

**Colorado  
Advanced Potato Selections**

**Data Summary**

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by

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**Table 1. Summary comparison of advanced selections and named cultivars for yield, grade, maturity, specific gravity, and grade defects - 1998. Advanced selections to be released for grower evaluation in 2000 are highlighted.**

Clone	Usage <sup>1</sup>	# Trials	Total Yield (Cwt/A)	% US #1	Vine Maturity <sup>2</sup>	Specific Gravity	% External Defects <sup>3</sup>	% Hollow Heart <sup>4</sup>
<b>Russets</b>								
AC83064-1	FM	10	469	88.5	3.2	1.078	1.5	0.0
AC83064-6	FM/Fry	10	392	86.0	3.0	1.079	1.1	0.3
CO85026-4	FM	8	372	89.1	3.7	1.082	3.8	0.0
AC87084-3	FM/Fry	6	520	90.7	3.5	1.093	2.2	0.1
AC87079-3	FM	4	443	84.7	2.7	1.089	2.0	1.4
AC87138-4	FM/Fry	4	504	82.6	3.3	1.086	3.5	0.6
CO89036-10	FM	4	458	80.8	3.3	1.082	4.0	0.0
AC90017-2	FM	3	447	83.0	3.3	1.079	5.0	0.0
AC89536-5	FM	3	572	87.7	3.2	1.082	1.4	0.0
Centennial Russet	FM	35	294	77.4	3.0	1.079	0.8	0.3
Russet Norkotah	FM	25	324	84.6	1.6	1.074	1.9	0.3
Russet Nugget	FM/Fry	28	416	81.6	3.9	1.093	1.7	0.2
<b>Reds</b>								
CO86218-2	FM	7	406	82.2	3.0	1.076	1.3	0.0
DT6063-1R	FM	5	461	87.8	2.8	1.080	3.0	0.4
CO89097-2	FM	4	508	84.2	2.9	1.080	2.3	0.1
NDC4655-1	FM	3	418	76.2	1.7	1.079	2.3	0.0
Sangre	FM	16	446	85.6	2.8	1.074	1.2	0.4
<b>Chippers</b>								
BC0894-2	Chip	7	402	84.7	2.0	1.080	0.8	0.0
AC87340-2	Chip	4	478	80.8	3.4	1.081	0.7	0.4
AC89653-3	Chip	3	540	81.3	3.1	1.089	0.7	0.0
Atlantic	Chip	12	424	87.7	3.3	1.097	2.0	3.4
Chipeta	Chip	13	492	84.8	3.4	1.092	3.9	0.3

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

<sup>2</sup> Vine maturity: 1=very early; 2=early; 3=medium; 4=late; 5=very late.

<sup>3</sup> Includes defects such as second growth, growth crack, misshapen, and green.

<sup>4</sup> Based 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)	10	469	361-569	
Yield US #1 (Cwt/A)	10	415	327-507	
% US #1	10	88.5	83.9-91.2	
Yield >10 oz (Cwt/A)	10	141	82-223	
Yield <4 oz (Cwt/A)	10	47	28-68	
% External Defects <sup>1</sup>	10	1.5	0.0-3.4	
% Hollow Heart <sup>2</sup>	10	0.0	0.0-0.0	
% Stand	10	98	97-100	
Emergence Uniformity	6	3.4	3.0-4.0	
Vine Vigor <sup>3</sup>	6	2.8	2.0-3.8	
Stems/Plant	10	3.7	2.7-4.9	
Vine Size <sup>4</sup>	6	3.6	3.0-4.0	
Vine Maturity <sup>5</sup>	10	3.2	3.0-3.5	
Blackspot <sup>6</sup>	Bud End	10	5.0	4.9-5.0
	Stem End	10	5.0	4.8-5.0
	Average	10	5.0	
Weight Loss <sup>7</sup>	10	3.9	2.4-5.2	
Dormancy <sup>8</sup>	9	70	49-88	
Enzymatic Browning <sup>9</sup>	10	4.6	3.8-5.0	
Specific Gravity	10	1.078	1.066-1.090	
Fry Color <sup>10</sup>	Harvest	10	2.9	2.0-4.0
	Storage	10	3.4	3.0-4.0
Fry Texture <sup>11</sup>	Harvest	10	2.9	1.0-4.0
	Storage	10	2.8	1.0-3.0

Refer to footnotes on page 24.

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

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	10	392	329-456	
Yield US #1 (Cwt/A)	10	337	269-396	
% US #1	10	86.0	76.6-91.4	
Yield >10 oz (Cwt/A)	10	108	35-188	
Yield <4 oz (Cwt/A)	10	51	27-79	
% External Defects <sup>1</sup>	10	1.1	0.2-2.8	
% Hollow Heart <sup>2</sup>	10	0.3	0.0-1.5	
% Stand	10	98	94-99	
Emergence Uniformity	6	3.3	3.0-3.5	
Vine Vigor <sup>3</sup>	6	3.4	3.0-3.8	
Stems/Plant	10	3.3	2.8-3.8	
Vine Size <sup>4</sup>	6	3.5	3.0-4.0	
Vine Maturity <sup>5</sup>	10	3.0	2.8-3.2	
Blackspot <sup>6</sup>	Bud End	10	4.6	3.9-5.0
	Stem End	10	4.8	3.8-5.0
	Average	10	4.7	
Weight Loss <sup>7</sup>	10	5.2	3.6-7.2	
Dormancy <sup>8</sup>	9	69	56-88	
Enzymatic Browning <sup>9</sup>	10	3.7	2.2-5.0	
Specific Gravity	10	1.079	1.071-1.090	
Fry Color <sup>10</sup>	Harvest	10	1.5	1.0-2.0
	Storage	10	1.7	1.0-2.0
Fry Texture <sup>11</sup>	Harvest	10	3.2	2.0-4.0
	Storage	10	3.2	2.0-4.0

Refer to footnotes on page 24.

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

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	8	372	295-422	
Yield US #1 (Cwt/A)	8	332	254-371	
% US #1	8	89.1	84.2-93.4	
Yield >10 oz (Cwt/A)	8	112	75-153	
Yield <4 oz (Cwt/A)	8	27	9-50	
% External Defects <sup>1</sup>	8	3.8	0.4-10.0	
% Hollow Heart <sup>2</sup>	8	0.0	0.0-0.0	
% Stand	8	99	97-100	
Emergence Uniformity	6	3.5	3.2-3.8	
Vine Vigor <sup>3</sup>	6	2.2	2.0-2.8	
Stems/Plant	8	2.6	2.2-2.9	
Vine Size <sup>4</sup>	6	3.0	1.8-4.0	
Vine Maturity <sup>5</sup>	8	3.7	3.2-4.0	
Blackspot <sup>6</sup>	Bud End	8	4.1	2.5-5.0
	Stem End	8	3.7	2.8-4.8
	Average	8	3.9	
Weight Loss <sup>7</sup>	8	3.7	2.3-5.0	
Dormancy <sup>8</sup>	8	81	64-95	
Enzymatic Browning <sup>9</sup>	8	4.0	3.0-4.6	
Specific Gravity	8	1.082	1.075-1.090	
Fry Color <sup>10</sup>	Harvest	8	2.3	1.0-4.0
	Storage	8	3.0	2.0-4.0
Fry Texture <sup>11</sup>	Harvest	8	2.6	1.0-4.0
	Storage	8	2.5	1.0-3.0

Refer to footnotes on page 24.

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

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	6	520	457-577	
Yield US #1 (Cwt/A)	6	471	411-530	
% US #1	6	90.7	87.4-94.3	
Yield >10 oz (Cwt/A)	6	203	106-271	
Yield <4 oz (Cwt/A)	6	37	18-53	
% External Defects <sup>1</sup>	6	2.2	0.5-4.3	
% Hollow Heart <sup>2</sup>	6	0.1	0.0-0.3	
% Stand	6	97	93-98	
Emergence Uniformity	6	3.5	3.0-4.2	
Vine Vigor <sup>3</sup>	6	3.9	3.5-4.2	
Stems/Plant	6	4.5	3.4-5.2	
Vine Size <sup>4</sup>	6	4.4	4.0-5.0	
Vine Maturity <sup>5</sup>	6	3.5	3.0-4.0	
Blackspot <sup>6</sup>	Bud End	6	3.7	1.8-4.6
	Stem End	6	3.6	1.9-4.9
	Average	6	3.5	
Weight Loss <sup>7</sup>	6	5.6	4.1-7.6	
Dormancy <sup>8</sup>	6	74	68-83	
Enzymatic Browning <sup>9</sup>	6	2.2	1.2-3.4	
Specific Gravity	6	1.093	1.086-1.101	
Fry Color <sup>10</sup>	Harvest	6	1.8	1.0-2.0
	Storage	6	2.3	2.0-3.0
Fry Texture <sup>11</sup>	Harvest	6	3.8	3.0-4.0
	Storage	6	4.0	4.0-4.0

Refer to footnotes on page 24.

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

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	4	443	351-509	
Yield US #1 (Cwt/A)	4	378	284-448	
% US #1	4	84.7	78.7-90.9	
Yield >10 oz (Cwt/A)	4	128	57-219	
Yield <4 oz (Cwt/A)	4	58	39-87	
% External Defects <sup>1</sup>	4	2.0	0.6-4.7	
% Hollow Heart <sup>2</sup>	4	1.4	0.0-4.2	
% Stand	4	95	86-100	
Emergence Uniformity	4	3.5	3.0-4.5	
Vine Vigor <sup>3</sup>	4	3.9	2.5-4.8	
Stems/Plant	4	3.1	2.4-3.8	
Vine Size <sup>4</sup>	4	3.4	3.0-3.8	
Vine Maturity <sup>5</sup>	4	2.7	2.0-3.0	
Blackspot <sup>6</sup>	Bud End	4	4.2	3.2-4.7
	Stem End	4	3.8	2.8-4.2
	Average	4	4.0	
Weight Loss <sup>7</sup>	4	5.7	5.2-5.9	
Dormancy <sup>8</sup>	4	80	71-97	
Enzymatic Browning <sup>9</sup>	4	4.3	3.8-5.0	
Specific Gravity	4	1.089	1.084-1093	
Fry Color <sup>10</sup>	Harvest	4	2.0	1.0-3.0
	Storage	4	3.0	3.0-3.0
Fry Texture <sup>11</sup>	Harvest	4	3.3	2.0-4.0
	Storage	4	3.3	3.0-4.0

Refer to footnotes on page 24.



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

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	4	504	435-555	
Yield US #1 (Cwt/A)	4	417	363-496	
% US #1	4	82.6	78.9-89.0	
Yield >10 oz (Cwt/A)	4	131	89-188	
Yield <4 oz (Cwt/A)	4	70	47-99	
% External Defects <sup>1</sup>	4	3.5	2.1-5.1	
% Hollow Heart <sup>2</sup>	4	0.6	0.0-1.2	
% Stand	4	98	94-100	
Emergence Uniformity	4	3.1	2.8-3.5	
Vine Vigor <sup>3</sup>	4	3.0	2.5-3.5	
Stems/Plant	4	4.6	3.9-5.0	
Vine Size <sup>4</sup>	4	3.3	3.0-3.5	
Vine Maturity <sup>5</sup>	4	3.3	3.0-3.5	
Blackspot <sup>6</sup>	Bud End	4	3.7	3.2-4.3
	Stem End	4	3.2	2.6-3.5
	Average	4	3.5	
Weight Loss <sup>7</sup>	4	5.6	5.1-6.1	
Dormancy <sup>8</sup>	4	91	85-104	
Enzymatic Browning <sup>9</sup>	4	3.0	2.6-3.6	
Specific Gravity	4	1.086	1.081-1.093	
Fry Color <sup>10</sup>	Harvest	4	1.3	1.0-2.0
	Storage	4	1.8	1.0-2.0
Fry Texture <sup>11</sup>	Harvest	4	3.0	1.0-4.0
	Storage	4	3.3	2.0-4.0

Refer to footnotes on page 24.

**Table 8.** Clone: **CO89036-10**  
Usage: **Fresh Market**  
Parents: **AC83064-6 x CO82142-4**

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	4	458	379-547	
Yield US #1 (Cwt/A)	4	371	317-469	
% US #1	4	80.8	75.7-85.8	
Yield >10 oz (Cwt/A)	4	95	36-180	
Yield <4 oz (Cwt/A)	4	69	42-102	
% External Defects <sup>1</sup>	4	4.0	0.9-7.5	
% Hollow Heart <sup>2</sup>	4	0.0	0.0-0.0	
% Stand	4	98	97-99	
Emergence Uniformity	4	3.3	3.0-3.5	
Vine Vigor <sup>3</sup>	4	3.4	3.0-3.5	
Stems/Plant	4	3.8	3.3-4.2	
Vine Size <sup>4</sup>	4	3.5	3.2-3.8	
Vine Maturity <sup>5</sup>	4	3.3	3.0-3.5	
Blackspot <sup>6</sup>	Bud End	4	4.6	4.3-5.0
	Stem End	4	4.7	4.3-4.9
	Average	4		
Weight Loss <sup>7</sup>	4	4.3	3.8-4.5	
Dormancy <sup>8</sup>	4	98	92-104	
Enzymatic Browning <sup>9</sup>	4	3.4	2.2-4.4	
Specific Gravity	4	1.082	1.075-1.089	
Fry Color <sup>10</sup>	Harvest	4	3.5	3.0-4.0
	Storage	4	3.5	3.0-4.0
Fry Texture <sup>11</sup>	Harvest	4	2.8	2.0-3.0
	Storage	4	2.8	2.0-3.0

Refer to footnotes on page 24.

**Table 9.** Clone: **AC90017-2**  
 Usage: **Fresh Market**  
 Parents: **A8495-13 x A8341-5**

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	3	447	422-491	
Yield US #1 (Cwt/A)	3	372	334-430	
% US #1	3	83.0	77.9-87.6	
Yield >10 oz (Cwt/A)	3	73	29-146	
Yield <4 oz (Cwt/A)	3	53	47-61	
% External Defects <sup>1</sup>	3	5.0	1.9-10.3	
% Hollow Heart <sup>2</sup>	3	0.0	0.0-0.0	
% Stand	3	99	98-100	
Emergence Uniformity	3	3.1	2.5-3.5	
Vine Vigor <sup>3</sup>	3	2.4	2.0-3.0	
Stems/Plant	3	2.5	2.4-2.5	
Vine Size <sup>4</sup>	3	3.4	3.3-3.5	
Vine Maturity <sup>5</sup>	3	3.3	2.5-4.0	
Blackspot <sup>6</sup>	Bud End	3	4.6	4.1-5.0
	Stem End	3	4.4	4.1-4.8
	Average	3	4.5	
Weight Loss <sup>7</sup>	3	4.5	4.4-4.5	
Dormancy <sup>8</sup>	3	75	71-82	
Enzymatic Browning <sup>9</sup>	3	4.1	3.4-4.4	
Specific Gravity	3	1.079	1.077-1.081	
Fry Color <sup>10</sup>	Harvest	3	3.0	2.0-4.0
	Storage	3	3.7	3.0-4.0
Fry Texture <sup>11</sup>	Harvest	3	2.7	2.0-3.0
	Storage	3	2.0	2.0-2.0

Refer to footnotes on page 24.

**Table 10.** Clone: **AC89536-5**  
Usage: **Fresh Market**  
Parents: **Butte x A8469-5**

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	3	572	515-683	
Yield US #1 (Cwt/A)	3	502	441-603	
% US #1	3	87.7	85.2-89.5	
Yield >10 oz (Cwt/A)	3	172	106-246	
Yield <4 oz (Cwt/A)	3	62	50-74	
% External Defects <sup>1</sup>	3	1.4	0.7-2.8	
% Hollow Heart <sup>2</sup>	3	0.0	0.0-0.0	
% Stand	3	99	98-100	
Emergence Uniformity	3	3.9	3.8-4.0	
Vine Vigor <sup>3</sup>	3	3.4	3.0-3.8	
Stems/Plant	3	3.3	3.0-3.6	
Vine Size <sup>4</sup>	3	4.2	4.0-4.5	
Vine Maturity <sup>5</sup>	3	3.2	3.0-3.3	
Blackspot <sup>6</sup>	Bud End	3	4.7	4.2-5.0
	Stem End	3	4.9	4.8-5.0
	Average	3	4.8	
Weight Loss <sup>7</sup>	3	6.0	5.5-6.9	
Dormancy <sup>8</sup>	3	82	78-85	
Enzymatic Browning <sup>9</sup>	3	3.9	3.2-4.2	
Specific Gravity	3	1.082	1.079-1.086	
Fry Color <sup>10</sup>	Harvest	3	2.0	2.2-2.0
	Storage	3	3.0	3.0-3.0
Fry Texture <sup>11</sup>	Harvest	3	3.0	2.0-4.0
	Storage	3	2.7	2.0-3.0

Refer to footnotes on page 24.

**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	232	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 <sup>1</sup>	35	0.8	0.0-3.3	
% Hollow Heart <sup>2</sup>	35	0.3	0.0-3.3	
% Stand	35	97	90-99	
Emergence Uniformity	15	3.2	3.0-3.5	
Vine Vigor <sup>3</sup>	15	2.2	1.0-3.0	
Stems/Plant	27	3.0	2.2-3.6	
Vine Size <sup>4</sup>	15	2.6	2.0-3.0	
Vine Maturity <sup>5</sup>	35	3.0	2.5-3.5	
Blackspot <sup>6</sup>	Bud End	25	4.8	3.7-5.0
	Stem End	25	4.8	4.2-5.0
	Average	28	4.8	
Weight Loss <sup>7</sup>	28	6.6	3.7-8.9	
Dormancy <sup>8</sup>	21	86	57-123	
Enzymatic Browning <sup>9</sup>	23	3.9	3.2-5.0	
Specific Gravity	27	1.079	1.070-1.090	
Fry Color <sup>10</sup>	Harvest	27	3.6	3.0-4.0
	Storage	27	3.9	3.0-4.0
Fry Texture <sup>11</sup>	Harvest	27	2.5	1.0-4.0
	Storage	27	2.1	1.0-3.0

Refer to footnotes on page 24.

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

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	25	324	174-435	
Yield US #1 (Cwt/A)	25	276	144-380	
% US #1	25	84.6	78.0-92.2	
Yield >10 oz (Cwt/A)	25	91	23-212	
Yield <4 oz (Cwt/A)	25	42	22-67	
% External Defects <sup>1</sup>	25	1.9	0.4-5.3	
% Hollow Heart <sup>2</sup>	25	0.3	0.0-2.0	
% Stand	25	97	88-100	
Emergence Uniformity	16	2.9	1.0-4.0	
Vine Vigor <sup>3</sup>	16	2.7	1.5-3.2	
Stems/Plant	21	3.2	2.5-4.6	
Vine Size <sup>4</sup>	16	2.0	1.0-3.0	
Vine Maturity <sup>5</sup>	25	1.6	1.0-3.0	
Blackspot <sup>6</sup>	Bud End	21	4.9	4.4-5.0
	Stem End	21	4.8	4.1-5.0
	Average	22	4.9	
Weight Loss <sup>7</sup>	22	4.5	1.0-7.1	
Dormancy <sup>8</sup>	21	96	82-116	
Enzymatic Browning <sup>9</sup>	21	3.4	2.6-4.8	
Specific Gravity	22	1.074	1.066-1.082	
Fry Color <sup>10</sup>	Harvest	22	2.3	1.0-4.0
	Storage	22	2.4	1.0-3.0
Fry Texture <sup>11</sup>	Harvest	22	2.7	2.0-4.0
	Storage	22	2.8	2.0-4.0

Refer to footnotes on page 24.

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

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	28	416	284-557	
Yield US #1 (Cwt/A)	28	342	225-518	
% US #1	28	81.6	68.0-93.0	
Yield >10 oz (Cwt/A)	28	87	11-258	
Yield <4 oz (Cwt/A)	28	67	30-113	
% External Defects <sup>1</sup>	28	1.7	0.1-4.3	
% Hollow Heart <sup>2</sup>	28	0.2	0.0-1.2	
% Stand	28	98	96-100	
Emergence Uniformity	18	3.3	3.0-4.0	
Vine Vigor <sup>3</sup>	18	3.2	3.0-4.0	
Stems/Plant	24	3.5	2.6-5.1	
Vine Size <sup>4</sup>	18	4.3	4.0-5.0	
Vine Maturity <sup>5</sup>	28	3.9	3.0-4.3	
Blackspot <sup>6</sup>	Bud End	23	4.9	4.4-5.0
	Stem End	23	4.8	4.3-5.0
	Average	26	4.8	
Weight Loss <sup>7</sup>	26	3.7	1.7-5.5	
Dormancy <sup>8</sup>	21	90	57-109	
Enzymatic Browning <sup>9</sup>	22	3.9	3.2-4.6	
Specific Gravity	26	1.093	1.081-1.110	
Fry Color <sup>10</sup>	Harvest	26	1.5	0.5-2.0
	Storage	26	2.0	1.0-3.0
Fry Texture <sup>11</sup>	Harvest	26	4.2	3.0-5.0
	Storage	26	4.0	3.0-5.0

Refer to footnotes on page 24.

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

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	7	406	290-501	
Yield US #1 (Cwt/A)	7	335	226-437	
% US #1	7	82.2	73.1-90.3	
Yield >10 oz (Cwt/A)	7	106	47-189	
Yield <4 oz (Cwt/A)	7	65	32-119	
% External Defects <sup>1</sup>	7	1.3	0.3-4.1	
% Hollow Heart <sup>2</sup>	7	0.0	0.0-0.2	
% Stand	7	96	91-99	
Emergence Uniformity	6	3.5	3.2-3.8	
Vine Vigor <sup>3</sup>	6	2.2	2.0-2.8	
Stems/Plant	8	2.6	2.2-2.9	
Vine Size <sup>4</sup>	6	3.0	1.8-4.0	
Vine Maturity <sup>5</sup>	7	3.0	2.5-3.8	
Blackspot <sup>6</sup>	Bud End	6	4.3	2.9-5.0
	Stem End	6	4.3	3.1-4.9
	Average	6	4.3	
Weight Loss <sup>7</sup>	6	4.7	4.2-5.4	
Dormancy <sup>8</sup>	6	79	68-88	
Enzymatic Browning <sup>9</sup>	6	3.0	2.2-4.0	
Specific Gravity	6	1.076	1.072-1.082	
Fry Color <sup>10</sup>	Harvest	6	2.8	2.0-3.0
	Storage	6	3.2	2.0-4.0
Fry Texture <sup>11</sup>	Harvest	6	2.7	2.0-3.0
	Storage	6	2.7	2.0-3.0

Refer to footnotes on page 24.



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

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	5	461	363-538	
Yield US #1 (Cwt/A)	5	406	307-462	
% US #1	5	87.8	84.4-90.7	
Yield >10 oz (Cwt/A)	5	163	98-192	
Yield <4 oz (Cwt/A)	5	41	30-48	
% External Defects <sup>1</sup>	5	3.0	2.2-5.5	
% Hollow Heart <sup>2</sup>	5	0.4	0.0-1.1	
% Stand	5	98	96-100	
Emergence Uniformity	5	3.2	2.8-3.8	
Vine Vigor <sup>3</sup>	5	3.2	3.0-3.5	
Stems/Plant	5	3.3	2.6-3.6	
Vine Size <sup>4</sup>	5	3.5	3.0-4.0	
Vine Maturity <sup>5</sup>	5	2.8	2.5-3.3	
Blackspot <sup>6</sup>	Bud End	5	4.9	4.7-5.0
	Stem End	5	4.8	4.6-5.0
	Average	5	4.9	
Weight Loss <sup>7</sup>	5	5.3	3.5-6.1	
Dormancy <sup>8</sup>	5	78	64-88	
Enzymatic Browning <sup>9</sup>	5	4.1	3.4-4.6	
Specific Gravity	5	1.080	1.077-1.086	
Fry Color <sup>10</sup>	Harvest	5	3.0	3.0-3.0
	Storage	5	3.2	3.0-4.0
Fry Texture <sup>11</sup>	Harvest	5	2.6	2.0-3.0
	Storage	5	2.8	2.0-3.0

Refer to footnotes on page 24.

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

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	4	508	390-581	
Yield US #1 (Cwt/A)	4	429	310-527	
% US #1	4	84.2	79.6-90.7	
Yield >10 oz (Cwt/A)	4	152	69-249	
Yield <4 oz (Cwt/A)	4	65	46-83	
% External Defects <sup>1</sup>	4	2.3	0.2-6.5	
% Hollow Heart <sup>2</sup>	4	0.1	0.0-0.5	
% Stand	4	98	95-100	
Emergence Uniformity	4	3.1	2.5-3.5	
Vine Vigor <sup>3</sup>	4	2.8	2.2-3.0	
Stems/Plant	4	3.4	2.8-3.8	
Vine Size <sup>4</sup>	4	3.5	3.0-4.0	
Vine Maturity <sup>5</sup>	4	2.9	2.2-3.8	
Blackspot <sup>6</sup>	Bud End	4	3.9	2.1-4.8
	Stem End	4	4.1	2.4-5.0
	Average	4	4.0	
Weight Loss <sup>7</sup>	4	7.4	6.8-8.2	
Dormancy <sup>8</sup>	4	61	54-76	
Enzymatic Browning <sup>9</sup>	4	4.5	4.0-4.8	
Specific Gravity	4	1.080	1.076-1.085	
Fry Color <sup>10</sup>	Harvest	4	2.8	2.0-3.0
	Storage	3	3.0	3.0-3.0
Fry Texture <sup>11</sup>	Harvest	4	2.8	2.0-3.0
	Storage	3	3.0	3.0-3.0

Refer to footnotes on page 24.

**Table 17.** Clone: **NDC4655-1**  
Usage: **Fresh Market**  
Parents: **ND1618-13R x LA12-59**

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	3	418	397-459	
Yield US #1 (Cwt/A)	3	320	280-371	
% US #1	3	76.2	70.2-80.9	
Yield >10 oz (Cwt/A)	3	74	24-122	
Yield <4 oz (Cwt/A)	3	88	68-111	
% External Defects <sup>1</sup>	3	2.3	1.1-4.3	
% Hollow Heart <sup>2</sup>	3	0.0	0.0-0.0	
% Stand	3	98	97-100	
Emergence Uniformity	3	3.1	3.0-3.2	
Vine Vigor <sup>3</sup>	3	2.9	2.8-3.0	
Stems/Plant	3	3.6	3.4-3.8	
Vine Size <sup>4</sup>	3	2.9	2.8-3.0	
Vine Maturity <sup>5</sup>	3	1.7	1.0-3.0	
Blackspot <sup>6</sup>	Bud End	3	4.6	4.3-4.9
	Stem End	3	4.3	3.2-5.0
	Average	3	4.5	
Weight Loss <sup>7</sup>	3	8.0	7.0-8.7	
Dormancy <sup>8</sup>	3	49	42-61	
Enzymatic Browning <sup>9</sup>	3	2.8	2.2-3.8	
Specific Gravity	3	1.079	1.074-1.087	
Fry Color <sup>10</sup>	Harvest	3	2.7	2.0-3.0
	Storage	3	3.7	3.0-4.0
Fry Texture <sup>11</sup>	Harvest	3	3.0	2.0-4.0
	Storage	3	2.7	2.0-3.0

Refer to footnotes on page 24.

**Table 18.** Clone: **Sangre**  
Usage: **Fresh Market**  
Parents: **Viking x A6356-9**

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	16	446	364-571	
Yield US #1 (Cwt/A)	16	382	305-497	
% US #1	16	85.6	72.2-92.8	
Yield >10 oz (Cwt/A)	16	123	35-319	
Yield <4 oz (Cwt/A)	16	58	30-117	
% External Defects <sup>1</sup>	16	1.2	0.0-5.7	
% Hollow Heart <sup>2</sup>	16	0.4	0.0-2.6	
% Stand	16	97	93-100	
Emergence Uniformity	6	3.1	2.5-3.5	
Vine Vigor <sup>3</sup>	6	2.4	1.8-3.0	
Stems/Plant	16	3.1	2.0-3.9	
Vine Size <sup>4</sup>	6	3.7	3.0-4.0	
Vine Maturity <sup>5</sup>	16	2.8	1.5-3.8	
Blackspot <sup>6</sup>	Bud End	15	4.1	2.4-5.0
	Stem End	15	4.6	2.5-5.0
	Average	16	4.4	
Weight Loss <sup>7</sup>	16	3.7	2.2-5.1	
Dormancy <sup>8</sup>	12	91	71-109	
Enzymatic Browning <sup>9</sup>	13	3.2	1.8-4.0	
Specific Gravity	15	1.074	1.066-1.081	
Fry Color <sup>10</sup>	Harvest	15	2.7	1.0-4.0
	Storage	15	2.6	1.0-4.0
Fry Texture <sup>11</sup>	Harvest	15	2.8	2.0-4.0
	Storage	15	2.6	2.0-3.0

Refer to footnotes on page 24.

**Table 19.** Clone: **BC0894-2**  
 Usage: **Chipping**  
 Parents: **B9955-46 x B0159-42**

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	7	402	330-471	
Yield US #1 (Cwt/A)	7	340	272-403	
% US #1	7	84.7	77.9-91.5	
Yield >10 oz (Cwt/A)	7	83	24-135	
Yield <4 oz (Cwt/A)	7	58	26-103	
% External Defects <sup>1</sup>	7	0.8	0.1-1.4	
% Hollow Heart <sup>2</sup>	7	0.0	0.0-0.0	
% Stand	7	96	90-99	
Emergence Uniformity	6	2.8	2.2-3.2	
Vine Vigor <sup>3</sup>	6	3.1	3.0-3.2	
Stems/Plant	7	3.0	2.5-3.8	
Vine Size <sup>4</sup>	6	2.8	2.2-3.0	
Vine Maturity <sup>5</sup>	7	2.0	1.2-2.8	
Blackspot <sup>6</sup>	Bud End	6	4.8	4.6-5.0
	Stem End	6	4.1	3.1-5.0
	Average	6	4.5	
Weight Loss <sup>7</sup>	6	6.2	3.5-12.9	
Dormancy <sup>8</sup>	6	84	78-88	
Enzymatic Browning <sup>9</sup>	6	3.2	1.4-4.0	
Specific Gravity	5	1.080	1.075-1.087	
Chip Color <sup>10</sup>	40	5	2.8	2.5-4.0
	40R	5	2.2	1.5-3.0
	50	5	1.5	1.0-2.0
	50R	5	1.3	1.0-2.0

Refer to footnotes on page 24.

**Table 20.** Clone: AC87340-2  
 Usage: Chipping  
 Parents: NDA2031-2 x Spartan Pearl

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	4	478	429-544	
Yield US #1 (Cwt/A)	4	387	308-464	
% US #1	4	80.8	69.3-86.1	
Yield >10 oz (Cwt/A)	4	83	29-115	
Yield <4 oz (Cwt/A)	4	87	55-137	
% External Defects <sup>1</sup>	4	0.7	0.1-1.4	
% Hollow Heart <sup>2</sup>	4	0.4	0.0-1.1	
% Stand	4	99	98-99	
Emergence Uniformity	4	3.5	3.0-3.8	
Vine Vigor <sup>3</sup>	4	2.8	2.5-3.0	
Stems/Plant	4	3.5	2.6-4.4	
Vine Size <sup>4</sup>	4	3.1	3.0-3.3	
Vine Maturity <sup>5</sup>	4	3.4	3.2-3.8	
Blackspot <sup>6</sup>	Bud End	9	3.9	2.8-4.8
	Stem End	9	4.2	3.2-5.0
	Average	9	4.1	
Weight Loss <sup>7</sup>	9	5.5	4.4-6.9	
Dormancy <sup>8</sup>	9	73	49-93	
Enzymatic Browning <sup>9</sup>	9	3.6	1.8-4.4	
Specific Gravity	10	1.081	1.075-1.091	
Chip Color <sup>10</sup>	40	10	3.1	2.5-4.0
	40R	10	2.3	1.5-4.0
	50	10	1.3	1.0-2.5
	50R	10	1.4	1.0-2.0

Refer to footnotes on page 24.

**Table 21.** Clone: AC89653-3  
 Usage: Chipping  
 Parents: NDA2031-2 x Spartan Pearl

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	3	540	476-611	
Yield US #1 (Cwt/A)	3	441	364-522	
% US #1	3	81.3	76.3-85.5	
Yield >10 oz (Cwt/A)	3	61	21-97	
Yield <4 oz (Cwt/A)	3	95	84-111	
% External Defects <sup>1</sup>	3	0.7	0.3-1.0	
% Hollow Heart <sup>2</sup>	3	0.0	0.0-0.0	
% Stand	3	99	99-100	
Emergence Uniformity	3	3.5	3.0-4.0	
Vine Vigor <sup>3</sup>	3	3.9	3.8-4.0	
Stems/Plant	3	4.1	3.2-5.0	
Vine Size <sup>4</sup>	3	3.8	3.5-4.0	
Vine Maturity <sup>5</sup>	3	3.1	2.8-3.3	
Blackspot <sup>6</sup>	Bud End	3	4.2	3.8-4.4
	Stem End	3	4.0	3.6-4.6
	Average	3	4.1	
Weight Loss <sup>7</sup>	3	7.1	5.7-9.1	
Dormancy <sup>8</sup>	3	53	49-57	
Enzymatic Browning <sup>9</sup>	3	4.1	3.4-4.8	
Specific Gravity	3	1.089	1.085-1.094	
Chip Color <sup>10</sup>	40	3	3.5	3.0-4.0
	40R	3	3.2	2.5-3.5
	50	3	1.8	1.5-2.0
	50R	3	2.0	2.0-2.0

Refer to footnotes on page 24.

**Table 22.** Clone: **Atlantic**  
 Usage: **Chipping**  
 Parents: **Wauseon x B5141-6**

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	12	424	307-566	
Yield US #1 (Cwt/A)	12	371	265-491	
% US #1	12	87.7	79.0-93.2	
Yield >10 oz (Cwt/A)	12	137	58-290	
Yield <4 oz (Cwt/A)	12	43	22-96	
% External Defects <sup>1</sup>	12	2.0	0.1-8.3	
% Hollow Heart <sup>2</sup>	12	3.4	0.3-14.1	
% Stand	12	97	94-99	
Emergence Uniformity	6	3.4	3.0-3.8	
Vine Vigor <sup>3</sup>	6	3.4	3.0-3.8	
Stems/Plant	12	3.0	2.2-3.9	
Vine Size <sup>4</sup>	6	3.0	2.2-3.5	
Vine Maturity <sup>5</sup>	12	3.3	2.8-4.0	
Blackspot <sup>6</sup>	Bud End	10	3.4	2.4-4.5
	Stem End	10	3.1	1.7-4.3
	Average	10	3.3	
Weight Loss <sup>7</sup>	10	5.2	3.0-7.4	
Dormancy <sup>8</sup>	8	83	64-95	
Enzymatic Browning <sup>9</sup>	9	4.3	3.8-4.8	
Specific Gravity	11	1.097	1.087-1.120	
Chip Color <sup>10</sup>	40	11	3.5	2.0-5.0
	40R	11	2.6	1.5-4.0
	50	11	2.3	1.0-3.0
	50R	11	1.9	1.5-2.5

Refer to footnotes on page 24.



**Table 23.** Clone: **Chipeta**  
 Usage: **Chipping**  
 Parents: **WNC612-13 x Wischip**

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	13	492	399-626	
Yield US #1 (Cwt/A)	13	419	306-566	
% US #1	13	84.8	72.4-90.4	
Yield >10 oz (Cwt/A)	13	153	52-388	
Yield <4 oz (Cwt/A)	13	53	22-119	
% External Defects <sup>1</sup>	13	3.9	1.2-10.3	
% Hollow Heart <sup>2</sup>	13	0.3	0.0-3.5	
% Stand	13	98	95-100	
Emergence Uniformity	6	3.2	3.0-3.5	
Vine Vigor <sup>3</sup>	6	3.6	3.2-4.0	
Stems/Plant	12	3.6	2.8-4.4	
Vine Size <sup>4</sup>	6	4.2	4.0-4.5	
Vine Maturity <sup>5</sup>	13	3.4	3.0-4.0	
Blackspot <sup>6</sup>	Bud End	10	4.0	2.7-4.7
	Stem End	10	3.9	2.8-4.6
	Average	12	4.0	
Weight Loss <sup>7</sup>	12	4.3	2.2-8.0	
Dormancy <sup>8</sup>	8	98	78-116	
Enzymatic Browning <sup>9</sup>	9	3.4	2.8-4.0	
Specific Gravity	12	1.092	1.080-1.100	
Chip Color <sup>10</sup>	40	12	4.2	3.0-5.0
	40R	12	3.0	2.0-4.0
	50	12	2.2	1.0-3.0
	50R	12	1.5	1.0-2.0

Refer to footnotes on page 24.

## Footnotes

- <sup>1</sup> Percent external defects based on the proportion of the total sample weight with significant defects.
- <sup>2</sup> Percent hollow heart calculated as follows: (Weight of tubers >10 ounces with defects/total sample weight) x 100.
- <sup>3</sup> Vine vigor is rated on a 1 to 5 scale, with 5 indicating very vigorous vines.
- <sup>4</sup> Vine size is rated on a 1 to 5 scale, with 5 indicating very large vines.
- <sup>5</sup> Vine maturity is rated on the following basis: 1=very early; 2=early; 3=medium; 4=late; and 5=very late.
- <sup>6</sup> Blackspot was rated on a 1 to 5 scale, with 5 indicating no discoloration.
- <sup>7</sup> Tubers were stored at 45F for approximately 3 months.
- <sup>8</sup> Days from harvest to first visible growth. Tubers were stored at 45F.
- <sup>9</sup> Degree of darkening rated at 60 minutes after slicing fresh lengthwise. Rated on a 1 to 5 scale, with 5 indicating no discoloration.
- <sup>10</sup> Chip color was rated using the Snack Food Association 1-5 scale. Ratings of  $\leq 2.0$  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  $\leq 2$  are acceptable.
- <sup>11</sup> 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.