

**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 - 2000. Advanced selections to be released for grower evaluation in 2001 are highlighted.

Clone	Usage ¹	# Trials	Total Yield (Cwt/A)	% US #1	Vine Maturity ²	Specific Gravity	% External Defects ³	% Hollow Heart ⁴
Russets								
AC83064-1	FM	13	465	88.8	3.1	1.078	1.5	0.0
AC83064-6	FM/Fry	13	391	85.4	3.0	1.080	1.5	0.3
CO85026-4	FM	11	375	89.1	3.6	1.084	3.5	0.0
AC87084-3	FM/Fry	8	509	89.2	3.4	1.094	2.8	0.3
AC87079-3	FM	6	434	81.9	2.8	1.090	1.6	2.2
AC87138-4	FM/Fry	6	483	78.1	3.3	1.087	3.7	0.7
AC89536-5	FM	5	504	82.8	3.2	1.083	3.1	0.2
AC91014-2	FM/Fry	4	407	77.6	3.0	1.090	2.6	1.5
AC91365-1	FM	4	438	82.1	3.6	1.086	2.0	8.2
Centennial Russet	FM	35	294	77.4	3.0	1.078	0.8	0.3
Russet Norkotah	FM	34	346	84.1	1.8	1.076	2.0	0.4
Russet Nugget	FM/Fry	36	407	80.3	3.8	1.090	1.7	0.2
Reds								
CO86218-2	FM	10	414	82.3	3.0	1.076	1.6	0.2
DT6063-1R	FM	7	460	86.8	2.9	1.081	3.0	0.4
CO89097-2	FM	6	492	82.9	2.9	1.080	2.7	0.3
Sangre	FM	19	453	85.5	2.9	1.072	1.6	1.0
Chippers								
BC0894-2	Chip	10	388	83.9	2.2	1.080	1.1	0.0
AC87340-2	Chip	6	475	79.2	3.3	1.082	1.0	0.3
AC89653-3	Chip	5	518	76.1	3.1	1.088	0.6	0.2
Atlantic	Chip	16	432	87.6	3.2	1.096	2.2	4.1
Chipeta	Chip	17	496	82.6	3.4	1.088	5.4	0.5

¹FM=fresh market; Fry=french fry; FM/Fry indicates a dual purpose clone.

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. Clone: **AC83064-1**
 Usage: Fresh Market
 Parents: CalWhite x A7875-5

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	13	465	361-569	
Yield US #1 (Cwt/A)	13	413	327-507	
% US #1	13	88.8	83.9-91.2	
Yield >10 oz (Cwt/A)	13	139	82-223	
Yield <4 oz (Cwt/A)	13	45	28-68	
% External Defects ¹	13	1.5	0.0-3.4	
% Hollow Heart ²	13	0.0	0.0-0.0	
% Stand	13	99	97-100	
Emergence Uniformity	9	3.3	2.8-4.0	
Vine Vigor ³	9	3.0	2.0-4.0	
Stems/Plant	13	3.7	2.7-4.9	
Vine Size ⁴	9	3.5	3.0-4.0	
Vine Maturity ⁵	13	3.1	3.0-3.5	
Blackspot ⁶	Bud End	11	5.0	4.9-5.0
	Stem End	11	5.0	4.8-5.0
	Average	11	5.0	
Weight Loss ⁷	11	3.9	2.4-5.2	
Dormancy ⁸	10	70	49-88	
Enzymatic Browning ⁹	11	4.6	3.8-5.0	
Specific Gravity	11	1.078	1.066-1.090	
Fry Color ¹⁰	Harvest	11	2.9	2.0-4.0
	Storage	11	3.5	3.0-4.0
Fry Texture ¹¹	Harvest	11	2.9	1.0-4.0
	Storage	11	2.8	1.0-3.0

Refer to footnotes on page 23.

Table 3. Clone: **AC83064-6**
 Usage: Dual
 Parents: CalWhite x A7875-5

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	13	391	329-456	
Yield US #1 (Cwt/A)	13	335	269-396	
% US #1	13	85.4	76.6-91.4	
Yield >10 oz (Cwt/A)	13	98	33-188	
Yield <4 oz (Cwt/A)	13	51	27-79	
% External Defects ¹	13	1.5	0.2-6.6	
% Hollow Heart ²	13	0.3	0.0-1.5	
% Stand	13	98	94-99	
Emergence Uniformity	9	3.5	3.0-4.5	
Vine Vigor ³	9	3.5	3.0-4.0	
Stems/Plant	13	3.2	2.4-3.8	
Vine Size ⁴	9	3.6	3.0-4.0	
Vine Maturity ⁵	13	3.0	2.5-3.2	
Blackspot ⁶	Bud End	11	4.5	3.6-5.0
	Stem End	11	4.6	3.8-5.0
	Average	11	4.6	
Weight Loss ⁷	11	5.2	3.6-7.2	
Dormancy ⁸	10	69	56-88	
Enzymatic Browning ⁹	11	3.7	2.2-5.0	
Specific Gravity	11	1.080	1.071-1.090	
Fry Color ¹⁰	Harvest	11	1.5	1.0-2.0
	Storage	11	1.7	1.0-2.0
Fry Texture ¹¹	Harvest	11	3.3	2.0-4.0
	Storage	11	3.2	2.0-4.0

Refer to footnotes on page 23.

Table 4. Clone: **CO85026-4**
 Usage: Fresh Market
 Parents: Century Russet x WNC630-2

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	11	375	295-422	
Yield US #1 (Cwt/A)	11	334	254-384	
% US #1	11	89.1	84.2-93.4	
Yield >10 oz (Cwt/A)	11	110	37-157	
Yield <4 oz (Cwt/A)	11	28	9-50	
% External Defects ¹	11	3.5	0.4-10.0	
% Hollow Heart ²	11	0.0	0.0-0.0	
% Stand	11	98	96-100	
Emergence Uniformity	9	3.5	3.2-3.8	
Vine Vigor ³	9	2.3	2.0-3.0	
Stems/Plant	11	2.5	1.8-2.9	
Vine Size ⁴	9	3.0	1.8-4.0	
Vine Maturity ⁵	11	3.6	3.2-4.0	
Blackspot ⁶	Bud End	9	3.9	2.5-5.0
	Stem End	9	3.5	1.8-4.8
	Average	9	3.7	
Weight Loss ⁷	9	3.6	2.3-5.0	
Dormancy ⁸	9	82	64-95	
Enzymatic Browning ⁹	9	3.9	3.0-4.6	
Specific Gravity	9	1.084	1.075-1.096	
Fry Color ¹⁰	Harvest	9	2.2	1.0-4.0
	Storage	9	3.0	2.0-4.0
Fry Texture ¹¹	Harvest	9	2.8	1.0-4.0
	Storage	9	2.6	1.0-3.0

Refer to footnotes on page 23.

Table 5. Clone: **AC87084-3**
 Usage: Dual
 Parents: A7979-28 x A8292-2

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	8	509	440-577	
Yield US #1 (Cwt/A)	8	455	335-530	
% US #1	8	89.2	76.2-94.3	
Yield >10 oz (Cwt/A)	8	189	63-271	
Yield <4 oz (Cwt/A)	8	40	18-70	
% External Defects ¹	8	2.8	0.5-7.9	
% Hollow Heart ²	8	0.3	0.0-1.9	
% Stand	8	97	93-98	
Emergence Uniformity	8	3.4	3.0-4.2	
Vine Vigor ³	8	3.8	3.3-4.2	
Stems/Plant	8	4.3	2.7-5.2	
Vine Size ⁴	8	4.4	4.0-5.0	
Vine Maturity ⁵	8	3.4	3.0-4.0	
Blackspot ⁶	Bud End	7	3.2	1.8-4.6
	Stem End	7	3.4	1.9-4.9
	Average	7	3.3	
Weight Loss ⁷	7	5.5	4.1-7.6	
Dormancy ⁸	7	74	68-83	
Enzymatic Browning ⁹	7	2.0	1.2-3.4	
Specific Gravity	7	1.094	1.086-1.101	
Fry Color ¹⁰	Harvest	7	1.9	1.0-2.0
	Storage	7	2.4	2.0-3.0
Fry Texture ¹¹	Harvest	7	3.9	3.0-4.0
	Storage	7	3.9	3.0-4.0

Refer to footnotes on page 23.

Table 6. Clone: **AC87079-3**
 Usage: Fresh Market
 Parents: A7979-28 x A8341-5

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	6	434	351-509	
Yield US #1 (Cwt/A)	6	360	233-448	
% US #1	6	81.9	66.1-90.9	
Yield >10 oz (Cwt/A)	6	114	13-219	
Yield <4 oz (Cwt/A)	6	68	39-116	
% External Defects ¹	6	1.6	0.5-4.7	
% Hollow Heart ²	6	2.2	0.0-6.0	
% Stand	6	96	86-100	
Emergence Uniformity	6	3.5	3.0-4.5	
Vine Vigor ³	6	3.8	2.5-4.8	
Stems/Plant	6	3.2	2.4-3.8	
Vine Size ⁴	6	3.5	3.0-4.0	
Vine Maturity ⁵	6	2.8	2.0-3.0	
Blackspot ⁶	Bud End	6	4.3	3.2-5.0
	Stem End	6	3.9	2.8-4.7
	Average	6	4.1	
Weight Loss ⁷	6	5.4	4.8-5.9	
Dormancy ⁸	6	87	71-114	
Enzymatic Browning ⁹	6	4.2	3.4-5.0	
Specific Gravity	6	1.090	1.083-1.098	
Fry Color ¹⁰	Harvest	6	2.0	1.0-3.0
	Storage	6	2.8	2.0-3.0
Fry Texture ¹¹	Harvest	6	3.5	2.0-4.0
	Storage	6	3.5	3.0-4.0

Refer to footnotes on page 23.

Table 7. Clone: **AC87138-4**
 Usage: Dual
 Parents: A81323-6 x Russet Norkotah

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	6	483	435-555	
Yield US #1 (Cwt/A)	6	380	231-496	
% US #1	6	78.1	52.6-89.0	
Yield >10 oz (Cwt/A)	6	114	17-188	
Yield <4 oz (Cwt/A)	6	86	47-182	
% External Defects ¹	6	3.7	2.1-5.6	
% Hollow Heart ²	6	0.7	0.0-1.9	
% Stand	6	98	94-100	
Emergence Uniformity	6	3.1	2.8-3.5	
Vine Vigor ³	6	3.1	2.5-3.5	
Stems/Plant	6	4.6	3.2-5.9	
Vine Size ⁴	6	3.4	3.0-3.5	
Vine Maturity ⁵	6	3.3	3.0-3.5	
Blackspot ⁶	Bud End	6	3.8	2.9-4.9
	Stem End	6	3.3	2.3-4.7
	Average	6	3.6	
Weight Loss ⁷	6	5.2	4.2-6.1	
Dormancy ⁸	6	96	85-121	
Enzymatic Browning ⁹	6	2.8	1.6-3.6	
Specific Gravity	6	1.087	1.081-1.094	
Fry Color ¹⁰	Harvest	6	1.5	1.0-2.0
	Storage	6	1.8	1.0-2.0
Fry Texture ¹¹	Harvest	6	3.0	1.0-4.0
	Storage	6	3.2	2.0-4.0

Refer to footnotes on page 23.

Table 8. Clone: **AC89536-5**
 Usage: Fresh Market
 Parents: Butte x A8469-5

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	5	504	367-683	
Yield US #1 (Cwt/A)	5	424	255-603	
% US #1	5	82.8	69.2-89.5	
Yield >10 oz (Cwt/A)	5	127	14-246	
Yield <4 oz (Cwt/A)	5	67	50-81	
% External Defects ¹	5	3.1	0.7-8.7	
% Hollow Heart ²	5	0.2	0.0-0.8	
% Stand	5	98	97-100	
Emergence Uniformity	5	3.7	3.0-4.0	
Vine Vigor ³	5	3.1	2.0-3.8	
Stems/Plant	5	3.1	2.0-3.6	
Vine Size ⁴	5	4.0	3.5-4.5	
Vine Maturity ⁵	5	3.2	3.0-3.5	
Blackspot ⁶	Bud End	5	4.7	4.2-5.0
	Stem End	5	4.6	3.0-5.0
	Average	5	4.6	
Weight Loss ⁷	5	5.7	4.0-6.9	
Dormancy ⁸	5	89	78-106	
Enzymatic Browning ⁹	5	3.8	3.2-4.2	
Specific Gravity	5	1.083	1.079-1.089	
Fry Color ¹⁰	Harvest	5	2.6	2.0-4.0
	Storage	5	3.2	3.0-4.0
Fry Texture ¹¹	Harvest	5	2.8	2.0-4.0
	Storage	5	2.8	2.0-3.0

Refer to footnotes on page 23.

Table 9. Clone: **AC91014-2**
Usage: Dual
Parents: A84180-8 x A8519-4

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	4	407	356-448	
Yield US #1 (Cwt/A)	4	317	249-356	
% US #1	4	77.6	69.9-87.8	
Yield >10 oz (Cwt/A)	4	50	22-77	
Yield <4 oz (Cwt/A)	4	79	47-96	
% External Defects ¹	4	2.6	0.6-4.4	
% Hollow Heart ²	4	1.5	0.0-4.4	
% Stand	4	98	97-98	
Emergence Uniformity	4	3.6	3.5-4.0	
Vine Vigor ³	4	3.1	3.0-3.3	
Stems/Plant	4	4.7	3.0-6.4	
Vine Size ⁴	4	3.0	3.0-3.0	
Vine Maturity ⁵	4	3.0	2.5-3.3	
Blackspot ⁶	Bud End	4	4.0	3.1-4.8
	Stem End	4	3.3	2.7-3.8
	Average	4	3.6	
Weight Loss ⁷	4	5.9	4.8-6.4	
Dormancy ⁸	4	95	85-104	
Enzymatic Browning ⁹	4	3.9	3.2-4.8	
Specific Gravity	4	1.090	1.084-1.099	
Fry Color ¹⁰	Harvest	4	1.3	1.0-2.0
	Storage	4	2.0	1.0-3.0
Fry Texture ¹¹	Harvest	4	4.0	4.0-4.0
	Storage	4	4.0	4.0-4.0

Refer to footnotes on page 23.

Table 10. Clone: **AC91365-1**
 Usage: **Fresh Market**
 Parents: **A85348-10 x A84118-3**

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	4	438	385-475	
Yield US #1 (Cwt/A)	4	362	301-409	
% US #1	4	82.1	77.9-86.1	
Yield >10 oz (Cwt/A)	4	91	39-181	
Yield <4 oz (Cwt/A)	4	67	44-79	
% External Defects ¹	4	2.0	0.0-4.6	
% Hollow Heart ²	4	8.2	3.8-19.8	
% Stand	4	98	94-100	
Emergence Uniformity	4	3.3	3.0-3.8	
Vine Vigor ³	4	3.0	2.8-3.3	
Stems/Plant	4	3.8	2.3-4.6	
Vine Size ⁴	4	3.4	3.0-4.0	
Vine Maturity ⁵	4	3.6	3.0-4.0	
Blackspot ⁶	Bud End	4	4.4	3.4-4.8
	Stem End	4	3.9	3.0-4.7
	Average	4	4.2	
Weight Loss ⁷	4	6.7	6.1-7.5	
Dormancy ⁸	4	92	85-103	
Enzymatic Browning ⁹	4	2.6	1.4-3.8	
Specific Gravity	4	1.086	1.080-1.092	
Fry Color ¹⁰	Harvest	4	2.8	2.0-3.0
	Storage	4	3.0	3.0-3.0
Fry Texture ¹¹	Harvest	4	3.0	2.0-4.0
	Storage	4	3.0	2.0-4.0

Refer to footnotes on page 23.

Table 11. Clone: **Centennial Russet**
 Usage: **Fresh Market**
 Parents: **Nooksack x W12-3**

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	32	4.8	3.7-5.0
	Stem End	32	4.8	4.2-5.0
	Average	35	4.8	
Weight Loss ⁷	35	6.8	3.7-9.0	
Dormancy ⁸	28	88	57-123	
Enzymatic Browning ⁹	30	4.0	3.2-5.0	
Specific Gravity	34	1.078	1.069-1.090	
Fry Color ¹⁰	Harvest	34	3.7	3.0-4.0
	Storage	34	3.9	3.0-4.0
Fry Texture ¹¹	Harvest	34	2.4	1.0-4.0
	Storage	34	2.2	1.0-3.0

Refer to footnotes on page 23.

Table 12. Clone: **Russet Norkotah**
 Usage: **Fresh Market**
 Parents: **ND9687-5 x ND9526-4**

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	34	346	174-451	
Yield US #1 (Cwt/A)	34	292	144-391	
% US #1	34	84.1	77.8-92.2	
Yield >10 oz (Cwt/A)	34	94	23-212	
Yield <4 oz (Cwt/A)	34	47	22-83	
% External Defects ¹	34	2.0	0.4-5.3	
% Hollow Heart ²	34	0.4	0.0-2.8	
% Stand	34	97	88-100	
Emergence Uniformity	25	3.1	1.0-4.0	
Vine Vigor ³	25	3.1	1.5-4.0	
Stems/Plant	30	3.6	2.5-4.8	
Vine Size ⁴	25	2.3	1.0-3.3	
Vine Maturity ⁵	34	1.8	1.0-3.0	
Blackspot ⁶	Bud End	28	4.9	4.1-5.0
	Stem End	28	4.7	3.4-5.0
	Average	29	4.8	
Weight Loss ⁷	29	4.5	1.0-7.1	
Dormancy ⁸	28	97	82-116	
Enzymatic Browning ⁹	28	3.3	2.2-4.8	
Specific Gravity	29	1.076	1.066-1.091	
Fry Color ¹⁰	Harvest	29	2.4	1.0-4.0
	Storage	29	2.6	1.0-4.0
Fry Texture ¹¹	Harvest	29	2.7	2.0-4.0
	Storage	29	2.8	2.0-4.0

Refer to footnotes on page 23.

Table 13. Clone: **Russet Nugget**
 Usage: Dual
 Parents: Krantz x AND71609-1RU

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	36	407	284-557	
Yield US #1 (Cwt/A)	36	329	225-518	
% US #1	36	80.3	68.0-93.0	
Yield >10 oz (Cwt/A)	36	82	11-258	
Yield <4 oz (Cwt/A)	36	71	30-113	
% External Defects ¹	36	1.7	0.1-4.3	
% Hollow Heart ²	36	0.2	0.0-1.2	
% Stand	35	98	96-100	
Emergence Uniformity	25	3.3	3.0-4.0	
Vine Vigor ³	25	3.2	3.0-4.0	
Stems/Plant	31	3.3	2.1-5.1	
Vine Size ⁴	25	4.2	4.0-5.0	
Vine Maturity ⁵	35	3.8	3.0-4.3	
Blackspot ⁶	Bud End	34	4.8	3.6-5.0
	Stem End	34	4.7	3.7-5.0
	Average	37	4.7	
Weight Loss ⁷	37	3.8	1.7-5.5	
Dormancy ⁸	32	94	57-116	
Enzymatic Browning ⁹	33	4.0	3.2-4.6	
Specific Gravity	37	1.090	1.072-1.110	
Fry Color ¹⁰	Harvest	37	1.7	0.5-3.0
	Storage	37	2.2	1.0-3.0
Fry Texture ¹¹	Harvest	37	4.0	2.0-5.0
	Storage	37	3.9	3.0-5.0

Refer to footnotes on page 23.

Table 14. Clone: **CO86218-2**
 Usage: **Fresh Market**
 Parents: **Sangre x NDTX9-1068-11R**

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	10	414	290-501	
Yield US #1 (Cwt/A)	10	342	226-437	
% US #1	10	82.3	73.1-90.3	
Yield >10 oz (Cwt/A)	10	104	45-189	
Yield <4 oz (Cwt/A)	10	65	32-119	
% External Defects ¹	10	1.6	0.3-4.4	
% Hollow Heart ²	10	0.2	0.0-1.9	
% Stand	10	94	88-99	
Emergence Uniformity	9	3.2	3.0-3.8	
Vine Vigor ³	9	2.2	2.0-3.0	
Stems/Plant	10	2.8	2.0-3.4	
Vine Size ⁴	9	3.0	2.0-4.0	
Vine Maturity ⁵	10	3.0	2.5-3.8	
Blackspot ⁶	Bud End	7	4.4	2.9-5.0
	Stem End	7	4.4	3.1-4.9
	Average	7	4.4	
Weight Loss ⁷	7	4.6	4.2-5.4	
Dormancy ⁸	7	78	68-88	
Enzymatic Browning ⁹	7	2.8	1.6-4.0	
Specific Gravity	7	1.076	1.072-1.082	
Fry Color ¹⁰	Harvest	7	2.7	2.0-3.0
	Storage	7	3.3	2.0-4.0
Fry Texture ¹¹	Harvest	7	2.6	2.0-3.0
	Storage	7	2.6	2.0-3.0

Refer to footnotes on page 23.

Table 15. Clone: **DT6063-1R**
Usage: **Fresh Market**
Parents: **ND4750-2R x LA1858**

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	7	460	363-538	
Yield US #1 (Cwt/A)	7	400	307-462	
% US #1	7	86.8	80.3-90.7	
Yield >10 oz (Cwt/A)	7	146	93-192	
Yield <4 oz (Cwt/A)	7	46	30-73	
% External Defects ¹	7	3.0	2.2-5.5	
% Hollow Heart ²	7	0.4	0.0-1.1	
% Stand	7	98	96-100	
Emergence Uniformity	7	3.2	2.8-3.8	
Vine Vigor ³	7	3.2	2.8-3.8	
Stems/Plant	7	3.2	2.1-3.9	
Vine Size ⁴	7	3.4	3.0-4.0	
Vine Maturity ⁵	7	2.9	2.5-3.3	
Blackspot ⁶	Bud End	7	4.9	4.6-5.0
	Stem End	7	4.8	4.6-5.0
	Average	7	4.8	
Weight Loss ⁷	7	5.4	3.5-6.1	
Dormancy ⁸	7	77	64-88	
Enzymatic Browning ⁹	7	4.1	3.4-4.6	
Specific Gravity	7	1.081	1.077-1.088	
Fry Color ¹⁰	Harvest	7	2.7	2.0-3.0
	Storage	7	3.1	2.0-4.0
Fry Texture ¹¹	Harvest	7	2.6	2.0-3.0
	Storage	7	2.9	2.0-3.0

Refer to footnotes on page 23.

Table 16. Clone: **CO89097-2**
 Usage: **Fresh Market**
 Parents: **NDTX9-1068-11R x DT6063-1R**

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	6	492	390-581	
Yield US #1 (Cwt/A)	6	410	310-527	
% US #1	6	82.9	75.6-90.7	
Yield >10 oz (Cwt/A)	6	134	69-249	
Yield <4 oz (Cwt/A)	6	68	46-98	
% External Defects ¹	6	2.7	0.2-6.5	
% Hollow Heart ²	6	0.3	0.0-0.8	
% Stand	6	97	95-100	
Emergence Uniformity	6	3.1	2.5-3.5	
Vine Vigor ³	6	2.9	2.2-3.0	
Stems/Plant	6	3.4	2.3-4.5	
Vine Size ⁴	6	3.5	3.0-4.0	
Vine Maturity ⁵	6	2.9	2.2-3.8	
Blackspot ⁶	Bud End	6	4.1	2.1-4.8
	Stem End	6	4.3	2.4-5.0
	Average	6	4.2	
Weight Loss ⁷	6	7.1	5.6-8.2	
Dormancy ⁸	6	65	54-78	
Enzymatic Browning ⁹	6	4.3	3.4-4.8	
Specific Gravity	6	1.080	1.071-1.086	
Fry Color ¹⁰	Harvest	6	2.7	2.0-3.0
	Storage	5	3.0	3.0-3.0
Fry Texture ¹¹	Harvest	6	2.8	2.0-4.0
	Storage	5	2.8	2.0-3.0

Refer to footnotes on page 23.

Table 17. Clone: **Sangre**
 Usage: Fresh Market
 Parents: Viking x A6356-9

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	19	453	364-571	
Yield US #1 (Cwt/A)	19	388	305-497	
% US #1	19	85.5	72.2-92.8	
Yield >10 oz (Cwt/A)	19	128	35-319	
Yield <4 oz (Cwt/A)	19	58	30-117	
% External Defects ¹	19	1.6	0.0-5.7	
% Hollow Heart ²	19	1.0	0.0-8.2	
% Stand	19	97	92-100	
Emergence Uniformity	9	3.1	2.5-3.5	
Vine Vigor ³	9	2.5	1.8-3.0	
Stems/Plant	19	3.0	1.9-3.9	
Vine Size ⁴	9	3.8	3.0-4.0	
Vine Maturity ⁵	19	2.9	1.5-4.0	
Blackspot ⁶	Bud End	23	4.3	2.4-5.0
	Stem End	23	4.6	2.5-5.0
	Average	24	4.5	
Weight Loss ⁷	24	3.8	2.2-5.1	
Dormancy ⁸	20	92	71-109	
Enzymatic Browning ⁹	21	3.3	1.8-4.8	
Specific Gravity	23	1.072	1.059-1.081	
Fry Color ¹⁰	Harvest	23	3.0	1.0-4.0
	Storage	23	3.0	1.0-4.0
Fry Texture ¹¹	Harvest	23	2.6	2.0-4.0
	Storage	23	2.5	2.0-3.0

Refer to footnotes on page 23.

Table 18. Clone: **BC0894-2**
Usage: **Chipping**
Parents: **B9955-46 x B0159-42**

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	10	388	330-471	
Yield US #1 (Cwt/A)	10	326	272-403	
% US #1	10	83.9	77.9-91.5	
Yield >10 oz (Cwt/A)	10	77	24-135	
Yield <4 oz (Cwt/A)	10	58	26-103	
% External Defects ¹	10	1.1	0.1-2.1	
% Hollow Heart ²	10	0.0	0.0-0.0	
% Stand	10	96	90-99	
Emergence Uniformity	9	3.0	2.2-3.8	
Vine Vigor ³	9	3.2	3.0-3.8	
Stems/Plant	10	2.9	2.3-3.8	
Vine Size ⁴	9	2.9	2.2-3.5	
Vine Maturity ⁵	10	2.2	1.2-2.8	
Blackspot ⁶	Bud End	13	4.7	3.6-5.0
	Stem End	13	4.1	2.6-5.0
	Average	13	4.4	
Weight Loss ⁷	13	5.6	3.5-12.9	
Dormancy ⁸	13	87	77-105	
Enzymatic Browning ⁹	13	3.4	1.4-4.4	
Specific Gravity	14	1.080	1.075-1.087	
Chip Color ¹⁰	40	14	3.0	2.0-4.5
	40R	14	2.3	1.0-4.0
	50	14	1.5	1.0-2.5
	50R	14	1.4	1.0-2.0

Refer to footnotes on page 23.

Table 19. Clone: **AC87340-2**
 Usage: Chipping
 Parents: NDA2031-2 x Spartan Pearl

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	6	475	429-544	
Yield US #1 (Cwt/A)	6	378	305-464	
% US #1	6	79.2	66.4-86.1	
Yield >10 oz (Cwt/A)	6	79	26-120	
Yield <4 oz (Cwt/A)	6	93	55-149	
% External Defects ¹	6	1.0	0.1-1.6	
% Hollow Heart ²	6	0.3	0.0-1.1	
% Stand	6	98	97-99	
Emergence Uniformity	6	3.6	3.0-4.0	
Vine Vigor ³	6	3.0	2.5-3.5	
Stems/Plant	6	3.6	2.6-4.8	
Vine Size ⁴	6	3.1	3.0-3.5	
Vine Maturity ⁵	6	3.3	3.0 -3.8	
Blackspot ⁶	Bud End	11	3.9	2.8-4.8
	Stem End	11	4.1	3.1-5.0
	Average	11	4.0	
Weight Loss ⁷	11	5.4	4.4-6.9	
Dormancy ⁸	11	74	49-93	
Enzymatic Browning ⁹	11	3.6	1.8-4.4	
Specific Gravity	12	1.082	1.075-1.094	
Chip Color ¹⁰	40	12	3.2	2.0-4.5
	40R	12	2.5	1.0-4.0
	50	12	1.5	1.0-2.5
	50R	12	1.4	1.0-2.5

Refer to footnotes on page 23.

Table 20. Clone: **AC89653-3**
 Usage: **Chipping**
 Parents: **NDA2031-2 x Spartan Pearl**

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	5	518	476-611	
Yield US #1 (Cwt/A)	5	398	297-522	
% US #1	5	76.1	62.4-85.5	
Yield >10 oz (Cwt/A)	5	49	21-97	
Yield <4 oz (Cwt/A)	5	117	84-178	
% External Defects ¹	5	0.6	0.1-1.0	
% Hollow Heart ²	5	0.2	0.0-0.5	
% Stand	5	99	97-100	
Emergence Uniformity	5	3.7	3.0-4.0	
Vine Vigor ³	5	3.9	3.8-4.0	
Stems/Plant	5	4.3	3.2-5.5	
Vine Size ⁴	5	3.8	3.5-4.0	
Vine Maturity ⁵	5	3.1	2.8-3.3	
Blackspot ⁶	Bud End	9	4.4	3.8-5.0
	Stem End	9	4.0	3.0-4.8
	Average	9	4.2	
Weight Loss ⁷	9	6.1	4.4-9.1	
Dormancy ⁸	9	66	49-78	
Enzymatic Browning ⁹	9	4.5	3.4-4.8	
Specific Gravity	10	1.088	1.079-1.096	
Chip Color ¹⁰	40	10	3.7	2.5-4.5
	40R	10	3.7	2.5-5.0
	50	10	2.4	1.5-3.5
	50R	10	2.3	1.5-3.5

Refer to footnotes on page 23.

Table 21. Clone: **Atlantic**
 Usage: **Chipping**
 Parents: **Wauseon x B5141-6**

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	16	432	307-566	
Yield US #1 (Cwt/A)	16	378	265-491	
% US #1	16	87.6	79.0-93.2	
Yield >10 oz (Cwt/A)	16	139	58-290	
Yield <4 oz (Cwt/A)	16	43	22-96	
% External Defects ¹	16	2.2	0.1-8.3	
% Hollow Heart ²	16	4.1	0.3-16.4	
% Stand	16	97	93-99	
Emergence Uniformity	10	3.5	3.0-4.3	
Vine Vigor ³	10	3.5	3.0-4.0	
Stems/Plant	16	3.0	2.2-4.2	
Vine Size ⁴	10	3.1	2.2-4.0	
Vine Maturity ⁵	16	3.2	2.8-4.0	
Blackspot ⁶	Bud End	18	3.3	1.8-5.0
	Stem End	18	3.1	1.7-4.3
	Average	18	3.2	
Weight Loss ⁷	18	5.4	3.0-7.9	
Dormancy ⁸	16	89	64-116	
Enzymatic Browning ⁹	17	4.4	3.8-5.0	
Specific Gravity	20	1.096	1.083-1.120	
Chip Color ¹⁰	40	20	3.7	2.0-5.0
	40R	20	3.0	1.5-4.5
	50	20	2.4	1.0-3.5
	50R	20	2.1	1.0-3.0

Refer to footnotes on page 23.

Table 22. Clone: **Chipeta**
 Usage: **Chipping**
 Parents: **WNC612-13 x Wischip**

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	17	496	399-626	
Yield US #1 (Cwt/A)	17	411	306-566	
% US #1	17	82.6	70.6-90.4	
Yield >10 oz (Cwt/A)	17	149	52-388	
Yield <4 oz (Cwt/A)	17	57	22-119	
% External Defects ¹	17	5.4	1.2-12.5	
% Hollow Heart ²	17	0.5	0.0-3.5	
% Stand	17	98	95-100	
Emergence Uniformity	10	3.3	3.0-3.8	
Vine Vigor ³	10	3.8	3.2-4.0	
Stems/Plant	16	3.5	2.5-4.4	
Vine Size ⁴	10	4.1	4.0-4.5	
Vine Maturity ⁵	17	3.4	3.0-4.0	
Blackspot ⁶	Bud End	19	4.1	2.7-5.0
	Stem End	19	3.9	2.2-4.9
	Average	21	4.0	
Weight Loss ⁷	20	4.1	2.2-5.3	
Dormancy ⁸	17	100	78-118	
Enzymatic Browning ⁹	18	3.6	2.8-5.0	
Specific Gravity	21	1.088	1.076-1.100	
Chip Color ¹⁰	40	21	4.3	3.0-5.0
	40R	21	3.4	2.0-5.0
	50	21	2.5	1.0-4.0
	50R	21	1.9	1.0-3.0

Refer to footnotes on page 23.

Footnotes

- 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.

Russet Selections and Recently Named Cultivars



AC91014-2RU



AC91365-1RU



AC87079-3RU



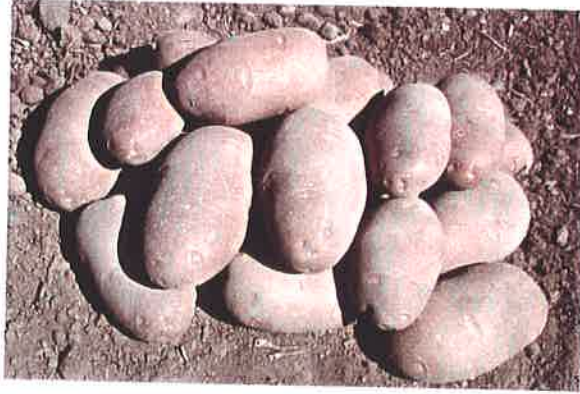
AC87138-4RU



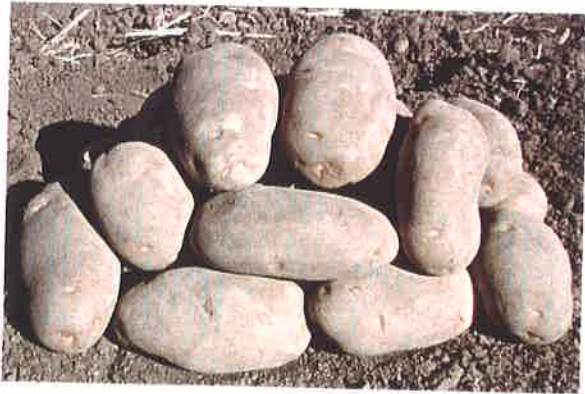
AC87084-3RU



AC89536-5RU



**Fremont Russet
(CO85026-4)**



Keystone Russet



Silverton Russet

Red Selections and Recently Named Cultivars



CO89097-2R



**Durango Red
(CO86218-2R)**



Cherry Red

Chipping Selections



BC0894-2W



AC87340-2W



AC89653-3W