8	6	6	6

2.4 APPLE VARIETY TRIAL 42

Planted in April 2001 on M9 rootstock with five single tree plots in a complete randomised block experiment. The first crop was recorded in 2002 when data from only three replicates was utilised.

Varieties:

- | | | |
|--------------|---------------|------------|
| 1. Queen Cox | 2. Royal Gala | 3. E402-16 |
| 4. E403-19 | 5. E447-62 | 6. E447-79 |
| 7. E500-47 | 8. E505-79 | 9. E506-80 |
| 10. E506-244 | 11. E506-312 | 12. G1-27 |
| 13. E506-362 | | |

Results:

Fruit set was variable in the spring with heavy set in some cases and but light in others. There was considerable variability within a variety. Trees are growing well.

This first years crop from HRI East Malling varieties compares favourably with the standards. The amount of crop has limited the grading and storage assessments, which could be carried out this season.

Table: Crop Yield 2002

Variety	Yield kg/tree		Mean Pick
	2002	Total	
Queen Cox	2.2	2.2	12-Sep
Royal Gala	1.8	1.8	23-Sep
E402-16	3.27	3.27	12-Sep
E403-19	2.3	2.3	05-Sep
E447-62	2.63	2.63	12-Sep
E447-79	3.07	3.07	12-Sep
E500-47	1.03	1.03	26-Sep
E505-79	2.53	2.53	12-Sep
E506-80	2.43	2.43	12-Sep
E506-244	2.8	2.8	26-Sep
E506-312	3.1	3.1	12-Sep
G1-12	0.9	0.9	05-Sep

Recommendations:

No recommendations can be made at this early stage in the cropping of the trial.

Table: Storage Assessments 2002/2003.

Variety	Timing	FROM STORE						AFTER 7 DAYS FROM STORE				
		Refract-ometer	Firm kg	Ripe ness	Eating Quality	Juic-iness	Texture	Firm kg	Ripe ness	Eating Quality	Juic-iness	Texture
Queen Cox	Mid Dec.	15.9	6.5	5.5	6.5	7	5	5.7	6	6	7	7
	Mid Jan.	Z										
Royal Gala	Mid Dec.	13.6	7.9	4	8	8	3	6.8	5	8	8	7
	Mid Jan.	13.5	7.1	5	7	8	5	6.4	5	7	8	5
	Early Feb	Z										
402/16	Mid Dec.	12.9	7.8	4.5	7	6	7	7.1	5.5	8	8	7
	Mid Jan.	12.0	7.5	5.5	7	7	7	6.9	9			
	Early Feb	12.2	7.4	9	3	7	7		9			
E 447/62	Mid Dec.	12.9	7.0	5	8	8	7	6.5	5.5	7	8	8
	Mid Jan.	13.3	7.1	4.5	8	8	4	6.3	5	8	8	7
	Early Feb	Z										
E 447/79	Mid Dec.	14.4	8.4	4.5	7	7	7	7.8	5	8	8	7
	Mid Jan.	13.8	8.6	4	7	7	5	7.5	4	7	7	5
	Early Feb	Z										
E 500/47	Mid Dec.	14.7	9.0	3	7	8	2	7.9	4.5	8	8	7
	Mid Jan.	Z										
E 505/79	Mid Dec.	15.2	7.6	5	7	7	7	6.4	4.5	5	8	3
	Mid Jan.	12.8	6.5	5	7	8	7	6.2	5.5	7	8	7
	Early Feb	13.3	7.1	3	5	6	3	6.0	5	7	7	7
E 506/80	Mid Dec.	13.6	8.8	3	7	7	7	8.6	3	7	7	7
	Mid Jan.	13.7	8.6	3	5	7	3	8.6	3	6	7	3
	Early Feb	Z										
E 506/244	Mid Dec.	13.6	7.7	4	7	8	3	7.3	5	8	8	5
	Mid Jan.	13.9	7.5	4.5	7	7	5	7.4	5	8	8	7
	Early Feb	13.4	7.5	4.5	7	8	3	6.9	4.5	7	8	4
E506/312	Mid Dec.	Z										
	Mid Jan.	14.4	6.9	4.5	7	7	7	6.9	5	7	7	7
	Early Feb	Z										

2.5 APPLE VARIETY TRIAL 43

Planted in April 2002 on M9 rootstock with three single tree plots in a complete randomised block experiment.

Varieties:

- | | | |
|--------------|---------------|-------------|
| 1. Queen Cox | 2. Royal Gala | 3. Karma |
| 4. Dalijean | 5. Inclin | 6. Katrina |
| 7. E275-14 | 8. E505-163 | 9. E506-336 |

Results:

Tree have established well and give indications of carrying a reasonable first crop in 2003.

Recommendations:

It is envisaged that recommendations will be made after 5 crops have been recorded from the trial.

3 PEAR VARIETY STUDIES

3.1 PEAR - VARIETY TRIAL 18

Maiden trees of six varieties on Quince A rootstock were planted in rows 4 x 1.5m apart in March 2002. Three replicates of single tree plots were planted in a randomised block experiment. Guard trees of Beurre Hardy were planted in addition to the trial trees which offer the opportunity to framework with any new varieties which become available for testing.

Varieties:

1. Conference 2. Deloran 3. Homored
4. Anna 5. Rocha 6. P507-21
Guards: Beurre Hardy

Results:

Tree have established well producing good growth in 2002.

Recommendations:

It is envisaged that recommendations will be made after 5 crops have been recorded from the trial.

4. NATIONAL FRUIT SHOW 2002

In October samples of fruit from APRC Trials were made available for the APRC Stand at the National Fruit Show in October 2002. Five varieties were selected from the oldest trials to give a representative range of variety types and also some advanced selections. Some 97 tasting forms from visitors to the stand were completed. The mean results were as follows;

Variety	Appearance	Colour	Texture	Flavour	Total Score	Flavour Weighted Total Score
Meridian	5.52	5.57	5.04	4.90	20.18	25.71
E83/4	5.03	5.14	5.10	4.55	19.55	24.11
E210/198	4.58	4.46	4.72	3.79	17.35	21.14
Jubile	4.86	4.8	4.69	4.17	18.26	22.43
Chevadel	4.61	4.59	4.78	4.70	18.44	23.14
Maximum Possible Score	7.00	7.00	7.00	7.00	28.00	35.00

Scores: 1 = Poor 7 = Excellent

5. APPENDICES

Storage and Fruit Quality Assessments

Refractometer: was used for the measurement of total soluble solids as a measure of fruit sugar levels. Results expressed as a percentage.

Firmness: was measured with an Effegi penetrometer using an 8mm probe for pears and 11mm probe for apples.

Eating Quality (Taste): scored on a 1 to 9 scale;

1= extremely poor

5= intermediate

7= good

9= excellent

Ripeness: scored on a 1 to 9 scale;

1=very unripe

5= peak ripeness

7= just past best ripeness

9= “over” ripe

Texture: scored on a 1 to 9 scale;

1=extremely coarse

3= coarse

5= intermediate

7= fine

9=extremely fine

Juiciness: scored on a 1 to 9 scale

1=very dry

3=dry

5=rather dry

7=juicy

9=very juicy

Footnotes to tables; z = no sample available

w = sample over mature