UNIVERSITY OF CALIFORNIA INTERMOUNTAIN RESEARCH & EXTENSION CENTER RESEARCH PROGRESS

Number 120 **Feburary, 2008**

2007 Annual Progress Report to the California Potato Research Advisory Board

Potato Variety Development in Tulelake

Project Leaders: Harry L. Carlson, Center Director/Farm Advisor; Donald Kirby, Superintendent; Brooke Kliewer & Corey Thompson, Staff Research Associates. University of California Intermountain Research & Extension Center, 2816 Havlina Rd. Tulelake, Ca. 96134 Phone 530/667-2719 Fax 530/667-5265 Email:hlcarlson@ucdavis.edu

Potato Variety Development

In 2007, the Intermountain Research and Extension Center (IREC) conducted three potato variety trials. University and USDA potato breeders, from western states, provided the experimental breeding lines. A few select standard varieties were also included in the trials. The entries were separated into the following three trials, a Russet Trial with 26 varieties, a Specialty Trial with 36 varieties, and a Chipper Trial with 19 varieties.

Each entry was replicated in four yield plots. The IREC trial plots consisted of two 36" wide raised planting beds and each was planted with 48 seed pieces. Planting and harvest dates, and seed spacing for each trial are listed below.

Trial	Planting Date	Harvest Date	Seed Spacing (inches)
Russet Trial	5/16/07	10/8/07	10.5"
Specialty Trial	5/14/07	10/5/07	9.0"
Chip Trial	5/15/07	10/1/07	9.0"

Following the local commercial production practices including fertilizer, irrigation, and pest management, the potatoes in each trial are grown to maturity appropriate for each market class. At maturity, a total of 324 plots were harvested. The potatoes were graded for size and for internal and external qualities. The Klamath Basin experienced an unseasonably cool harvest season which affected the crop yield. In addition, verticillium wilt was common in the trial area and undoubtedly affected yield of susceptible varieties. Two replications for each variety were stored in a controlled environment for dormancy and storability assessments. Storage evaluation for each trial is in progress. The Russet and Specialty varieties will be stored for 180 days after harvest (DAH) at 40^{o}F each, and the Chip varieties will be stored for 120 DAH at 50^{o}F. Sprout inhibitor is not applied to any of the trial varieties.

Results

Russet Trial

The two highest yielding varieties in the Russet Trial were CO97138-7RU and AOA95155-7, which both produced 333 cwt/A of U.S. #1 potatoes. These varieties are both attractive potatoes with CO97138-7RU being the darker russet variety of the two. Neither showed signs of Hollow Heart at IREC. Other top yielding experimental lines included medium russet skinned varieties TXA549-1RU (similar results as 2006), A97287-6, and A95409-1. See Tables 1 and 2.

The above top performing varieties had good external appearance and little or no internal defects. The recently released standard variety, A93157-6LS, was the only higher yielding variety. See Tables 1 and 2.

Specialty Trial

The Specialty Trial included varieties with multiple and unique combinations of skin color and/or colored flesh. The combinations included red skin with white, yellow, or red flesh; purple skin with yellow or purple flesh, yellow, white or light russet skin with yellow flesh, and unique skin combinations of purple and yellow or red and yellow with yellow flesh. See Table 3.

Starting with the red skin and white fleshed varieties, experimental entry COTX00104-7R yielded similarly to the standard Dark Red Norland with yields of 409 cwt/A and 401 cwt/A of U.S. #1 potatoes respectively. The COTX00104-7R is an attractive round potato which yielded the most in the greater than 10 ounce size category. See Tables 4 and 5.

Next, CO97233-3R/Y was the highest yielding among red skinned and yellow fleshed potatoes. Producing a total of 395 cwt/A and 301 cwt/A of U.S. #1's. This light red skinned, deep yellow fleshed variety is oblong in shape with medium deep eyes. Other varieties producing higher yields were CO97232-2RY, which is light red skinned with a deep yellow flesh, medium eye depth, and is intermediate in overall appearance; and AC97521-1RY, an attractive semi round tuber with white flesh and deep eyes. See Tables 4 and 5.

Five entries were red skinned and red flesh. POR02PG5-1 far out yielded the others with a total yield of 516 cwt/A and 413 cwt/A of U.S. #1 potatoes. This variety is dark skinned with a light red flesh that produced larger, round tubers with average appearance. This variety ehibited little internal defects when compared to the other varieties with red skin and flesh. See Tables 4 and 5.

This year six purple skinned varieties were evaluated, four with purple flesh and two with yellow flesh. Of these varieties ATTX98500-2P/Y was the highest yielding at 449 cwt/A (similar results in 2006). This yellow fleshed variety is dark purple in skin color and round in shape with average eye depth. The standard All Blue variety with purple flesh came in

second with a total of 424 cwt/A but only yielded 233 cwt/A of U.S. #1 potatoes, due to the number of small tubers. See Tables 4 and 5.

Among the remaining yellow fleshed varieties, the highest total yields were produced by ATTX98500-3P/Y, an unusual purple and yellow skinned combination, and A96510-4Y, a light russet tuber. ATTX98500-3P/Y is an attractive potato that is eye catching with its wild appearance; it also has a deep yellow flesh, average eye depth, and produces larger sized tubers. See Tables 4 and 5.

Chip Trial

This years chip trial was much larger in the number of varieties planted compared to 2006 and the experimental varieties performed well against the standards. The highest yielding was 709781 with a total yield of 442 cwt/A and 411 cwt/A of U.S. #1's, with a majority of the tubers being 6 ounces and greater in size. Next was the standard Chipeta with a total yield of 430 cwt/A. Mega Chip also performed well in yield with a large percentage of tubers in the 6-10 ounce size and also tested well in our specific gravity evaluation. See Tables 6 and 7. The storage trial for the Chip Trial has not been completed but at 60 DAH, three varieties have shown sprout, Atlantic, 708402, and Pike.

Tuber samples from each variety were evaluated for chip fry quality at harvest and as of yet 60 DAH, being stored at 50^{o}F. At harvest all 19 varieties produced chips with a Snack Food Association (SFA) rating of 2, being a light yellow in color. Several varieties improved their SFA rating, becoming a rating of 1, after being stored for 60 days. Variety 708402 was the highest in percentage of Total Defects Found (TDF) at harvest. Dakota Pearl was very low in TDF for both cook test dates. Altlantic, Chipeta, Ivory Crisp, and 707681 all performed well in the chip fry quality and specific gravity tests for both dates. See Table 8.

Table 1. Tuber Yield & Size Grade of Standard & Experimental Russet Skinned Potato Varieties. Tulelake 2007.

	Tuber Yield (cwt/A)								
	U.S. No. 1's (cwt)								
Variety Name	**Total 1's**	**>12oz**	**8-12oz**	**4-8oz**	**<4oz**	**Culls**	**Total**	**%1's**	**% Stand**
Ranger Russet	238	21	65	151	66	12	315	75	97
Russet Burbank	245	8	54	183	69	19	333	73	97
Russet Norkotah	224	35	72	117	52	10	286	78	95
Shepody	234	7	49	178	98	9	342	69	98
A95409-1	304	39	124	140	42	14	359	85	90
A96104-2	286	72	101	114	35	13	334	86	97
A97287-6	307	15	92	199	64	8	379	81	92
AC96052-1RU	250	56	80	114	42	25	317	80	81
AO96141-3	264	34	93	138	43	15	322	82	96
AO96164-1	278	25	93	161	61	6	345	81	94
AOA95154-1	283	50	92	140	67	13	363	78	94
AOA95155-7	333	60	136	138	33	8	374	89	91
AOTX95265-2ARu	212	33	66	113	43	10	264	80	94
AOTX95265-3Ru	249	37	83	128	45	8	302	83	98
AOTX95265-4Ru	275	77	86	113	32	18	326	85	95
CO95172-3RU	288	24	86	178	57	9	354	81	91
CO97087-2RU	271	38	92	141	52	11	333	81	93
CO97138-3RU	236	41	80	114	40	11	286	82	92
CO97138-7RU	333	90	127	116	39	8	381	88	96
TXA549-1Ru	320	94	109	118	36	20	376	85	91
A93157-6LS	335	85	123	127	34	19	389	86	95
Russet Norkotah-S3	316	96	96	125	38	8	363	87	98
Russet Norkotah 278	278	57	94	127	46	7	331	84	96
ATX97232-1RU	172	4	31	138	95	12	280	61	96
CO98067-7RU	270	36	75	160	62	5	337	80	95
CO98368-2RU	191	10	49	132	68	15	273	70	78
Mean	268.92	44.02	86.37	138.54	52.22	11.98	333.12	80.34	93.39
CV%	9.71	38.58	16.83	12.13	16.24	90.31	7.75	5.17	4.06
LSD(0.05)	36.78	23.93	20.48	23.68	11.95	NS	36.39	5.86	5.34

Table 2. Tuber Characteristics of Experimental and Standard Russet Skinned Potato Varieties. Tulelake 2007.

Variety Name	Hollow Heart[1]	Shape[2]	Eye[3]	Russeting[4]	Appearance[5]	Maturity[6]	Specific Gravity
Ranger Russet	0	4.8	3.0	3.3	3.0	3.3	1.096
Russet Burbank	3	4.0	3.8	4.3	3.8	2.3	1.089
Russet Norkotah	5	4.0	3.5	4.5	4.5	1.0	1.078
Shepody	0	4.5	3.5	3.8	3.8	2.3	1.086
A95409-1	0	4.0	3.3	3.0	4.3	2.5	1.093
A96104-2	15	4.3	3.0	4.0	4.0	3.0	1.084
A97287-6	0	4.0	3.0	3.0	3.5	2.5	1.092
AC96052-1RU	13	4.0	4.0	4.8	4.8	4.0	1.087
AO96141-3	0	5.0	3.5	3.8	2.8	2.8	1.090
AO96164-1	10	4.3	4.3	3.5	3.8	2.0	1.087
AOA95154-1	5	4.0	4.0	4.3	4.3	3.5	1.093
AOA95155-7	0	4.0	3.5	3.0	4.8	4.5	1.085
AOTX95265-2ARu	10	4.0	3.5	4.8	4.8	1.0	1.072
AOTX95265-3Ru	20	4.0	3.3	4.3	3.8	1.3	1.078
AOTX95265-4Ru	15	4.0	3.3	5.0	4.0	1.3	1.077
CO95172-3RU	3	4.0	3.5	3.8	3.8	4.0	1.086
CO97087-2RU	0	4.0	4.0	4.3	3.8	1.8	1.087
CO97138-3RU	0	4.3	4.0	4.3	4.8	1.0	1.069
CO97138-7RU	0	4.0	4.0	4.0	4.8	2.3	1.071
TXA549-1Ru	3	3.8	3.8	3.0	4.0	3.0	1.098
A93157-6LS	5	4.0	3.8	4.0	4.3	5.0	1.099
Russet Norkotah-S3	45	4.5	3.3	4.5	4.3	2.5	1.076
Russet Norkotah 278	10	4.5	3.3	4.8	4.5	1.0	1.074
ATX97232-1RU	0	3.5	3.3	3.3	4.8	2.0	1.086
CO98067-7RU	0	4.0	3.8	3.5	4.3	1.3	1.085
CO98368-2RU	0	4.0	4.8	4.0	4.0	1.5	1.078
Mean	2.3	4.1	3.6	3.9	4.1	2.4	1.084
CV%	249	7.7	12.3	11.0	12.1	15.7	0.45
LSD (0.05)	NS	0.45	0.62	0.61	0.7	0.53	0.010

Rating Scales

[1]1 = % of 8-12oz Tubers

[2]1 = Round 5 = Long

[3]1 = Shallow 5 = Deep

[4]1 = Light 5 = Heavy

[5]1 = Poor 5 = Excellent

[6]1 = Early 5 = Late

Table 3. Skin & Flesh Colors of Experimental & Standard Varieties. Specialty Variety Trial. Tulelake 2007.

VARIETY	SKIN	FLESH
Dk Red Norland	Red	White
Red LaSoda	Red	White
CO98012-5R	Red	White
NDA7985-1R	Red	White
ATTX98453-6R	Red	White
CO99076-6R	Red	White
CO99256-2R	Red	White
CO99256-3R	Red	White
COTX94218-1R	Red	White
COTX00104-7R	Red	White
NDTX4784-7R	Red	White
AC97521-1R/Y	Red	Yellow
ATTX961014-1R/Y	Red	Yellow
CO97232-1R/Y	Red	Yellow
CO97232-2R/Y	Red	Yellow
CO97233-3R/Y	Red	Yellow
CO97222-1R/R	Red	Red
CO97226-2R/R	Red	Red
POR01PG20-12	Red	Red
POR01PG22-1	Red	Red
POR02PG5-1	Red	Red
All Blue	Purple	Purple
CO97215-2P/P	Purple	Purple
CO97227-2P/PW	Purple	Purple
POR01PG16-1	Purple	Purple
ATTX98500-2P/Y	Purple	Yellow
AC99330-1P/Y	Purple	Yellow
Yukon Gold	White	Yellow
A96510-4Y	Light Russet	Yellow
CO99045-1W/Y	Russet	Yellow
CO99338-3RU/Y	Russet	Yellow
POR02PG26-5	Yellow	Yellow
POR02PG37-2	Yellow	Yellow
AC99329-7PW/Y	Purple/Yellow	Yellow
ATTX98500-3P/Y	Purple/Yellow	Yellow
POR00PG4-1	Red/Yellow	Yellow

Table 4. Tuber Yield & Size Grade of Experimental and Standard Specialty Varieties. Tulelake 2007.

	Tuber Yield (cwt/A)								
	U.S. No. 1's (cwt)								
Variety Name	**Total 1's**	**>10oz**	**6-10oz**	**4-6oz**	**<4oz**	**Culls**	**Total**	**%1's**	**% Stand**
Dk Red Norland	401	132	181	89	56	15	472	85	94
Red LaSoda	372	133	172	68	32	21	425	87	88
CO98012-5R	206	9	70	127	138	13	357	58	94
NDA7985-1R	397	169	166	62	36	12	444	89	94
ATTX98453-6R	351	108	179	64	59	5	414	85	93
CO99076-6R	261	32	142	87	44	24	329	80	71
CO99256-2R	245	13	99	134	125	14	384	64	91
CO99256-3R	235	9	104	122	104	20	358	66	79
COTX94218-1R	274	23	129	122	120	26	420	65	98
COTX00104-7R	409	214	148	48	34	28	471	87	84
NDTX4784-7R	343	71	191	81	53	11	406	85	89
AC97521-1R/Y	294	36	145	114	67	25	387	76	85
ATTX961014-1R/Y	221	11	87	124	145	7	374	59	88
CO97232-1R/Y	216	20	91	105	108	11	335	65	88
CO97232-2R/Y	297	41	140	117	82	11	391	76	92
CO97233-3R/Y	301	84	136	82	57	37	395	76	67
CO97222-1R/R	210	12	99	99	104	66	381	55	86
CO97226-2R/R	171	0	46	125	176	16	364	47	96
POR01PG20-12	282	41	147	94	99	33	414	68	96
POR01PG22-1	0	0	0	0	254	0	254	0	97
POR02PG5-1	413	174	168	71	38	65	516	80	87
All Blue	233	16	105	112	161	29	424	55	99
CO97215-2P/P	187	20	88	78	93	24	304	61	75
CO97227-2P/PW	140	1	42	97	167	24	330	42	94
POR01PG16-1	106	0	31	75	140	79	325	33	97
ATTX98500-2P/Y	330	40	155	134	90	30	449	73	89
AC99330-1P/Y	59	0	11	48	193	4	256	23	95
Yukon Gold	288	85	134	69	58	4	350	82	84
A96510-4Y	323	167	113	43	27	39	388	83	88
CO99045-1W/Y	219	18	99	102	130	23	373	59	94
CO99338-3RU/Y	189	14	71	104	150	10	349	54	91
POR02PG26-5	193	11	64	118	149	10	351	55	91
POR02PG37-2	175	10	57	108	168	6	349	50	91
AC99329-7PW/Y	260	64	102	94	90	11	360	72	89
ATTX98500-3P/Y	283	36	133	113	95	40	417	68	83
POR00PG4-1	169	20	78	71	60	56	284	59	94
Mean	251.4	50.9	108.8	91.7	102.8	23.5	377.7	64.5	89.2
LSD (0.05)	39.3	28.1	26.5	18.1	18.3	13.9	40.4	5.4	7.8
CV%	11.1	39.5	17.4	14.1	12.7	42.2	7.6	5.9	6.3

Table 5. Tuber Characteristics of Experimental and Standard Specialty Varieties. Tulelake 2007.

Variety Name	Appearance[1]	Skin Color[2]	Internal Color[3]	Tuber Shape[4]	Eye Depth[5]	Net Necrosis[6]	Maturity[7]
Dk Red Norland	3.30	2.00	1.00	1.50	3.30	0.00	1.80
Red LaSoda	1.80	2.00	1.00	1.00	1.30	1.00	1.50
CO98012-5R	3.50	4.00	1.00	1.00	2.80	0.00	1.80
NDA7985-1R	4.30	3.30	1.00	1.50	3.50	0.00	1.30
ATTX98453-6R	3.80	2.30	1.00	1.00	3.00	0.00	1.30
CO99076-6R	4.00	3.80	1.00	1.00	3.00	0.00	1.30
CO99256-2R	4.80	3.30	1.00	1.30	3.80	3.00	2.80
CO99256-3R	3.80	2.80	1.00	2.00	3.00	1.00	1.00
COTX94218-1R	4.00	2.30	1.30	1.00	3.50	0.00	3.30
COTX00104-7R	3.30	3.30	1.00	1.80	3.00	0.00	2.80
NDTX4784-7R	3.30	3.50	1.00	1.00	2.80	0.00	1.00
AC97521-1R/Y	4.30	2.30	4.00	2.50	4.00	1.00	2.80
ATTX961014-1R/Y	4.00	2.50	2.50	1.50	3.50	0.00	1.00
CO97232-1R/Y	3.80	2.00	4.10	3.00	3.30	0.00	1.00
CO97232-2R/Y	3.00	1.80	4.00	2.30	3.50	0.00	1.00
CO97233-3R/Y	2.50	2.30	3.60	3.00	2.80	0.00	3.30
CO97222-1R/R	3.00	4.50	4.80	3.00	3.30	20.00	2.80
CO97226-2R/R	2.80	4.50	4.70	1.00	3.00	47.00	3.00
POR01PG20-12	2.80	3.80	3.00	4.80	3.50	49.00	3.00
POR01PG22-1	5.00	3.00	3.00	5.00	4.00	0.00	2.30
POR02PG5-1	2.30	4.80	1.50	1.30	3.00	3.00	5.00
All Blue	2.80	5.00	4.60	5.00	3.00	1.00	2.50
CO97215-2P/P	3.30	5.00	5.00	2.80	4.00	28.00	2.80
CO97227-2P/PW	3.30	5.00	5.00	5.00	3.80	1.00	2.30
POR01PG16-1	2.00	5.00	5.00	5.00	4.00	1.00	1.50
ATTX98500-2P/Y	3.50	5.00	3.80	1.00	3.00	0.00	3.80
AC99330-1P/Y	3.80	5.00	4.00	1.00	3.00	0.00	1.00
Yukon Gold	4.00	1.80	3.00	2.30	4.30	0.00	1.00
A96510-4Y	3.30	3.00	2.50	4.30	4.00	0.00	3.80
CO99045-1W/Y	4.00	2.30	3.80	4.50	4.00	8.00	2.00
CO99338-3RU/Y	3.80	2.30	4.00	2.30	3.00	25.00	1.00
POR02PG26-5	3.30	1.50	3.70	1.30	3.00	0.00	1.00
POR02PG37-2	3.50	2.00	3.90	1.00	3.00	0.00	1.00
AC99329-7PW/Y	3.80	3.00	3.40	1.00	2.80	46.00	3.50
ATTX98500-3P/Y	4.00	2.80	4.00	2.80	3.00	13.00	3.30
POR00PG4-1	3.80	2.00	4.60	2.80	3.30	3.00	1.30
Mean	3.5	3.2	3.0	2.3	3.3	6.0	2.1
LSD (0.05)	0.7	0.6	0.5	0.5	0.6	11.7	0.7
CV%	13.9	13.2	12.1	15.7	11.9	139	22.8

Rating Scales

[1]1 = Worst	5 = Best
[2]1 = White	5 = Dark
If Russet Skinned 1= Light	5 = Dark
[3]1 = White	5 = Dark
[4]1 = Round	5 = Long
[5]1 = Shallow	5 = Deep
[6]% (40 Tuber Sampled)	
[7]1 = Early	5 = Late

Table 6. Tuber Yield & Size Grade of Experimental and Standard Chip Varieties. Tulelake 2007.

	Tuber Yield (cwt/A)								
	U.S. No. 1's (cwt)								
Variety Name	**Total 1's**	**>10 oz**	**6-10 oz**	**4-6 oz**	**<4 oz**	**cull**	**Total**	**% 1's**	**% Stand**
Alantic	278	28	147	104	86	3	367	76	85
Chipeta	390	134	181	75	25	14	430	91	91
Ivory Crisp	293	52	142	100	78	6	377	78	88
AC97097-14W	220	14	90	116	119	11	349	63	81
CO96141-4W	327	51	172	104	71	3	400	82	92
CO97043-14W	318	74	149	95	71	7	396	80	90
CO97065-7W	219	14	86	119	87	4	309	70	85
Dakota Diamond	330	101	143	86	61	5	396	83	84
Wisconsin 2324-1	274	44	124	106	69	26	370	74	90
White Pearl	159	40	58	60	116	9	283	55	88
Beacon Chipper	318	113	141	64	48	11	377	84	94
708402	205	100	77	28	42	11	258	80	52
Mega Chip	325	68	163	94	57	24	406	80	84
Pike	332	111	151	70	46	5	383	87	74
Dakota Pearl	192	12	72	109	131	6	330	58	90
707681	290	49	149	93	64	4	359	81	82
703351	231	15	111	106	96	3	330	69	88
709781	411	154	191	66	24	6	442	93	83
AC99213-8W	318	71	147	100	71	13	402	79	87
Mean	285.8	65.5	131.1	89.2	71.7	9.0	366.5	77.0	84.5
CV%	10.1	26.6	16.3	20.8	23.9	127.3	7.1	7.0	7.2
LSD (0.05)	41.1	24.7	30.3	26.3	24.4	NS	36.9	7.6	8.6

Table 7. Tuber Characteristics of Experimental and Standard Chip Varieties. Tulelake 2007.

	Rating (1-5)					
Variety Name	**Shape[1]**	**Eye[2]**	**Skin[3]**	**Maturity[4]**	**Appearance[5]**	**Specific Gravity**
Atlantic	1.0	3.3	2.8	1.3	3.5	1.107
Chipeta	1.5	2.8	2.0	3.8	3.8	1.104
Ivory Crisp	1.3	2.0	1.8	3.0	3.0	1.101
AC97097-14W	2.8	4.3	1.5	2.5	5.0	1.100
CO96141-4W	1.8	3.5	1.5	2.0	4.0	1.092
CO97043-14W	1.5	3.0	1.5	2.3	3.3	1.096
CO97065-7W	1.0	2.3	2.0	1.0	3.3	1.103
Dakota Diamond	1.3	3.0	1.8	2.5	3.8	1.092
Wisconsin 2324-1	1.5	2.8	2.3	3.0	3.0	1.102
White Pearl	1.8	3.0	1.5	2.5	3.3	1.091
Beacon Chipper	1.8	3.0	2.3	3.0	3.5	1.097
708402	2.3	2.8	2.5	3.5	3.3	1.102
Mega Chip	2.0	2.3	2.0	4.0	3.0	1.106
Pike	2.3	3.3	1.5	2.8	3.0	1.094
Dakota Pearl	1.5	3.3	1.3	1.0	3.8	1.090
707681	1.5	2.5	1.5	1.0	3.3	1.106
703351	1.3	2.5	1.8	1.5	3.3	1.099
709781	1.5	2.8	1.5	2.8	3.0	1.094
AC99213-8W	1.0	2.3	1.8	4.0	3.0	1.103
Mean	1.6	2.9	1.8	2.5	3.4	1.099
CV%	29.2	15.7	31.8	28.1	11.5	0.3
LSD (0.05)	0.7	0.6	0.8	1.0	0.6	0.007

Rating Scales

[1]1 = Round	5 = Long
[2]1 = Shallow	5 = Deep
[3]1 = White	5 = Dark
[4]1 = Early	5 = Late
[5]1 = Worst	5 = Best

Table 8. Chip Fry Quality Data and Snack Food Association (SFA) Rating at Harvest and After 60 Days Storage at 50°F of Chip Varieties. Tulelake 2007.

	Date: 10/18/07			Date: 12/18/07		
Variety Name	**Specific Gravity**	**Total Defects Found[1]**	**SFA[2]**	**Specific Gravity**	**Total Defects Found[1]**	**SFA[2]**
AC99213-8W	1.103	11.3	2	1.097	2.6	1
CO96141-4W	1.093	2.5	2	1.097	7.9	2
Dakota Pearl	1.089	2.4	2	1.091	2.0	2
Dakota Diamond	1.091	12.7	2	1.101	16.9	1
Pike	1.098	4.5	2	1.092	9.5	1
Atlantic	1.106	6.0	2	1.108	25.3	2
AC97097-14W	1.100	3.2	2	1.102	7.9	2
White Pearl	1.103	6.9	2	1.105	17.9	2
703351	1.099	4.3	2	1.104	10.8	1
707681	1.106	6.3	2	1.111	11.4	1
708402	—	36.9	2	1.111	18.8	2
Beacon chipper	1.092	20.7	2	1.098	22.0	1
Chipeta	1.106	16.2	2	1.106	25.9	2
CO97043-14W	1.092	5.1	2	1.096	10.1	2
Ivory Crisp	1.106	2.3	2	1.111	14.0	1
Wisconsin 2324-1	1.105	2.2	2	1.108	17.9	2
CO97065-7W	1.097	8.8	2	1.085	12.3	2
Mega chip	—	7.2	2	1.108	64.5	1
709781	1.100	13.6	2	1.099	25.7	2

1= % of potato found to have undesirable coloring, external, and/or internal defects
2= Rating of 1-3 (1=best or most desired, 3= worst or dark yellow to brown in color)