

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.

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	9	425	85.1	2.9	1.081	1.9	2.8
CO95172-3RU	FM	8	500	81.3	3.2	1.089	1.1	0.6
AC96052-1RU	Dual	7	458	87.1	3.4	1.090	1.1	0.2
CO97087-2RU	Dual	6	428	84.4	3.0	1.096	1.9	0.3
CO98067-7RU	Dual	5	460	85.1	2.5	1.078	0.8	0.0
CO98368-2RU	FM	5	419	75.0	2.4	1.083	1.0	0.0
AC99375-1RU	Dual	4	502	83.4	3.1 <i>MD</i>	1.099	1.6	0.0
CO99053-3RU	Dual	4	495	87.7	3.4 <i>MD</i>	1.088	2.8	0.9
CO99053-4RU	Dual	4	378	85.0	1.8 <i>early</i>	1.084	1.6	0.0
CO99100-1RU	Dual	4	401	83.4	1.4	1.084	5.1	0.1
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	18	526	81.8	2.9	1.086	2.9	0.5
Russet Norkotah	FM	73	377	84.2	1.8	1.079	2.2	0.4
Russet Nugget	Dual	64	441	81.3	3.8	1.093	1.5	0.2
Reds								
CO98012-5R	FM	5	450	77.8	3.0	1.079	0.7	0.4
CO99076-6R	FM	4	419	73.8	1.4 <i>early</i>	1.087	2.4	0.0
CO99256-2R	FM	4	508	67.1	2.8 <i>MD</i>	1.087	0.3	0.0
Colorado Rose	FM	13	514	84.1	2.7	1.082	2.9	0.3
Rio Colorado	FM	11	405	55.8	1.7	1.087	0.9	0.0
Sangre-S10	FM	22	541	86.9	3.3	1.075	2.0	1.8
Specialties								
VC1009-1W/Y	Spec	8	591	71.7	3.2	1.084	1.9	1.0
AC97521-1R/Y	Spec	6	569	78.1	2.9	1.090	0.6	1.1
CO97226-2R/R	Spec	6	381	38.9	2.3	1.081	0.2	0.0

Table 1 continued on next page.

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

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	9	425	345 - 507	
Yield US #1 (Cwt/A)	9	362	279 - 406	
% US #1	9	85.1	80.0 - 92.1	
Yield >10 oz (Cwt/A)	9	102	54 - 144	
Yield <4 oz (Cwt/A)	9	55	23 - 103	
% External Defects ¹	9	1.9	0.2 - 2.3	
% Hollow Heart ²	9	2.8	0.8 - 5.4	
% Stand	9	96	91 - 99	
Emergence Uniformity	9	3.3	3.0 - 3.8	
Vine Vigor ³	9	3.6	2.8 - 4.0	
Stems/Plant	9	2.9	2.2 - 3.5	
Vine Size ⁴	9	3.5	3.0 - 4.0	
Vine Maturity ⁵	9	2.9	2.8 - 3.0	
Blackspot ⁶	Bud End	10	4.0	2.9 - 5.0
	Stem End	10	3.7	2.7 - 5.0
	Average	10	3.9	
Weight Loss ⁷	10	3.7	1.2 - 6.8	
Dormancy ⁸	10	95	83 - 105	
Enzymatic Browning ⁹	10	4.6	4.0 - 5.0	
Specific Gravity	10	1.081	1.074 - 1.090	
Fry Color ¹⁰	Harvest	10	1.3	0.0 - 2.0
	Storage	10	1.8	1.0 - 4.0
Fry Texture ¹¹	Harvest	10	2.8	2.0 - 3.0
	Storage	10	3.1	3.0 - 4.0

Refer to footnotes on page 47.

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

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	7	452	398-530	
Yield US #1 (Cwt/A)	7	394	357-457	
% US #1	7	87.2	82.9-92.2	
Yield >10 oz (Cwt/A)	7	97	66-117	
Yield <4 oz (Cwt/A)	7	54	30-73	
% External Defects ¹	7	0.9	0.3-1.9	
% Hollow Heart ²	7	0.2	0.0-0.7	
% Stand	7	94	68-100	
Emergence Uniformity	7	2.8	1.5-3.5	
Vine Vigor ³	7	3.0	3.0-3.3	
Stems/Plant	7	3.0	2.3-3.9	
Vine Size ⁴	7	3.9	3.8-4.5	
Vine Maturity ⁵	7	3.2	2.8-3.8	
Blackspot ⁶	Bud End	7	4.1	2.7-4.8
	Stem End	7	3.0	1.4-3.8
	Average	7	3.5	
Weight Loss ⁷	7	2.5	1.0-4.9	
Dormancy ⁸	7	84	70-104	
Enzymatic Browning ⁹	7	3.7	3.2-4.2	
Specific Gravity	7	1.090	1.080-1.096	
Fry Color ¹⁰	Harvest	7	0.3	0.0-1.0
	Storage	7	1.0	0.0-2.0
Fry Texture ¹¹	Harvest	7	3.7	2.0-5.0
	Storage	7	3.6	3.0-4.0

Refer to footnotes on page 47.

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

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	5	460	403-560	
Yield US #1 (Cwt/A)	5	393	337-500	
% US #1	5	85.1	75.4-89.0	
Yield >10 oz (Cwt/A)	5	81	54-102	
Yield <4 oz (Cwt/A)	5	62	41-103	
% External Defects ¹	5	0.8	0.1-1.6	
% Hollow Heart ²	5	0.0	0.0-0.0	
% Stand	5	98	95-100	
Emergence Uniformity	5	3.3	3.0-3.8	
Vine Vigor ³	5	3.0	2.8-3.5	
Stems/Plant	5	3.3	2.0-4.4	
Vine Size ⁴	5	3.3	3.0-3.8	
Vine Maturity ⁵	5	2.5	2.0-3.0	
Blackspot ⁶	Bud End	5	5.0	5.0 5.0
	Stem End	5	5.0	4.8 5.0
	Average	5	5.0	
Weight Loss ⁷	5	3.4	1.4-4.9	
Dormancy ⁸	5	70	56-87	
Enzymatic Browning ⁹	5	4.5	4.0 4.8	
Specific Gravity	5	1.078	1.075-1.080	
Fry Color ¹⁰	Harvest	5	1.0	0.0-2.0
	Storage	5	2.0	1.0 3.0
Fry Texture ¹¹	Harvest	5	3.4	3.0-4.0
	Storage	5	3.2	3.0-4.0

Refer to footnotes on page 47.

Table 8. Detailed data summary for AC99375-1RU.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	4	502	451-545	
Yield US #1 (Cwt/A)	4	419	404-457	
% US #1	4	83.4	77.6-90.6	
Yield >10 oz (Cwt/A)	4	122	79-148	
Yield <4 oz (Cwt/A)	4	67	32-86	
% External Defects ¹	4	1.6	0.6-2.3	
% Hollow Heart ²	4	0.0	0.0-0.0	
% Stand	4	97	94-100	
Emergence Uniformity	4	3.1	3.0-3.3	
Vine Vigor ³	4	3.5	2.5-4.0	
Stems/Plant	4	4.0	2.1-6.3	
Vine Size ⁴	4	3.8	3.0-4.3	
Vine Maturity ⁵	4	3.1	2.8-3.5	
Blackspot ⁶	Bud End	4	4.9	4.4-5.0
	Stem End	4	4.4	3.7-4.8
	Average	4	4.6	
Weight Loss ⁷	4	2.2	1.4-2.8	
Dormancy ⁸	4	100	84-132	
Enzymatic Browning ⁹	4	3.2	2.2-4.0	
Specific Gravity	4	1.099	1.095-1.101	
Fry Color ¹⁰	Harvest	4	0.8	0.0-1.0
	Storage	4	1.3	1.0-2.0
Fry Texture ¹¹	Harvest	4	3.5	3.0-4.0
	Storage	4	3.5	3.0-4.0

Refer to footnotes on page 47.

Table 10. Detailed data summary for CO99053-4RU.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	4	378	320-480	
Yield US #1 (Cwt/A)	4	320	269-385	
% US #1	4	85.0	80.3-91.1	
Yield >10 oz (Cwt/A)	4	89	60-109	
Yield <4 oz (Cwt/A)	4	52	30-87	
% External Defects ¹	4	1.6	0.0-3.4	
% Hollow Heart ²	4	0.0	0.0-0.0	
% Stand	4	98	96-100	
Emergence Uniformity	4	3.2	3.0-3.3	
Vine Vigor ³	4	3.0	2.5-3.5	
Stems/Plant	4	3.9	3.1-4.6	
Vine Size ⁴	4	2.9	2.5-3.3	
Vine Maturity ⁵	4	1.8	1.3-2.0	
Blackspot ⁶	Bud End	4	4.9	4.6-5.0
	Stem End	4	4.7	4.2-5.0
	Average	4	4.8	
Weight Loss ⁷	4	2.7	1.5-3.5	
Dormancy ⁸	4	74	62-87	
Enzymatic Browning ⁹	4	4.5	4.4-4.6	
Specific Gravity	4	1.084	1.083-1.086	
Fry Color ¹⁰	Harvest	4	0.8	0.0-1.0
	Storage	4	1.8	1.0-3.0
Fry Texture ¹¹	Harvest	4	3.3	2.0-4.0
	Storage	4	3.0	2.0-4.0

Refer to footnotes on page 47.

Table 12. 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	0.0-0.9	
% 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 47.

Table 14. Detailed data summary for Rio Grande Russet.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	18	526	367-683	
Yield US #1 (Cwt/A)	18	433	255-603	
% US #1	18	81.8	69.2-90.7	
Yield >10 oz (Cwt/A)	18	140	14-275	
Yield <4 oz (Cwt/A)	18	77	33-158	
% External Defects ¹	18	2.9	0.1-8.7	
% Hollow Heart ²	18	0.5	0.0-4.1	
% Stand	18	99	96-100	
Emergence Uniformity	18	3.5	3.0-4.0	
Vine Vigor ³	18	3.6	2.0-4.5	
Stems/Plant	18	3.2	2.0-4.4	
Vine Size ⁴	18	4.0	3.5-4.5	
Vine Maturity ⁵	18	2.9	2.3 -3.5	
Blackspot ⁶	Bud End	17	4.7	4.1-5.0
	Stem End	17	4.5	3.0-5.0
	Average	17	4.6	
Weight Loss ⁷	17	4.5	1.5-7.1	
Dormancy ⁸	17	91	73-120	
Enzymatic Browning ⁹	17	3.9	3.0-5.0	
Specific Gravity	17	1.086	1.079-1.094	
Fry Color ¹⁰	Harvest	17	2.1	1.0-4.0
	Storage	17	2.9	2.0-4.0
Fry Texture ¹¹	Harvest	17	3.1	2.0-4.0
	Storage	17	2.9	2.0-4.0

Refer to footnotes on page 47.

Table 16. Detailed data summary for Russet Nugget.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	64	441	284-585	
Yield US #1 (Cwt/A)	64	360	225-518	
% US #1	64	81.3	68.0-93.0	
Yield >10 oz (Cwt/A)	64	91	11-258	
Yield <4 oz (Cwt/A)	64	73	30-133	
% External Defects ¹	64	1.5	0.1-4.3	
% Hollow Heart ²	64	0.2	0.0-1.9	
% Stand	64	98	96-100	
Emergence Uniformity	54	3.3	2.8-4.0	
Vine Vigor ³	54	3.4	2.5-4.0	
Stems/Plant	60	3.4	2.1-5.7	
Vine Size ⁴	54	4.2	3.8-5.0	
Vine Maturity ⁵	64	3.8	3.0-4.3	
Blackspot ⁶	Bud End	74	4.7	3.0-5.0
	Stem End	74	4.5	2.1-5.0
	Average	77	4.6	
Weight Loss ⁷	77	3.1	1.1-5.5	
Dormancy ⁸	72	95	57-144	
Enzymatic Browning ⁹	73	4.0	2.8-4.8	
Specific Gravity	79	1.093	1.072-1.110	
Fry Color ¹⁰	Harvest	77	1.5	0.0-3.0
	Storage	77	2.0	1.0-3.0
Fry Texture ¹¹	Harvest	77	4.1	2.0-5.0
	Storage	77	4.0	2.0-5.0

Refer to footnotes on page 47.

Table 18. Detailed data summary for CO99076-6R.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	4	419	382-492	
Yield US #1 (Cwt/A)	4	310	262-365	
% US #1	4	73.8	68.4-79.1	
Yield >10 oz (Cwt/A)	4	45	17-77	
Yield <4 oz (Cwt/A)	4	99	82-121	
% External Defects ¹	4	2.4	0.5-4.8	
% Hollow Heart ²	4	0.0	0.0-0.0	
% Stand	4	98	97-99	
Emergence Uniformity	4	3.4	3.0-4.0	
Vine Vigor ³	4	3.5	3.0-4.0	
Stems/Plant	4	4.4	4.1-4.8	
Vine Size ⁴	4	3.3	3.0-3.5	
Vine Maturity ⁵	4	1.4	1.0-2.3	
Blackspot ⁶	Bud End	4	4.0	3.5-4.5
	Stem End	4	3.2	2.3-3.7
	Average	4	3.6	
Weight Loss ⁷	4	5.6	1.7-7.4	
Dormancy ⁸	4	67	56-79	
Enzymatic Browning ⁹	4	1.7	1.0-2.0	
Specific Gravity	4	1.087	1.085-1.089	
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	1.8	1.0-2.0

Refer to footnotes on page 47.

Table 20. Detailed data summary for Colorado Rose.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	13	514	390-641	
Yield US #1 (Cwt/A)	13	434	310-530	
% US #1	13	84.1	75.6-90.7	
Yield >10 oz (Cwt/A)	13	150	69-249	
Yield <4 oz (Cwt/A)	13	65	43-98	
% External Defects ¹	13	2.9	0.2-6.5	
% Hollow Heart ²	13	0.3	0.0-0.8	
% Stand	13	97	92-100	
Emergence Uniformity	13	3.0	2.5-3.5	
Vine Vigor ³	13	3.0	2.2-3.8	
Stems/Plant	13	3.5	2.3-4.5	
Vine Size ⁴	13	3.4	3.0-4.0	
Vine Maturity ⁵	13	2.7	2.0-3.8	
Blackspot ⁶	Bud End	14	3.8	2.1-4.8
	Stem End	14	3.8	2.4-5.0
	Average	14	3.8	
Weight Loss ⁷	14	6.0	1.4-8.2	
Dormancy ⁸	14	63	54-78	
Enzymatic Browning ⁹	14	4.2	3.4-4.8	
Specific Gravity	14	1.082	1.071-1.086	
Fry Color ¹⁰	Harvest	14	2.2	1.0-3.0
	Storage	13	2.8	2.0-3.0
Fry Texture ¹¹	Harvest	14	2.8	2.0-4.0
	Storage	13	2.8	2.0-3.0

Refer to footnotes on page 47.

Table 22. Detailed data summary for Sangre-S10.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	22	541	410-616	
Yield US #1 (Cwt/A)	22	470	358-548	
% US #1	22	86.9	72.0-92.8	
Yield >10 oz (Cwt/A)	22	181	100-319	
Yield <4 oz (Cwt/A)	22	60	34-148	
% External Defects ¹	22	2.0	0.3-5.7	
% Hollow Heart ²	22	1.8	0.0-8.2	
% Stand	22	97	91-100	
Emergence Uniformity	22	3.0	2.5-3.8	
Vine Vigor ³	22	2.9	1.8-4.0	
Stems/Plant	22	3.0	1.9-4.3	
Vine Size ⁴	22	4.0	3.5-4.5	
Vine Maturity ⁵	22	3.3	3.0-4.0	
Blackspot ⁶	Bud End	32	3.9	2.0-5.0
	Stem End	32	4.1	2.5-5.0
	Average	32	4.0	
Weight Loss ⁷	32	2.9	1.0-4.5	
Dormancy ⁸	32	89	56-126	
Enzymatic Browning ⁹	32	3.3	2.6-4.8	
Specific Gravity	32	1.075	1.060-1.087	
Fry Color ¹⁰	Harvest	32	3.6	2.0-4.0
	Storage	32	3.9	3.0-4.0
Fry Texture ¹¹	Harvest	32	2.3	1.0-4.0
	Storage	32	2.3	1.0-3.0

Refer to footnotes on page 47.

Table 24. Detailed data summary for AC97521-1R/Y.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	6	569	420-666	
Yield US #1 (Cwt/A)	6	447	319-548	
% US #1	6	78.1	71.5-88.5	
Yield >10 oz (Cwt/A)	6	78	22-129	
Yield <4 oz (Cwt/A)	6	119	62-166	
% External Defects ¹	6	0.6	0.0-1.7	
% Hollow Heart ²	6	1.1	0.4-1.9	
% Stand	6	97	93-100	
Emergence Uniformity	6	3.3	2.8-3.8	
Vine Vigor ³	6	3.9	3.3-4.3	
Stems/Plant	6	4.1	3.5-5.3	
Vine Size ⁴	6	4.0	3.5-4.5	
Vine Maturity ⁵	6	2.9	2.5-3.0	
Blackspot ⁶	Bud End	6	3.5	3.1-4.0
	Stem End	6	3.5	2.3-4.6
	Average	6	3.5	
Weight Loss ⁷	6	3.0	1.5-6.4	
Dormancy ⁸	6	89	62-108	
Enzymatic Browning ⁹	6	3.5	2.8-4.0	
Specific Gravity	6	1.089	1.085-1.096	
Fry Color ¹⁰	Harvest	6	4.0	4.0-4.0
	Storage	6	3.8	3.0-4.0
Fry Texture ¹¹	Harvest	6	2.5	2.0-3.0
	Storage	6	2.7	2.0-3.0

Refer to footnotes on page 47.

Table 26. Detailed data summary for CO97232-1R/Y.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	6	434	352-509	
Yield US #1 (Cwt/A)	6	312	234-372	
% US #1	6	71.3	66.5-75.3	
Yield >10 oz (Cwt/A)	6	29	10-67	
Yield <4 oz (Cwt/A)	6	118	105-131	
% External Defects ¹	6	0.8	0.1-1.3	
% Hollow Heart ²	6	0.0	0.0-0.0	
% Stand	6	94	90-99	
Emergence Uniformity	6	3.2	2.8-3.5	
Vine Vigor ³	6	3.3	3.0-4.0	
Stems/Plant	6	3.8	2.9-4.7	
Vine Size ⁴	6	2.9	2.3-3.3	
Vine Maturity ⁵	6	2.1	1.3-2.8	
Blackspot ⁶	Bud End	6	4.3	2.9-5.0
	Stem End	6	3.4	2.6-4.2
	Average	6	3.9	
Weight Loss ⁷	6	4.8	1.6-8.1	
Dormancy ⁸	6	60	49-80	
Enzymatic Browning ⁹	6	3.8	3.4-4.4	
Specific Gravity	6	1.081	1.077-1.084	
Fry Color ¹⁰	Harvest	5	0.8	0.0-1.0
	Storage	6	1.3	1.0-2.0
Fry Texture ¹¹	Harvest	6	3.2	2.0-4.0
	Storage	6	2.8	2.0-3.0

Refer to footnotes on page 47.

Table 28. Detailed data summary for CO97233-3R/Y.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	6	482	409-524	
Yield US #1 (Cwt/A)	6	358	301-425	
% US #1	6	71.7	54.7-82.4	
Yield >10 oz (Cwt/A)	6	88	42-133	
Yield <4 oz (Cwt/A)	6	106	67-162	
% External Defects ¹	6	4.2	2.8-6.1	
% Hollow Heart ²	6	2.6	0.8-5.2	
% Stand	6	91	84-95	
Emergence Uniformity	6	3.2	3.0-3.5	
Vine Vigor ³	6	3.5	3.3- 4.0	
Stems/Plant	6	3.7	2.6-4.6	
Vine Size ⁴	6	3.2	3.0-3.8	
Vine Maturity ⁵	6	3.3	2.8-4.0	
Blackspot ⁶	Bud End	6	4.7	4.2-5.0
	Stem End	6	4.0	3.2-5.0
	Average	6	4.4	
Weight Loss ⁷	6	3.1	1.6-6.0	
Dormancy ⁸	6	74	62-94	
Enzymatic Browning ⁹	6	4.1	3.6-4.6	
Specific Gravity	6	1.082	1.077-1.090	
Fry Color ¹⁰	Harvest	6	1.2	0.0-2.0
	Storage	6	2.0	1.0-3.0
Fry Texture ¹¹	Harvest	6	2.7	2.0-3.0
	Storage	6	2.7	2.0-3.0

Refer to footnotes on page 47.

Table 30. Detailed data summary for CO97227-2P/PW.

Variable	# Trials	Mean	Range
Total Yield (Cwt/A)	5	477	385-561
Yield US #1 (Cwt/A)	5	155	79-284
% US #1	5	32.6	20.5-59.4
Yield >10 oz (Cwt/A)	5	7	0-34
Yield <4 oz (Cwt/A)	5	316	198-434
% External Defects ¹	5	1.1	0.2-2.4
% Hollow Heart ²	5	0.0	0.0-0.0
% Stand	5	97	94-100
Emergence Uniformity	5	3.5	3.3-4.0
Vine Vigor ³	5	3.6	3.0-4.0
Stems/Plant	5	4.8	4.0-6.7
Vine Size ⁴	5	3.8	3.0-4.0
Vine Maturity ⁵	5	2.7	2.0-3.0
Blackspot ⁶	Bud End	--	-- --
	Stem End	--	-- --
	Average	--	--
Weight Loss ⁷	6	3.8	2.0-5.0
Dormancy ⁸	6	99	77-153
Enzymatic Browning ⁹	--	--	-- --
Specific Gravity	6	1.086	1.082-1.092
Fry Color ¹⁰	Harvest	--	-- --
	Storage	--	-- --
Fry Texture ¹¹	Harvest	4	3.0-5.0
	Storage	4	3.0-5.0

Refer to footnotes on page 47.

Table 32. Detailed data summary for AC99329-7PW/Y.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	4	519	463-561	
Yield US #1 (Cwt/A)	4	386	349-426	
% US #1	4	74.2	71.2-75.4	
Yield >10 oz (Cwt/A)	4	64	43-97	
Yield <4 oz (Cwt/A)	4	128	112-149	
% External Defects ¹	4	1.6	0.5-3.7	
% Hollow Heart ²	4	0.5	0.0-1.6	
% Stand	4	99	98-100	
Emergence Uniformity	4	3.6	3.0-4.0	
Vine Vigor ³	4	4.0	3.8-4.3	
Stems/Plant	4	5.0	3.6-7.1	
Vine Size ⁴	4	4.2	3.5-4.8	
Vine Maturity ⁵	4	2.9	2.8-3.3	
Blackspot ⁶	Bud End	4	4.5	4.2-4.9
	Stem End	4	3.5	2.7-4.5
	Average	4	4.0	
Weight Loss ⁷	4	3.8	2.0-4.6	
Dormancy ⁸	4	44	35-52	
Enzymatic Browning ⁹	4	4.1	3.0-4.6	
Specific Gravity	4	1.090	1.081-1.094	
Fry Color ¹⁰	Harvest	4	2.3	1.0-3.0
	Storage	4	2.5	2.0-3.0
Fry Texture ¹¹	Harvest	4	2.8	2.0-3.0
	Storage	4	3.5	3.0-4.0

Refer to footnotes on page 47.

Table 34. Detailed data summary for CO99045-1W/Y.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	4	508	422-561	
Yield US #1 (Cwt/A)	4	388	259-462	
% US #1	4	72.3	48.4-84.7	
Yield >10 oz (Cwt/A)	4	105	49-169	
Yield <4 oz (Cwt/A)	4	102	71-158	
% External Defects ¹	4	3.4	1.5-5.2	
% Hollow Heart ²	4	0.1	0.0-0.2	
% Stand	4	100	99-100	
Emergence Uniformity	4	3.3	3.0-3.5	
Vine Vigor ³	4	3.4	3.0-4.0	
Stems/Plant	4	4.4	3.7-6.0	
Vine Size ⁴	4	4.1	3.8-4.5	
Vine Maturity ⁵	4	3.1	2.5-3.5	
Blackspot ⁶	Bud End	4	4.8	4.5-5.0
	Stem End	4	4.5	4.1-5.0
	Average	4	4.6	
Weight Loss ⁷	4	2.2	1.4-2.6	
Dormancy ⁸	4	69	55-87	
Enzymatic Browning ⁹	4	4.6	4.0-5.0	
Specific Gravity	4	1.088	1.080-1.093	
Fry Color ¹⁰	Harvest	4	2.8	2.0-3.0
	Storage	4	3.0	2.0-4.0
Fry Texture ¹¹	Harvest	4	2.8	2.0-3.0
	Storage	4	2.8	2.0-3.8

Refer to footnotes on page 47.

Table 36. Detailed data summary for All Blue.

Variable	# Trials	Mean	Range
Total Yield (Cwt/A)	13	521	438-639
Yield US #1 (Cwt/A)	13	319	217-422
% US #1	13	60.8	46.5-74.9
Yield >10 oz (Cwt/A)	13	44	4-90
Yield <4 oz (Cwt/A)	13	199	139-280
% External Defects ¹	13	0.6	0.0-1.8
% Hollow Heart ²	13	0.2	0.0-1.5
% Stand	13	99	97-100
Emergence Uniformity	13	3.3	2.8-3.8
Vine Vigor ³	13	3.6	2.8-4.0
Stems/Plant	13	4.5	3.0-6.5
Vine Size ⁴	13	3.9	3.0-4.8
Vine Maturity ⁵	13	3.0	2.2-3.3
Blackspot ⁶	Bud End	---	---
	Stem End	---	---
	Average	---	---
Weight Loss ⁷	13	2.2	1.1-4.8
Dormancy ⁸	13	104	82-167
Enzymatic Browning ⁹	---	---	---
Specific Gravity	13	1.085	1.071-1.091
Fry Color ¹⁰	Harvest	---	---
	Storage	---	---
Fry Texture ¹¹	Harvest	13	2.8
	Storage	13	2.8

Refer to footnotes on page 47.

Table 38. Detailed data summary for Purple Majesty.

Variable	# Trials	Mean	Range
Total Yield (Cwt/A)	9	502	404-606
Yield US #1 (Cwt/A)	9	318	203-401
% US #1	9	62.8	43.6-72.3
Yield >10 oz (Cwt/A)	9	41	14-103
Yield <4 oz (Cwt/A)	9	179	122-290
% External Defects ¹	9	0.7	0.0-1.7
% Hollow Heart ²	9	1.5	0.4-3.4
% Stand	9	98	94-99
Emergence Uniformity	9	3.4	3.0-4.0
Vine Vigor ³	9	3.6	2.8-4.0
Stems/Plant	9	4.3	3.5-6.1
Vine Size ⁴	9	2.9	2.3-3.5
Vine Maturity ⁵	9	2.1	1.5-3.0
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 47.

Table 40. Detailed data summary for CO95051-7W.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	7	420	372-469	
Yield US #1 (Cwt/A)	7	359	295-411	
% US #1	7	85.3	78.3-90.0	
Yield >10 oz (Cwt/A)	7	78	28-145	
Yield <4 oz (Cwt/A)	7	57	37-92	
% External Defects ¹	7	1.0	0.6-1.6	
% Hollow Heart ²	7	0.5	0.0-1.3	
% Stand	7	94	82-99	
Emergence Uniformity	7	3.1	2.8-3.5	
Vine Vigor ³	7	3.1	3.0-3.3	
Stems/Plant	7	3.1	2.6-3.9	
Vine Size ⁴	7	3.5	3.0-4.0	
Vine Maturity ⁵	7	3.3	2.5-4.0	
Blackspot ⁶	Bud End	14	4.2	3.1-4.9
	Stem End	14	2.8	1.6-4.2
	Average	14	3.5	
Weight Loss ⁷	14	5.1	1.7-11.0	
Dormancy ⁸	14	76	62-100	
Enzymatic Browning ⁹	14	3.6	1.8-4.4	
Specific Gravity	15	1.098	1.089-1.110	
Chip Color ¹⁰	40	15	3.4	2.5-4.5
	40R	15	2.8	1.0-4.0
	50	15	2.2	1.0-4.0
	50R	15	1.9	1.0-3.5

Refer to footnotes on page 47.

Table 42. Detailed data summary for CO97043-14W.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	6	427	351-483	
Yield US #1 (Cwt/A)	6	355	297-428	
% US #1	6	83.1	77.2-88.5	
Yield >10 oz (Cwt/A)	6	103	48-187	
Yield <4 oz (Cwt/A)	6	66	44-96	
% External Defects ¹	6	1.4	0.3-2.4	
% Hollow Heart ²	6	0.4	0.0-1.3	
% Stand	6	88	69-100	
Emergence Uniformity	6	2.8	1.0-3.5	
Vine Vigor ³	6	3.2	2.8-3.8	
Stems/Plant	6	3.1	2.5-3.9	
Vine Size ⁴	6	3.0	2.8-3.0	
Vine Maturity ⁵	5	2.9	2.5-3.3	
Blackspot ⁶	Bud End	11	4.0	3.2-4.6
	Stem End	11	3.5	2.4-4.4
	Average	11	3.8	
Weight Loss ⁷	11	4.0	1.3-7.7	
Dormancy ⁸	11	108	84-160	
Enzymatic Browning ⁹	11	4.3	3.8-4.8	
Specific Gravity	12	1.088	1.083-1.093	
Chip Color ¹⁰	40	12	3.9	3.5-4.5
	40R	12	3.3	2.5-4.0
	50	12	2.0	1.0-2.5
	50R	12	1.9	1.5-2.5

Refer to footnotes on page 47.

Table 44. Detailed data summary for Atlantic.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	35	456	307-597	
Yield US #1 (Cwt/A)	35	392	265-512	
% US #1	35	86.1	67.9-93.2	
Yield >10 oz (Cwt/A)	35	148	53-290	
Yield <4 oz (Cwt/A)	35	51	19-135	
% External Defects ¹	35	2.6	0.1-9.1	
% Hollow Heart ²	35	5.1	0.3-16.4	
% Stand	35	96	88-100	
Emergence Uniformity	29	3.6	3.0-4.3	
Vine Vigor ³	29	3.5	2.8-4.3	
Stems/Plant	35	3.1	2.2-4.9	
Vine Size ⁴	29	3.1	2.2-4.0	
Vine Maturity ⁵	35	3.2	2.8-4.0	
Blackspot ⁶	Bud End	47	3.1	1.8-5.0
	Stem End	47	2.7	1.4-4.3
	Average	48	2.9	
Weight Loss ⁷	48	4.7	1.1-7.9	
Dormancy ⁸	45	85	62-119	
Enzymatic Browning ⁹	46	4.5	3.8-5.0	
Specific Gravity	49	1.097	1.083-1.120	
Chip Color ¹⁰	40	49	3.9	2.0-5.0
	40R	49	3.4	1.5-5.0
	50	49	2.6	1.0-4.0
	50R	49	2.4	1.0-4.0

Refer to footnotes on page 47.

Footnotes for Tables 2-45:

- 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.



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

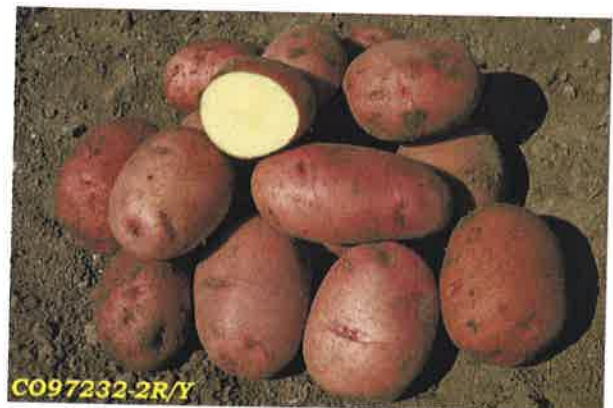


Figure 1 (cont'd). Photographs of advanced selections.

