Colorado Advanced Potato Selections

Data Summary

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Table 1. Summary comparison of advanced selections and named cultivars for yield, grade, maturity, specific gravity, and grade defects - 2003. Advanced selections that may be released for grower evaluation in 2004 are highlighted.

Clone	Usage[1]	# Trials	Total Yield (Cwt/A)	% US #1	Vine Maturity[2]	Specific Gravity	% External Defects[3]	% Hollow Heart[4]
Russets								
AC89536-5RU	FM	10	518	81.7	3.1	1.087	3.4	0.5
AC92009-4RU	FM	6	347	89.3	3.1	1.093	1.2	0.0
TC1675-1RU	Dual	6	447	75.6	3.2	1.090	3.9	0.1
AC93026-9RU	FM	5	485	76.9	3.2	1.088	2.8	0.2
CO93001-11RU	Dual	5	423	81.4	2.4	1.079	3.7	0.4
CO93016-3RU	Dual	5	425	74.7	3.0	1.090	0.8	1.8
CO94035-15RU	**Dual**	**4**	**432**	**85.0**	**2.9**	**1.082**	**2.1**	**2.9**
Centennial Russet	FM	35	294	77.4	3.0	1.080	0.8	0.3
Russet Norkotah	FM	49	372	83.6	1.9	1.077	2.2	0.5
Russet Nugget	Dual	48	423	80.4	3.7	1.092	1.6	0.2
Reds								
CO89097-2R	FM	11	516	83.7	2.9	1.082	3.0	0.3
NDC5281-2R	FM	6	396	48.6	1.9	1.086	0.7	0.0
CO93037-6R	FM	5	592	71.4	3.1	1.082	2.8	0.1
Sangre	FM	25	478	86.1	2.9	1.073	1.6	1.3
Chippers								
AC87340-2W	Chip	11	497	77.6	3.1	1.084	1.1	0.2
Atlantic	Chip	25	449	86.6	3.1	1.097	2.8	5.4
Chipeta	Chip	23	516	82.8	3.3	1.089	6.1	0.6
Specialty								
CO94165-3P/P	Spec	4	489	63.2	2.3	1.082	1.1	2.0
CO94183-1R/R	Spec	4	407	73.8	2.6	1.080	1.5	0.0
VC0967-2R/Y	**Spec**	**4**	**452**	**83.6**	**2.6**	**1.074**	**0.9**	**0.1**
VC0967-5R/Y	**Spec**	**4**	**509**	**86.2**	**3.1**	**1.077**	**1.6**	**0.3**
VC1002-3W/Y	**Spec**	**4**	**472**	**49.2**	**2.7**	**1.090**	**0.8**	**0.2**
All Blue	Spec	4	532	61.7	2.7	1.080	0.6	0.0
Yukon Gold	Spec	12	404	87.6	1.9	1.084	2.2	0.9

[1] FM=fresh market; Fry=french fry; Dual= fresh market and processing potential; SPEC=specialty.
[2] Vine maturity: 1=very early; 2=early; 3=medium; 4=late; 5=very late.
[3] Includes defects such as second growth, growth crack, misshapen, and green.
[4] Based on tubers greater than 10 ounces.

Table 2. Detailed data summary for AC89536-5RU.

Variable		# Trials	Mean	Range
Total Yield (Cwt/A)		10	518	367-683
Yield US #1 (Cwt/A)		10	426	255-603
% US #1		10	81.7	69.2-89.5
Yield >10 oz (Cwt/A)		10	134	14-246
Yield <4 oz (Cwt/A)		10	75	50-111
% External Defects[1]		10	3.4	0.7-8.7
% Hollow Heart[2]		10	0.5	0.0-1.6
% Stand		10	99	97-100
Emergence Uniformity		10	3.7	3.0-4.0
Vine Vigor[3]		10	3.5	2.0-4.5
Stems/Plant		10	3.1	2.0-3.6
Vine Size[4]		10	3.9	3.5-4.5
Vine Maturity5		10	3.1	2.5 -3.5
Blackspot[6]	Bud End	9	4.7	4.2-5.0
	Stem End	9	4.3	3.0-5.0
	Average	9	4.5	
Weight Loss[7]		9	5.1	3.6-6.9
Dormancy[8]		9	86	77-106
Enzymatic Browning[9]		9	3.8	3.2-4.2
Specific Gravity		9	1.087	1.079-1.094
Fry Color[10]	Harvest	9	2.4	1.0-4.0
	Storage	9	3.2	3.0-4.0
Fry Texture[11]	Harvest	9	2.9	2.0-4.0
	Storage	9	2.8	2.0-3.0

Refer to footnotes on page 26.

Table 3. Detailed data summary for AC92009-4RU.

Variable		# Trials	Mean	Range
Total Yield (Cwt/A)		6	347	332-365
Yield US #1 (Cwt/A)		6	310	290-331
% US #1		6	89.3	86.4-93.3
Yield >10 oz (Cwt/A)		6	100	63-156
Yield <4 oz (Cwt/A)		6	32	23-42
% External Defects[1]		6	1.2	0.0-2.4
% Hollow Heart[2]		6	0.0	0.0-0.0
% Stand		6	98	97-99
Emergence Uniformity		6	3.1	2.5-3.5
Vine Vigor[3]		6	2.2	2.0-2.5
Stems/Plant		6	1.8	1.4-2.4
Vine Size[4]		6	3.6	3.0-4.3
Vine Maturity5		6	3.1	2.8-3.5
Blackspot[6]	Bud End	6	4.4	3.7-5.0
	Stem End	6	3.9	2.5-5.0
	Average	6	4.1	
Weight Loss[7]		6	4.6	3.3-5.4
Dormancy[8]		6	135	113-171
Enzymatic Browning[9]		6	4.0	3.4-4.8
Specific Gravity		6	1.093	1.081-1.102
Fry Color[10]	Harvest	6	1.7	1.0-3.0
	Storage	6	2.2	1.0-3.0
Fry Texture[11]	Harvest	6	3.5	3.0-5.0
	Storage	6	3.3	3.0-4.0

Refer to footnotes on page 26.

Table 4. Detailed data summary for TC1675-1RU.

Variable		# Trials	Mean	Range
Total Yield (Cwt/A)		6	447	409-533
Yield US #1 (Cwt/A)		6	340	275-420
% US #1		6	75.6	64.5-82.8
Yield >10 oz (Cwt/A)		6	86	35-155
Yield <4 oz (Cwt/A)		6	89	67-136
% External Defects[1]		6	3.9	2.7-5.7
% Hollow Heart[2]		6	0.1	0.0-0.7
% Stand		6	98	95-100
Emergence Uniformity		6	3.2	2.8-3.5
Vine Vigor[3]		6	3.1	2.8-3.5
Stems/Plant		6	3.3	2.4-4.9
Vine Size[4]		6	3.4	3.0-4.0
Vine Maturity5		6	3.2	3.0-3.5
Blackspot[6]	Bud End	6	4.4	3.6-4.9
	Stem End	6	3.5	2.4-4.9
	Average	6	4.0	
Weight Loss[7]		6	2.7	1.6-3.6
Dormancy[8]		6	103	70-115
Enzymatic Browning[9]		6	3.1	2.2-3.6
Specific Gravity		6	1.090	1.080-1.101
Fry Color[10]	Harvest	6	1.0	1.0-1.0
	Storage	6	1.7	1.0-2.0
Fry Texture[11]	Harvest	6	3.5	2.0-4.0
	Storage	6	3.5	2.0-4.0

Refer to footnotes on page 26.

Table 5. Detailed data summary for AC93026-9RU.

Variable		# Trials	Mean	Range
Total Yield (Cwt/A)		5	485	400-633
Yield US #1 (Cwt/A)		5	374	302-494
% US #1		5	76.9	74.1-79.9
Yield >10 oz (Cwt/A)		5	106	58-185
Yield <4 oz (Cwt/A)		5	97	85-116
% External Defects[1]		5	2.8	1.3-3.6
% Hollow Heart[2]		5	0.2	0.0-0.9
% Stand		5	97	96-99
Emergence Uniformity		5	3.3	2.8-3.8
Vine Vigor[3]		5	3.0	2.5-3.3
Stems/Plant		5	3.0	2.2-3.9
Vine Size[4]		5	3.7	3.3-4.0
Vine Maturity5		5	3.2	3.0-3.5
Blackspot[6]	Bud End	5	3.5	2.8-4.5
	Stem End	5	2.6	2.1-3.3
	Average	5	3.1	
Weight Loss[7]		5	4.6	2.7-7.4
Dormancy[8]		5	121	112-134
Enzymatic Browning[9]		5	3.9	3.4-4.6
Specific Gravity		5	1.088	1.080-1.096
Fry Color[10]	Harvest	5	2.6	2.0-3.0
	Storage	5	3.4	3.0-4.0
Fry Texture[11]	Harvest	5	3.0	3.0-3.0
	Storage	5	3.2	3.0-4.0

Refer to footnotes on page 26.

Table 6. Detailed data summary for CO93001-11RU.

Variable		# Trials	Mean	Range
Total Yield (Cwt/A)		5	423	373-518
Yield US #1 (Cwt/A)		5	345	283-436
% US #1		5	81	75.7-84.2
Yield >10 oz (Cwt/A)		5	78	59-104
Yield <4 oz (Cwt/A)		5	62	44-76
% External Defects[1]		5	3.7	2.0-6.1
% Hollow Heart[2]		5	0.4	0.0-1.3
% Stand		5	99	97-100
Emergence Uniformity		5	3.6	3.0-3.8
Vine Vigor[3]		5	3.4	2.5-4.0
Stems/Plant		5	4.1	2.8-5.7
Vine Size[4]		5	3.0	2.3-4.0
Vine Maturity5		5	2.4	2.0-3.0
Blackspot[6]	Bud End	5	4.4	3.3-5.0
	Stem End	5	3.9	3.4-4.8
	Average	5	4.1	
Weight Loss[7]		5	6.1	3.9-8.1
Dormancy[8]		5	63	51-71
Enzymatic Browning[9]		5	2.6	1.6-3.4
Specific Gravity		5	1.079	1.072-1.086
Fry Color[10]	Harvest	5	1.0	1.0-1.0
	Storage	5	1.2	1.0-2.0
Fry Texture[11]	Harvest	5	2.6	2.0-3.0
	Storage	5	3.2	3.0-4.0

Refer to footnotes on page 26.

Table 7. Detailed data summary for CO93016-3RU.

Variable		# Trials	Mean	Range
Total Yield (Cwt/A)		5	425	383-506
Yield US #1 (Cwt/A)		5	320	256-396
% US #1		5	74.7	66.4-81.4
Yield >10 oz (Cwt/A)		5	65	22-139
Yield <4 oz (Cwt/A)		5	102	74-128
% External Defects[1]		5	0.8	0.0-1.8
% Hollow Heart[2]		5	1.8	0.0-3.7
% Stand		5	98	96-100
Emergence Uniformity		5	3.7	3.5-4.0
Vine Vigor[3]		5	3.6	3.0-4.0
Stems/Plant		5	4.2	2.8-5.4
Vine Size[4]		5	3.3	3.0-4.0
Vine Maturity5		5	3.0	2.3-3.8
Blackspot[6]	Bud End	5	3.3	2.7-3.7
	Stem End	5	3.0	2.6-3.2
	Average	5	3.2	
Weight Loss[7]		5	5.3	3.8-6.5
Dormancy[8]		5	66	58-71
Enzymatic Browning[9]		5	2.0	1.2-2.4
Specific Gravity		5	1.090	1.086-1.095
Fry Color[10]	Harvest	5	1.4	1.0-2.0
	Storage	5	2.4	1.0-3.0
Fry Texture[11]	Harvest	5	3.4	3.0-4.0
	Storage	5	3.4	3.0-4.0

Refer to footnotes on page 26.

Table 8. Detailed data summary for CO94035-15RU.

Variable		# Trials	Mean	Range
Total Yield (Cwt/A)		4	432	398-478
Yield US #1 (Cwt/A)		4	367	345-406
% US #1		4	85	84.1-86.5
Yield >10 oz (Cwt/A)		4	114	98-130
Yield <4 oz (Cwt/A)		4	55	46-61
% External Defects[1]		4	2.1	1.9-2.3
% Hollow Heart[2]		4	2.9	1.4-5.4
% Stand		4	97	94-98
Emergence Uniformity		4	3.4	3.0-3.8
Vine Vigor[3]		4	3.9	3.8-4.0
Stems/Plant		4	2.9	2.2-3.4
Vine Size[4]		4	3.3	3.0-3.5
Vine Maturity5		4	2.9	2.8-3.0
Blackspot[6]	Bud End	4	3.7	2.9-4.2
	Stem End	4	3.4	2.7-4.4
	Average	4	3.5	
Weight Loss[7]		4	4.5	3.0-6.1
Dormancy[8]		4	91	84-105
Enzymatic Browning[9]		4	4.5	4.0-5.0
Specific Gravity		4	1.082	1.074-1.090
Fry Color[10]	Harvest	4	1.5	1.0-2.0
	Storage	4	1.8	1.0-3.0
Fry Texture[11]	Harvest	5	2.8	2.0-3.0
	Storage	5	3.0	3.0-3.0

Refer to footnotes on page 26.

Table 9. Detailed data summary for Centennial Russet.

Variable		# Trials	Mean	Range
Total Yield (Cwt/A)		35	294	177-392
Yield US #1 (Cwt/A)		35	229	129-320
% US #1		35	77.4	61.9-89.0
Yield >10 oz (Cwt/A)		35	26	4-72
Yield <4 oz (Cwt/A)		35	62	32-102
% External Defects[1]		35	0.8	0.0-3.3
% Hollow Heart[2]		35	0.3	0.0-3.3
% Stand		35	97	90-99
Emergence Uniformity		15	3.2	3.0-3.5
Vine Vigor[3]		15	2.2	1.0-3.0
Stems/Plant		27	3.0	2.2-3.6
Vine Size[4]		15	2.6	2.0-3.0
Vine Maturity5		15	3.0	2.5-3.5
Blackspot[6]	Bud End	35	4.8	3.7-5.0
	Stem End	35	4.8	4.2-5.0
	Average	38	4.8	
Weight Loss[7]		38	6.6	2.7-9.0
Dormancy[8]		31	88	57-123
Enzymatic Browning[9]		33	4.0	3.2-5.0
Specific Gravity		45	1.080	1.069-1.092
Fry Color[10]	Harvest	37	3.7	3.0-4.0
	Storage	37	4.0	3.0-5.0
Fry Texture[11]	Harvest	37	2.4	1.0-4.0
	Storage	37	2.2	1.0-3.0

Refer to footnotes on page 26.

Table 10. Detailed data summary for Russet Norkotah.

Variable		# Trials	Mean	Range
Total Yield (Cwt/A)		49	372	174-557
Yield US #1 (Cwt/A)		49	311	144-444
% US #1		49	83.6	77.8-92.2
Yield >10 oz (Cwt/A)		49	102	23-212
Yield <4 oz (Cwt/A)		49	52	22-88
% External Defects[1]		49	2.2	0.4-5.3
% Hollow Heart[2]		49	0.5	0.0-2.8
% Stand		49	98	76-100
Emergence Uniformity		40	3.3	1.0-4.0
Vine Vigor[3]		40	3.0	1.5-4.0
Stems/Plant		45	3.6	2.5-4.8
Vine Size[4]		40	2.4	1.0-4.5
Vine Maturity5		49	1.9	1.0-3.3
Blackspot[6]	Bud End	43	4.7	2.9-5.0
	Stem End	43	4.5	3.4-5.0
	Average	44	4.6	
Weight Loss		44	4.3	1.0-7.1
Dormancy[8]		43	96	78-116
Enzymatic Browning[9]		43	3.1	2.2-4.8
Specific Gravity		47	1.077	1.066-1.091
Fry Color[10]	Harvest	44	2.2	1.0-4.0
	Storage	44	2.5	1.0-4.0
Fry Texture[11]	Harvest	44	2.7	2.0-4.0
	Storage	44	2.6	1.0-4.0

Refer to footnotes on page 26.

Table 11. Detailed data summary for Russet Nugget.

Variable		# Trials	Mean	Range
Total Yield (Cwt/A)		48	423	284-585
Yield US #1 (Cwt/A)		48	342	225-518
% US #1		48	80.4	68.0-93.0
Yield >10 oz (Cwt/A)		48	88	11-258
Yield <4 oz (Cwt/A)		48	74	30-133
% External Defects[1]		48	1.6	0.1-4.3
% Hollow Heart[2]		48	0.2	0.0-1.9
% Stand		48	98	90-100
Emergence Uniformity		38	3.3	3.0-4.0
Vine Vigor[3]		38	3.3	3.0-4.0
Stems/Plant		44	3.3	2.1-5.1
Vine Size[4]		38	4.2	3.3-5.0
Vine Maturity5		48	3.7	1.8-4.3
Blackspot[6]	Bud End	49	4.6	3.0-5.0
	Stem End	49	4.4	2.1-5.0
	Average	52	4.5	
Weight Loss[7]		52	3.5	1.7-5.5
Dormancy[8]		47	93	57-116
Enzymatic Browning[9]		48	4.0	3.2-4.6
Specific Gravity		54	1.092	1.072-1.110
Fry Color[10]	Harvest	52	1.6	0.5-3.0
	Storage	52	2.1	1.0-3.0
Fry Texture[11]	Harvest	52	4.0	2.0-5.0
	Storage	52	3.7	2.0-5.0

Refer to footnotes on page 26.

Table 12. Detailed data summary for CO89097-2R.

Variable		# Trials	Mean	Range
Total Yield (Cwt/A)		11	515	390-641
Yield US #1 (Cwt/A)		11	433	310-530
% US #1		11	83.7	75.6-90.7
Yield >10 oz (Cwt/A)		11	150	69-249
Yield <4 oz (Cwt/A)		11	67	43-98
% External Defects[1]		11	3.0	0.2-6.5
% Hollow Heart[2]		11	0.3	0.0-0.8
% Stand		11	96	92-100
Emergence Uniformity		11	3.1	2.5-3.5
Vine Vigor[3]		11	3.0	2.2-3.8
Stems/Plant		11	3.4	2.3-4.5
Vine Size[4]		11	3.3	3.0-4.0
Vine Maturity5		11	2.9	2.2-3.8
Blackspot[6]	Bud End	10	3.9	2.1-4.8
	Stem End	10	3.8	2.4-5.0
	Average	10	3.9	
Weight Loss[7]		10	6.3	3.7-8.2
Dormancy[8]		10	64	54-78
Enzymatic Browning[9]		10	4.1	3.4-4.8
Specific Gravity		10	1.082	1.071-1.086
Fry Color[10]	Harvest	10	2.3	1.0-3.0
	Storage	9	2.8	2.0-3.0
Fry Texture[11]	Harvest	10	2.8	2.0-4.0
	Storage	9	2.8	2.0-3.0

Refer to footnotes on page 26.

Table 13. Detailed data summary for NDC5281-2R.

Variable		# Trials	Mean	Range
Total Yield (Cwt/A)		6	396	321-474
Yield US #1 (Cwt/A)		6	192	115-272
% US #1		6	48.6	28.4-61.3
Yield >10 oz (Cwt/A)		6	5	0-14
Yield <4 oz (Cwt/A)		6	201	123-289
% External Defects[1]		6	0.7	0.0-1.8
% Hollow Heart[2]		6	0.0	0.0-0.0
% Stand		6	97	96-99
Emergence Uniformity		6	3.5	3.3-4.0
Vine Vigor[3]		6	3.1	2.8-3.5
Stems/Plant		6	4.6	2.9-6.4
Vine Size[4]		6	3.1	2.5-3.8
Vine Maturity5		6	1.9	1.0-3.0
Blackspot[6]	Bud End	6	3.4	2.7-4.7
	Stem End	6	3.1	1.8-4.2
	Average	6	3.3	
Weight Loss[7]		6	7.9	5.2-10.0
Dormancy[8]		6	81	70-101
Enzymatic Browning[9]		6	1.4	1.0-2.4
Specific Gravity		6	1.086	1.080-1.096
Fry Color[10]	Harvest	6	1.8	1.0-3.0
	Storage	6	2.2	1.0-4.0
Fry Texture[11]	Harvest	6	3.0	2.0-4.0
	Storage	6	2.5	1.0-3.0

Refer to footnotes on page 26.

Table 14. Detailed data summary for CO93037-6R.

Variable		# Trials	Mean	Range
Total Yield (Cwt/A)		5	592	512-728
Yield US #1 (Cwt/A)		5	426	344-559
% US #1		5	71.4	59.9-87.2
Yield >10 oz (Cwt/A)		5	109	30-235
Yield <4 oz (Cwt/A)		5	148	73-208
% External Defects[1]		5	2.8	1.1-6.6
% Hollow Heart[2]		5	0.1	0.0-0.3
% Stand		5	95	93-100
Emergence Uniformity		5	3.4	3.3-3.5
Vine Vigor[3]		5	3.5	3.3-4.0
Stems/Plant		5	4.6	3.3-6.7
Vine Size[4]		5	4.2	4.0-4.5
Vine Maturity5		5	3.1	3.0-3.3
Blackspot[6]	Bud End	5	2.9	1.8-3.9
	Stem End	5	2.4	1.3-3.8
	Average	5	2.7	
Weight Loss[7]		5	4.9	3.5-5.9
Dormancy[8]		5	112	98-128
Enzymatic Browning[9]		5	3.2	2.4-4.2
Specific Gravity		5	1.082	1.075-1.087
Fry Color[10]	Harvest	5	2.6	2.0-3.0
	Storage	5	3.8	3.0-4.0
Fry Texture[11]	Harvest	5	2.0	1.0-3.0
	Storage	5	2.0	2.0-2.0

Refer to footnotes on page 26.

Table 15. Detailed data summary for Sangre.

Variable		# Trials	Mean	Range
Total Yield (Cwt/A)		25	478	364-616
Yield US #1 (Cwt/A)		25	413	305-548
% US #1		25	86.1	72.2-92.8
Yield >10 oz (Cwt/A)		25	144	35-319
Yield <4 oz (Cwt/A)		25	57	30-117
% External Defects[1]		25	1.6	0.0-5.7
% Hollow Heart[2]		25	1.3	0.0-8.2
% Stand		25	97	92-100
Emergence Uniformity		15	3.2	2.5-4.3
Vine Vigor[3]		15	2.8	1.8-4.8
Stems/Plant		25	3.1	1.9-4.7
Vine Size[4]		15	3.8	3.0-4.0
Vine Maturity5		25	2.9	1.5-4.0
Blackspot[6]	Bud End	32	4.1	2.4-5.0
	Stem End	32	4.4	2.5-5.0
	Average	33	4.2	
Weight Loss[7]		33	3.5	1.6-5.1
Dormancy[8]		29	92	71-109
Enzymatic Browning[9]		30	3.2	1.8-4.8
Specific Gravity		33	1.073	1.059-1.085
Fry Color[10]	Harvest	32	3.2	1.0-4.0
	Storage	32	3.3	1.0-4.0
Fry Texture[11]	Harvest	32	2.6	1.0-4.0
	Storage	32	2.4	1.0-3.0

Refer to footnotes on page 26.

Table 16. Detailed data summary for AC87340-2W.

Variable		# Trials	Mean	Range
Total Yield (Cwt/A)		11	496	429-553
Yield US #1 (Cwt/A)		11	385	305-464
% US #1		11	77.6	65.7-86.1
Yield >10 oz (Cwt/A)		11	77	26-120
Yield <4 oz (Cwt/A)		11	106	55-183
% External Defects[1]		11	1.1	0.1-1.9
% Hollow Heart[2]		11	0.2	0.0-1.1
% Stand		11	98	95-100
Emergence Uniformity		11	3.6	2.8-4.0
Vine Vigor[3]		11	3.1	2.5-3.5
Stems/Plant		11	3.6	2.6-4.8
Vine Size[4]		11	3.1	2.8-3.5
Vine Maturity5		11	3.1	2.3-3.8
Blackspot[6]	Bud End	18	3.5	2.4-4.8
	Stem End	18	3.9	2.0-5.0
	Average	18	3.7	
Weight Loss[7]		18	4.7	2.7-6.9
Dormancy[8]		18	74	49-93
Enzymatic Browning[9]		18	3.7	1.8-4.4
Specific Gravity		19	1.084	1.075-1.094
Chip Color[10]	40	19	3.6	2.0-5.0
	40R	19	2.9	1.0-5.0
	50	19	1.5	1.0-2.5
	50R	19	1.7	1.0-3.0

Refer to footnotes on page 26.

Table 17. Detailed data summary for Atlantic.

Variable		# Trials	Mean	Range
Total Yield (Cwt/A)		25	449	307-597
Yield US #1 (Cwt/A)		25	388	265-512
% US #1		25	86.6	79.0-93.2
Yield >10 oz (Cwt/A)		25	147	58-290
Yield <4 oz (Cwt/A)		25	47	19-96
% External Defects[1]		25	2.8	0.1-9.1
% Hollow Heart[2]		25	5.4	0.3-16.4
% Stand		25	97	92-99
Emergence Uniformity		19	3.6	3.0-4.3
Vine Vigor[3]		19	3.4	2.8-4.0
Stems/Plant		25	3.1	2.2-4.2
Vine Size[4]		19	3.0	2.2-4.0
Vine Maturity5		25	3.1	2.0-4.0
Blackspot[6]	Bud End	31	3.0	1.8-5.0
	Stem End	31	2.6	1.4-4.3
	Average	32	2.8	
Weight Loss[7]		32	5.1	2.6-7.9
Dormancy[8]		29	88	64-116
Enzymatic Browning[9]		30	4.5	3.8-5.0
Specific Gravity		33	1.097	1.083-1.120
Chip Color[10]	40	33	3.8	2.0-5.0
	40R	33	3.3	1.5-4.5
	50	33	2.3	1.0-3.5
	50R	33	2.3	1.0-4.0

Refer to footnotes on page 26.

Table 18. Detailed data summary for Chipeta.

Variable		# Trials	Mean	Range
Total Yield (Cwt/A)		23	516	399-757
Yield US #1 (Cwt/A)		23	429	306-606
% US #1		23	82.8	70.6-90.4
Yield >10 oz (Cwt/A)		23	161	52-388
Yield <4 oz (Cwt/A)		23	55	22-119
% External Defects[1]		23	6.1	1.2-13.0
% Hollow Heart[2]		23	0.6	0.0-4.0
% Stand		23	98	95-100
Emergence Uniformity		16	3.4	3.0-4.0
Vine Vigor[3]		16	3.9	3.2-4.5
Stems/Plant		22	3.5	2.5-4.9
Vine Size[4]		16	4.1	4.0-4.5
Vine Maturity5		23	3.3	3.0-4.0
Blackspot[6]	Bud End	29	3.8	2.2-5.0
	Stem End	29	3.4	1.4-4.9
	Average	31	3.7	
Weight Loss[7]		31	3.8	1.9-8.0
Dormancy[8]		27	98	77-118
Enzymatic Browning[9]		28	3.7	2.8-5.0
Specific Gravity		31	1.089	1.076-1.100
Chip Color[10]	40	31	4.4	3.0-5.0
	40R	31	3.5	1.5-5.0
	50	31	2.4	1.0-4.0
	50R	31	2.2	1.0-4.0

Refer to footnotes on page 26.

Table 19. Detailed data summary for CO94165-3P/P.

Variable		# Trials	Mean	Range
Total Yield (Cwt/A)		4	488	427-606
Yield US #1 (Cwt/A)		4	312	203-401
% US #1		4	63.2	43.6-72.3
Yield >10 oz (Cwt/A)		4	38	15-61
Yield <4 oz (Cwt/A)		4	171	122-244
% External Defects[1]		4	1.1	0.0-1.7
% Hollow Heart[2]		4	2.0	0.5-3.4
% Stand		4	98	94-99
Emergence Uniformity		4	3.6	3.3-4.0
Vine Vigor[3]		4	3.6	3.0-4.0
Stems/Plant		4	3.9	2.9-4.7
Vine Size[4]		4	2.8	2.3-3.0
Vine Maturity5		4	2.3	1.5-2.8
Blackspot[6]	Bud End	---		
	Stem End	---		
	Average	---		
Weight Loss[7]		6	3.9	2.9-4.6
Dormancy[8]		6	76	63-85
Enzymatic Browning[9]		---		
Specific Gravity		6	1.082	1.076-1.085
Chip Color[10]	40	---		
	40R	---		
	50	---		
	50R	---		

Refer to footnotes on page 26.

Table 20. Detailed data summary for CO94183-1R/R.

Variable		# Trials	Mean	Range
Total Yield (Cwt/A)		4	407	385-449
Yield US #1 (Cwt/A)		4	302	261-354
% US #1		4	73.8	67.2-78.8
Yield >10 oz (Cwt/A)		4	31	9-63
Yield <4 oz (Cwt/A)		4	99	91-116
% External Defects[1]		4	1.5	0.9-2.4
% Hollow Heart[2]		4	0.0	0.0-0.0
% Stand		4	98	96-100
Emergence Uniformity		4	3.8	3.0-4.3
Vine Vigor[3]		4	2.6	2.0-3.0
Stems/Plant		4	3.4	2.7-4.2
Vine Size[4]		4	3.0	2.5-4.0
Vine Maturity5		4	2.6	1.5-3.5
Blackspot[6]	Bud End	6	2.4	1.8-3.1
	Stem End	6	2.1	1.5-2.6
	Average	6	2.2	
Weight Loss[7]		6	4.9	3.7-5.4
Dormancy[8]		6	93	77-105
Enzymatic Browning[9]		---		
Specific Gravity		6	1.079	1.074-1.084
Chip Color[10]	40	---		
	40R	---		
	50	---		
	50R	---		

Refer to footnotes on page 26.

Table 21. Detailed data summary for VC0967-2R/Y

Variable		# Trials	Mean	Range
Total Yield (Cwt/A)		4	452	355-527
Yield US #1 (Cwt/A)		4	380	288-466
% US #1		4	83.6	71.1-93.4
Yield >10 oz (Cwt/A)		4	87.8	22-140
Yield <4 oz (Cwt/A)		4	68	31-119
% External Defects[1]		4	0.9	0.3-2.0
% Hollow Heart[2]		4	0.1	0.0-0.5
% Stand		4	94	90-99
Emergence Uniformity		4	3.5	3.3-3.8
Vine Vigor[3]		4	3.4	3.0-3.8
Stems/Plant		4	3.4	2.8-4.0
Vine Size[4]		4	2.8	2.8-3.0
Vine Maturity5		4	2.6	2.3-3.0
Blackspot[6]	Bud End	5	3.4	2.4-3.9
	Stem End	5	3.4	2.4-4.2
	Average	5	3.8	
Weight Loss[7]		5	3.8	2.7-5.0
Dormancy[8]		5	83	63-105
Enzymatic Browning[9]		5	4.0	3.8 4.2
Specific Gravity		5	1.074	1.071-1.079
Fry Color[10]	Harvest	5	1.0	1.0-1.0
	Storage	5	1.4	1.0-2.0
Fry Texture[11]	Harvest	5	2.4	2.0-3.0
	Storage	5	2.2	2.0-3.0

Refer to footnotes on page 26.

Table 22. Detailed data summary for VC0967-5R/Y

Variable		# Trials	Mean	Range
Total Yield (Cwt/A)		4	509	435-601
Yield US #1 (Cwt/A)		4	441	352-526
% US #1		4	86.2	80.8-89.8
Yield >10 oz (Cwt/A)		4	148	76-210
Yield <4 oz (Cwt/A)		4	60	52-71
% External Defects[1]		4	1.6	0.3-2.8
% Hollow Heart[2]		4	0.3	0.0-1.2
% Stand		4	94	92-96
Emergence Uniformity		4	3.4	2.8-4.3
Vine Vigor[3]		4	3.5	3.0-4.0
Stems/Plant		4	3.4	2.5-4.4
Vine Size[4]		4	3.8	2.3-4.5
Vine Maturity5		4	3.1	2.8-3.5
Blackspot[6]	Bud End	5	3.9	3.4-4.3
	Stem End	5	3.4	2.5-4.2
	Average	5	3.7	
Weight Loss[7]		5	3.0	2.5-3.5
Dormancy[8]		5	120	98-133
Enzymatic Browning[9]		5	4.2	3.6 4.8
Specific Gravity		5	1.077	1.065-1.086
Fry Color[10]	Harvest	5	1.4	1.0-2.0
	Storage	5	1.6	1.0-2.0
Fry Texture[11]	Harvest	5	2.8	2.0-4.0
	Storage	5	3.0	3.0-3.0

Refer to footnotes on page 26.

Table 23. Detailed data summary for VC1002-3W/Y.

Variable		# Trials	Mean	Range
Total Yield (Cwt/A)		4	472	416-522
Yield US #1 (Cwt/A)		4	234	163-355
% US #1		4	49.2	39.0-68.0
Yield >10 oz (Cwt/A)		4	23	10-33
Yield <4 oz (Cwt/A)		4	233	164-297
% External Defects[1]		4	0.8	0.0-2.2
% Hollow Heart[2]		4	0.2	0.0-0.7
% Stand		4	93	86-98
Emergence Uniformity		4	3.1	2.5-3.3
Vine Vigor[3]		4	3.5	2.5-4.0
Stems/Plant		4	4.2	3.3-4.6
Vine Size[4]		4	3.8	3.3-4.0
Vine Maturity5		4	2.7	2.3-3.0
Blackspot[6]	Bud End	7	4.5	4.1-4.9
	Stem End	7	4.6	4.3-4.9
	Average	7	4.5	
Weight Loss[7]		7	3.2	1.7-4.1
Dormancy[8]		7	96	84-105
Enzymatic Browning[9]		7	4.4	3.8 5.0
Specific Gravity		8	1.090	1.080-1.098
Fry Color[10]	Harvest	2	1.0	1.0-1.0
	Storage	2	1.0	1.0-1.0
Chip Color[10]	40	6	5.0	5.0 5.0
	40R	6	4.2	3.0 4.5
	50	6	2.5	2.0 3.5
	50R	6	2.7	2.0 3.5

Refer to footnotes on page 26.

Table 24. Detailed data summary for All Blue.

Variable		# Trials	Mean	Range
Total Yield (Cwt/A)		4	532	460-639
Yield US #1 (Cwt/A)		4	330	248-418
% US #1		4	61.7	54.0-72.8
Yield >10 oz (Cwt/A)		4	49	23-81
Yield <4 oz (Cwt/A)		4	199	149-280
% External Defects[1]		4	0.6	0.1-1.7
% Hollow Heart[2]		4	0.0	0.0-0.0
% Stand		4	99	97-100
Emergence Uniformity		4	3.4	2.8-3.8
Vine Vigor[3]		4	3.6	3.2-4.0
Stems/Plant		4	3.7	2.5-5.2
Vine Size[4]		4	3.4	3.0-4.0
Vine Maturity5		4	2.7	2.2-3.0
Blackspot[6]	Bud End	2	3.8	3.6-3.9
	Stem End	2	2.4	2.3-2.5
	Average	2	3.1	
Weight Loss[7]		3	3.4	2.1-4.8
Dormancy[8]		3	88	82-99
Enzymatic Browning[9]		---		
Specific Gravity		3	1.080	1.076-1.084
Chip Color[10]	40	---		
	40R	---		
	50	---		
	50R	---		

Refer to footnotes on page 26.

Table 25. Detailed data summary for Yukon Gold.

Variable		# Trials	Mean	Range
Total Yield (Cwt/A)		12	404	321-513
Yield US #1 (Cwt/A)		12	354	293-439
% US #1		12	87.6	81.6-94.3
Yield >10 oz (Cwt/A)		12	160	93-248
Yield <4 oz (Cwt/A)		12	41	22-66
% External Defects[1]		12	2.2	0.6-4.4
% Hollow Heart[2]		12	0.9	0.0-2.2
% Stand		12	97	94-100
Emergence Uniformity		12	3.3	2.5-3.8
Vine Vigor[3]		12	3.7	3.3-4.0
Stems/Plant		12	2.2	1.6-2.9
Vine Size[4]		12	3.0	2.8-3.3
Vine Maturity5		12	1.9	1.0-2.5
Blackspot[6]	Bud End	12	3.6	2.0-5.0
	Stem End	12	3.5	2.8-5.0
	Average	12	3.5	
Weight Loss[7]		12	2.8	1.3-4.3
Dormancy[8]		12	95	71-118
Enzymatic Browning[9]		12	4.4	3.8 5.0
Specific Gravity		12	1.084	1.079-1.089
Fry Color[10]	Harvest	12	1.7	1.0-2.0
	Storage	12	2.8	2.0-4.0
Fry Texture[11]	Harvest	12	2.8	1.0-4.0
	Storage	12	2.8	1.0-4.0

Refer to footnotes on page 26.

Footnotes for Tables 2-25:

[1]Percent external defects based on the proportion of the total sample weight with significant defects.

[2]Percent hollow heart calculated as follows: (Weight of tubers >10 ounces with defects/total sample weight) x 100.

[3]Vine vigor is rated on a 1 to 5 scale, with 5 indicating very vigorous vines.

[4]Vine size is rated on a 1 to 5 scale, with 5 indicating very large vines.

[5]Vine maturity is rated on the following basis: 1=very early; 2=early; 3=medium; 4=late; and 5=very late.

[6]Blackspot was rated on a 1 to 5 scale, with 5 indicating no discoloration.

[7]Tubers were stored at 45F for approximately 3 months.

[8]Days from harvest to first visible growth. Tubers were stored at 45F.

[9]Degree of darkening rated at 60 minutes after slicing fresh lengthwise. Rated on a 1 to 5 scale, with 5 indicating no discoloration.

[10]Chip color was rated using the Snack Food Association 1-5 scale. Ratings of <2.0 are acceptable. Reconditioned samples were stored at 60F for three weeks. Fry color was rated on a 0 to 4 scale, with 0 being the lightest or best color. Color ratings of <2.0 are acceptable.

[11]Fry texture was rated on a 1 to 5 scale, with 5 indicating the cooked flesh was dry and mealy and 1 representing a soggy, wet texture.

Figure 1. Photographs of advanced selections - 2003.

Figure 1 (cont'd). Photographs of advanced selections - 2003.

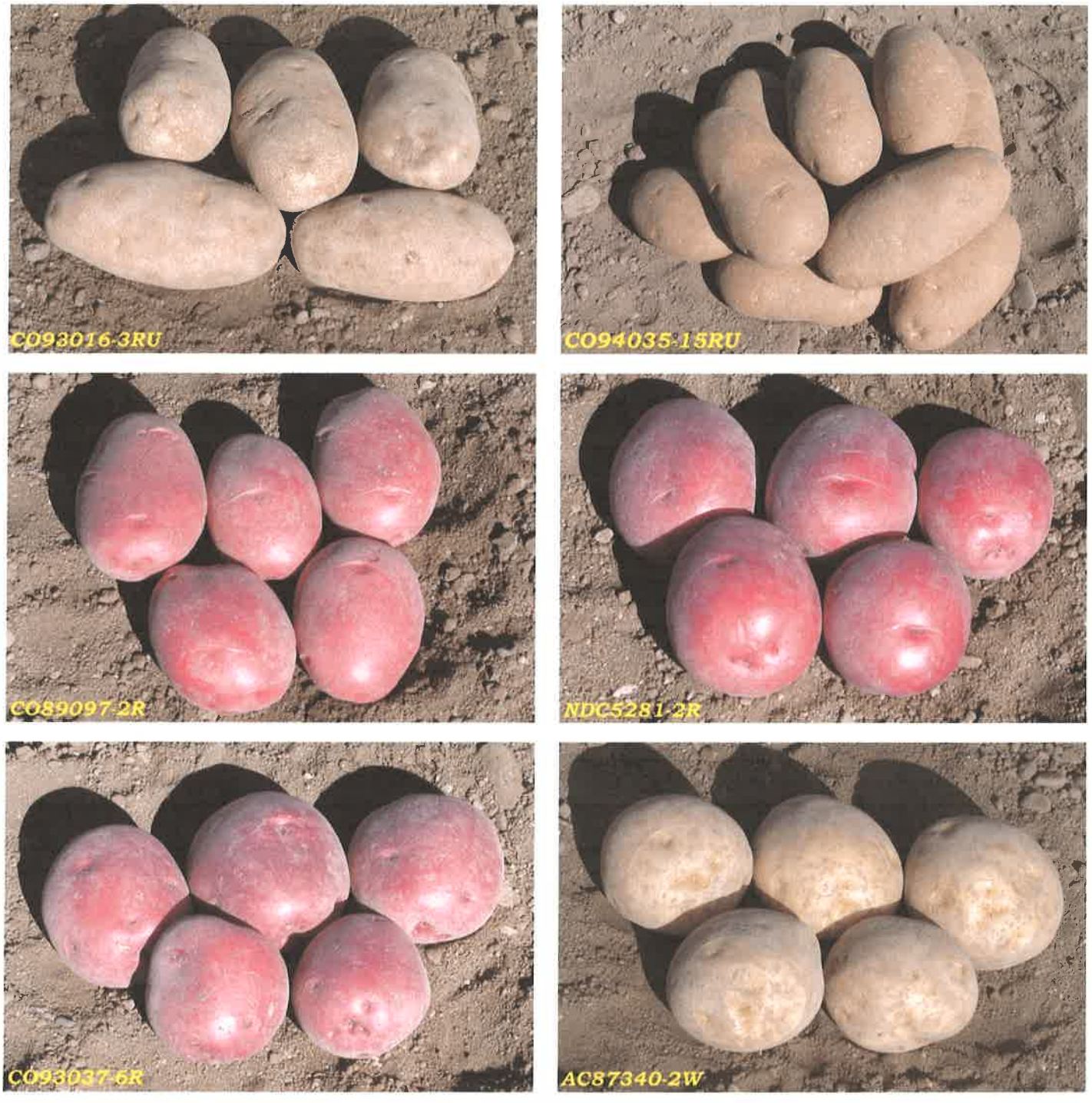

Figure 1 (cont'd). Photographs of advanced selections - 2003.