



Know-how for Horticulture™

Potato evaluation trials - Victoria

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Potato Association

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Thorpdale Fresh Market Cultivar Evaluation
2003/2004

Final Report

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Executive Summary

Twenty-seven crossbred lines from the Toolangi breeding program and three standard commercial cultivars were planted at L. Giardina's property at Thorpdale in November 2003. The replicated trial site was in a commercial crop of Sebago and the trial was managed as part of the surrounding crop. Agronomists visited the trial several times during growth to check on emergence, crop vigour, plant health and maturity of the different lines. The trial was allowed to senesce naturally and was harvested on April 15, 2004. A small field day was held in conjunction with the harvest to allow industry representatives and growers to examine the lines and assist with the field evaluation. Following harvest, the lines were assessed more thoroughly by separate grading and weighing of each plot into a number of size categories.

At the time of harvest it was evident there had been high disease pressure due to powdery scab, particularly in the first replications of the trial. This enabled a field assessment to be made of crossbred lines that were particularly susceptible to this disease, and some lines were discarded based on this field assessment.

There were six crossbred lines that stood out from the others in the trial. They are as follows;

00-48-1 Highest yield of marketable tubers and a good skin bloom on attractive tubers

00-45-1 Very low levels of powdery scab under high disease pressure

00-20-50 High yield of evenly sized tubers. Very high tuber numbers

98-33-57 Large proportion of the yield in the marketable size range. Little waste.

95-97-9 Good yields. Consistent performer over a large number of trials.

These are not the only good performing crossbreeds from this trial, and in total there are about 15 lines that warrant further evaluation. This trial is only a single evaluation at a single property in one season, and the performance of individual lines have to be considered across a number of sites.

This trial at Thorpdale was initiated by the Victorian Potato Growers Council who considered that this sort of evaluation was fundamental to maintaining flexibility and choice in the Victorian industry. The Council does not have funds for research and approached Victorian merchants and packing houses to generate support.

There were eight commercial sponsors of this trial work for 2003/2004 and the work was only possible because of the funds provided by the sponsors. Matching Commonwealth government funds were provided through Horticulture Australia Ltd. The continuation of this work will be dependant on continued funds from these or other sources.

Introduction and background

The Potato Growers Council policy on breeding is for a continuation of fresh market cultivar work, both crossing and evaluation. Victoria has the only potato breeding program in Australia. Without a breeding program, new cultivar releases within Victoria will be limited to proprietary varieties from overseas. While these proprietary varieties have a role in the industry, the Potato Growers Council does not believe it to be a healthy situation for the industry to be solely dependant on imported cultivars. Australia has many unique aspects to our climate, our production systems, and consumer preferences, and there is a clear role for breeding new cultivars in Australia.

There has been successful commercial exploitation of new varieties nominated from the core breeding program to improve cost competitiveness of the Australian fresh market industry. Some of the more notable examples are Coliban, Lustre and Ruby Lou. The industry has agreed to restructure the evaluation process and develop commercial varieties that will encourage the uptake of new varieties commercially. This trial involving some of the potential cultivars that might be grown for fresh markets in Victoria was planted in the Thorpdale potato district so that the new evaluation process can be tested.

The trial in Thorpdale will evaluate varieties for the fresh potato industry (brushed), where the evaluations will need to meet the requirements of demanding fresh markets. The project has been initiated due to the financial support of eight potato merchants or packing houses. These sponsors are Produce One, Durkin Produce, Red Gem Packers, JC Cutbush & Co, Mancarella Produce, Monaghan Packers, Alannon Produce and Cummaudo Farms. The financial sponsorship was matched with a Commonwealth grant under the stewardship of Horticulture Australia Limited.

The fresh market today is greatly influenced by consumer preference. Over 50% of the potatoes supplied to fresh markets are now washed before sale, and another 10% are red skinned varieties. The fresh market is strongly influenced by appearances. The change of market preference to appearance over the past few decades means that bright skinned, unblemished potatoes are in greater demand for both washed and brushed potatoes. The requirement for fresh market potatoes is for tubers weighing 80-450g, with the preferred size 120-300g.

The Thorpdale trial involved 30 different cultivars, with Sebago, Nadine and Coliban varieties used as a standard. The breeding years range from 1993 to 2000, with the earlier lines already extensively tested at Toolangi and other sites, or having being used before in trials. The aim of the trial is to select varieties that could become commercially available for the fresh market and to increase fresh market grower efficiencies by reducing input costs and increasing price or size of the market with these new potato varieties.

Methodology

The source of cultivars used for this trial is NaPIES (National Potato Improvement and Evaluation) program. The NaPIES program produces seed through crossbreeding each year, and then evaluates them over 3 generations after cross breeding. This results in around 20 or 30 lines for further testing in district trials. The entries for Thorpdale trial have been selected from those 20 or 30 advanced selections from the NaPIES program. The cultivars that were planted at Thorpdale are from a variety of different seed lines bred between 1993 and 2000.

The trial was planted in an area that was being used to grow fresh market potatoes at the time of planting. The position in the paddock was negotiated with a fresh market grower whose farm was being used for the trial. The 90 plots (30 entries x 3 reps) were planted in a randomised plot design.

The Thorpdale trial had input from the farming community at Thorpdale, who helped with planting and assessment of the cultivars at harvest and with the bagging up of each plot and grading measurements following the harvest. Prime responsibility for agronomic measurement and observation however, rested with ViCSPA and this included emergence counts, assessment of crop maturity, tuber assessment of harvest, and measurement of yield and tuber number and grading.

The trial was hand planted on 21st November 2003 in mild conditions. A Desiree seed piece was planted at the beginning and end of each plot to minimise the end plant effect (Coliban used for the red skinned variety). There was a space of 30 inches between rows, and the inter row spacing was 225mm. The thirty varieties were planted over three replications in a random grid, where each variety appeared once in each replication. The plots were labelled and 2500kg/ha of 5.2.1 fertiliser was applied at planting. During the growing period, two crop observations were done and one plant assessment.

The trial was harvested on April 15, 2004. Field assessments of tuber bloom, shape, and general marketable appearance were made on each cultivar prior to bugging. Assessments of powdery scab were made across all the replicates, though replicate 1 in particular had very high disease pressure. Each plot was then taken to a shed where it was graded for size and weighed. Tuber numbers per plot were recorded.

Variety	Characteristic	Variety	Characteristic
95-95-13	Probably the tallest variety - very strong tops	00-51-3	Vigorous strong tops - higher than Sebago
96-102-10	Softer looking leaves	00-5-2	Good strong tops
97-9-10	Tops not covering the rows	00-19-46	Light green coloured foliage
99-36-8	Light blue flowers	00-45-1	Open canopy
99-52-1	Very vigorous tops		

Results

Field observation were made on December 23, 2003 and revealed some interesting characteristics in some of the varieties. These observations are recorded in Table 1.

A second set of field observations took into account an emergence rating (table 2), where some cultivars were seen to be uneven in growth and later maturing plants were showing up clearly. The purpose of these field observations is to identify any disease or problems with varieties during growth.

Replications							Rating 1 to 5, 5 is best even & all up 20 to 25 cm high
Cultivar	Rep 1	No. emerged	Rep 2	No. emerged	Rep 3	No. emerged	Comments / Emergence rating
Coliban	11	43	37	39	73	44	Mostly just up/few late 3,2,2
Nadine	22	30	40	28	64	35	Still emerging 1,1,1
Sebago	27	44	36	41	83	42	Still emerging 0,1,0, Rating 3 & 2
93-37-3	1	33	52	37	69	38	Variable emergence 0 to 20 cm 2,1,1
95-95-13	15	44	41	44	79	44	Only very odd late plant 5,5,5
95-97-9	21	42	33	42	85	40	12 late in one plot, 0 to 25 cm 2,3,3
96-30-9	14	43	38	41	76	44	Mostly even 4,3,1, Rating 1 uneven
96-32-19	3	41	55	43	61	41	Mostly even, few late 3,3,1, Rating 1 uneven
96-102-10	25	44	60	43	80	41	Just emerging
97-9-10	10	29	62	42	89	43	Still emerging, Rating 1 Uneven, Rating 3
98-31-7	19	43	46	43	70	43	Odd late plant mostly even 4,4,3
98-33-57	9	41	54	44	75	43	Very even odd late plant 5,5,3
98-54-31	29	44	48	41	86	41	Mostly even 10-20 cm, Plot 48 is later 4,2,2
99-10-8	16	42	56	43	82	42	Some just emerging others 20cm 2,5,3
99-20-11	23	37	43	44	78	41	Uneven 0 to 20 cm 2,2, Rating 2
99-31-2	24	39	35	40	87	33	Mostly even to 20cm some late 3,2,2
99-36-8	2	37	58	43	65	39	Variable 0 to 15 cm 1,3,2
99-52-1	8	42	31	42	71	41	Mostly even 0 to 20 cm 4,3,4
99-79-1	13	43	45	42	68	41	Very/to mostly even 5,2,3
00-1-3	20	44	44	42	88	41	Very/to mostly even 5,4,4
00-5-2	17	38	51	38	90	42	Uneven 2,1,2
00-19-46	4	40	53	36	63	44	Just emerging to 20 cm 1,2,1, Rating 2
00-20-14	26	41	49	42	59	44	Just emerging to 20 cm 2,3, Rating 3
00-20-50	18	40	50	44	72	44	Good growth few late plants 3,4,3
00-45-1	12	39	47	18	81	41	Some just emerging few 20cm 1,1, Rating 2
00-48-1	5	44	67	44	77	43	Strong mostly even growth to 25 cm 5,5,4, R4
00-51-3	28	44	34	44	74	38	Odd late plant mostly even 5,4,2
00-54-5	6	42	39	44	84	44	Even 0 to 15 cm 3,4,4
00-63-2	30	39	42	42	66	40	A few are just emerging 2,2,1
00-84-1	7	41	32	41	57	44	Mostly even 0 to 20 cm 3,3,3

A crop maturity classification was undertaken in late March. The later maturing plants were obvious and would hold up the rest of the crop for harvest time. The maturity evaluation is reported in table 3.

Cultivar	Rep 1	Maturity assessment	Rep 2	Maturity assessment	Rep 3	Maturity assessment	Average Maturity Assessment
Coliban	11	4	37	4	73	3	4 - Late Maturing
Nadine	22	2	40	2	64	2	2 - Early Maturing
Sebago	27	3	36	3	83	4	3 - Mid Season
93-37-3	1	3	52	1	69	1	2 - Early Maturing
95-95-13	15	2	41	1	79	1	1 - Very Early Maturing
95-97-9	21	1	33	2	85	3	2 - Early Maturing
96-30-9	14	1	38	1	76	2	1 - Very Early Maturing
96-32-19	3	1	55	1	61	1	1 - Very Early Maturing
96-102-10	25	2	60	2	80	1	2 - Early Maturing
97-9-10	10	3	62	3	89	4	3 - Mid Season
98-31-7	19	2	46	3	70	2	2 - Early Maturing
98-33-57	9	1	54	1	75	3	2 - Early Maturing
98-54-31	29	2	48	2	86	3	2 - Early Maturing
99-10-8	16	1	56	1	82	1	1 - Very Early Maturing
99-20-11	23	1	43	1	78	1	1 - Very Early Maturing
99-31-2	24	2	35	1	87	3	2 - Early Maturing
99-36-8	2	2	58	1	65	2	2 - Early Maturing
99-52-1	8	2	31	3	71	3	3 - Mid Season
99-79-1	13	1	45	1	68	3	2 - Early Maturing
00-1-3	20	1	44	1	88	3	2 - Early Maturing
00-5-2	17	1	51	2	90	3	2 - Early Maturing
00-19-46	4	3	53	2	63	2	2 - Early Maturing
00-20-14	26	3	49	1	59	2	2 - Early Maturing
00-20-50	18	2	50	2	72	4	3 - Mid Season
00-45-1	12	4	47	2	81	3	3 - Mid Season
00-48-1	5	4	67	1	77	1	2 - Early Maturing
00-51-3	28	2	34	1	74	2	2 - Early Maturing
00-54-5	6	4	39	2	84	4	3 - Mid Season
00-63-2	30	2	42	1	66	1	1 - Very Early Maturing
00-84-1	7	1	32	1	57	1	1 - Very Early Maturing

Classification: 1 = Very early (*Plant dead*)
 2 = Early (*Plant almost dead, some yellowing*)
 3 = Mid (*Some yellowing, mostly green*)
 4 = Late (*Plant just starting to die, still green*)
 5 = Very Late (*Plant only just wilted*)

The harvest assessments (table 5), proved useful. Some varieties were deemed unsuitable and discarded on the day.

Table 5. Crop Harvest Record. Thursday 15th April 2004				Recommendations for further trial work based on visual assessment.			
Cultivar	Tuber characteristics			Harvest notes	Discard	Consider retesting Re-test	Best emerging – even and quick.
	Skin colour	Basic shape	# Heel depth				
Coliban	WB	O		Some rough shapes and growth cracks. Uneven.			
Nadine	Buff	OI		Looked good. Even size.			
Sebago	WB	O		Nice line, good sample but smallish. Not even.			
93-37-3	W	O		Looks to have a good yield. Even.		*	
95-95-13	W	O		Bold scab, growth cracks. Even size.			*
95-97-9	W	O		Some scab, Some rough tubers. Not even.		*	*
96-30-9	WB	Ob		Scab, uneven.	*		
96-32-19		Or		Good set, roundish tubers. Even size.	*		
96-102-10	WB	O		Bit small?	*		
97-9-10		O		Bad scab in top plot.	*	*	
98-31-7	WB	Of		Bad scab in top plot, uneven sizes.	*		*
98-33-57	C	Ob	M	Good yield, very few smalls.		*	*
98-54-31	WB	Ob		Scab in bottom plot.	*		
99-10-8	WB	Ob		Nice line, Even size.		*	*
99-20-11	W	Ob		Very uneven.	*		
99-31-2	W	O		Good yield, some rough tubers. Not even.		*	*
99-36-8		Or		Rotting with scab.	*		
99-52-1			M	Scabby, uneven.	*		*
99-79-1	WB	Or		Plots vary with scab, even.			*
00-1-3	W	Of	M	Looks OK. Not even.		*	*
00-5-2	WB	Or		Good set, bright skins, long tubers. Not even.		*	
00-19-46	WB	OI		Long tubers, even sizing.		*	
00-20-14		OI		Many tubers, needs spaced planting.	*		*
00-20-50	WB	O		Good set, even sized tubers.		*	*
00-45-1	W	O		Attractive longish tubers.		*	
00-48-1	W	OI	M	Even sizes.			*
00-51-3	W	Or		Roundish tubers.		*	*
00-54-5	W	Or		Some rot, even sizes.	*		
00-63-2	W	Rf		Rough skins, even sizes.	*		
00-84-1		OI		Ugly, bad scab. uneven.	*		*

Note – All were shallow in relation to heel depth, except those with M (medium).
 – Highlighted Cultivars indicate good emergence and visual appearance at harvest.

Skin Colour: W = White skinned
 WB = White, Bright Skinned

Shape: O = Oblong
 Or = Oblong, Round
 Of = Oblong, Flat
 OI = Oblong, Long
 Rf = Round, Flat

Powdery Scab was evident in each replicate, the first rep being the worst affected. Table 6 shows the scab levels in replicates 1 and 2. It was thought that the position in the paddock – near a gate – meant that the area would have been used as a loading area for the rest of the paddock. Thus bins, machinery and other equipment that had been loaded and unloaded in this area may have created a compacted area and had some detrimental impact on soil structure and soil aeration.

The scab was severe in the first replicate. Some common scab also appeared on the more readily affected tubers. Grading was not based on scab, but a field assessment done straight after harvest gave us a good indication of varieties that appeared to have some levels of field tolerance.

Table 6. Visual Scab Assessment
Thursday 15th April 2004

Entry	Rep 1	Rep 2	Rep 3	AVERAGE	Entry	Rep 1	Rep 2	Rep 3	AVERAGE
Coliban	5	2	3	3	99-31-2	4	2	-	2
Nadine	1	2	1	1	99-36-8	5	1	-	2
Sebago	3	2	-	2	99-52-1	5	4	-	3
93-37-3	3	1	-	1	99-79-1	4	4	-	3
95-95-13	3	3	3	3	00-1-3	1	2	-	1
95-97-9	2	3	2	2	00-5-2	4	1	-	2
96-30-9	3	3	2	3	00-19-46	4	3	-	2
96-32-19	5	3	-	4	00-20-14	5	2	-	2
96-102-10	4	3	3	3	00-20-50	1	1	-	1
97-9-10	4	-	3	2	00-45-1	1	1	1	1
98-31-7	2	2	3	2	00-48-1	4	4	1	3
98-33-57	5	1	-	2	00-51-3	5	3	2	3
98-54-31	5	3	3	4	00-54-5	5	4	4	4
99-10-8	4	1	2	2	00-63-2	1	3	4	3
99-20-11	4	5	3	4	00-84-1	5	4	4	4

- 1 = Mild**
- 2 = Moderate**
- 3 = High levels**
- 4 = Very high, some rot**
- 5 = Severe & rot**

The trial was graded over a two day period in the sheds of the farmer on whose land the trial was planted. Using a grading table and electronic scales, the varieties from each rep were counted individually and recorded on a custom made table. Varieties that had performed poorly in the field such that they were to be discarded, were not assessed in the shed for data on tuber number and weight of each tuber grade.

Table 7. Trial Assessment Results. 26th April 2004

Entry	Yield, Tonnes per Hectare						Rank by No. 1 grade	Tuber No. per Plant
	Chats 0-70g	Small 70-120g	Medium 120-300g	Large 300-450g	Oversize >450g	Waste (% of yield in kgs)		
00-48-1	5.5	20.9	48.6	11.9	0	0.53	1	14.1
95-95-13	1.8	8.8	45.5	11.1	1.8	1.1	2	12.6
95-97-9	1.7	5.5	45.1	10.3	0.25	2.4	3	10.9
00-54-5	2.7	8.5	42	9.7	0.51	0.16	4	13.3
Coliban	1	5.9	46.3	4.9	0.46	5.2	5	9.1
98-33-57	0.94	16	32.4	18.4	1.5	0.35	6	10.8
Nadine	4.7	14.3	44.1	6.6	0.2	0.43	7	15.2
99-10-8	1.3	8.3	45.5	4	0.19	0.85	8	12
00-20-50	5.2	18.5	43.7	4.4	0.4	0	9	15.8
93-37-3	2.6	12.1	46.9	1.2	0	0.21	10	12.9
00-1-3	5.4	11.3	42.4	5.4	0.21	0.28	11	13.2
00-45-1	2	8	37.7	9.9	0	0	12	10.8
00-5-2	2.9	11.2	45.2	2.2	0	0.63	13	13.5
00-51-3	2.9	10.3	41.8	2.8	0	1.1	14	10.5
98-31-7	1.9	6.1	37.2	7	1.1	1.5	15	10.5
99-79-1	2.3	9.5	35.1	5.3	0.43	0.16	16	10.9
Sebago	3.7	11	35.4	0.9	0	0.39	17	11.3
96-30-9	5.5	12.8	32.2	3.4	0	0.78	18	11.1
98-54-31	3.8	11.8	27	6.1	0.19	0.29	19	12.9
99-20-11	1.9	9.1	31.1	1.6	0	0.79	20	9.9
00-63-2	3.9	16.3	29.4	1.2	0	0.69	21	13.4
00-19-46	3.2	13.6	29.4	0.96	0	0.82	22	12.4
96-32-19	-	-	-	-	-	-	-	-
96-102-10	-	-	-	-	-	-	-	-
97-9-10	-	-	-	-	-	-	-	-
99-31-2	-	-	-	-	-	-	-	-
99-36-8	-	-	-	-	-	-	-	-
99-52-1	-	-	-	-	-	-	-	-
00-20-14	-	-	-	-	-	-	-	-
00-84-1	-	-	-	-	-	-	-	-

As well as six varieties within the trial that were discarded by the farmers and the agronomists prior to grading, a further two were discarded at grading due to the appearance of the potatoes. The remaining 22 lines, including the 3 standards, were all graded and weighed and tuber number recorded. This data is reported in table 7. The ranks by Number 1 grade covered the 120g to 450g size range.

From the Specific Gravity calculations (SG), (Where $Dm = (SG - .983214) / .004813$) the potential retesting varieties can be further narrowed down. The SG calculations (table 8) are done to identify if the potato is fit for fresh markets, as it determines the uses of the potato.

Entry	WT (air)	WT (water)	SG	DM	Crisp Score	COMMENT
00-19-46	2200.2	151.5	1.074	18.9	5	Hollow Heart
00-1-3	3055.6	211.5	1.078	19.7	3.5	Acceptable Frying
95-95-13	3397.9	192.0	1.060	15.9	9	Very Dark Chip
00-48-1	0875.1	050.4	1.061	16.2	3.6	Variable Shape
00-20-50	2843.2	162.0	1.060	16.0	6.7	Not Acceptable Chip
00-45-1	3537.4	256.3	1.078	19.7	5	-
98-33-57	2505.2	136.9	1.058	15.5	6	Borderline Fry

Discussion

This is the first planting of the cultivation evaluation trial in the Thorpdale district and the first opportunity for the Thorpdale farming community to assess and evaluate those lines in their district. It would be prudent to be cautious about any high performing cultivars from this single trial, as a second planting next season of the same lines may produce quite different results due to different seasonal conditions. There may be inherent faults or weaknesses in some of the crossbred lines that are not apparent from a single trial planting in a single season.

Nevertheless there are a number of crossbred lines within this trial that had one or more characteristics, which were prominent at harvest and grading. One or more of these crossbred lines may have a very significant future role to play in our industry and consideration to be given at this early stage to more serious commercial evaluation. These “stand-out” lines are as follows;

00-48-1 had a marketable yield (70g-450g) of above 70 tonne/Ha, with an average of 14 tubers pre plant. Wider spacing and additional nitrogen application as sidedressing even higher yields. The yield in the 120g to 300g-size range was around 49 tonnes/Ha. Tuber shape was attractive with noticeable bloom in a soil type that was not conducive to strong skin bloom.

00-45-1 showed very low or almost negligible levels of powdery scab in an area where disease pressure from this fungus was extreme. The tubers were slightly long, not unlike Kennebec in appearance, and attractive. Yields were moderate and similar to Sebago in this trial. This cultivar may have role where powdery scab is significant and the grower is reluctant to plant more susceptible cultivars such as Coliban and Sebago.

00-20-50 had a very high yield of evenly sized tubers. Tuber size was a little small but tuber number was high (average 16 tubers/plant) and a wider spacing with additional sideressing fertiliser would probably see very high yields from the cultivar.

98-33-57 had very few small and chat size tubers. The grading sheets do not fully reflect this visual observation at the time of harvest, and it appears that a number of tubers between 90g and 120g have elevated the yield of “smalls” beyond what was visually observed in the field. Several of the growers identified this cultivar as the one they would like to grow because of the large proportion of the tubers in the preferred size range.

95-95-13 has been a consistent performer over a large number of competitive trials. It regularly out yields Coliban and Sebago. It may be appropriate to consider full commercial evaluation of this line.

95-97-9 has similarly been a consistent performer over a number of trials and needs to be evaluated.

These are not the only cultivars that may have some future role to play in our own industry from this collection of crossbred lines. They are merely the ones that seem to stand out in this single evaluation trial.

As a result of the data collected in this and previous trials, the following cultivars have been selected for further evaluation:

Cultivar	Rank by No1 Grade	Powdery Scab rating	Emergence	Maturity	Specific Gravity	General Comments
Sebago	17	2	Slow & Uneven	Mid	-	Lots of chats at harvest, Not too scabby.
Nadine	7	1	Slow & Even	Early	-	Good, even yield.
Coliban	5	3	Medium & Even	Late	-	Rough, unattractive, very scabby.
99-52-1	-	3	Early & Even	Mid	-	Very vigorous tops at growth.
99-10-8	8	2	Slow & Uneven	Very Early	-	Even, nice looking, few smalls.
98-33-57	6	2	Early & Even	Early	1.058	Early maturing, even tubers, good yield, attractive shape.
98-31-7	15	2	Early & Uneven	Early	-	Bright skin, good yields.
95-97-9	3	1	Slow & Even	Early	-	Early maturing, good yield, clean skin.
95-95-13	2	1	Early & Even	Very Early	1.060	Early maturing, susceptible to scab, high yield.
93-37-3	10	1	Slow & Uneven	Early	-	Thin skin at harvest, bright and clean
00-5-2	13	2	Medium & Uneven	Early	-	Good strong tops at growth, long tuber, not much scab or smalls. Bright skin.
00-48-1	1	3	Early & Even	Early	1.061	Early maturing, Strong growth, Variable shape at harvest, very high yield, clean skin.
00-45-1	12	3	Slow & Even	Mid	1.078	Mid season maturity, attractive, long.
00-20-50	9	2	Slow & Even	Mid	1.060	Mid season maturity, even sized tubers, attractive.
00-1-3	11	1	Early & Even	Early	1.078	Visually looked good, good frying.

In addition to the above, a further 10 to 15 crossbred lines will be chosen from the senior multiplication trial at Toolangi for further field trial work and seed multiplication in 2004/2005.

The continuation of this work will be dependant on continued support from donors. The financial support that was provided for 2003/2004 was a "one off" commitment from eight businesses who provided funds on an interim basis to preserve the continuity of evaluation work that has previously been done at Toolangi. There was an expectation that an industry development order would be in place by 2005 to provide ongoing funds after the present year. However, the industry development order failed to receive the required number of rates from growers in order for it to be created by government. It will now be necessary to reconsider whether this evaluation work will continue, and how it will be financially supported.

Acknowledgements

The Thorpdale Fresh Market Cultivar Evaluation Trial was made possible due to the following;

Our sponsors for their generous donations that ensured the trial could take place this year. Without the support and financial help from our eight generous sponsors, this trial could not have ahead.

These sponsors are;

Produce One
Durkin Produce
Red Gem Packers
JC Cutbush & Co
Mancarella Packers
Monaghan Packers
Alannon Produce
Cummaudo Farms

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