

Colorado Advanced Potato Selections

Data Summary

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David G. Holm and Patrick F. Naranjo

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



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Table 1. Summary comparison of advanced selections and named cultivars for yield, grade, maturity, specific gravity, and grade defects - 2005. Advanced selections that may be released for grower evaluation in 2006 are highlighted.

Clone	Usage ¹	# Trials	Total Yield (Cwt/A)	% US #1	Vine Maturity ²	Specific Gravity	% External Defects ³	% Hollow Heart ⁴
Russets								
AC92009-4RU	FM	10	387	89.4	3.1	1.096	1.3	0.0
CO94035-15RU	Dual	6	416	85.5	3.0	1.082	2.1	2.4
CO95086-8RU	Dual	5	375	81.6	2.2	1.087	1.2	0.0
CO95172-3RU	FM	5	510	80.9	3.3	1.088	1.3	0.5
AC96052-1RU	Dual	4	467	86.5	3.4	1.088	1.2	0.2
Centennial Russet	FM	35	294	77.4	3.0	1.080	0.8	0.3
Rio Grande Russet	FM	11	525	82.5	3.1	1.086	3.5	0.5
Russet Norkotah	FM	59	369	84.3	1.8	1.078	2.1	0.4
Russet Nugget	Dual	56	438	81.0	3.8	1.093	1.6	0.2
Reds								
NDC5281-2R	FM	10	404	56.4	1.8	1.087	0.7	0.0
CO93037-6R	FM	6	599	73.9	3.1	1.083	2.8	0.1
Colorado Rose	FM	12	518	83.7	2.8	1.082	3.0	0.3
Sangre-S10	FM	16	536	87.4	3.5	1.075	2.1	2.1
Specialties								
VC0967-2R/Y	Spec	6	450	84.1	2.5	1.075	0.8	0.1
VC1002-3W/Y	Spec	6	477	50.0	2.8	1.091	0.8	0.2
VC1015-7R/Y	Spec	5	429	83.8	2.4	1.078	0.6	0.0
VC1009-1W/Y	Spec	5	616	73.8	3.4	1.084	1.9	1.4

Table 1 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 - 2005. Advanced selections that may be released for grower evaluation in 2006 are highlighted.

Clone	Usage ¹	# Trials	Total Yield (Cwt/A)	% US #1	Vine Maturity ²	Specific Gravity	% External Defects ³	% Hollow Heart ⁴
CO94157-2W/Y	Spec	4	455	64.6	2.7	1.092	1.2	0.0
VC1123-2W/Y	Spec	4	574	89.8	3.3	1.089	2.0	5.1
All Blue	Spec	8	526	62.3	3.0	1.084	0.8	0.0
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	16	405	88.1	1.8	1.085	1.9	0.7
<i>Chippers</i>								
CO95051-7W	Chip	5	426	86.3	3.4	1.098	1.1	0.3
CO96141-4W	Chip	4	427	88.8	2.8	1.087	1.5	0.0
Atlantic	Chip	29	454	86.9	3.2	1.097	2.7	5.3
Chipeta	Chip	27	529	83.7	3.3	1.089	5.4	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 AC92009-4RU.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	10	387	332-468	
Yield US #1 (Cwt/A)	10	346	290-421	
% US #1	10	89.4	86.4-93.3	
Yield >10 oz (Cwt/A)	10	101	63-156	
Yield <4 oz (Cwt/A)	10	36	23-49	
% External Defects ¹	10	1.3	0.0-2.4	
% Hollow Heart ²	10	0.0	0.0-0.4	
% Stand	10	98	96-99	
Emergence Uniformity	10	3.1	2.5-3.5	
Vine Vigor ³	10	2.5	2.0-3.0	
Stems/Plant	10	2.0	1.4-2.6	
Vine Size ⁴	10	3.7	3.0-4.3	
Vine Maturity ⁵	10	3.1	2.8-3.8	
Blackspot ⁶	Bud End	9	4.4	3.7-5.0
	Stem End	9	3.8	2.5-5.0
	Average	9	4.1	
Weight Loss ⁷	9	4.2	1.3-7.0	
Dormancy ⁸	9	149	113-195	
Enzymatic Browning ⁹	9	4.2	3.4-5.0	
Specific Gravity	11	1.096	1.081-1.106	
Fry Color ¹⁰	Harvest	9	2.0	1.0-3.0
	Storage	9	2.3	1.0-3.0
Fry Texture ¹¹	Harvest	9	3.6	3.0-5.0
	Storage	9	3.7	3.0-5.0

Refer to footnotes on page 31.

Table 3. Detailed data summary for CO94035-15RU.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	6	416	345-478	
Yield US #1 (Cwt/A)	6	356	279-406	
% US #1	6	85.5	80.8-92.1	
Yield >10 oz (Cwt/A)	6	109	54-144	
Yield <4 oz (Cwt/A)	6	51	23-61	
% External Defects ¹	6	2.1	1.7-2.3	
% Hollow Heart ²	6	2.4	1.0-5.4	
% Stand	6	97	94-99	
Emergence Uniformity	6	3.3	3.0-3.8	
Vine Vigor ³	6	3.6	2.8-4.0	
Stems/Plant	6	2.9	2.2-3.5	
Vine Size ⁴	6	3.3	3.0-3.5	
Vine Maturity ⁵	6	3.0	2.8-3.0	
Blackspot ⁶	Bud End	6	3.6	2.9-4.2
	Stem End	6	3.3	2.7-4.4
	Average	6	3.4	
Weight Loss ⁷	6	4.3	1.2-6.8	
Dormancy ⁸	6	92	83-105	
Enzymatic Browning ⁹	6	4.6	4.0-5.0	
Specific Gravity	7	1.082	1.074-1.090	
Fry Color ¹⁰	Harvest	6	1.5	1.0-2.0
	Storage	6	1.7	1.0-3.0
Fry Texture ¹¹	Harvest	6	2.8	2.0-3.0
	Storage	6	3.0	3.0-3.0

Refer to footnotes on page 31.

Table 4. Detailed data summary for CO95086-8RU.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	5	375	355-394	
Yield US #1 (Cwt/A)	5	306	290-326	
% US #1	5	81.6	73.5-87.2	
Yield >10 oz (Cwt/A)	5	58	30-87	
Yield <4 oz (Cwt/A)	5	65	43-94	
% External Defects ¹	5	1.2	0.2-2.5	
% Hollow Heart ²	5	0.0	0.0-0.0	
% Stand	5	97	96-99	
Emergence Uniformity	5	3.3	2.8-4.0	
Vine Vigor ³	5	3.1	2.8-3.5	
Stems/Plant	5	3.2	2.8-3.9	
Vine Size ⁴	5	2.9	2.8-3.0	
Vine Maturity ⁵	5	2.2	1.8-2.5	
Blackspot ⁶	Bud End	5	3.9	3.1-4.5
	Stem End	5	4.2	3.8-4.6
	Average	5	4.1	
Weight Loss ⁷	5	3.3	1.4-5.1	
Dormancy ⁸	5	85	77-97	
Enzymatic Browning ⁹	5	4.4	4.2-4.8	
Specific Gravity	6	1.087	1.082-1.091	
Fry Color ¹⁰	Harvest	5	1.0	0.0-2.0
	Storage	5	1.2	1.0-2.0
Fry Texture ¹¹	Harvest	5	3.0	2.0-4.0
	Storage	5	3.2	3.0-4.0

Refer to footnotes on page 31.

Table 5. Detailed data summary for CO95172-3RU.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	5	510	415-547	
Yield US #1 (Cwt/A)	5	413	327-450	
% US #1	5	80.9	78.3-84.2	
Yield >10 oz (Cwt/A)	5	97	58-138	
Yield <4 oz (Cwt/A)	5	90	80-103	
% External Defects ¹	5	1.3	0.2-2.2	
% Hollow Heart ²	5	0.5	0.0-2.1	
% Stand	5	97	94-100	
Emergence Uniformity	5	3.3	2.8-3.8	
Vine Vigor ³	5	3.0	2.5-3.5	
Stems/Plant	5	3.0	2.5-3.8	
Vine Size ⁴	5	3.9	3.5-4.0	
Vine Maturity ⁵	5	3.3	3.0-3.5	
Blackspot ⁶	Bud End	5	4.6	4.3-5.0
	Stem End	5	4.2	3.7-4.7
	Average	5	4.4	
Weight Loss ⁷	5	3.9	1.1-6.2	
Dormancy ⁸	5	83	76-90	
Enzymatic Browning ⁹	5	3.1	2.4-4.2	
Specific Gravity	6	1.088	1.075-1.096	
Fry Color ¹⁰	Harvest	5	2.4	1.0-4.0
	Storage	5	2.4	1.0-4.0
Fry Texture ¹¹	Harvest	5	2.4	1.0-3.0
	Storage	5	2.6	1.0-4.0

Refer to footnotes on page 31.

Table 6. Detailed data summary for AC96052-1RU.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	4	467	398-530	
Yield US #1 (Cwt/A)	4	404	357-457	
% US #1	4	86.5	84.2-89.4	
Yield >10 oz (Cwt/A)	4	100	79-117	
Yield <4 oz (Cwt/A)	4	58	37-69	
% External Defects ¹	4	1.2	0.6-1.9	
% Hollow Heart ²	4	0.2	0.0-0.6	
% Stand	4	90	68-99	
Emergence Uniformity	4	2.7	1.5-3.5	
Vine Vigor ³	4	3.0	3.0-3.0	
Stems/Plant	4	3.1	2.4-3.9	
Vine Size ⁴	4	4.0	3.8-4.5	
Vine Maturity ⁵	4	3.4	3.0-3.8	
Blackspot ⁶	Bud End	4	3.7	2.7-4.5
	Stem End	4	2.7	1.4-3.3
	Average	4	3.2	
Weight Loss ⁷	4	2.9	1.0-4.9	
Dormancy ⁸	4	84	70-104	
Enzymatic Browning ⁹	4	3.9	3.4-4.2	
Specific Gravity	5	1.088	1.080-1.096	
Fry Color ¹⁰	Harvest	4	0.5	0.0-1.0
	Storage	4	1.0	0.0-2.0
Fry Texture ¹¹	Harvest	4	3.3	2.0-4.0
	Storage	4	3.3	3.0-4.0

Refer to footnotes on page 31.

Table 7. 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	37	4.8	3.7-5.0
	Stem End	37	4.8	4.2-5.0
	Average	40	4.8	
Weight Loss ⁷	40	6.5	1.6-9.0	
Dormancy ⁸	33	87	57-123	
Enzymatic Browning ⁹	35	4.0	3.2-5.0	
Specific Gravity	48	1.080	1.069-1.092	
Fry Color ¹⁰	Harvest	39	3.7	3.0-4.0
	Storage	39	3.9	3.0-5.0
Fry Texture ¹¹	Harvest	39	2.4	1.0-4.0
	Storage	39	2.2	1.0-3.0

Refer to footnotes on page 31.

Table 8. Detailed data summary for Rio Grande Russet.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	11	525	367-683	
Yield US #1 (Cwt/A)	11	436	255-603	
% US #1	11	82.5	69.2-90.7	
Yield >10 oz (Cwt/A)	11	147	14-275	
Yield <4 oz (Cwt/A)	11	71	33-111	
% External Defects ¹	11	3.5	0.7-8.7	
% Hollow Heart ²	11	0.5	0.0-1.6	
% Stand	11	98	96-100	
Emergence Uniformity	11	3.6	3.0-4.0	
Vine Vigor ³	11	3.5	2.0-4.5	
Stems/Plant	11	3.0	2.0-3.6	
Vine Size ⁴	11	3.9	3.5-4.5	
Vine Maturity ⁵	11	3.1	2.5 -3.5	
Blackspot ⁶	Bud End	12	4.6	4.1-5.0
	Stem End	12	4.4	3.0-5.0
	Average	12	4.5	
Weight Loss ⁷	12	5.1	1.5-7.1	
Dormancy ⁸	12	84	73-106	
Enzymatic Browning ⁹	12	4.0	3.2-5.0	
Specific Gravity	12	1.086	1.079-1.094	
Fry Color ¹⁰	Harvest	12	2.3	1.0-4.0
	Storage	12	3.2	3.0-4.0
Fry Texture ¹¹	Harvest	12	3.2	2.0-4.0
	Storage	12	2.9	2.0-4.0

Refer to footnotes on page 31.

Table 9. Detailed data summary for Russet Norkotah.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	59	369	174-557	
Yield US #1 (Cwt/A)	59	311	144-444	
% US #1	59	84.3	77.8-92.2	
Yield >10 oz (Cwt/A)	59	100	23-212	
Yield <4 oz (Cwt/A)	59	50	22-88	
% External Defects ¹	59	2.1	0.0-5.3	
% Hollow Heart ²	59	0.4	0.0-2.8	
% Stand	59	98	88-100	
Emergence Uniformity	50	3.3	1.0-4.0	
Vine Vigor ³	50	2.8	1.0-4.0	
Stems/Plant	55	3.6	2.5-4.8	
Vine Size ⁴	50	2.2	1.0-3.3	
Vine Maturity ⁵	59	1.8	1.0-3.0	
Blackspot ⁶	Bud End	53	4.6	2.9-5.0
	Stem End	53	4.4	3.1-5.0
	Average	54	4.5	
Weight Loss	54	4.2	1.0-7.1	
Dormancy ⁸	53	98	78-132	
Enzymatic Browning ⁹	53	3.3	2.2-4.8	
Specific Gravity	62	1.078	1.066-1.091	
Fry Color ¹⁰	Harvest	54	2.2	1.0-4.0
	Storage	54	2.6	1.0-4.0
Fry Texture ¹¹	Harvest	54	2.6	2.0-4.0
	Storage	54	2.6	1.0-4.0

Refer to footnotes on page 31.

Table 10. Detailed data summary for Russet Nugget.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	56	438	284-585	
Yield US #1 (Cwt/A)	56	357	225-518	
% US #1	56	81.0	68.0-93.0	
Yield >10 oz (Cwt/A)	56	92	11-258	
Yield <4 oz (Cwt/A)	56	73	30-133	
% External Defects ¹	56	1.6	0.1-4.3	
% Hollow Heart ²	56	0.2	0.0-1.9	
% Stand	56	98	96-100	
Emergence Uniformity	46	3.3	2.8-4.0	
Vine Vigor ³	46	3.3	2.5-4.0	
Stems/Plant	52	3.4	2.1-5.7	
Vine Size ⁴	46	4.2	3.8-5.0	
Vine Maturity ⁵	56	3.8	3.0-4.3	
Blackspot ⁶	Bud End	59	4.6	3.0-5.0
	Stem End	59	4.4	2.1-5.0
	Average	62	4.5	
Weight Loss ⁷	62	3.4	1.1-5.5	
Dormancy ⁸	57	95	57-144	
Enzymatic Browning ⁹	58	4.0	3.2-4.8	
Specific Gravity	69	1.093	1.072-1.110	
Fry Color ¹⁰	Harvest	62	1.6	0.0-3.0
	Storage	62	2.1	1.0-3.0
Fry Texture ¹¹	Harvest	62	4.0	2.0-5.0
	Storage	62	3.8	2.0-5.0

Refer to footnotes on page 31.

Table 11. Detailed data summary for NDC5281-2R.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	10	404	321-474	
Yield US #1 (Cwt/A)	10	228	115-298	
% US #1	10	56.4	28.4-72.3	
Yield >10 oz (Cwt/A)	10	9	0-22	
Yield <4 oz (Cwt/A)	10	173	110-289	
% External Defects ¹	10	0.7	0.0-1.8	
% Hollow Heart ²	10	0.0	0.0-0.0	
% Stand	10	96	92-99	
Emergence Uniformity	10	3.4	3.0-4.0	
Vine Vigor ³	10	3.1	2.8-3.5	
Stems/Plant	10	4.2	2.9-6.4	
Vine Size ⁴	10	3.1	2.5-3.8	
Vine Maturity ⁵	10	1.8	1.0-3.0	
Blackspot ⁶	Bud End	9	3.2	2.1-4.7
	Stem End	9	2.8	1.8-4.2
	Average	9	3.0	
Weight Loss ⁷	9	6.7	1.2-10.2	
Dormancy ⁸	9	89	70-118	
Enzymatic Browning ⁹	9	1.4	1.0-2.4	
Specific Gravity	11	1.087	1.080-1.096	
Fry Color ¹⁰	Harvest	9	1.6	1.0-3.0
	Storage	9	1.9	1.0-4.0
Fry Texture ¹¹	Harvest	9	2.9	2.0-4.0
	Storage	9	2.7	1.0-3.0

Refer to footnotes on page 31.

Table 12. Detailed data summary for CO93037-6R.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	6	599	512-728	
Yield US #1 (Cwt/A)	6	446	344-559	
% US #1	6	73.9	59.9-87.2	
Yield >10 oz (Cwt/A)	6	133	30-253	
Yield <4 oz (Cwt/A)	6	135	64-208	
% External Defects ¹	6	2.8	1.1-6.6	
% Hollow Heart ²	6	0.1	0.0-0.3	
% Stand	6	96	93-100	
Emergence Uniformity	6	3.3	3.0-3.5	
Vine Vigor ³	6	3.6	3.3-4.0	
Stems/Plant	6	4.4	3.1-6.7	
Vine Size ⁴	6	4.2	4.0-4.5	
Vine Maturity ⁵	6	3.1	3.0-3.3	
Blackspot ⁶	Bud End	7	2.9	1.8-3.9
	Stem End	7	2.5	1.3-3.8
	Average	7	2.7	
Weight Loss ⁷	7	4.9	1.5-8.3	
Dormancy ⁸	7	103	62-128	
Enzymatic Browning ⁹	7	3.3	2.4-4.2	
Specific Gravity	7	1.083	1.075-1.088	
Fry Color ¹⁰	Harvest	7	2.7	2.0-3.0
	Storage	7	3.7	3.0-4.0
Fry Texture ¹¹	Harvest	7	2.1	1.0-3.0
	Storage	7	2.1	2.0-3.0

Refer to footnotes on page 31.

Table 13. 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 31.

Table 14. Detailed data summary for Sangre-S10.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	16	536	410-616	
Yield US #1 (Cwt/A)	16	469	358-548	
% US #1	16	87.4	82.2-92.8	
Yield >10 oz (Cwt/A)	16	193	101-319	
Yield <4 oz (Cwt/A)	16	56	34-90	
% External Defects ¹	16	2.1	0.3-5.7	
% Hollow Heart ²	16	2.1	0.0-8.2	
% Stand	16	97	91-100	
Emergence Uniformity	16	3.0	2.5-3.5	
Vine Vigor ³	16	2.7	1.8-3.0	
Stems/Plant	16	2.9	1.9-4.3	
Vine Size ⁴	16	3.9	3.5-4.5	
Vine Maturity ⁵	16	3.5	3.0-4.0	
Blackspot ⁶	Bud End	23	3.8	2.0-5.0
	Stem End	23	4.0	2.5-5.0
	Average	23	3.9	
Weight Loss ⁷	23	3.3	1.0-4.5	
Dormancy ⁸	23	88	69-118	
Enzymatic Browning ⁹	23	3.3	2.6-4.8	
Specific Gravity	26	1.075	1.060-1.087	
Fry Color ¹⁰	Harvest	23	3.7	2.0-4.0
	Storage	23	3.9	3.0-4.0
Fry Texture ¹¹	Harvest	23	2.3	1.0-4.0
	Storage	23	2.3	1.0-3.0

Refer to footnotes on page 31.

Table 15. Detailed data summary for VC0967-2R/Y.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	6	450	355-527	
Yield US #1 (Cwt/A)	6	380	288-466	
% US #1	6	84.1	71.1-93.4	
Yield >10 oz (Cwt/A)	6	85	22-140	
Yield <4 oz (Cwt/A)	6	66	31-119	
% External Defects ¹	6	0.8	0.3-2.0	
% Hollow Heart ²	6	0.1	0.0-0.5	
% Stand	6	89	76-99	
Emergence Uniformity	6	3.3	2.8-3.5	
Vine Vigor ³	6	3.2	2.8-3.8	
Stems/Plant	6	3.2	2.5-4.4	
Vine Size ⁴	6	2.9	2.8-3.0	
Vine Maturity ⁵	6	2.5	2.3-3.0	
Blackspot ⁶	Bud End	7	3.5	2.4-4.0
	Stem End	7	3.3	2.4-4.2
	Average	7	3.4	
Weight Loss ⁷	7	3.8	1.2-6.3	
Dormancy ⁸	7	78	62-105	
Enzymatic Browning ⁹	7	4.1	3.8 4.4	
Specific Gravity	8	1.075	1.071-1.079	
Fry Color ¹⁰	Harvest	7	1.0	1.0-1.0
	Storage	7	1.6	1.0-2.0
Fry Texture ¹¹	Harvest	7	2.6	2.0-3.0
	Storage	7	2.4	2.0-3.0

Refer to footnotes on page 31.

Table 16. Detailed data summary for VC1002-3W/Y.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	6	477	416-522	
Yield US #1 (Cwt/A)	6	241	163-355	
% US #1	6	50.0	39.0-68.0	
Yield >10 oz (Cwt/A)	6	21	10-33	
Yield <4 oz (Cwt/A)	6	233	164-297	
% External Defects ¹	6	0.8	0.0-2.2	
% Hollow Heart ²	6	0.2	0.0-0.7	
% Stand	6	97	94-99	
Emergence Uniformity	6	3.5	3.3-4.3	
Vine Vigor ³	6	4.0	3.5-4.8	
Stems/Plant	6	4.0	3.3-5.1	
Vine Size ⁴	6	4.0	3.8-4.0	
Vine Maturity ⁵	6	2.8	2.5-3.0	
Blackspot ⁶	Bud End	10	4.4	4.1-4.9
	Stem End	10	4.4	3.7-4.9
	Average	10	4.4	
Weight Loss ⁷	10	3.3	1.0-5.6	
Dormancy ⁸	10	97	83-118	
Enzymatic Browning ⁹	10	4.5	3.8 5.0	
Specific Gravity	12	1.091	1.080-1.104	
Fry Color ¹⁰	Harvest	4	1.0	1.0-1.0
	Storage	4	1.0	1.0-1.0
Fry Texture ¹¹	Harvest	4	3.0	3.0-4.0
	Storage	4	3.0	3.0-4.0

Refer to footnotes on page 31.

Table 17. Detailed data summary for VC1015-7R/Y.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	5	429	368-543	
Yield US #1 (Cwt/A)	5	359	298-443	
% US #1	5	83.8	79.0-90.9	
Yield >10 oz (Cwt/A)	5	71	40-98	
Yield <4 oz (Cwt/A)	5	67	37-94	
% External Defects ¹	5	0.6	0.0-1.7	
% Hollow Heart ²	5	0.0	0.0-0.0	
% Stand	5	97	95-99	
Emergence Uniformity	5	3.4	3.0-3.8	
Vine Vigor ³	5	3.1	2.8-3.8	
Stems/Plant	5	3.5	2.6-4.6	
Vine Size ⁴	5	2.8	2.3-3.3	
Vine Maturity ⁵	5	2.4	2.0-3.0	
Blackspot ⁶	Bud End	5	3.7	3.3-4.1
	Stem End	5	3.8	2.7-4.7
	Average	5	3.8	
Weight Loss ⁷	5	4.0	1.3-6.9	
Dormancy ⁸	5	91	76-118	
Enzymatic Browning ⁹	5	4.8	4.6-5.0	
Specific Gravity	6	1.078	1.073-1.087	
Fry Color ¹⁰	Harvest	5	2.2	1.0-3.0
	Storage	5	3.0	3.0-3.0
Fry Texture ¹¹	Harvest	5	1.8	1.0 3.0
	Storage	5	2.4	2.0 3.0

Refer to footnotes on page 31.

Table 18. Detailed data summary for VC1009-1W/Y.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	5	616	558-641	
Yield US #1 (Cwt/A)	5	456	420-508	
% US #1	5	73.8	67.5-79.7	
Yield >10 oz (Cwt/A)	5	105	67-142	
Yield <4 oz (Cwt/A)	5	148	121-198	
% External Defects ¹	5	1.9	0.6-4.3	
% Hollow Heart ²	5	1.4	0.5-2.6	
% Stand	5	98	96-99	
Emergence Uniformity	5	3.4	3.0-3.8	
Vine Vigor ³	5	4.1	3.8-4.5	
Stems/Plant	5	4.3	3.1-5.4	
Vine Size ⁴	5	4.6	4.0-5.0	
Vine Maturity ⁵	5	3.4	3.3-3.5	
Blackspot ⁶	Bud End	6	3.9	3.0-4.6
	Stem End	6	3.4	2.6-4.2
	Average	6	3.6	
Weight Loss ⁷	6	3.1	1.0-6.8	
Dormancy ⁸	6	102	90-132	
Enzymatic Browning ⁹	6	4.0	3.4-4.8	
Specific Gravity	8	1.084	1.072-1.092	
Fry Color ¹⁰	Harvest	5	1.4	1.0-2.0
	Storage	5	1.8	1.0-3.0
Fry Texture ¹¹	Harvest	5	3.0	3.0-3.0
	Storage	5	3.0	2.0-4.0

Refer to footnotes on page 31.

Table 19. Detailed data summary for CO94157-2W/Y.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	4	455	399-513	
Yield US #1 (Cwt/A)	4	299	227-395	
% US #1	4	64.6	55.5-77.1	
Yield >10 oz (Cwt/A)	4	39	7-61	
Yield <4 oz (Cwt/A)	4	151	111-193	
% External Defects ¹	4	1.2	0.0-2.3	
% Hollow Heart ²	4	0.0	0.0-0.0	
% Stand	4	94	84-100	
Emergence Uniformity	4	3.0	2.3-3.8	
Vine Vigor ³	4	2.9	2.8-3.0	
Stems/Plant	4	3.1	2.8-3.4	
Vine Size ⁴	4	3.2	3.0-3.5	
Vine Maturity ⁵	4	2.7	2.3-3.0	
Blackspot ⁶	Bud End	4	3.2	2.2-4.1
	Stem End	4	2.9	1.8-4.4
	Average	4	3.0	
Weight Loss ⁷	4	5.0	1.3-10.1	
Dormancy ⁸	4	166	146-202	
Enzymatic Browning ⁹	4	3.7	2.6-4.4	
Specific Gravity	5	1.092	1.086-1.100	
Fry Color ¹⁰	Harvest	4	1.3	1.0-2.0
	Storage	4	1.8	1.0-3.0
Fry Texture ¹¹	Harvest	4	3.3	3.0-4.0
	Storage	4	3.3	3.0-4.0

Refer to footnotes on page 31.

Table 20. Detailed data summary for VC1123-2W/Y.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	4	574	537-662	
Yield US #1 (Cwt/A)	4	514	455-580	
% US #1	4	89.8	84.9-94.9	
Yield >10 oz (Cwt/A)	4	207	159-232	
Yield <4 oz (Cwt/A)	4	48	24-71	
% External Defects ¹	4	2.0	1.0-3.3	
% Hollow Heart ²	4	5.1	2.5-11.2	
% Stand	4	97	95-98	
Emergence Uniformity	4	3.3	3.0-3.5	
Vine Vigor ³	4	3.5	3.0- 3.8	
Stems/Plant	4	4.0	2.9-5.8	
Vine Size ⁴	4	4.0	3.8-4.3	
Vine Maturity ⁵	4	3.3	3.0-3.5	
Blackspot ⁶	Bud End	4	3.8	2.9-4.3
	Stem End	4	4.0	3.5-4.7
	Average	4	3.9	3.2
Weight Loss ⁷	4	3.3	1.4-5.6	
Dormancy ⁸	4	84	69-104	
Enzymatic Browning ⁹	4	4.7	4.4-4.8	
Specific Gravity	5	1.089	1.076-1.098	
Fry Color ¹⁰	Harvest	4	1.5	1.0-2.0
	Storage	4	1.5	1.0-2.0
Fry Texture ¹¹	Harvest	4	3.0	2.0-4.0
	Storage	4	2.8	2.0-3.0

Refer to footnotes on page 31.

Table 21. Detailed data summary for All Blue.

Variable	# Trials	Mean	Range
Total Yield (Cwt/A)	8	526	460-639
Yield US #1 (Cwt/A)	8	329	248-418
% US #1	8	62.3	54.0-72.8
Yield >10 oz (Cwt/A)	8	46	6-81
Yield <4 oz (Cwt/A)	8	193	149-280
% External Defects ¹	8	0.8	0.1-1.8
% Hollow Heart ²	8	0.0	0.0-0.3
% Stand	8	98	97-100
Emergence Uniformity	8	3.3	2.8-3.8
Vine Vigor ³	8	3.5	2.8-4.0
Stems/Plant	8	4.6	3.0-6.5
Vine Size ⁴	8	3.7	3.0-4.0
Vine Maturity ⁵	8	3.0	2.2-3.3
Blackspot ⁶	Bud End	---	---
	Stem End	---	---
	Average	---	---
Weight Loss ⁷	6	2.7	1.1-4.8
Dormancy ⁸	6	111	82-167
Enzymatic Browning ⁹	---	---	---
Specific Gravity	8	1.084	1.076-1.090
Fry Color ¹⁰	Harvest	---	---
	Storage	---	---
Fry Texture ¹¹	Harvest	6	2.8
	Storage	6	2.8

Refer to footnotes on page 31.

Table 22. 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	9	4.2	1.3-6.3
Dormancy ⁸	9	105	77-153
Enzymatic Browning ⁹	---	---	---
Specific Gravity	10	1.081	1.074-1.086
Fry Color ¹⁰	Harvest	---	---
	Storage	---	---
Fry Texture ¹¹	Harvest	4	2.3
	Storage	4	2.5

Refer to footnotes on page 31.

Table 23. 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	9	3.6	1.1-6.8
Dormancy ⁸	9	69	48-85
Enzymatic Browning ⁹	---	---	---
Specific Gravity	10	1.083	1.076-1.088
Fry Color ¹⁰	Harvest	---	---
	Storage	---	---
Fry Texture ¹¹	Harvest	4	1.8
	Storage	4	2.3

Refer to footnotes on page 31.

Table 24. Detailed data summary for Yukon Gold.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	16	405	321-513	
Yield US #1 (Cwt/A)	16	357	293-439	
% US #1	16	88.1	81.6-94.3	
Yield >10 oz (Cwt/A)	16	160	93-248	
Yield <4 oz (Cwt/A)	16	40	22-66	
% External Defects ¹	16	1.9	0.6-4.4	
% Hollow Heart ²	16	0.7	0.0-2.2	
% Stand	16	96	94-100	
Emergence Uniformity	16	3.3	2.5-3.8	
Vine Vigor ³	16	3.6	3.0-4.0	
Stems/Plant	16	2.3	1.6-3.4	
Vine Size ⁴	16	3.0	2.5-3.3	
Vine Maturity ⁵	16	1.8	1.0-2.8	
Blackspot ⁶	Bud End	19	3.7	2.0-5.0
	Stem End	19	3.5	2.4-5.0
	Average	19	3.6	
Weight Loss ⁷	19	2.7	1.0-4.3	
Dormancy ⁸	19	93	69-132	
Enzymatic Browning ⁹	19	4.4	3.8 5.0	
Specific Gravity	22	1.085	1.079-1.091	
Fry Color ¹⁰	Harvest	19	1.7	1.0-2.0
	Storage	19	2.7	1.0-4.0
Fry Texture ¹¹	Harvest	19	2.9	1.0-4.0
	Storage	19	2.8	1.0-4.0

Refer to footnotes on page 30.

Table 25. Detailed data summary for CO95051-7W.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	5	426	372-469	
Yield US #1 (Cwt/A)	5	369	295-411	
% US #1	5	86.3	79.1-90.0	
Yield >10 oz (Cwt/A)	5	92	28-145	
Yield <4 oz (Cwt/A)	5	53	37-75	
% External Defects ¹	5	1.1	0.6-1.6	
% Hollow Heart ²	5	0.3	0.0-0.9	
% Stand	5	94	82-99	
Emergence Uniformity	5	3.2	3.0-3.5	
Vine Vigor ³	5	3.1	3.0-3.3	
Stems/Plant	5	3.1	2.6-3.9	
Vine Size ⁴	5	3.6	3.0-4.0	
Vine Maturity ⁵	5	3.4	3.0 4.0	
Blackspot ⁶	Bud End	9	4.0	3.1-4.9
	Stem End	9	2.7	1.6-4.0
	Average	9	3.4	
Weight Loss ⁷	9	5.5	1.7-11.0	
Dormancy ⁸	9	76	62-99	
Enzymatic Browning ⁹	9	3.6	1.8-4.4	
Specific Gravity	12	1.098	1.089-1.110	
Chip Color ¹⁰	40	10	3.4	2.5-4.5
	40R	10	2.7	1.5-4.0
	50	10	2.2	1.0-4.0
	50R	10	2.2	1.0-3.5

Refer to footnotes on page 30.

Table 26. Detailed data summary for CO96141-4W.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	4	427	399-460	
Yield US #1 (Cwt/A)	4	378	361-398	
% US #1	4	88.8	81.0-95.0	
Yield >10 oz (Cwt/A)	4	132	104-176	
Yield <4 oz (Cwt/A)	4	42	15-78	
% External Defects ¹	4	1.5	1.0-2.0	
% Hollow Heart ²	4	0.0	0.0-0.0	
% Stand	4	97	93-99	
Emergence Uniformity	4	3.3	3.0-3.5	
Vine Vigor ³	4	2.7	2.3-3.0	
Stems/Plant	4	2.6	2.1-3.2	
Vine Size ⁴	4	2.7	2.3-3.0	
Vine Maturity ⁵	4	2.8	2.5-3.0	
Blackspot ⁶	Bud End	7	4.4	3.7-4.9
	Stem End	7	3.3	2.6-4.3
	Average	7	3.9	
Weight Loss ⁷	7	3.7	1.2-7.3	
Dormancy ⁸	7	88	69-105	
Enzymatic Browning ⁹	7	4.0	2.8-4.8	
Specific Gravity	10	1.087	1.081-1.092	
Chip Color ¹⁰	40	8	3.8	2.5-4.5
	40R	8	3.4	2.5-4.0
	50	8	2.4	2.0-3.0
	50R	8	2.2	1.0-3.0

Refer to footnotes on page 30.

Table 27. Detailed data summary for Atlantic.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	29	454	307-597	
Yield US #1 (Cwt/A)	29	394	265-512	
% US #1	29	86.9	79.0-93.2	
Yield >10 oz (Cwt/A)	29	154	58-290	
Yield <4 oz (Cwt/A)	29	47	19-96	
% External Defects ¹	29	2.7	0.1-9.1	
% Hollow Heart ²	29	5.3	0.3-16.4	
% Stand	29	96	88-99	
Emergence Uniformity	23	3.6	3.0-4.3	
Vine Vigor ³	23	3.5	2.8-4.3	
Stems/Plant	29	3.0	2.2-4.2	
Vine Size ⁴	23	3.1	2.2-4.0	
Vine Maturity ⁵	29	3.2	2.8-4.0	
Blackspot ⁶	Bud End	38	3.1	1.8-5.0
	Stem End	38	2.6	1.4-4.3
	Average	39	2.9	
Weight Loss ⁷	39	5.0	1.1-7.9	
Dormancy ⁸	36	85	62-116	
Enzymatic Browning ⁹	37	4.5	3.8-5.0	
Specific Gravity	43	1.097	1.083-1.120	
Chip Color ¹⁰	40	40	3.8	2.0-5.0
	40R	40	3.3	1.5-4.5
	50	40	2.5	1.0-4.0
	50R	40	2.5	1.0-4.0

Refer to footnotes on page 30.

Table 28. Detailed data summary for Chipeta.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	27	529	399-757	
Yield US #1 (Cwt/A)	27	444	306-606	
% US #1	27	83.7	70.6-90.4	
Yield >10 oz (Cwt/A)	27	167	52-388	
Yield <4 oz (Cwt/A)	27	56	22-119	
% External Defects ¹	27	5.4	1.1-13.0	
% Hollow Heart ²	27	0.6	0.0-4.0	
% Stand	27	98	95-100	
Emergence Uniformity	20	3.5	3.0-4.3	
Vine Vigor ³	20	4.0	3.2-5.0	
Stems/Plant	26	3.6	2.5-4.9	
Vine Size ⁴	20	4.2	4.0-4.5	
Vine Maturity ⁵	27	3.3	3.0-4.0	
Blackspot ⁶	Bud End	35	3.8	2.2-5.0
	Stem End	35	3.5	1.4-4.9
	Average	37	3.7	
Weight Loss ⁷	37	3.7	1.0-8.0	
Dormancy ⁸	33	102	77-153	
Enzymatic Browning ⁹	34	3.9	2.8-5.0	
Specific Gravity	40	1.089	1.073-1.102	
Chip Color ¹⁰	40	37	4.4	3.0-5.0
	40R	37	3.6	1.5-5.0
	50	37	2.5	1.0-4.0
	50R	37	2.3	1.0-4.0

Refer to footnotes on page 30.

Footnotes for Tables 2-28:

- 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.

Nutrition Facts

Serving Size 1 potato (148g/5.3oz)

Amount Per Serving

Calories 100 **Calories from Fat** 0

% Daily Value*

Total Fat 0g **0%**

 Saturated Fat 0g **0%**

Cholesterol 0mg **0%**

Sodium 0mg **0%**

Potassium 720mg **21%**

Total Carbohydrate 26g **9%**

 Dietary Fiber 3g **12%**

 Sugars 3g

Protein 4g

Vitamin A 0% • Vitamin C 45%

Calcium 2% • Iron 6%

Thiamin 8% • Riboflavin 2%

Niacin 8% • Vitamin B₆ 10%

Folate 6% • Phosphorous 6%

Zinc 2% • Magnesium 6%

*Percent Daily Values are based on a 2,000 calorie diet.

Figure 1. Photographs of advanced selections - 2005.



Figure 1 (cont'd). Photographs of advanced selections - 2005.



Figure 1 (cont'd). Photographs of advanced selections - 2005.

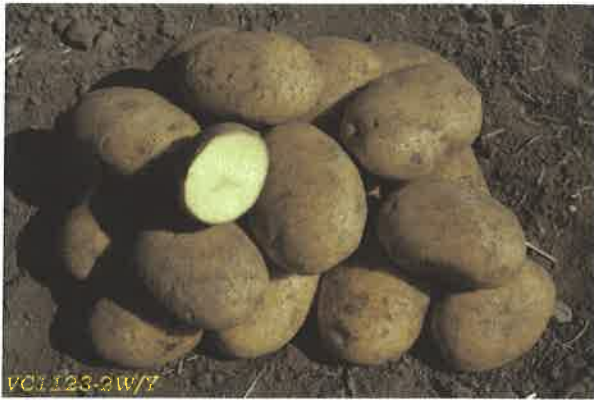


Figure 1 (cont'd). Photographs of advanced selections - 2005.

