

Colorado Advanced Potato Selections Data Summary

November 7, 2007

Prepared for the 2007 Open House

David G. Holm and Fahrettin Goktepe

**San Luis Valley Research Center
Colorado State University**



Table of Contents

Summary Comparisons	1
Russets	
CO94035-15RU	3
CO95172-3RU	4
AC96052-1RU	5
CO97087-2RU	6
CO98067-2RU	7
CO98368-2RU	8
Canela Russet	9
Centennial Russet	10
Rio Grande Russet	11
Russet Norkotah	12
Russet Nugget	13
Reds	
CO98012-5R	14
Colorado Rose	15
Rio Colorado	16
Sangre-S10	17
Specialty	
VC1009-1W/Y	18
AC97521-1R/Y	19
CO97226-2R/R	20
CO97232-1R/Y	21
CO97232-2R/Y	22
CO97233-3R/Y	23
CO97215-2P/P	24
CO97222-1R/R	25
CO97227-2P/PW	26
All Blue	27
Mountain Rose	28
Purple Majesty	29
Yukon Gold	30
Chippers	
CO95051-7W	31
CO96141-4W	32
AC97097-14W	33
CO97043-14W	34
CO97065-7W	35
Atlantic	36
Chipeta	36
Footnotes	38
Photographs	39

Table 1. Summary comparison of advanced selections and named cultivars for yield, grade, maturity, specific gravity, and grade defects.

Clone	Usage ¹	# Trials	Total Yield (Cwt/A)	% US #1	Vine Maturity ²	Specific Gravity	% External Defects ³	% Hollow Heart ⁴
Russets								
CO94035-15RU	Dual	8	415	85.8	2.9	1.082	2.1	3.0
CO95172-3RU	FM	6	505	81.3	3.3	1.088	1.3	0.7
AC96052-1RU	Dual	5	458	87.1	3.4	1.088	1.1	0.2
CO97087-2RU	Dual	4	427	86.0	2.9	1.095	2.2	0.2
CO98067-7RU	Dual	3	475	88.7	2.5	1.077	0.8	0.0
CO98368-2RU	FM	3	416	77.6	2.4	1.084	1.2	0.0
Canela Russet	FM	11	386	89.8	3.1	1.096	1.3	0.1
Centennial Russet	FM	35	294	77.4	3.0	1.080	0.8	0.3
Rio Grande Russet	FM	12	525	82.6	3.1	1.086	3.8	0.8
Russet Norkotah	FM	63	368	84.6	1.8	1.078	2.2	0.4
Russet Nugget	Dual	60	440	81.3	3.8	1.093	1.5	0.2
Reds								
CO98012-5R	FM	3	435	77.0	3.0	1.079	0.6	0.7
Colorado Rose	FM	12	518	83.7	2.8	1.082	3.0	0.3
Rio Colorado	FM	11	405	55.8	1.7	1.087	0.9	0.0
Sangre-S10	FM	18	541	87.5	3.4	1.075	2.3	2.1
Specialties								
VC1009-1W/Y	Spec	6	606	71.2	3.3	1.084	1.9	1.2
AC97521-1R/Y	Spec	4	610	80.4	3.0	1.090	0.5	1.1
CO97226-2R/R	Spec	4	374	40.2	2.3	1.081	0.2	0.0
CO97232-1R/Y	Spec	4	436	72.3	2.1	1.081	0.6	0.0
CO97232-2R/Y	Spec	4	448	87.1	2.7	1.070	0.8	1.1
CO97233-3R/Y	Spec	4	509	74.9	3.5	1.082	4.6	3.5
CO97215-2P/P	Spec	3	456	73.9	3.1	1.088	1.4	0.8
CO97222-1R/R	Spec	3	385	55.6	2.6	1.076	1.8	0.0
CO97227-2P/PW	Spec	3	503	27.7	2.7	1.087	1.4	0.0

Table 11 continued on next page

Table 1 (cont'd). Summary comparison of advanced selections and named cultivars for yield, grade, maturity, specific gravity, and grade defects.

Clone	Usage ¹	# Trials	Total Yield (Cwt/A)	% US #1	Vine Maturity ²	Specific Gravity	% External Defects ³	% Hollow Heart ⁴
All Blue	Spec	10	531	63.0	3.0	1.084	0.7	0.2
Mountain Rose	Spec	7	382	68.3	2.1	1.081	1.3	0.0
Purple Majesty	Spec	7	485	63.8	2.0	1.083	0.8	1.7
Yukon Gold	Spec	18	407	88.2	1.8	1.085	2.0	0.7
<i>Chippers</i>								
CO95051-7W	Chip	6	418	86.5	3.4	1.098	1.1	0.3
CO96141-4W	Chip	5	421	89.2	2.8	1.087	1.5	0.0
AC97097-14W	Chip	4	440	85.7	3.1	1.095	0.9	3.3
CO97043-14W	Chip	4	418	85.9	2.9	1.088	1.8	0.5
CO97065-7W	Chip	4	418	87.8	2.6	1.098	0.9	0.2
Atlantic	Chip	31	455	87.2	3.2	1.097	2.8	5.6
Chipeta	Chip	29	533	83.8	3.3	1.089	5.5	0.6

¹FM=fresh market; Dual= fresh market and processing potential; SPEC=specialty.

²Vine maturity: 1=very early; 2=early; 3=medium; 4=late; 5=very late.

³Includes defects such as second growth, growth crack, misshapen, and green.

⁴Based on tubers greater than 10 ounces.

Table 2. Detailed data summary for CO94035-15RU.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	8	415	345-478	
Yield US #1 (Cwt/A)	8	356	279-406	
% US #1	8	85.8	80.8-92.1	
Yield >10 oz (Cwt/A)	8	104	54-144	
Yield <4 oz (Cwt/A)	8	50	23-61	
% External Defects ¹	8	2.1	1.7-2.3	
% Hollow Heart ²	8	3.0	1.0-5.4	
% Stand	8	96	91-99	
Emergence Uniformity	8	3.3	3.0-3.8	
Vine Vigor ³	8	3.6	2.8-4.0	
Stems/Plant	8	2.8	2.2-3.5	
Vine Size ⁴	8	3.4	3.0-3.8	
Vine Maturity ⁵	8	2.9	2.8-3.0	
Blackspot ⁶	Bud End	9	3.9	2.9-5.0
	Stem End	9	3.6	2.7-4.7
	Average	9	3.7	
Weight Loss ⁷	9	3.8	1.2-6.8	
Dormancy ⁸	9	94	83-105	
Enzymatic Browning ⁹	9	4.6	4.0-5.0	
Specific Gravity	9	1.081	1.073-1.089	
Fry Color ¹⁰	Harvest	9	1.2	0.0-2.0
	Storage	9	1.6	1.0-3.0
Fry Texture ¹¹	Harvest	9	2.9	2.0-3.0
	Storage	9	3.1	3.0-4.0

Refer to footnotes on page 38.

Table 3. Detailed data summary for CO95172-3RU.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	6	505	415-547	
Yield US #1 (Cwt/A)	6	411	327-450	
% US #1	6	81.3	78.3-84.2	
Yield >10 oz (Cwt/A)	6	98	58-138	
Yield <4 oz (Cwt/A)	6	87	73-103	
% External Defects ¹	6	1.3	0.2-2.2	
% Hollow Heart ²	6	0.7	0.0-2.1	
% Stand	6	97	94-100	
Emergence Uniformity	6	3.3	2.8-3.8	
Vine Vigor ³	6	3.0	2.5-3.5	
Stems/Plant	6	2.9	2.3-3.8	
Vine Size ⁴	6	3.8	3.5-4.0	
Vine Maturity ⁵	6	3.3	3.0-3.5	
Blackspot ⁶	Bud End	7	4.6	4.3-5.0
	Stem End	7	4.2	3.5-5.0
	Average	7	4.4	
Weight Loss ⁷	7	3.5	1.1-6.2	
Dormancy ⁸	7	83	76-91	
Enzymatic Browning ⁹	7	3.2	2.4-4.2	
Specific Gravity	7	1.088	1.075-1.096	
Fry Color ¹⁰	Harvest	7	2.3	1.0-4.0
	Storage	7	2.0	1.0-4.0
Fry Texture ¹¹	Harvest	7	2.7	1.0-4.0
	Storage	7	2.9	1.0-4.0

Refer to footnotes on page 38.

Table 4. Detailed data summary for AC96052-1RU.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	5	458	398-530	
Yield US #1 (Cwt/A)	5	398	357-457	
% US #1	5	87.1	84.2-89.4	
Yield >10 oz (Cwt/A)	5	101	79-117	
Yield <4 oz (Cwt/A)	5	54	37-69	
% External Defects ¹	5	1.1	0.6-1.9	
% Hollow Heart ²	5	0.2	0.0-0.6	
% Stand	5	91	68-99	
Emergence Uniformity	5	2.8	1.5-3.5	
Vine Vigor ³	5	3.1	3.0-3.0	
Stems/Plant	5	2.9	2.3-3.9	
Vine Size ⁴	5	4.0	3.8-4.5	
Vine Maturity ⁵	5	3.4	3.0-3.8	
Blackspot ⁶	Bud End	6	4.0	2.7-4.6
	Stem End	6	3.0	1.4-3.8
	Average	6	3.5	
Weight Loss ⁷	6	2.5	1.0-4.9	
Dormancy ⁸	6	83	70-104	
Enzymatic Browning ⁹	6	3.8	3.4-4.2	
Specific Gravity	6	1.090	1.080-1.096	
Fry Color ¹⁰	Harvest	6	0.3	0.0-1.0
	Storage	6	1.0	0.0-2.0
Fry Texture ¹¹	Harvest	6	3.7	2.0-5.0
	Storage	6	3.5	3.0-4.0

Refer to footnotes on page 38.

Table 5. Detailed data summary for CO97087-2RU.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	4	427	404-446	
Yield US #1 (Cwt/A)	4	367	334-390	
% US #1	4	86.0	82.6-87.6	
Yield >10 oz (Cwt/A)	4	99	77-149	
Yield <4 oz (Cwt/A)	4	50	43-60	
% External Defects ¹	4	2.2	1.7-2.6	
% Hollow Heart ²	4	0.2	0.0-0.7	
% Stand	4	98	97-98	
Emergence Uniformity	4	3.4	3.0-3.8	
Vine Vigor ³	4	3.3	3.0-3.8	
Stems/Plant	4	4.0	3.1-5.4	
Vine Size ⁴	4	3.4	3.3-3.8	
Vine Maturity ⁵	4	2.9	2.8-3.0	
Blackspot ⁶	Bud End	5	4.7	4.2-5.0
	Stem End	5	4.3	2.9-4.6
	Average	5	4.5	
Weight Loss ⁷	5	2.7	1.1-5.8	
Dormancy ⁸	5	91	76-111	
Enzymatic Browning ⁹	5	4.0	3.8-4.4	
Specific Gravity	5	1.096	1.089-1.102	
Fry Color ¹⁰	Harvest	5	0.4	0.0-1.0
	Storage	5	0.8	0.0-2.0
Fry Texture ¹¹	Harvest	5	3.2	2.0-4.0
	Storage	5	3.6	3.0-4.0

Refer to footnotes on page 38.

Table 6. Detailed data summary for CO98067-7RU.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	3	475	420-560	
Yield US #1 (Cwt/A)	3	423	373-500	
% US #1	3	88.7	88.4-89.0	
Yield >10 oz (Cwt/A)	3	92	78-102	
Yield <4 oz (Cwt/A)	3	49	41-58	
% External Defects ¹	3	0.8	0.3-1.6	
% Hollow Heart ²	3	0.0	0.0-0.0	
% Stand	3	97	95-99	
Emergence Uniformity	3	3.3	3.0-3.8	
Vine Vigor ³	3	3.1	2.8-3.5	
Stems/Plant	3	3.2	2.0-4.4	
Vine Size ⁴	3	3.2	3.0-3.5	
Vine Maturity ⁵	3	2.5	2.5-2.5	
Blackspot ⁶	Bud End	4	5.0	5.0 5.0
	Stem End	4	5.0	5.0 5.0
	Average	4	5.0	
Weight Loss ⁷	4	3.3	1.4-4.9	
Dormancy ⁸	4	66	56-76	
Enzymatic Browning ⁹	4	4.5	4.0 4.8	
Specific Gravity	4	1.077	1.075-1.080	
Fry Color ¹⁰	Harvest	4	1.0	0.0 2.0
	Storage	4	2.0	1.0 3.0
Fry Texture ¹¹	Harvest	4	3.5	3.0-4.0
	Storage	4	3.0	3.0-3.0

Refer to footnotes on page 38.

Table 7. Detailed data summary for CO98368-2RU.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	3	416	396-426	
Yield US #1 (Cwt/A)	3	323	303-335	
% US #1	3	77.6	71.0-83.1	
Yield >10 oz (Cwt/A)	3	66	36-82	
Yield <4 oz (Cwt/A)	3	87	63-116	
% External Defects ¹	3	1.2	0.5-1.8	
% Hollow Heart ²	3	0.0	0.0-0.0	
% Stand	3	93	88-99	
Emergence Uniformity	3	3.0	2.5-3.5	
Vine Vigor ³	3	3.1	3.0-3.3	
Stems/Plant	3	3.5	2.7-5.0	
Vine Size ⁴	3	3.0	3.0-3.0	
Vine Maturity ⁵	3	2.4	2.3-2.5	
Blackspot ⁶	Bud End	4	4.5	3.6 5.0
	Stem End	4	4.2	3.6 5.0
	Average	4	4.3	
Weight Loss ⁷	4	2.6	1.2-3.3	
Dormancy ⁸	4	108	90-146	
Enzymatic Browning ⁹	4	4.5	4.0 4.8	
Specific Gravity	4	1.084	1.082-1.086	
Fry Color ¹⁰	Harvest	4	1.5	1.0 2.0
	Storage	4	2.8	2.0 4.0
Fry Texture ¹¹	Harvest	4	3.8	3.0-4.0
	Storage	4	3.3	3.0-4.0

Refer to footnotes on page 38.

Table 8. Detailed data summary for Canela Russet.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	11	386	332-468	
Yield US #1 (Cwt/A)	11	347	290-421	
% US #1	11	89.8	86.4-93.5	
Yield >10 oz (Cwt/A)	11	105	63-156	
Yield <4 oz (Cwt/A)	11	35	20-49	
% External Defects ¹	11	1.3	0.0-2.4	
% Hollow Heart ²	11	0.1	0.0-0.4	
% Stand	11	97	88-99	
Emergence Uniformity	11	3.1	2.5-3.5	
Vine Vigor ³	11	2.5	2.0-3.0	
Stems/Plant	11	1.9	1.4-2.6	
Vine Size ⁴	11	3.8	3.0-4.3	
Vine Maturity ⁵	11	3.1	2.8-3.8	
Blackspot ⁶	Bud End	12	4.5	3.7-5.0
	Stem End	12	3.8	2.5-5.0
	Average	12	4.2	
Weight Loss ⁷	12	3.8	1.3-7.0	
Dormancy ⁸	12	147	113-195	
Enzymatic Browning ⁹	12	4.4	3.4-5.0	
Specific Gravity	12	1.096	1.081-1.106	
Fry Color ¹⁰	Harvest	12	1.9	1.0-3.0
	Storage	12	2.2	1.0-3.0
Fry Texture ¹¹	Harvest	12	3.4	3.0-5.0
	Storage	12	3.6	3.0-5.0

Refer to footnotes on page 38.

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 Maturity ⁵	35	3.0	2.5-3.5	
Blackspot ⁶	Bud End	39	4.8	3.7-5.0
	Stem End	39	4.8	4.2-5.0
	Average	42	4.8	
Weight Loss ⁷	42	6.4	1.6-9.0	
Dormancy ⁸	35	87	57-123	
Enzymatic Browning ⁹	37	4.0	3.2-5.0	
Specific Gravity	49	1.080	1.069-1.092	
Fry Color ¹⁰	Harvest	41	3.7	3.0-4.0
	Storage	41	4.0	3.0-5.0
Fry Texture ¹¹	Harvest	41	2.3	1.0-4.0
	Storage	41	2.2	1.0-3.0

Refer to footnotes on page 38.

Table 10. Detailed data summary for Rio Grande Russet.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	12	525	367-683	
Yield US #1 (Cwt/A)	12	437	255-603	
% US #1	12	82.6	69.2-90.7	
Yield >10 oz (Cwt/A)	12	148	14-275	
Yield <4 oz (Cwt/A)	12	69	33-111	
% External Defects ¹	12	3.8	0.7-8.7	
% Hollow Heart ²	12	0.8	0.0-4.1	
% Stand	12	99	96-100	
Emergence Uniformity	12	3.6	3.0-4.0	
Vine Vigor ³	12	3.6	2.0-4.5	
Stems/Plant	12	3.0	2.0-3.6	
Vine Size ⁴	12	3.9	3.5-4.5	
Vine Maturity ⁵	12	3.1	2.5 -3.5	
Blackspot ⁶	Bud End	14	4.7	4.1-5.0
	Stem End	14	4.5	3.0-5.0
	Average	14	4.6	
Weight Loss ⁷	14	4.7	1.5-7.1	
Dormancy ⁸	14	86	73-111	
Enzymatic Browning ⁹	14	3.9	3.0-5.0	
Specific Gravity	14	1.086	1.079-1.094	
Fry Color ¹⁰	Harvest	14	2.2	1.0-4.0
	Storage	14	3.1	2.0-4.0
Fry Texture ¹¹	Harvest	14	3.1	2.0-4.0
	Storage	14	2.9	2.0-4.0

Refer to footnotes on page 31.

Table 11. Detailed data summary for Russet Norkotah.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	63	368	174-557	
Yield US #1 (Cwt/A)	63	312	144-444	
% US #1	63	84.6	77.8-92.2	
Yield >10 oz (Cwt/A)	63	100	23-212	
Yield <4 oz (Cwt/A)	63	49	22-88	
% External Defects ¹	63	2.2	0.0-5.3	
% Hollow Heart ²	63	0.4	0.0-2.8	
% Stand	63	98	88-100	
Emergence Uniformity	54	3.3	1.0-4.0	
Vine Vigor ³	54	2.7	1.0-4.0	
Stems/Plant	59	3.6	2.4-4.8	
Vine Size ⁴	54	2.2	1.0-3.3	
Vine Maturity ⁵	63	1.8	1.0-3.0	
Blackspot ⁶	Bud End	62	4.6	2.9-5.0
	Stem End	62	4.4	3.1-5.0
	Average	63	4.5	
Weight Loss	63	3.9	1.0-7.1	
Dormancy ⁸	62	98	78-132	
Enzymatic Browning ⁹	62	3.3	2.2-4.8	
Specific Gravity	66	1.078	1.066-1.091	
Fry Color ¹⁰	Harvest	63	2.2	1.0-4.0
	Storage	63	2.6	1.0-4.0
Fry Texture ¹¹	Harvest	63	2.7	1.0-4.0
	Storage	63	2.7	1.0-4.0

Refer to footnotes on page 38.

Table 12. Detailed data summary for Russet Nugget.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	60	440	284-585	
Yield US #1 (Cwt/A)	60	360	225-518	
% US #1	60	81.3	68.0-93.0	
Yield >10 oz (Cwt/A)	56	92	11-258	
Yield <4 oz (Cwt/A)	60	72	30-133	
% External Defects ¹	60	1.5	0.1-4.3	
% Hollow Heart ²	60	0.2	0.0-1.9	
% Stand	60	98	96-100	
Emergence Uniformity	50	3.3	2.8-4.0	
Vine Vigor ³	50	3.3	2.5-4.0	
Stems/Plant	56	3.4	2.1-5.7	
Vine Size ⁴	50	4.2	3.8-5.0	
Vine Maturity ⁵	60	3.8	3.0-4.3	
Blackspot ⁶	Bud End	69	4.7	3.0-5.0
	Stem End	69	4.5	2.1-5.0
	Average	72	4.6	
Weight Loss ⁷	72	3.2	1.1-5.5	
Dormancy ⁸	67	95	57-144	
Enzymatic Browning ⁹	68	4.0	2.8-4.8	
Specific Gravity	74	1.093	1.072-1.110	
Fry Color ¹⁰	Harvest	72	1.5	0.0-3.0
	Storage	72	2.0	1.0-3.0
Fry Texture ¹¹	Harvest	72	4.0	2.0-5.0
	Storage	72	3.9	2.0-5.0

Refer to footnotes on page 38.

Table 13. Detailed data summary for CO98012-5R.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	3	435	368-494	
Yield US #1 (Cwt/A)	3	337	290-426	
% US #1	3	77.0	66.4-86.3	
Yield >10 oz (Cwt/A)	3	60	24-105	
Yield <4 oz (Cwt/A)	3	95	65-148	
% External Defects ¹	3	0.6	0.0-1.3	
% Hollow Heart ²	3	0.7	0.0-1.1	
% Stand	3	97	95-99	
Emergence Uniformity	3	3.2	3.0-3.3	
Vine Vigor ³	3	3.0	2.8-3.3	
Stems/Plant	3	3.3	2.6-4.4	
Vine Size ⁴	3	3.1	3.0-3.3	
Vine Maturity ⁵	3	3.0	3.0-3.0	
Blackspot ⁶	Bud End	4	4.1	3.4 4.8
	Stem End	4	3.5	2.4 4.5
	Average	4	3.8	
Weight Loss ⁷	4	3.1	1.6-5.5	
Dormancy ⁸	4	61	56-69	
Enzymatic Browning ⁹	4	1.9	1.2 3.0	
Specific Gravity	4	1.079	1.072-1.082	
Fry Color ¹⁰	Harvest	4	1.8	1.0 2.0
	Storage	4	2.8	2.0 3.0
Fry Texture ¹¹	Harvest	4	2.3	2.0-3.0
	Storage	4	2.3	2.0-3.0

Refer to footnotes on page 38.

Table 14. Detailed data summary for Colorado Rose.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	12	518	390-641	
Yield US #1 (Cwt/A)	12	435	310-530	
% US #1	12	83.7	75.6-90.7	
Yield >10 oz (Cwt/A)	12	151	69-249	
Yield <4 oz (Cwt/A)	12	66	43-98	
% External Defects ¹	12	3.0	0.2-6.5	
% Hollow Heart ²	12	0.3	0.0-0.8	
% Stand	12	96	92-100	
Emergence Uniformity	12	3.0	2.5-3.5	
Vine Vigor ³	12	3.0	2.2-3.8	
Stems/Plant	12	3.5	2.3-4.5	
Vine Size ⁴	12	3.4	3.0-4.0	
Vine Maturity ⁵	12	2.8	2.0-3.8	
Blackspot ⁶	Bud End	13	3.7	2.1-4.8
	Stem End	13	3.7	2.4-5.0
	Average	13	3.7	
Weight Loss ⁷	13	6.1	1.4-8.2	
Dormancy ⁸	13	63	54-78	
Enzymatic Browning ⁹	13	4.2	3.4-4.8	
Specific Gravity	13	1.082	1.071-1.086	
Fry Color ¹⁰	Harvest	13	2.2	1.0-3.0
	Storage	12	2.8	2.0-3.0
Fry Texture ¹¹	Harvest	13	2.8	2.0-4.0
	Storage	12	2.8	2.0-3.0

Refer to footnotes on page 38.

Table 15. Detailed data summary for Rio Colorado.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	11	405	321-474	
Yield US #1 (Cwt/A)	11	226	115-298	
% US #1	11	55.8	28.4-72.3	
Yield >10 oz (Cwt/A)	11	10	0-22	
Yield <4 oz (Cwt/A)	11	175	110-289	
% External Defects ¹	11	0.9	0.0-2.2	
% Hollow Heart ²	11	0.0	0.0-0.0	
% Stand	11	96	92-99	
Emergence Uniformity	11	3.4	3.0-4.0	
Vine Vigor ³	11	3.1	2.8-4.0	
Stems/Plant	11	4.2	2.9-6.4	
Vine Size ⁴	11	3.1	2.5-3.8	
Vine Maturity ⁵	11	1.7	1.0-3.0	
Blackspot ⁶	Bud End	12	3.6	2.1-4.8
	Stem End	12	3.0	1.8-4.2
	Average	12	3.3	
Weight Loss ⁷	12	6.6	1.2-10.2	
Dormancy ⁸	12	86	70-118	
Enzymatic Browning ⁹	12	1.4	1.0-2.4	
Specific Gravity	12	1.087	1.080-1.096	
Fry Color ¹⁰	Harvest	12	1.4	1.0-3.0
	Storage	12	1.8	1.0-4.0
Fry Texture ¹¹	Harvest	12	2.8	2.0-4.0
	Storage	12	2.7	1.0-3.0

Refer to footnotes on page 38.

Table 16. Detailed data summary for Sangre-S10.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	18	541	410-616	
Yield US #1 (Cwt/A)	18	473	358-548	
% US #1	18	87.5	82.2-92.8	
Yield >10 oz (Cwt/A)	18	194	101-319	
Yield <4 oz (Cwt/A)	18	55.2	34-90	
% External Defects ¹	18	2.3	0.3-5.7	
% Hollow Heart ²	18	2.1	0.0-8.2	
% Stand	18	96	91-100	
Emergence Uniformity	18	3.0	2.5-3.5	
Vine Vigor ³	18	2.8	1.8-3.5	
Stems/Plant	18	2.9	1.9-4.3	
Vine Size ⁴	18	3.9	3.5-4.5	
Vine Maturity ⁵	18	3.4	3.0-4.0	
Blackspot ⁶	Bud End	29	3.8	2.0-5.0
	Stem End	29	4.1	2.5-5.0
	Average	29	4.0	
Weight Loss ⁷	29	3.0	1.0-4.5	
Dormancy ⁸	29	87	56-118	
Enzymatic Browning ⁹	29	3.3	2.6-4.8	
Specific Gravity	29	1.075	1.060-1.087	
Fry Color ¹⁰	Harvest	29	3.6	2.0-4.0
	Storage	29	3.9	3.0-4.0
Fry Texture ¹¹	Harvest	29	2.3	1.0-4.0
	Storage	29	2.2	1.0-3.0

Refer to footnotes on page 38.

Table 17. Detailed data summary for VC1009-1W/Y.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	6	606	553-641	
Yield US #1 (Cwt/A)	6	434	327-508	
% US #1	6	71.2	58.3-79.7	
Yield >10 oz (Cwt/A)	6	95	42-142	
Yield <4 oz (Cwt/A)	6	160	121-216	
% External Defects ¹	6	1.9	0.6-4.3	
% Hollow Heart ²	6	1.2	0.0-2.6	
% Stand	6	98	96-99	
Emergence Uniformity	6	3.4	3.0-3.8	
Vine Vigor ³	6	4.2	3.8-4.8	
Stems/Plant	6	4.2	3.1-5.4	
Vine Size ⁴	6	4.6	4.0-5.0	
Vine Maturity ⁵	6	3.3	3.0-3.5	
Blackspot ⁶	Bud End	8	4.0	3.0-4.9
	Stem End	8	3.7	2.6-5.0
	Average	8	3.9	
Weight Loss ⁷	8	3.0	1.0-6.8	
Dormancy ⁸	8	99	84-132	
Enzymatic Browning ⁹	8	4.0	3.2-4.8	
Specific Gravity	9	1.085	1.072-1.092	
Fry Color ¹⁰	Harvest	7	1.1	0.0-2.0
	Storage	7	1.7	1.0-3.0
Fry Texture ¹¹	Harvest	7	3.0	3.0-3.0
	Storage	7	3.0	2.0-4.0

Refer to footnotes on page 38.

Table 18. Detailed data summary for AC97521-1R/Y.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	4	610	519-666	
Yield US #1 (Cwt/A)	4	491	391-548	
% US #1	4	80.4	74.6-88.5	
Yield >10 oz (Cwt/A)	4	92	54-129	
Yield <4 oz (Cwt/A)	4	116	62-166	
% External Defects ¹	4	0.5	0.0-1.2	
% Hollow Heart ²	4	1.1	0.4-1.9	
% Stand	4	97	93-100	
Emergence Uniformity	4	3.3	2.8-3.8	
Vine Vigor ³	4	3.9	3.8-4.0	
Stems/Plant	4	4.3	3.5-5.3	
Vine Size ⁴	4	4.2	4.0-4.5	
Vine Maturity ⁵	4	3.0	3.0-3.0	
Blackspot ⁶	Bud End	5	3.6	3.4-4.0
	Stem End	5	3.6	2.3-4.6
	Average	5	3.6	
Weight Loss ⁷	5	3.0	1.5-6.4	
Dormancy ⁸	5	88	62-108	
Enzymatic Browning ⁹	5	3.4	2.8-4.0	
Specific Gravity	5	1.089	1.085-1.096	
Fry Color ¹⁰	Harvest	5	4.0	4.0-4.0
	Storage	5	3.8	3.0-4.0
Fry Texture ¹¹	Harvest	5	2.4	2.0-3.0
	Storage	5	2.6	2.0-3.0

Refer to footnotes on page 38.

Table 19. Detailed data summary for CO97226-2R/R.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	4	374	336-406	
Yield US #1 (Cwt/A)	4	154	90-224	
% US #1	4	40.2	26.8-55.1	
Yield >10 oz (Cwt/A)	4	1	0-1	
Yield <4 oz (Cwt/A)	4	220	179-253	
% External Defects ¹	4	0.2	0.0-0.7	
% Hollow Heart ²	4	0.0	0.0-0.0	
% Stand	4	98	96-99	
Emergence Uniformity	4	3.1	3.0-3.3	
Vine Vigor ³	4	3.1	3.0-3.5	
Stems/Plant	4	3.9	3.0-4.6	
Vine Size ⁴	4	3.3	3.0-3.8	
Vine Maturity ⁵	4	2.3	1.3-3.0	
Blackspot ⁶	Bud End	--	-- --	
	Stem End	--	-- --	
	Average	--	--	
Weight Loss ⁷	5	3.9	1.9-7.8	
Dormancy ⁸	5	66	48-94	
Enzymatic Browning ⁹	--	--	-- --	
Specific Gravity	5	1.080	1.076-1.084	
Fry Color ¹⁰	Harvest	--	-- --	
	Storage	--	-- --	
Fry Texture ¹¹	Harvest	5	3.0	2.0-4.0
	Storage	5	2.6	2.0-3.0

Refer to footnotes on page 38.

Table 20. Detailed data summary for CO97232-1R/Y.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	4	436	397-481	
Yield US #1 (Cwt/A)	4	316	289-366	
% US #1	4	72.3	68.5-75.3	
Yield >10 oz (Cwt/A)	4	24	20-33	
Yield <4 oz (Cwt/A)	4	117	105-131	
% External Defects ¹	4	0.6	0.1-1.0	
% Hollow Heart ²	4	0.0	0.0-0.0	
% Stand	4	95	91-99	
Emergence Uniformity	4	3.2	3.0-3.5	
Vine Vigor ³	4	3.3	3.0-4.0	
Stems/Plant	4	3.9	2.9-4.7	
Vine Size ⁴	4	3.1	3.0-3.3	
Vine Maturity ⁵	4	2.1	1.3-2.8	
Blackspot ⁶	Bud End	5	4.2	2.9-5.0
	Stem End	5	3.4	2.6-4.2
	Average	5	3.8	
Weight Loss ⁷	5	4.7	1.6-8.1	
Dormancy ⁸	5	59	49-80	
Enzymatic Browning ⁹	5	3.8	3.4-3.8	
Specific Gravity	5	1.081	1.077-1.084	
Fry Color ¹⁰	Harvest	4	1.0	1.0-1.0
	Storage	5	1.4	1.0-2.0
Fry Texture ¹¹	Harvest	5	3.0	2.0-4.0
	Storage	5	2.8	2.0-3.0

Refer to footnotes on page 38.

Table 21. Detailed data summary for CO97232-2R/Y.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	4	448	416-471	
Yield US #1 (Cwt/A)	4	391	354-420	
% US #1	4	87.1	83.4-91.2	
Yield >10 oz (Cwt/A)	4	111	72-148	
Yield <4 oz (Cwt/A)	4	54	36-70	
% External Defects ¹	4	0.8	0.3-1.7	
% Hollow Heart ²	4	1.1	0.0-2.7	
% Stand	4	92	85-96	
Emergence Uniformity	4	3.1	2.8-3.5	
Vine Vigor ³	4	3.2	3.0- 3.5	
Stems/Plant	4	3.2	2.6-4.0	
Vine Size ⁴	4	2.8	2.5-3.0	
Vine Maturity ⁵	4	2.7	2.0-3.0	
Blackspot ⁶	Bud End	5	4.5	4.1-5.0
	Stem End	5	4.3	3.5-5.0
	Average	5	4.4	
Weight Loss ⁷	5	4.0	1.5-8.8	
Dormancy ⁸	5	69	49-94	
Enzymatic Browning ⁹	5	4.5	4.0-5.0	
Specific Gravity	5	1.070	1.069-1.072	
Fry Color ¹⁰	Harvest	5	1.4	1.0-2.0
	Storage	5	1.8	1.0-2.0
Fry Texture ¹¹	Harvest	5	2.2	1.0-3.0
	Storage	5	2.4	2.0-3.0

Refer to footnotes on page 38.

Table 22. Detailed data summary for CO97233-3R/Y.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	4	509	492-524	
Yield US #1 (Cwt/A)	4	383	301-425	
% US #1	4	74.9	61.0-82.4	
Yield >10 oz (Cwt/A)	4	104	68-133	
Yield <4 oz (Cwt/A)	4	105	67-162	
% External Defects ¹	4	4.6	3.2-6.1	
% Hollow Heart ²	4	3.5	1.0-5.2	
% Stand	4	90	84-92	
Emergence Uniformity	4	3.2	3.0-3.5	
Vine Vigor ³	4	3.7	3.3- 4.0	
Stems/Plant	4	3.8	2.6-4.6	
Vine Size ⁴	4	3.1	3.0-3.3	
Vine Maturity ⁵	4	3.5	3.3-4.0	
Blackspot ⁶	Bud End	5	4.6	4.2-5.0
	Stem End	5	4.0	3.2-5.0
	Average	5	4.3	
Weight Loss ⁷	5	3.2	1.6-6.0	
Dormancy ⁸	5	72	62-94	
Enzymatic Browning ⁹	5	4.2	3.8-4.6	
Specific Gravity	5	1.082	1.077-1.090	
Fry Color ¹⁰	Harvest	5	1.4	1.0-2.0
	Storage	5	2.2	2.0-3.0
Fry Texture ¹¹	Harvest	5	2.8	2.0-3.0
	Storage	5	2.8	2.0-3.0

Refer to footnotes on page 38.

Table 23. Detailed data summary for CO97215-2P/P.

Variable	# Trials	Mean	Range
Total Yield (Cwt/A)	3	456	423-506
Yield US #1 (Cwt/A)	3	338	268-392
% US #1	3	73.9	61.1-83.4
Yield >10 oz (Cwt/A)	3	66	30-85
Yield <4 oz (Cwt/A)	3	112	64-168
% External Defects ¹	3	1.4	0.6-2.2
% Hollow Heart ²	3	0.8	0.0-1.5
% Stand	3	94	87-98
Emergence Uniformity	3	2.8	2.5-3.0
Vine Vigor ³	3	3.1	3.0-3.3
Stems/Plant	3	3.6	2.4-5.6
Vine Size ⁴	3	3.7	3.5-3.8
Vine Maturity ⁵	3	3.1	3.0-3.3
Blackspot ⁶	Bud End	--	-- --
	Stem End	--	-- --
	Average	--	--
Weight Loss ⁷	5	3.4	1.4-5.6
Dormancy ⁸	5	107	83-139
Enzymatic Browning ⁹	--	--	-- --
Specific Gravity	5	1.088	1.085-1.091
Fry Color ¹⁰	Harvest	--	-- --
	Storage	--	-- --
Fry Texture ¹¹	Harvest	3	1.3
	Storage	3	1.7

Refer to footnotes on page 38.

Table 24. Detailed data summary for CO97215-2P/P.

Variable	# Trials	Mean	Range
Total Yield (Cwt/A)	3	456	423-506
Yield US #1 (Cwt/A)	3	338	268-392
% US #1	3	73.9	61.1-83.4
Yield >10 oz (Cwt/A)	3	66	30-85
Yield <4 oz (Cwt/A)	3	112	64-168
% External Defects ¹	3	1.4	0.6-2.2
% Hollow Heart ²	3	0.8	0.0-1.5
% Stand	3	94	87-98
Emergence Uniformity	3	2.8	2.5-3.0
Vine Vigor ³	3	3.1	3.0-3.3
Stems/Plant	3	3.6	2.4-5.6
Vine Size ⁴	3	3.7	3.5-3.8
Vine Maturity ⁵	3	3.1	3.0-3.3
Blackspot ⁶	Bud End	--	-- --
	Stem End	--	-- --
	Average	--	--
Weight Loss ⁷	5	3.4	1.4-5.6
Dormancy ⁸	5	107	83-139
Enzymatic Browning ⁹	--	--	-- --
Specific Gravity	5	1.088	1.085-1.091
Fry Color ¹⁰	Harvest	--	-- --
	Storage	--	-- --
Fry Texture ¹¹	Harvest	3	1.3 1.0-2.0
	Storage	3	1.7 1.0-2.0

Refer to footnotes on page 38.

Table 25. Detailed data summary for CO97227-2P/PW.

Variable	# Trials	Mean	Range
Total Yield (Cwt/A)	3	503	453-561
Yield US #1 (Cwt/A)	3	138	115-163
% US #1	3	27.7	20.5-35.5
Yield >10 oz (Cwt/A)	3	1	0-2
Yield <4 oz (Cwt/A)	3	358	288-434
% External Defects ¹	3	1.4	0.6-2.4
% Hollow Heart ²	3	0.0	0.0-0.0
% Stand	3	97	96-98
Emergence Uniformity	3	3.6	3.3-4.0
Vine Vigor ³	3	3.7	3.0-4.0
Stems/Plant	3	4.9	4.0-6.7
Vine Size ⁴	3	4.0	4.0-4.0
Vine Maturity ⁵	3	2.7	2.0-3.0
Blackspot ⁶	Bud End	--	-- --
	Stem End	--	-- --
	Average	--	-- --
Weight Loss ⁷	5	3.7	2.0-5.0
Dormancy ⁸	5	102	77-153
Enzymatic Browning ⁹	--	--	-- --
Specific Gravity	5	1.087	1.082-1.095
Fry Color ¹⁰	Harvest	--	-- --
	Storage	--	-- --
Fry Texture ¹¹	Harvest	3	3.0-4.0
	Storage	3	3.0-3.0

Refer to footnotes on page 38.

Table 26. Detailed data summary for All Blue.

Variable	# Trials	Mean	Range
Total Yield (Cwt/A)	10	531	460-639
Yield US #1 (Cwt/A)	10	336	248-422
% US #1	10	63.0	54.0-74.9
Yield >10 oz (Cwt/A)	10	52	6-90
Yield <4 oz (Cwt/A)	10	191	139-280
% External Defects ¹	10	0.7	0.1-1.8
% Hollow Heart ²	10	0.2	0.0-1.5
% Stand	10	98	97-100
Emergence Uniformity	10	3.4	2.8-3.8
Vine Vigor ³	10	3.6	2.8-4.0
Stems/Plant	10	4.4	3.0-6.5
Vine Size ⁴	10	3.8	3.0-4.3
Vine Maturity ⁵	10	3.0	2.2-3.3
Blackspot ⁶	Bud End	---	---
	Stem End	---	---
	Average	---	---
Weight Loss ⁷	10	2.3	1.1-4.8
Dormancy ⁸	10	103	82-167
Enzymatic Browning ⁹	---	---	---
Specific Gravity	10	1.085	1.076-1.091
Fry Color ¹⁰	Harvest	---	---
	Storage	---	---
Fry Texture ¹¹	Harvest	10	2.7
	Storage	10	2.6

Refer to footnotes on page 38.

Table 27. Detailed data summary for Mountain Rose.

Variable	# Trials	Mean	Range
Total Yield (Cwt/A)	7	382	288-449
Yield US #1 (Cwt/A)	7	265	150-354
% US #1	7	68.3	51.9-78.8
Yield >10 oz (Cwt/A)	7	25	4-63
Yield <4 oz (Cwt/A)	7	112	91-136
% External Defects ¹	7	1.3	0.7-2.4
% Hollow Heart ²	7	0.0	0.0-0.0
% Stand	7	98	94-100
Emergence Uniformity	7	3.6	3.0-4.3
Vine Vigor ³	7	2.7	2.0-3.0
Stems/Plant	7	3.6	2.9-4.9
Vine Size ⁴	7	2.6	2.3-3.0
Vine Maturity ⁵	7	2.1	1.5-3.0
Blackspot ⁶	Bud End	---	---
	Stem End	---	---
	Average	---	---
Weight Loss ⁷	10	4.1	1.3-6.3
Dormancy ⁸	10	103	77-153
Enzymatic Browning ⁹	---	---	---
Specific Gravity	10	1.081	1.074-1.086
Fry Color ¹⁰	Harvest	---	---
	Storage	---	---
Fry Texture ¹¹	Harvest	5	2.4
	Storage	5	2.6

Refer to footnotes on page 38.

Table 28. Detailed data summary for Purple Majesty.

Variable	# Trials	Mean	Range
Total Yield (Cwt/A)	7	485	404-606
Yield US #1 (Cwt/A)	7	313	203-401
% US #1	7	63.8	43.6-72.3
Yield >10 oz (Cwt/A)	7	31	14-61
Yield <4 oz (Cwt/A)	7	168	122-244
% External Defects ¹	7	0.8	0.0-1.7
% Hollow Heart ²	7	1.7	0.5-3.4
% Stand	7	98	94-99
Emergence Uniformity	7	3.4	3.0-4.0
Vine Vigor ³	7	3.5	2.8-4.0
Stems/Plant	7	4.3	3.5-6.1
Vine Size ⁴	7	2.8	2.3-3.0
Vine Maturity ⁵	7	2.0	1.5-2.8
Blackspot ⁶	Bud End	---	---
	Stem End	---	---
	Average	---	---
Weight Loss ⁷	10	3.6	1.1-6.8
Dormancy ⁸	10	67	48-85
Enzymatic Browning ⁹	---	---	---
Specific Gravity	10	1.083	1.076-1.088
Fry Color ¹⁰	Harvest	---	---
	Storage	---	---
Fry Texture ¹¹	Harvest	5	1.0-3.0
	Storage	5	2.0 3.0

Refer to footnotes on page 38.

Table 29. Detailed data summary for Yukon Gold.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	18	407	321-513	
Yield US #1 (Cwt/A)	18	359	293-439	
% US #1	18	88.2	81.6-94.3	
Yield >10 oz (Cwt/A)	18	163	93-248	
Yield <4 oz (Cwt/A)	18	39	22-66	
% External Defects ¹	18	2.0	0.6-4.4	
% Hollow Heart ²	18	0.7	0.0-2.2	
% Stand	18	96	94-100	
Emergence Uniformity	18	3.3	2.5-3.8	
Vine Vigor ³	18	3.7	3.0-4.0	
Stems/Plant	18	2.3	1.6-3.4	
Vine Size ⁴	18	3.0	2.5-3.3	
Vine Maturity ⁵	18	1.8	1.0-2.8	
Blackspot ⁶	Bud End	25	4.0	2.0-5.0
	Stem End	25	3.8	2.4-5.0
	Average	25	3.9	
Weight Loss ⁷	25	2.4	1.0-4.3	
Dormancy ⁸	25	90	69-132	
Enzymatic Browning ⁹	25	4.4	3.8 5.0	
Specific Gravity	25	1.085	1.079-1.091	
Fry Color ¹⁰	Harvest	25	1.6	1.0-3.0
	Storage	25	2.8	1.0-4.0
Fry Texture ¹¹	Harvest	25	3.0	1.0-4.0
	Storage	25	2.9	1.0-4.0

Refer to footnotes on page 38.

Table 30. Detailed data summary for CO95051-7W.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	6	418	372-469	
Yield US #1 (Cwt/A)	6	362	295-411	
% US #1	6	86.5	79.1-90.0	
Yield >10 oz (Cwt/A)	6	85	28-145	
Yield <4 oz (Cwt/A)	6	53	37-75	
% External Defects ¹	6	1.1	0.6-1.6	
% Hollow Heart ²	6	0.3	0.0-0.9	
% Stand	6	94	82-99	
Emergence Uniformity	6	3.1	3.0-3.5	
Vine Vigor ³	6	3.0	3.0-3.3	
Stems/Plant	6	3.0	2.6-3.9	
Vine Size ⁴	6	3.5	3.0-4.0	
Vine Maturity ⁵	6	3.4	3.0 4.0	
Blackspot ⁶	Bud End	13	4.2	3.1-4.9
	Stem End	13	2.8	1.6-4.2
	Average	13	3.5	
Weight Loss ⁷	13	5.2	1.7-11.0	
Dormancy ⁸	13	75	62-99	
Enzymatic Browning ⁹	13	3.6	1.8-4.4	
Specific Gravity	14	1.098	1.089-1.110	
Chip Color ¹⁰	40	14	3.4	2.5-4.5
	40R	14	2.7	1.0-4.0
	50	14	2.2	1.0-4.0
	50R	14	2.0	1.0-3.5

Refer to footnotes on page 38.

Table 31. Detailed data summary for CO96141-4W.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	5	421	397-460	
Yield US #1 (Cwt/A)	5	375	361-398	
% US #1	5	89.2	81.0-95.0	
Yield >10 oz (Cwt/A)	5	131	104-176	
Yield <4 oz (Cwt/A)	5	39	15-78	
% External Defects ¹	5	1.5	1.0-2.0	
% Hollow Heart ²	5	0.0	0.0-0.0	
% Stand	5	97	93-99	
Emergence Uniformity	5	3.2	3.0-3.5	
Vine Vigor ³	5	2.7	2.3-3.0	
Stems/Plant	5	2.6	2.1-3.2	
Vine Size ⁴	5	2.7	2.3-3.0	
Vine Maturity ⁵	5	2.8	2.5-3.0	
Blackspot ⁶	Bud End	11	4.3	2.6-5.0
	Stem End	11	3.5	2.3-5.0
	Average	11	3.9	
Weight Loss ⁷	11	3.6	1.2-7.3	
Dormancy ⁸	11	87	69-105	
Enzymatic Browning ⁹	11	4.0	2.8-5.0	
Specific Gravity	12	1.087	1.081-1.092	
Chip Color ¹⁰	40	12	4.0	2.5-4.5
	40R	12	3.3	2.5-4.0
	50	12	2.3	2.0-3.0
	50R	12	2.3	1.0-3.0

Refer to footnotes on page 38.

Table 32. Detailed data summary for AC97097-14W.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	4	440	419-460	
Yield US #1 (Cwt/A)	4	378	352-411	
% US #1	4	85.7	81.0-89.4	
Yield >10 oz (Cwt/A)	4	101	52-145	
Yield <4 oz (Cwt/A)	4	58	42-79	
% External Defects ¹	4	0.9	0.4-1.4	
% Hollow Heart ²	4	3.3	0.4-6.3	
% Stand	4	87	79-92	
Emergence Uniformity	4	2.8	2.5-3.0	
Vine Vigor ³	4	3.3	3.3-3.5	
Stems/Plant	4	3.1	2.5-4.1	
Vine Size ⁴	4	3.1	3.0-3.3	
Vine Maturity ⁵	4	3.1	3.0-3.5	
Blackspot ⁶	Bud End	9	4.2	3.7-5.0
	Stem End	9	3.8	2.6-4.4
	Average	9	4.0	
Weight Loss ⁷	9	2.3	1.1-4.8	
Dormancy ⁸	9	82	70-108	
Enzymatic Browning ⁹	9	4.3	3.6-4.8	
Specific Gravity	10	1.095	1.087-1.103	
Chip Color ¹⁰	40	10	3.7	3.0-4.5
	40R	10	3.1	2.0-4.5
	50	10	2.3	1.5-3.5
	50R	10	2.0	1.0-3.5

Refer to footnotes on page 38.

Table 33. Detailed data summary for CO97043-14W.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	4	418	351-483	
Yield US #1 (Cwt/A)	4	359	297-428	
% US #1	4	85.9	84.4-88.5	
Yield >10 oz (Cwt/A)	4	129	101-187	
Yield <4 oz (Cwt/A)	4	51	44-64	
% External Defects ¹	4	1.8	0.8-2.4	
% Hollow Heart ²	4	0.5	0.0-1.3	
% Stand	4	83	69-97	
Emergence Uniformity	4	2.6	1.0-3.5	
Vine Vigor ³	4	2.9	2.8-3.0	
Stems/Plant	4	2.8	2.5-3.3	
Vine Size ⁴	4	2.9	2.8-3.0	
Vine Maturity ⁵	4	2.9	2.5-3.3	
Blackspot ⁶	Bud End	9	4.0	3.2-4.6
	Stem End	9	3.4	2.4-4.4
	Average	9	3.7	
Weight Loss ⁷	9	4.0	1.3-7.7	
Dormancy ⁸	9	105	84-160	
Enzymatic Browning ⁹	9	4.3	3.8-4.8	
Specific Gravity	10	1.088	1.083-1.093	
Chip Color ¹⁰	40	10	3.9	3.5-4.5
	40R	10	3.3	2.5-4.0
	50	10	1.9	1.0-2.5
	50R	10	2.0	1.5-2.5

Refer to footnotes on page 38.

Table 34. Detailed data summary for CO97065-7W.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	4	418	389-443	
Yield US #1 (Cwt/A)	4	367	337-393	
% US #1	4	87.8	86.4-88.8	
Yield >10 oz (Cwt/A)	4	106	78-123	
Yield <4 oz (Cwt/A)	4	46	41-49	
% External Defects ¹	4	0.9	0.2-1.6	
% Hollow Heart ²	4	0.2	0.0-0.8	
% Stand	4	96	95-96	
Emergence Uniformity	4	3.1	3.0-3.5	
Vine Vigor ³	4	3.4	3.3-3.5	
Stems/Plant	4	3.1	2.5-4.2	
Vine Size ⁴	4	3.1	3.0-3.3	
Vine Maturity ⁵	4	2.6	2.0-3.0	
Blackspot ⁶	Bud End	9	4.5	3.9-4.9
	Stem End	9	3.4	1.9-4.6
	Average	9	3.9	
Weight Loss ⁷	9	2.9	1.3-6.4	
Dormancy ⁸	9	124	90-160	
Enzymatic Browning ⁹	9	4.5	4.0-5.0	
Specific Gravity	10	1.098	1.093-1.103	
Chip Color ¹⁰	40	10	4.1	3.0-5.0
	40R	10	3.4	3.0-4.0
	50	10	2.1	1.0-3.0
	50R	10	2.1	1.5-3.0

Refer to footnotes on page 38.

Table 35. Detailed data summary for Atlantic.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	31	455	307-597	
Yield US #1 (Cwt/A)	31	396	265-512	
% US #1	31	87.2	79.0-93.2	
Yield >10 oz (Cwt/A)	31	158	58-290	
Yield <4 oz (Cwt/A)	31	45	19-96	
% External Defects ¹	31	2.8	0.1-9.1	
% Hollow Heart ²	31	5.6	0.3-16.4	
% Stand	31	96	88-99	
Emergence Uniformity	25	3.6	3.0-4.3	
Vine Vigor ³	25	3.4	2.8-4.3	
Stems/Plant	31	3.0	2.2-4.2	
Vine Size ⁴	25	3.1	2.2-4.0	
Vine Maturity ⁵	31	3.2	2.8-4.0	
Blackspot ⁶	Bud End	44	3.1	1.8-5.0
	Stem End	44	2.7	1.4-4.3
	Average	45	2.9	
Weight Loss ⁷	45	4.7	1.1-7.9	
Dormancy ⁸	42	84	62-116	
Enzymatic Browning ⁹	43	4.5	3.8-5.0	
Specific Gravity	46	1.097	1.083-1.120	
Chip Color ¹⁰	40	46	3.9	2.0-5.0
	40R	46	3.3	1.5-4.5
	50	46	2.6	1.0-4.0
	50R	46	2.4	1.0-4.0

Refer to footnotes on page 38.

Table 36. Detailed data summary for Chipeta.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	29	533	399-757	
Yield US #1 (Cwt/A)	29	448	306-606	
% US #1	29	83.7	70.6-90.4	
Yield >10 oz (Cwt/A)	29	169	52-388	
Yield <4 oz (Cwt/A)	29	55	22-119	
% External Defects ¹	29	5.5	1.1-13.0	
% Hollow Heart ²	29	0.6	0.0-4.0	
% Stand	29	98	95-100	
Emergence Uniformity	22	3.5	3.0-4.3	
Vine Vigor ³	22	4.0	3.2-5.0	
Stems/Plant	28	3.5	2.5-4.9	
Vine Size ⁴	22	4.2	4.0-4.5	
Vine Maturity ⁵	29	3.3	3.0-4.0	
Blackspot ⁶	Bud End	41	3.8	2.2-5.0
	Stem End	41	3.6	1.4-4.9
	Average	43	3.7	
Weight Loss ⁷	43	3.4	1.0-8.0	
Dormancy ⁸	39	103	77-153	
Enzymatic Browning ⁹	40	3.9	2.8-5.0	
Specific Gravity	43	1.089	1.073-1.102	
Chip Color ¹⁰	40	43	4.4	3.0-5.0
	40R	43	3.6	1.5-5.0
	50	43	2.5	1.0-4.0
	50R	43	2.2	1.0-4.0

Refer to footnotes on page 38.

Footnotes for Tables 2-36:

- ¹Percent external defects based on the proportion of the total sample weight with significant defects.
- ²Percent hollow heart calculated as follows: (Weight of tubers >10 ounces with defects/total sample weight) x 100.
- ³Vine vigor is rated on a 1 to 5 scale, with 5 indicating very vigorous vines.
- ⁴Vine size is rated on a 1 to 5 scale, with 5 indicating very large vines.
- ⁵Vine maturity is rated on the following basis: 1=very early; 2=early; 3=medium; 4=late; and 5=very late.
- ⁶Blackspot was rated on a 1 to 5 scale, with 5 indicating no discoloration.
- ⁷Tubers were stored at 45F for approximately 3 months.
- ⁸Days from harvest to first visible growth. Tubers were stored at 45F.
- ⁹Degree of darkening rated at 60 minutes after slicing fresh lengthwise. Rated on a 1 to 5 scale, with 5 indicating no discoloration.
- ¹⁰Chip 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.
- ¹¹Fry 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.



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

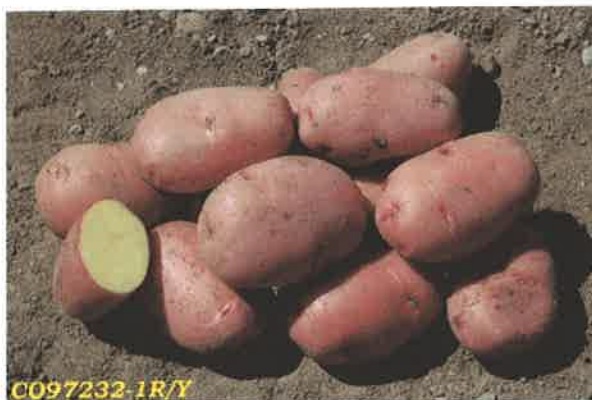


Figure 1 (cont'd). Photographs of advanced selections.



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

