

Florida Potato Variety Trial Report, 2011



HORTICULTURAL SCIENCES DEPARTMENT
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CHAPTER 1. INTRODUCTION

General Potato Production Information

Potato clones were obtained from university, government, and industry breeding programs. Clones progress through the evaluation program following the track described in the Potato Variety Evaluation Flowchart (Figure 1, page 9).

Potatoes (*Solanum tuberosum* L.) in the Tri-County Agricultural Area (TCAA) around Hastings, Florida are grown in 60-foot wide beds consisting of sixteen rows. Rows are raised with a between row spacing of 40 inches (center to center). The research plots were irrigated with seepage irrigation. A clay layer underlies the topsoil at a depth of three to five feet in the TCAA. In this system, the perched water table depth is managed by water flow into irrigation canals spaced between beds. Potato beds were irrigated continuously over the season except after a rain event.

Variety trials, unless noted, were conducted at the University of Florida/IFAS Partnership for Water Agricultural and Community Sustainability (PWACS) at Hastings, FL research and demonstration farm. PWACS is part of the University of Florida/IFAS network of research and demonstration farms located around the state to conduct research on important horticultural crops. The soil at the field site is classified as Ellzey fine sand (sandy, siliceous, hyperthermic Arenic Ochraqualf; sand 90-95%, < 2.5% clay, < 5% silt).

Potatoes were planted following a sorghum/sudan grass summer cover crop (*Sorghum bicolor* (L.) Moench x *S. arundinaceum* (Desv.) Stapf var. SX17, Dekalb). Cover crop was incorporated into the potato beds in October, 2010. Potato beds were fumigated with Pic-Clor 60, 11 gal/A (1,3-dichloropropene 39%, and chloropicrin 59.4%) in early-January 2011. Potato seed pieces were dusted with fungicide (Maxim) prior to planting. Quadris (8 oz/A) was applied in furrow at planting. Aldicarb (Temik, 20 lb/A) was also applied in furrow at planting. Boundary (1.5 pint/A), a combination of S-metolachlor and metribuzin was broadcast sprayed at hilling for weed control. Fungicides and insecticides were applied on a schedule based on IPM practices. Fresh market variety plots were vine-killed by chemical desiccation with diquat (Reglone 1 pt/A, 2 applications).

Fertilizer (50-100-150, granular) was incorporated into the beds prior to planting, unless otherwise noted. Two split side-dress fertilizer applications (75-0-125, granular and 75-0-0, granular) were made in all trials during the season, unless otherwise noted. Side-dress application dates were February 15, 23 and March 9, 2011.

Potato seed pieces were hand cut (approx. 2.5 oz) and hand planted on an 8-inch within row spacing unless otherwise noted. Plant growth characteristics were rated during the season following the descriptions listed in Table 1 (page 10). Plant type was rated at full flower approximately 60 days after planting. No growth enhancers or chemicals to enhance skin color were used in any trial unless otherwise noted.

Plots were harvested with a single-row, commercial potato harvester. Potatoes were graded using commercial grading equipment. Culls were removed and remaining potatoes were separated into six size classes and weighed. Specific gravity was measured on a random 20-tuber sample from each plot using the weight-in-air/weight-in-water method. A random sample was rated for external appearance characteristics. External tuber quality characteristics were rated following the descriptions in Table 2 (page 11). A second 20-tuber sample was collected and each tuber cut into fourths and rated for hollow heart (HH), brown rot (BR), corky ringspot (CRS), internal heat necrosis (IHN), and brown center (BC). BC was rated as light, moderate, or heavy if the cut pieces displayed the respective defects.

Sub-samples of potatoes from the USPB/SFA and Chipping trial were shipped to Utz Quality Foods and Wise Foods, Inc. respectively. Chips were prepared following the procedures outlined in the Snack Food Association Chipping Potato Handbook (1995). Chips fried by Wise utilized a 1-5 rating scale. Chips fried by Utz utilized the Hunter Lab rating scale. Chip visual scores are presented in their respective chapters.

Seasonal Weather and Growing Conditions

Overall growing conditions for the 2011 growing season were rated as good to fair. Yields were somewhat lower than in previous years. Only 3 days saw temperatures at or below freezing, and there were no freezing events from the planting dates forward for all variety trials. Rainfall, however, was below average in both April and May. In addition, temperatures were 4-5 degrees above average in both April and May, which added stress to the vines and reduced the bulking of many clones.

Production

There were no major changes to the production system in 2011.

FIGURE 1. POTATO VARIETY PROGRAM EVALUATION FLOWCHART

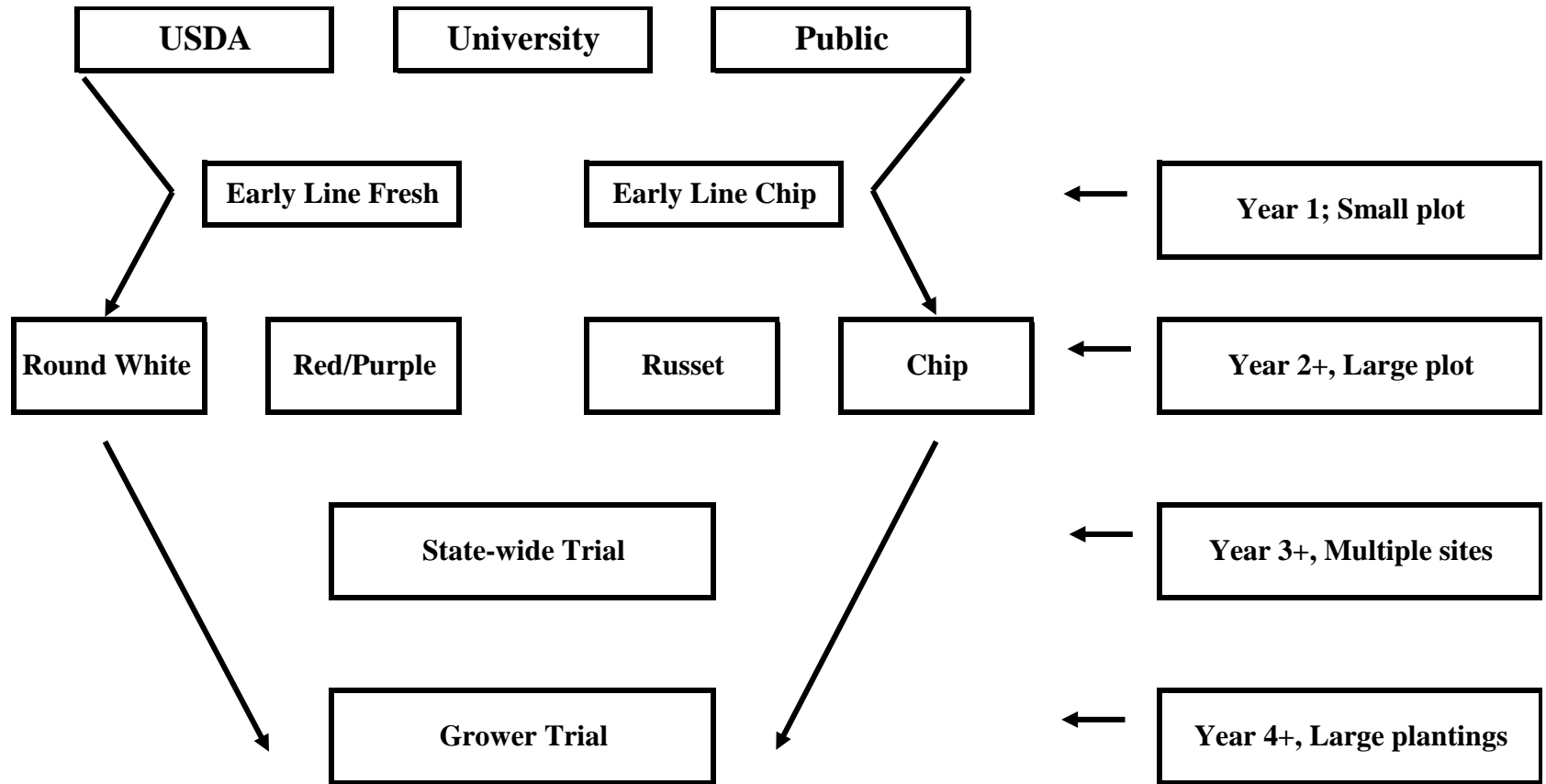


TABLE 1. PLANT GROWTH CHARACTERISTICS

Rating	Early Vigor (plant height)	Vine Type	Vine Maturity at Harvest/Vine Kill
1	no emergence	decumbent – poor	dead
2	leaves in rosette	decumbent – fair	+–
3	plants < 2 in	decumbent – good	yellow and dying
4	plants 2 to 4 in	spreading – poor	+–
5	plants 4 to 6 in	spreading – fair	moderately senesced
6	plants 6 to 8 in	spreading – good	+–
7	plants 8 to 10 in	upright – poor	starting to senesce
8	plants 10 to 12 in	upright – fair	+–
9	plants > 12 in	upright – good	green and vigorous

Adapted from Sisson and Porter, 2002.

TABLE 2. INTERNAL AND EXTERNAL POTATO TUBER CHARACTERISTICS

	Internal	Skin	Skin	Tuber	Eye	Overall
Rating	Flesh Color	Color	Texture	Shape	Depth	Appearance
1	White	Purple	Partial Russet	Round	Very Deep	Very Poor
2	Cream	Red	Heavy Russet	Mostly Round	+-	+-
3	Light Yellow	Pink	Mod. Russet	Round to Oblong	Deep	Poor
4	Medium Yellow	Dark Brown	Light Russet	Mostly Oblong	+-	+-
5	Dark Yellow	Brown	Netted	Oblong	Intermediate	Fair
6	Pink	Tan	Slightly Netted	Oblong to Long	+-	+-
7	Red	Buff	Mod. Smooth	Mostly Long	Shallow	Good
8	Blue	White	Smooth	Long	+-	+-
9	Purple	Cream	Very Smooth	Cylindrical	Very Shallow	Excellent

Adapted from Sisson and Porter, 2002.

CHAPTER 2. USDA 2nd YEAR VARIETY TRIAL, 2011

General Comments

A goal of the 2nd year USDA trial is to continue evaluating new clones for production in Florida. The entries in this trial were selected from an early generation clone trial conducted in 2010.

Planting Information

Planting Site	PWACS - Hastings Farm, Hastings, FL
Planting Date	January 28, 2011
Vine Kill Dates	N/A
Harvest Date	May 9, 2011
Season Length	101 days planting to harvest
Fertilizer Program	pre-plant, 50-100-150 lb/A; 1 st side-dress, 75-0-125 lb/A; 2 nd side-dress, 75-0-0 lb/A
Irrigation Program	seepage

Experimental Design

Number of Varieties	6 (Standard: Atlantic)
Number of Clones	29
Within Row Spacing	8 in (20 cm)
Between Row Spacing	40 in (102 cm)
Replications and Design	1 non-replicated, single row, 24 hill plot
Plot Size	16 ft (4.8 m)

Production Facts

Early Vigor Ratings	40 days after planting
Highest Total Yield	BNC272-2 (525 cwt/acre or 58 T/ha)
Highest Marketable Yield	BNC272-2 (441 cwt/acre or 49 T/ha)
Best Appearance Rating	Harley Blackwell, B2844-3, B2850-1, B2873-1, B2874-1, B2903-10, and B2904-2 (7.0, good)

Table 3. Production facts for USDA 2nd year potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
Atlantic	MFX	194	183	100	1	5	87	7	0	0	94	7	1.084
Belrus	MFX	187	130	71	5	23	72	0	0	0	72	0	1.080
Goldrush	MFX	269	177	97	4	20	76	0	0	0	76	0	1.074
Harley Blackwell	MFX	369	300	164	3	10	72	15	0	0	87	15	1.078
LaChipper	MFX	340	255	140	3	9	88	0	0	0	88	0	1.062
Yukon Gold	MFX	268	214	117	1	5	65	28	0	0	93	28	1.073
B2842-1	USDA	417	316	173	4	17	57	8	14	0	79	22	1.081
B2844-3	USDA	270	175	96	5	24	72	0	0	0	72	0	1.062
B2845-1	USDA	247	99	54	9	48	43	0	0	0	43	0	1.070
B2850-1	USDA	459	392	215	2	8	61	25	5	0	90	29	1.071
B2854-2	USDA	288	204	112	4	22	75	0	0	0	75	0	1.066
B2863-8	USDA	227	153	84	6	16	63	15	0	0	78	15	1.068
B2869-29	USDA	349	230	126	4	18	70	7	0	0	77	7	1.082
B2872-16	USDA	301	241	132	2	4	61	0	34	0	94	34	1.067
B2873-1	USDA	313	245	134	5	14	63	16	2	0	82	18	1.064
B2874-1	USDA	356	176	96	12	35	53	0	0	0	53	0	1.070
B2884-4	USDA	358	318	174	2	6	79	13	0	0	91	13	1.068
B2890-11	USDA	292	242	133	3	11	71	15	0	0	86	15	1.059
B2895-2	USDA	398	327	179	4	12	62	22	0	0	84	22	1.074
B2897-1	USDA	349	272	149	4	13	57	26	0	0	83	26	1.070

Table 3 (cont'd). Production facts for USDA 2nd year potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
B2897-2	USDA	428	304	166	6	13	53	12	16	0	81	28	1.064
B2897-5	USDA	475	363	199	3	12	37	29	19	0	85	48	1.070
B2897-7	USDA	276	231	126	2	9	46	24	18	0	89	42	1.058
B2903-2	USDA	320	245	134	3	17	63	17	0	0	80	17	1.070
B2903-10	USDA	384	294	161	3	16	69	12	0	0	81	12	1.066
B2904-2	USDA	378	279	153	3	13	58	26	0	0	84	26	1.086
B2904-11	USDA	439	346	190	3	14	62	22	0	0	83	22	1.078
B2906-2	USDA	409	369	202	1	4	57	27	12	0	96	38	1.073
BNC260-1	USDA	443	363	199	2	10	70	16	2	0	88	18	1.070
BNC266-2	USDA	387	264	144	4	25	60	10	0	0	71	10	1.081
BNC266-6	USDA	513	436	239	2	9	72	16	0	0	89	16	1.079
BNC267-3	USDA	407	334	183	3	7	57	22	10	0	90	33	1.070
BNC272-2	USDA	525	441	241	2	8	64	20	5	0	89	25	1.068
BNC275-1	USDA	420	295	162	3	15	75	7	0	0	82	7	1.079
BNC276-1	USDA	476	356	195	1	11	59	28	2	0	88	29	1.080

¹Marketable Yield: size classes A1 to A3.

²Size classes: C = 0.5 to 1.5" , B = 1.5 to 1.88", A1 = 1.88 to 2.5", A2 = 2.5 to 3.25", A3 = 3.25 to 4", A4 = >4"

Table 4. Plant growth and tuber characteristics of USDA 2nd year potato selections.

Clone	Plant Growth Characteristics ¹				APP	Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity		
Atlantic	96	6	9	3	6	okay
Belrus	96	5	8	3	6	okay
Goldrush	100	6	8-9	3	6	crs
Harley Blackwell	96	7	8-5	4	7	okay
LaChipper	100	6	9-6	3	6	crs
Yukon Gold	100	6	8	1	6	decent
B2842-1	100	8	9-6	3	6	okay
B2844-3	100	8	8-5	1	7	nice skin color
B2845-1	100	8	9	1	5	too many shapes
B2850-1	100	6	8	7	7	crs
B2854-2	100	5	9	4	6	crs
B2863-8	100	5	8	2	6	nice skin color
B2869-29	100	7	5-8	3	5	lenticels
B2872-16	92	6	8	5	6	large tubers
B2873-1	100	8	6-9	1	7	attractive, dark purple
B2874-1	100	7	8-5	3	7	nice skin color
B2884-4	100	6	8	3	6	slightly flat
B2890-11	100	7	8-5	1	6	decent
B2895-2	96	6	9-6	3	6	decent
B2897-1	96	6	9-6	4	6	crs

Table 4 (cont'd). Plant growth and tuber characteristics of USDA 2nd year potato selections.

Clone	Plant Growth Characteristics ¹				APP	Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity		
B2897-2	96	7	9-6	2	6	crs
B2897-5	83	6	9	5	6	crs
B2897-7	75	5	8	5	6	crs
B2903-2	100	6	5-8	2	6	okay
B2903-10	100	6	8	3	7	attractive
B2904-2	100	7	9	4	7	attractive
B2904-11	100	7	9	3	6	decent
B2906-2	96	7	8	6	6	nice yield
BNC260-1	100	7	9	4	6	nice yield, some IHN
BNC266-2	100	7	8	4	6	crs and IHN
BNC266-6	100	7	9-6	4	6	okay
BNC267-3	100	7	9	3	6	crs and IHN
BNC272-2	100	6	9	3	6	nice yield and size
BNC275-1	100	7	9-6	4	6	too many shapes
BNC276-1	100	8	8-5	2	5	attractive pink blush

¹See rating system outlined in Table 1 (page 10).

²See rating system outlined in Table 2 (page 11).

Table 5. External and internal defects of USDA 2nd year potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
Atlantic	0	0	0	0	0	0	0	0	5	0	0	0
Belrus	0	0	1	2	3	0	0	10	0	0	0	0
Goldrush	2	0	3	8	14	0	0	40	20	0	0	0
Harley Blackwell	0	0	1	6	7	0	0	0	10	0	0	0
LaChipper	1	2	0	11	14	0	0	30	0	0	0	0
Yukon Gold	2	0	5	8	14	0	0	0	0	0	5	0
B2842-1	0	0	3	1	4	0	0	0	0	0	0	0
B2844-3	3	0	3	4	10	0	0	0	0	0	0	0
B2845-1	0	0	3	4	7	0	0	0	0	0	0	0
B2850-1	3	0	1	1	5	0	0	30	0	0	0	0
B2854-2	0	0	0	5	5	0	0	40	0	0	0	0
B2863-8	0	0	3	10	13	0	0	0	0	0	0	0
B2869-29	2	1	1	10	15	0	0	0	0	0	0	0
B2872-16	6	2	6	1	15	0	0	5	0	0	0	0
B2873-1	0	0	3	1	4	0	0	0	0	0	0	0
B2874-1	0	2	0	4	6	5	0	0	0	0	0	0
B2884-4	0	0	2	0	3	0	0	5	0	0	0	0
B2890-11	0	0	3	0	3	0	0	0	0	0	0	0
B2895-2	0	0	1	1	2	0	0	0	0	0	0	0
B2897-1	0	0	3	2	6	0	0	35	0	0	0	0

Table 5 (cont'd). External and internal defects of USDA 2nd year potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
B2897-2	1	5	3	3	12	0	0	30	0	0	0	0
B2897-5	2	2	2	4	10	5	0	30	5	0	0	0
B2897-7	0	1	2	3	6	6	0	38	0	0	0	0
B2903-2	0	1	4	0	4	0	0	5	0	0	0	0
B2903-10	0	1	4	0	5	0	0	0	0	0	0	0
B2904-2	2	1	1	8	12	0	0	0	0	0	0	0
B2904-11	0	1	4	1	5	0	0	5	0	5	0	0
B2906-2	3	0	2	2	6	0	0	0	0	10	0	0
BNC260-1	1	0	2	4	7	0	0	0	20	0	0	0
BNC266-2	0	0	2	1	3	0	0	20	30	0	0	0
BNC266-6	0	0	3	1	4	0	0	0	0	0	0	0
BNC267-3	1	0	4	4	9	0	5	15	30	0	0	0
BNC272-2	1	1	3	1	6	0	0	0	0	0	0	0
BNC275-1	0	2	5	7	14	0	0	0	0	0	0	0
BNC276-1	1	1	7	7	15	0	0	0	0	0	20	0

¹Percent of Total Yield. Total culls include the sum of growth cracks, misshapen, sunburned and rotten/misc.

²Percent tubers; HH, hollow heart; BR, brown rot; CRS, corky ring spot; IHN, internal heat necrosis.

Brown Center: L = Light, M = Moderate, H = Heavy

CHAPTER 3. USDA 3rd YEAR VARIETY TRIAL, 2011

General Comments

A goal of the 3rd year USDA trial is to continue evaluating new clones for production in Florida. The entries in this trial were selected from the 2nd year clone trial conducted in 2010.

Planting Information

Planting Site	PWACS - Hastings Farm, Hastings, FL
Planting Date	January 28, 2011
Vine Kill Dates	N/A
Harvest Date	May 9, 2011
Season Length	101 days planting to harvest
Fertilizer Program	pre-plant, 50-100-150 lb/A; 1 st side-dress, 75-0-125 lb/A; 2 nd side-dress, 75-0-0 lb/A
Irrigation Program	seepage

Experimental Design

Number of Varieties	6 (Standard: Atlantic)
Number of Clones	28
Within Row Spacing	8 in (20 cm)
Between Row Spacing	40 in (102 cm)
Replications and Design	1 non-replicated, single row, 24 hill plot
Plot Size	16 ft (4.8 m)

Production Facts

Early Vigor Ratings	40 days after planting
Highest Total Yield	BNC244-4 (459 cwt/A or 51.4 T/ha)
Highest Marketable Yield	B2832-21 and BNC236-13 (309 cwt/acre or 34.6 T/ha)
Best Appearance Rating	Harley Blackwell, B2832-12, B2832-17, and B2832-18 (7.0 good)

Table 6. Production facts for USDA 3rd year potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
Atlantic	MFX	325	287	100	3	8	62	23	4	0	89	27	1.083
Belrus	MFX	216	134	47	5	30	65	0	0	0	65	0	1.078
Goldrush	MFX	296	235	82	3	15	76	6	0	0	81	6	1.067
Harley Blackwell	MFX	347	291	101	3	11	61	18	8	0	86	26	1.073
LaChipper	MFX	320	270	94	2	10	73	15	0	0	88	15	1.069
Yukon Gold	MFX	273	225	78	2	9	66	22	0	0	88	22	1.072
B2827-7	USDA	330	277	96	1	9	72	17	0	0	90	17	1.067
B2827-9	USDA	289	237	83	2	11	78	8	0	0	86	8	1.073
B2828-2	USDA	328	122	43	7	28	66	0	0	0	66	0	1.075
B2832-1	USDA	311	194	68	9	27	65	0	0	0	65	0	1.078
B2832-2	USDA	298	178	62	6	33	61	0	0	0	61	0	1.083
B2832-12	USDA	387	302	105	5	13	59	22	0	0	81	22	1.077
B2832-14	USDA	328	241	84	3	16	66	14	0	0	81	14	1.081
B2832-16	USDA	258	167	58	6	27	66	0	0	0	66	0	1.083
B2832-17	USDA	365	256	89	5	22	67	6	0	0	72	6	1.082
B2832-18	USDA	314	242	84	5	19	68	8	0	0	76	8	1.070
B2832-21	USDA	390	309	107	3	14	58	25	0	0	83	25	1.076
B2833-1	USDA	346	236	82	5	18	58	20	0	0	78	20	1.080
B2833-6	USDA	426	279	97	6	21	70	2	0	0	72	2	1.072
B2833-9	USDA	334	183	64	8	32	61	0	0	0	61	0	1.092
BNC234-6	USDA	272	140	49	7	37	56	0	0	0	56	0	1.080
BNC236-13	USDA	378	309	108	3	10	57	30	0	0	88	30	1.086
BNC244-2	USDA	415	277	96	5	22	67	6	0	0	73	6	1.082
BNC244-4	USDA	459	284	99	5	22	66	8	0	0	74	8	1.089
BNC244-5	USDA	374	216	75	6	26	62	6	0	0	68	6	1.081
BNC244-8	USDA	436	244	85	9	32	60	0	0	0	60	0	1.087
BNC244-16	USDA	420	265	92	6	29	65	0	0	0	65	0	1.086
BNC245-6	USDA	340	307	107	2	6	63	29	0	0	92	29	1.068

¹Marketable Yield: size classes A1 to A3.²Size classes: C = 0.5 to 1.5", B = 1.5 to 1.88", A1 = 1.88 to 2.5", A2 = 2.5 to 3.25", A3 = 3.25 to 4", A4 = >4"

Table 7. Plant growth and tuber characteristics of USDA 3rd year potato selections.

Clone	Plant Growth Characteristics ¹				APP	Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity		
Atlantic	100	6.0	9	5.5	6	decent
Belrus	92	5.5	7.5	4.0	6	okay
Goldrush	98	6.0	9	3.0	6	okay
Harley Blackwell	100	6.5	9-6	3.5	7	attractive
LaChipper	96	6.0	9-6	3.0	6	some crs
Yukon Gold	92	6.0	8-7	2.0	6	crs
B2827-7	100	6.5	8	3.5	6	nice
B2827-9	100	5.0	8	3.5	6	nice
B2828-2	96	6.0	6-9	2.5	5	crs and GC
B2832-1	100	7.5	8.5	1.5	6	okay
B2832-2	100	7.0	9	3.5	6	okay
B2832-12	100	6.0	8.5	3.0	7	attractive
B2832-14	98	6.0	8	3.0	6	okay
B2832-16	100	6.0	8	1.5	6	okay
B2832-17	100	7.5	9-6	3.0	7	attractive
B2832-18	100	6.0	8	3.8	7	good appearance
B2832-21	100	6.0	8	3.0	6	nice yield and size
B2833-1	100	6.0	9-6	3.0	6	some crs and IHN
B2833-6	100	6.0	9-6	4.0	5	crs
B2833-9	100	6.5	8.5	4.0	6	okay
BNC234-6	100	7.5	8-9	1.0	6	crs
BNC236-13	100	6.0	9-6	7.5	6	nice yield and size
BNC244-2	100	6.0	9-6	3.0	6	nice color, some crs
BNC244-4	100	7.5	8-5	4.5	3	crs
BNC244-5	100	7.0	6-9	1.5	6	nice color, some crs
BNC244-8	100	7.0	9-6	4.0	5	crs
BNC244-16	100	7.0	6-9	4.0	5	crs, too many shapes
BNC245-6	96	5.5	8	5.5	6	nice yield and size

¹See rating system outlined in Table 1 (page 10).²See rating system outlined in Table 2 (page 11).

Table 8. External and internal defects of USDA 3rd year potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
										L	M	H
Atlantic	0	0	0	1	1	0	0	0	3	0	3	0
Belrus	0	1	1	0	1	0	0	0	0	0	0	0
Goldrush	0	1	1	0	2	0	0	3	0	0	0	0
Harley Blackwell	1	0	1	1	2	0	0	0	0	3	0	0
LaChipper	1	0	2	1	4	0	0	15	0	0	0	0
Yukon Gold	1	0	6	1	7	0	0	25	0	10	0	0
B2827-7	1	1	0	4	7	0	0	0	0	0	0	0
B2827-9	0	0	2	3	5	0	0	0	0	0	0	0
B2828-2	25	1	2	16	44	0	0	38	0	0	0	0
B2832-1	0	1	2	1	4	0	0	0	0	0	0	0
B2832-2	1	0	0	1	2	3	0	0	0	0	0	0
B2832-12	0	2	1	2	4	0	0	0	0	3	0	0
B2832-14	1	1	5	2	9	0	0	0	0	3	0	0
B2832-16	0	0	1	2	3	0	0	0	0	0	0	0
B2832-17	0	0	2	1	3	0	0	0	0	0	0	0
B2832-18	1	0	0	1	2	0	0	0	0	0	0	0
B2832-21	1	0	1	4	5	0	0	0	0	0	0	0
B2833-1	4	0	6	3	13	3	0	6	8	0	0	0
B2833-6	2	2	4	2	9	0	0	23	0	0	0	0
B2833-9	0	0	1	19	20	0	0	5	0	0	0	0
BNC234-6	2	2	2	2	8	0	0	20	0	0	0	0
BNC236-13	3	0	2	1	7	0	0	0	0	3	0	0
BNC244-2	0	0	5	3	9	0	0	13	3	0	0	0
BNC244-4	1	0	10	4	16	0	0	40	8	0	0	0
BNC244-5	1	0	0	15	16	0	0	13	0	3	5	0
BNC244-8	1	2	0	2	6	0	0	18	0	0	0	0
BNC244-16	0	0	1	1	3	0	0	23	13	0	8	0
BNC245-6	0	0	1	1	2	8	0	0	0	10	0	0

¹Percent of Total Yield. Total culls include the sum of growth cracks, misshapen, sunburned and rotten/misc.

²Percent tubers; HH, hollow heart; BR, brown rot; CRS, corky ring spot; IHN, internal heat necrosis.

Brown Center: L = Light, M = Moderate, H = Heavy

CHAPTER 4. FRESH MARKET POTATO VARIETY TRIAL, 2011

General Comments

A goal of the fresh market variety trial is to identify a round white potato that has better quality and production characteristics than LaChipper and promising new russet varieties. Identification of “specialty” potatoes that expand the marketable varieties produced in Florida is also a priority. Established varieties were included to provide a baseline for the numbered clones.

Planting Information

Planting Site	PWACS - Hastings Farm, Hastings, FL
Planting Date	February 4, 2011
Vine Kill Dates	May 2, 2011
Harvest Date	May 19, 2011
Season Length	87 days planting to vine kill; 104 days planting to harvest
Fertilizer Program	pre-plant, 50-100-150 lb/A; 1 st side-dress, 75-0-125 lb/A; 2 nd side-dress, 75-0-0 lb/A
Irrigation Program	seepage

Experimental Design

Number of Varieties	21 (Standard: LaChipper)
Number of Clones	1
Within Row Spacing	8 in (20 cm)
Between Row Spacing	40 in (102 cm)
Replications and Design	4 replications, Randomized Complete Block design
Plot Size	16 ft (4.8 m)

Production Statistics

Early Vigor Ratings	34 days after planting
Highest Total Yield	Satina (493 cwt/acre or 55.2 T/ha)
Highest Marketable Yield	Michigan Purple (397 cwt/acre or 44.4 T/ha)
Best Appearance Rating	Snowbird (7.0, good)

Table 9. Production facts for Fresh Market Tablestock potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
LaChipper	MFX	408	283	100	4	17	53	8	17	1	78	25	1.063
Adora	HZPC	356	199	70	4	29	62	5	0	0	67	5	1.050
AF0338-17	Univ. of Maine	399	277	98	4	22	68	5	2	0	74	7	1.068
Belrus	MFX	277	143	51	10	37	51	1	0	0	52	1	1.067
Fabula	MFX	373	314	111	1	7	53	29	10	0	92	38	1.050
French Fingerling ⁴	MFX	384	na	na	22	46	32	0	0	0	32	0	1.061
Goldrush	MFX	364	208	73	8	29	59	4	0	0	63	4	1.058
Green Mountain	MFX	361	213	75	6	21	61	7	6	0	74	12	1.069
Katahdin	MFX	363	232	82	5	25	60	4	7	0	70	11	1.061
Marcella	MFX	398	277	98	4	21	70	5	0	0	76	6	1.058
Marcy	MFX	439	341	121	3	12	50	20	16	0	85	36	1.060
Maris Peer	Grower	384	119	42	16	49	35	1	0	0	35	1	1.062
Michigan Purple	MSU	474	397	140	3	10	64	17	6	0	87	23	1.062
Harley Blackwell	MFX	418	275	97	5	19	49	13	14	0	76	27	1.063
Peter Wilcox (B1816-5)	MFX	422	185	65	7	45	48	0	0	0	48	0	1.062
Red Canyon	Real	267	190	67	6	21	68	6	0	0	73	6	1.061
Red LaSoda	MFX	418	301	106	3	13	55	17	12	0	84	29	1.055
Russian Banana ⁴	MFX	269	na	na	32	68	0	0	0	0	0	0	1.070
Satina	MFX	493	315	111	3	15	54	11	16	0	82	27	1.050
Selma	Real	405	243	86	4	28	67	1	0	0	68	1	1.062
Snowbird	HZPC	443	282	100	7	18	61	11	3	0	75	14	1.065
Yukon Gold	MFX	348	248	88	3	13	56	15	13	0	83	28	1.068
<i>MSD</i> ³		79	83		5	10	20	12	13	ns	13	18	0.007
<i>P Value</i>		<.0001	<.0001		<.0001	<.0001	<.0001	<.0001	<.0001	0.4750	<.0001	<.0001	<.0001

¹Marketable Yield: size classes A1 to A3.

²Size classes: C = 0.5 to 1.5", B = 1.5 to 1.88", A1 = 1.88 to 2.5", A2 = 2.5 to 3.25", A3 = 3.25 to 4", A4 = >4"

³Means separated within columns by Tukey's Studentized Range (HSD) Test.

⁴Entries are fingerling types and, due to small size and shape, are not included in statistical analysis.

Table 10. Plant growth and tuber characteristics of Fresh Market Tablestock potato selections.

Clone	Plant Growth Characteristics ¹				Tuber Characteristics ²						Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity	IFC	SC	ST	TS	ED	APP	
LaChipper	98	6.3	9-6	5.8	1	7.5	7	4	3	6	slightly flat, too many shapes
Adora	96	5.0	8-5	4.8	3	7	8	4	5	6	slightly lumpy
AF0338-17	99	6.3	8-5	7.3	1	7	5	3	4	6	too much netting
Belrus	93	5.8	8	6.5	2	5	2	6	4	6	slightly flat
Fabula	79	2.8	7.5	8.3	3	7	6.5	4	3	6	large size tubers
French Fingerling	97	6.3	9-6	5.8	3	3	7	crescent	3	6	large fingerlings, salmon color
Goldrush	96	5.8	9	6.3	1	5	3	6	5	6	decent russet
Green Mountain	100	5.8	8.7	6.3	1	7	6	3	3	5	too many shapes
Katahdin	97	5.8	8.5	6.5	1	6	6	3	5	5	some russetting skin
Marcella	98	6.0	8-9	5.0	2	7	6	3	5	5	too many shapes
Marcy	85	5.5	8.5	8.3	1	6	5	4	5	6	too much netting
Maris Peer	99	5.8	9	6.0	2	7	7	4	5	6	some mishapen, IHN
Michigan Purple	100	6.0	8-5	7.0	1	1	7	3	4	6	slightly flat, nice color
Harley Blackwell	96	6.0	8-6	6.5	1	6	5	3	5	6	decent
Peter Wilcox (B1816-5)	100	6.3	9-6	5.5	4	1	6	4	5	5	dark purple, some scab
Red Canyon	84	5.8	7.3	6.0	1	2	6	4	4	6	nice dark red skin
Red LaSoda	98	5.8	9-6	6.0	1	3	6.5	3	3	5	too many shapes
Russian Banana	97	4.5	9-6	8.3	2	7	7	crescent	4	5	many knobs
Satina	94	6.3	8-5	6.3	4.5	7	6.5	3	4	5	some mishapen, lumpy
Selma	83	3.5	8	9.0	4.5	7	6	4	6	5	fair
Snowbird	94	5.0	9	8.5	1	7.5	7	3	5	7	bright tubers
Yukon Gold	94	5.3	8	6.5	4.5	7	6	4	6	5	some russetting skin

¹See rating system outlined in Table 1 (page 10).

²See rating system outlined in Table 2 (page 11).

Table 11. External and internal defects of Fresh Market Tablestock potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
LaChipper	2	3	4	2	11	0	0	3	0	0	0	0
Adora	2	4	3	8	17	5	0	0	0	1	4	0
AF0338-17	1	0	4	2	7	1	0	0	0	1	0	0
Belrus	0	1	0	1	2	11	0	0	0	0	6	0
Fabula	2	2	4	1	8	0	0	0	0	0	0	0
French Fingerling ⁴	1	6	2	2	11	1	0	0	6	4	0	0
Goldrush	0	5	2	2	9	0	0	0	0	0	0	0
Green Mountain	3	8	6	3	20	1	1	0	0	1	1	0
Katahdin	2	2	3	3	10	0	0	0	0	8	3	0
Marcella	1	2	3	3	8	1	0	0	1	4	0	0
Marcy	0	2	4	3	9	4	0	0	0	4	0	0
Maris Peer	1	9	3	1	15	3	0	0	29	3	0	3
Michigan Purple	0	0	3	1	4	0	0	16	0	3	0	1
Harley Blackwell	3	1	5	5	14	3	0	0	0	4	0	0
Peter Wilcox (B1816-5)	0	1	4	5	10	0	0	1	0	6	0	0
Red Canyon	0	2	0	1	4	0	0	0	0	0	0	0
Red LaSoda	1	4	3	6	14	1	0	0	0	3	0	1
Russian Banana ⁴	1	14	3	0	18	0	0	0	0	1	0	0
Satina	2	10	5	5	22	1	0	0	3	10	0	1
Selma	3	1	5	2	11	4	0	0	8	5	1	0
Snowbird	3	3	5	5	15	1	0	0	0	0	0	0
Yukon Gold	1	2	8	3	14	0	0	0	3	5	1	0
MSD ³	4	6	4	6	10	9	ns	ns	10	10.5	5	ns
<i>P Value</i>	0.0161	<.0001	<.0001	0.0002	<.0001	0.0054	0.4750	0.5101	<.0001	0.0238	0.0042	0.6097

¹Percent of Total Yield. Total culls include the sum of growth cracks, misshapen, sunburned and rotten/misc.

²Percent tubers; HH, hollow heart; BR, brown rot; CRS, corky ring spot; IHN, internal heat necrosis.

Brown Center: L = Light, M = Moderate, H = Heavy

³Means separated within columns by Tukey's Studentized Range (HSD) Test.

CHAPTER 5. RED AND PURPLE POTATO VARIETY TRIAL, 2011

General Comments

A goal of the Red/Purple-skinned Fresh Market Potato Variety trial is to identify a red or purple potato that has better quality and production characteristics than Red LaSoda or LaRouge. Identification of “specialty” potatoes that expand the marketable varieties produced in Florida is also a priority. Established varieties were included to provide a baseline for the numbered clones.

Planting Information

Planting Site	PWACS - Hastings Farm, Hastings, FL
Planting Date	January 28, 2011
Vine Kill Dates	April 22, 2011
Harvest Date	May 12, 2011
Season Length	87 days planting to vine kill; 107 days planting to harvest
Fertilizer Program	pre-plant, 50-100-150 lb/A; 1 st side-dress, 75-0-125 lb/A; 2 nd side-dress, 75-0-0 lb/A
Irrigation Program	seepage

Experimental Design

Number of Varieties	4 (Standard: Red LaSoda)
Number of Clones	12
Within Row Spacing	8 in (20 cm)
Between Row Spacing	40 in (102 cm)
Replications and Design	4 replications, Randomized Complete Block design
Plot Size	16 ft (4.8 m)

Production Statistics

Early Vigor Ratings	40 days after planting
Highest Total Yield	BCO01306-2 (433 cwt/acre or 48.5 T/ha)
Highest Marketable Yield	Michigan Purple (303 cwt/acre or 33.9 T/ha)
Best Appearance Rating	Michigan Purple, B2538-5, BNC193-1 (7.0, good)

Table 12. Production facts for red and purple-skinned potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
Red LaSoda	MFX	310	163	100	5	17	64	14	0	0	77	14	1.058
Adirondack Blue	Cornell	242	148	91	4	32	64	1	0	0	65	1	1.062
Red Maria (NY129)	MSU	215	79	49	7	27	60	5	0	0	65	5	1.054
Michigan Purple	USDA	366	303	186	2	9	79	10	0	0	88	10	1.062
Peter Wilcox (B1816-5)	USDA	256	158	97	5	28	67	0	0	0	67	0	1.065
B2152-17	USDA	253	155	95	8	29	63	0	0	0	63	0	1.066
BCO01044-2	USDA	172	90	55	7	41	52	0	0	0	52	0	1.053
BCO01306-2	USDA	433	97	59	11	38	51	0	0	0	51	0	1.064
B2538-5	USDA	264	219	134	3	12	83	2	0	0	85	2	1.064
B2676-2	USDA	277	173	106	7	28	63	2	0	0	65	2	1.069
BNC193-1	USDA	267	170	104	5	24	72	0	0	0	72	0	1.063
B2810-2	USDA	237	89	54	8	49	43	0	0	0	43	0	1.067
B2810-3	USDA	265	109	67	8	29	61	2	0	0	63	2	1.060
B2810-4	UMN	244	95	58	9	43	48	0	0	0	48	0	1.066
MN02616	Cornell	282	135	83	7	35	58	0	0	0	58	0	1.062
NY136	MFX	318	159	98	7	36	57	0	0	0	57	0	1.059
<i>MSD</i> ³		ns	47		4	10	13	7	ns	ns	12	7	0.003
<i>P Value</i>		0.0873	<.0001		0.0005	<.0001	<.0001	0.0005	*	*	<.0001	0.0005	<.0001

¹Marketable Yield: size classes A1 to A3.

²Size classes: C = 0.5 to 1.5", B = 1.5 to 1.88", A1 = 1.88 to 2.5", A2 = 2.5 to 3.25", A3 = 3.25 to 4", A4 = >4"

³Means separated within columns by Waller-Duncan K-ratio t Test.

Table 13. Plant growth and tuber characteristics of red and purple-skinned potato selections.

Clone	Plant Growth Characteristics ¹				Tuber Characteristics ²						Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity	IFC	SC	ST	TS	ED	APP	
Red LaSoda	99	6.0	8	6.3	1	2.5	7	3	3	6	light skin color
Adirondack Blue	100	6.0	8-7	5.8	9	1	6	4	3	5	some silver scurf
Red Maria (NY129)	93	4.5	7.3	8.8	2	2	6	2	6	4	too much netting
Michigan Purple	100	6.0	8-5	6.8	1	1	7	3	5	7	nice purple color
Peter Wilcox (B1816-5)	98	6.0	8-5	6.5	4	1	6	4	3	5	variable skin color
B2152-17	100	6.0	8	5.8	3	2	7	3	5	6	decent appearance
BCO01044-2	97	5.3	8-7	6.8	9-1	1	6	3	7	5	mottled purple/white flesh
BCO01306-2	99	6.5	8	4.8	1-6	2	6	3	3	5	nice purple color
B2538-5	91	6.0	8	7.0	1	1	7	4	3	7	decent purple skin
B2676-2	97	6.3	8-7	6.5	2	2	6	3	7	6	light skin color
BNC193-1	100	6.0	9	6.0	1	1	7	3	3	7	decent purple skin
B2810-2	98	6.3	7.8	3.5	3	1	6.5	3	5	6	not bad
B2810-3	100	6.5	8-5	5.5	3	1	7	2	4	6	okay
B2810-4	100	6.3	8-9	5.8	3	2	6.5	3	4	6	not bad
MN02616	100	6.0	8	5.5	4	2	6	3	3	6	too much netting
NY136	100	6.3	8-9	5.5	1	2	6	3	4	6	nice dark skin color

¹See rating system outlined in Table 1 (page 10).

²See rating system outlined in Table 2 (page 11).

Table 14. External and internal defects of red and purple-skinned potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
Red LaSoda	3	1	0	36	39	0	0	3	0	0	0	0
Adirondack Blue	0	1	2	4	7	0	0	0	0	0	1	0
Red Maria (NY129)	0	0	1	49	50	0	0	3	3	0	0	0
Michigan Purple	1	0	1	5	6	0	0	16	0	0	0	0
Peter Wilcox (B1816-5)	1	0	0	11	12	0	0	0	0	0	0	0
B2152-17	0	0	0	2	3	0	0	0	0	0	0	0
BCO01044-2	0	0	0	2	3	0	0	0	0	0	0	0
BCO01306-2	0	0	0	47	47	0	0	16	0	3	0	0
B2538-5	0	0	1	1	3	0	0	0	0	0	0	0
B2676-2	0	1	2	3	5	0	0	0	0	0	0	0
BNC193-1	0	0	0	16	16	0	0	10	0	0	0	0
B2810-2	0	1	1	11	14	0	0	8	0	0	0	0
B2810-3	0	0	0	34	34	0	0	3	0	3	0	0
B2810-4	0	1	2	16	19	0	0	0	0	0	0	0
MN02616	0	0	1	23	24	0	0	35	0	0	0	1
NY136	3	0	0	16	19	0	0	3	0	0	0	0
<i>MSD</i> ³	ns	ns	2	19	18	ns	ns	18	ns	ns	ns	ns
<i>P Value</i>	0.3651	0.0931	0.0250	<.0001	<.0001	*	*	0.0028	0.4718	0.2012	0.4718	0.4718

¹Percent of Total Yield. Total culls include the sum of growth cracks, misshapen, sunburned and rotten/misc.

²Percent tubers; HH, hollow heart; BR, brown rot; CRS, corky ring spot; IHN, internal heat necrosis.

Brown Center: L = Light, M = Moderate, H = Heavy

³Means separated within columns by Waller-Duncan K-ratio t Test.

CHAPTER 6. USDA EARLY GENERATION STUDY, 2011

General Comments

In the past, many selections from breeding programs may have been eliminated before they have had an opportunity to be looked at in Florida. This study has been established to evaluate the earliest breeding selections from the USDA breeding program in Beltsville, MD. These clones are also evaluated in North Carolina, New Jersey, New York and Maine. The goal is to identify selections that may have wide adaptability across many locations.

Planting Information

Planting Site	PWACS - Hastings Farm, Hastings, FL
Planting Date	January 24, 2011
Vine Kill Dates	N/A
Harvest Dates	May 11, 2011
Season Length	108 days planting to harvest
Fertilizer Program	pre-plant, 50-100-150 lb/A; 1 st side-dress, 75-0-125 lb/A; 2 nd side-dress, 75-0-0 lb/A
Irrigation Program	Seepage

Experimental Design

Number of Varieties	7 (Standard: Atlantic)
Number of Clones	351
Within Row Spacing	8 in (20.3 cm)
Between Row Spacing	40 in (102 cm)
Replications and Design	1 non-replicated, single row, 8 hill plot
Plot Size	5.3 ft (1.6 m)

Production Statistics- Based over all sites

Early Vigor Ratings	40 days after planting
Highest Total Yield	BNC315-4 (750 cwt/acre or 83.9 T/ha)
Highest Marketable Yield	BNC315-4 (590 cwt/acre or 66.0 T/ha)

Table 15. Production facts for USDA Early Generation potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
Atlantic	MFX	331	284	100	2	10	88	0	0	0	88	0	1.079
Belrus	MFX	240	180	63	3	22	75	0	0	0	75	0	1.071
Goldrush	MFX	420	362	128	2	12	86	0	0	0	86	0	1.069
Harley Blackwell	MFX	407	302	106	5	17	44	34	0	0	78	34	1.075
LaChipper	MFX	414	373	132	3	7	54	36	0	0	90	36	1.070
Peter Wilcox (B1816-5)	MFX	459	311	110	4	21	75	0	0	0	75	0	1.066
Red LaSoda	MFX	436	352	124	2	8	76	14	0	0	90	14	1.060
Yukon Gold	MFX	365	284	100	3	13	55	29	0	0	85	29	1.071
B1992-106	Univ. of Maine	488	425	150	2	7	29	23	39	0	91	62	1.087
B2923-1	USDA	342	163	58	8	44	48	0	0	0	48	0	1.060
B2923-2	USDA	393	113	40	21	49	30	0	0	0	30	0	1.070
B2923-3	USDA	478	253	89	8	31	61	0	0	0	61	0	1.063
B2923-4	USDA	255	130	46	10	36	54	0	0	0	54	0	1.070
B2923-5	USDA	422	250	88	7	28	65	0	0	0	65	0	1.067
B2923-6	USDA	564	409	144	3	17	64	15	0	0	80	15	1.070
B2923-7	USDA	319	265	94	2	7	91	0	0	0	91	0	1.062
B2924-4	USDA	333	147	52	7	43	50	0	0	0	50	0	1.083
B2924-5	USDA	254	145	51	9	29	62	0	0	0	62	0	1.068
B2926-1	USDA	433	253	89	6	23	51	20	0	0	71	20	1.065
B2926-2	USDA	356	221	78	10	26	64	0	0	0	64	0	1.062

Table 15 (cont'd). Production facts for USDA Early Generation potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
B2926-3	USDA	391	193	68	10	37	53	0	0	0	53	0	1.065
B2926-4	USDA	351	267	94	3	16	68	13	0	0	80	13	1.073
B2926-5	USDA	408	317	112	4	13	71	12	0	0	83	12	1.069
B2927-1	USDA	326	160	57	13	36	51	0	0	0	51	0	1.065
B2927-2	USDA	202	74	26	10	50	40	0	0	0	40	0	1.062
B2928-1	USDA	342	171	60	8	37	54	0	0	0	54	0	1.069
B2928-2	USDA	506	346	122	7	25	68	0	0	0	68	0	1.066
B2928-3	USDA	388	228	80	8	29	63	0	0	0	63	0	1.066
B2928-4	USDA	420	286	101	5	26	70	0	0	0	70	0	1.065
B2928-5	USDA	314	148	52	10	39	51	0	0	0	51	0	1.071
B2928-6	USDA	397	278	98	4	21	75	0	0	0	75	0	1.069
B2928-8	USDA	353	246	87	8	19	73	0	0	0	73	0	1.049
B2928-9	USDA	528	414	146	2	11	86	0	0	0	86	0	1.065
B2928-10	USDA	307	137	48	7	47	46	0	0	0	46	0	1.063
B2928-11	USDA	468	313	110	6	21	57	16	0	0	73	16	1.061
B2929-1	USDA	430	226	80	8	32	60	0	0	0	60	0	1.081
B2929-2	USDA	454	318	112	2	22	76	0	0	0	76	0	1.081
B2929-3	USDA	480	366	129	1	15	84	0	0	0	84	0	1.081
B2929-4	USDA	501	221	78	9	40	51	0	0	0	51	0	1.078
B2930-1	USDA	488	270	95	4	20	76	0	0	0	76	0	1.057

Table 15 (cont'd). Production facts for USDA Early Generation potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
B2930-2	USDA	499	301	106	7	22	72	0	0	0	72	0	1.067
B2930-3	USDA	489	332	117	3	21	64	12	0	0	76	12	1.072
B2930-4	USDA	469	262	93	4	25	52	20	0	0	72	20	1.066
B2930-5	USDA	668	502	177	2	10	60	28	0	0	88	28	1.071
B2932-1	USDA	402	240	85	6	34	60	0	0	0	60	0	1.066
B2932-2	USDA	373	188	66	13	31	56	0	0	0	56	0	1.071
B2932-3	USDA	587	394	139	4	25	63	8	0	0	71	8	1.060
B2932-4	USDA	391	328	116	4	12	81	3	0	0	84	3	1.064
B2932-5	USDA	399	267	94	6	25	70	0	0	0	70	0	1.073
B2932-6	USDA	412	201	71	9	35	56	0	0	0	56	0	1.076
B2932-7	USDA	546	309	109	7	14	79	0	0	0	79	0	1.071
B2932-8	USDA	547	362	128	5	19	76	0	0	0	76	0	1.068
B2932-9	USDA	431	158	56	13	45	42	0	0	0	42	0	1.070
B2932-10	USDA	497	248	87	5	38	57	0	0	0	57	0	1.073
B2935-1	USDA	508	338	119	7	18	76	0	0	0	76	0	1.068
B2935-2	USDA	485	250	88	9	37	54	0	0	0	54	0	1.085
B2935-3	USDA	581	423	149	5	10	56	29	0	0	85	29	1.081
B2936-1	USDA	494	256	90	12	32	55	0	0	0	55	0	1.077
B2936-2	USDA	493	299	106	11	24	65	0	0	0	65	0	1.085
B2937-1	USDA	543	368	130	3	18	79	0	0	0	79	0	1.059

Table 15 (cont'd). Production facts for USDA Early Generation potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
B2937-2	USDA	339	231	81	4	21	75	0	0	0	75	0	1.057
B2937-3	USDA	432	300	106	2	14	84	0	0	0	84	0	1.058
B2938-1	USDA	323	95	33	10	56	34	0	0	0	34	0	1.069
B2938-2	USDA	363	184	65	10	35	55	0	0	0	55	0	1.061
B2938-3	USDA	400	189	67	13	36	51	0	0	0	51	0	1.064
B2938-4	USDA	395	130	46	10	51	39	0	0	0	39	0	1.067
B2938-5	USDA	294	104	37	15	47	38	0	0	0	38	0	1.076
B2938-6	USDA	395	150	53	17	42	41	0	0	0	41	0	1.067
B2938-7	USDA	308	121	43	15	32	53	0	0	0	53	0	1.061
B2938-8	USDA	291	140	49	8	34	57	0	0	0	57	0	1.073
B2938-9	USDA	276	68	24	5	68	27	0	0	0	27	0	1.078
B2938-10	USDA	342	213	75	5	28	67	0	0	0	67	0	1.053
B2938-11	USDA	368	63	22	12	60	28	0	0	0	28	0	1.058
B2941-1	USDA	575	405	143	3	23	75	0	0	0	75	0	1.058
B2942-1	USDA	264	164	58	4	31	65	0	0	0	65	0	1.053
B2942-2	USDA	387	268	94	5	26	69	0	0	0	69	0	1.060
B2942-3	USDA	235	110	39	10	40	50	0	0	0	50	0	1.054
B2942-5	USDA	318	151	53	10	32	58	0	0	0	58	0	1.066
B2942-6	USDA	373	148	52	18	30	52	0	0	0	52	0	1.062
B2942-7	USDA	329	66	23	25	55	20	0	0	0	20	0	1.073

Table 15 (cont'd). Production facts for USDA Early Generation potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
B2943-1	USDA	346	151	53	10	39	51	0	0	0	51	0	1.055
B2943-2	USDA	352	109	39	13	55	33	0	0	0	33	0	1.064
B2944-1	USDA	323	162	57	8	36	56	0	0	0	56	0	1.066
B2944-2	USDA	368	61	21	13	68	18	0	0	0	18	0	1.074
B2944-3	USDA	371	113	40	15	51	34	0	0	0	34	0	1.077
B2944-4	USDA	323	84	30	20	52	29	0	0	0	29	0	1.077
B2945-1	USDA	321	203	71	3	17	55	25	0	0	80	0	1.074
B2945-2	USDA	362	225	79	4	27	69	0	0	0	69	0	1.071
B2945-3	USDA	519	287	101	12	30	58	0	0	0	58	0	1.077
B2945-4	USDA	440	273	96	9	24	62	5	0	0	67	0	1.065
B2947-1	USDA	439	78	28	2	79	19	0	0	0	19	0	1.063
B2947-2	USDA	476	362	128	13	5	82	0	0	0	82	0	1.087
B2947-3	USDA	345	279	98	2	17	81	0	0	0	81	0	1.063
B2947-4	USDA	425	343	121	4	10	64	22	0	0	86	0	1.069
B2947-5	USDA	432	345	122	4	10	80	7	0	0	86	0	1.069
B2947-6	USDA	413	273	96	9	23	69	0	0	0	69	0	1.081
B2947-7	USDA	449	365	129	5	12	79	3	0	0	83	0	1.064
B2947-8	USDA	399	287	101	6	17	77	0	0	0	77	0	1.069
B2947-9	USDA	241	70	25	10	49	42	0	0	0	42	0	1.076
B2947-10	USDA	235	103	36	9	42	49	0	0	0	49	0	1.069

Table 15 (cont'd). Production facts for USDA Early Generation potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
B2947-11	USDA	367	228	81	6	23	71	0	0	0	71	0	1.087
B2947-12	USDA	483	278	98	4	31	65	0	0	0	65	0	1.078
B2948-1	USDA	466	398	141	3	4	60	33	0	0	93	0	1.077
B2948-7	USDA	260	130	46	21	22	57	0	0	0	57	0	1.084
B2948-8	USDA	428	208	73	6	38	56	0	0	0	56	0	1.064
B2948-9	USDA	416	208	73	8	30	63	0	0	0	63	0	1.082
B2950-1	USDA	497	213	75	7	44	49	0	0	0	49	0	1.069
B2950-2	USDA	457	348	123	4	17	72	7	0	0	79	0	1.064
B2950-3	USDA	482	291	103	8	31	61	0	0	0	61	0	1.058
B2950-4	USDA	319	210	74	4	24	72	0	0	0	72	0	1.067
B2950-6	USDA	430	209	74	11	37	52	0	0	0	52	0	1.072
B2950-8	USDA	424	226	80	12	33	55	0	0	0	55	0	1.056
B2950-9	USDA	515	297	105	9	27	64	0	0	0	64	0	1.069
B2951-1	USDA	333	196	69	13	24	63	0	0	0	63	0	1.068
B2951-4	USDA	392	243	86	4	31	65	0	0	0	65	0	1.073
B2951-5	USDA	438	147	52	7	55	35	4	0	0	39	0	1.067
B2951-6	USDA	369	284	0	5	15	79	0	0	0	79	0	1.082
B2951-7	USDA	423	252	89	6	24	70	0	0	0	70	0	1.082
B2951-8	USDA	414	322	0	7	9	59	26	0	0	84	0	1.066
B2951-9	USDA	344	179	63	10	28	63	0	0	0	63	0	1.088

Table 15 (cont'd). Production facts for USDA Early Generation potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
B2952-1	USDA	387	283	100	6	20	74	0	0	0	74	0	1.074
B2952-2	USDA	356	148	52	12	43	45	0	0	0	45	0	1.083
B2952-3	USDA	451	301	106	6	22	72	0	0	0	72	0	1.078
B2952-4	USDA	462	338	119	5	14	68	13	0	0	82	0	1.082
B2952-5	USDA	486	372	131	3	12	43	42	0	0	85	0	1.077
B2952-6	USDA	493	249	88	14	28	50	8	0	0	58	0	1.073
B2952-7	USDA	486	358	126	5	20	69	6	0	0	75	0	1.067
B2952-8	USDA	418	283	100	4	21	56	18	0	0	74	0	1.071
B2952-9	USDA	397	236	83	7	26	67	0	0	0	67	0	1.070
B2952-11	USDA	468	284	100	4	20	76	0	0	0	76	0	1.079
B2952-12	USDA	407	209	74	7	27	61	5	0	0	66	0	1.074
B2952-13	USDA	409	308	109	3	16	72	8	0	0	80	0	1.075
B2952-14	USDA	469	338	119	4	20	65	12	0	0	76	0	1.073
B2953-3	USDA	380	259	91	7	23	70	0	0	0	70	0	1.076
B2953-4	USDA	401	256	90	10	21	65	4	0	0	70	0	1.086
B2953-5	USDA	275	122	43	11	42	47	0	0	0	47	0	1.075
B2953-6	USDA	359	268	95	3	18	73	6	0	0	79	0	1.084
B2954-1	USDA	338	198	70	13	22	65	0	0	0	65	0	1.076
B2954-2	USDA	447	237	84	7	33	46	14	0	0	60	0	1.081
B2954-3	USDA	344	179	63	11	26	63	0	0	0	63	0	1.072

Table 15 (cont'd). Production facts for USDA Early Generation potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
B2954-4	USDA	494	144	51	14	47	38	0	0	0	38	0	1.080
B2954-5	USDA	455	224	79	9	27	55	9	0	0	64	0	1.069
B2954-6	USDA	434	160	56	4	56	18	23	0	0	40	0	1.073
B2954-7	USDA	375	173	61	11	33	56	0	0	0	56	0	1.076
B2954-10	USDA	469	298	105	6	20	47	28	0	0	75	0	1.068
B2954-11	USDA	519	448	158	5	8	52	36	0	0	87	0	1.067
B2954-12	USDA	358	222	78	11	23	60	6	0	0	66	0	1.067
B2954-13	USDA	431	259	91	12	24	46	18	0	0	64	0	1.075
B2954-14	USDA	364	126	44	14	47	39	0	0	0	39	0	1.079
B2954-17	USDA	508	305	107	9	25	46	19	0	0	66	0	1.072
B2954-18	USDA	253	146	51	9	34	58	0	0	0	58	0	1.072
B2954-19	USDA	384	208	73	10	31	59	0	0	0	59	0	1.062
B2954-20	USDA	565	455	160	3	12	58	27	0	0	85	0	1.067
B2954-23	USDA	433	266	94	10	23	68	0	0	0	68	0	1.073
B2954-25	USDA	369	182	64	13	34	49	4	0	0	53	0	1.071
B2954-26	USDA	506	311	110	7	26	56	11	0	0	68	0	1.072
B2954-27	USDA	372	229	81	9	21	70	0	0	0	70	0	1.078
B2954-28	USDA	487	247	87	17	27	52	4	0	0	56	0	1.073
B2955-3	USDA	401	268	95	5	20	52	24	0	0	75	0	1.060
B2955-5	USDA	435	146	51	10	45	45	0	0	0	45	0	1.075

Table 15 (cont'd). Production facts for USDA Early Generation potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
B2956-3	USDA	504	277	98	3	9	59	29	0	0	88	0	1.064
B2956-4	USDA	590	395	139	5	8	50	37	0	0	87	0	1.057
B2957-3	USDA	542	201	71	11	39	51	0	0	0	51	0	1.071
B2957-4	USDA	583	399	141	4	19	11	66	0	0	77	0	1.070
B2957-5	USDA	347	141	50	11	35	53	0	0	0	53	0	1.071
B2957-6	USDA	383	207	73	8	27	65	0	0	0	65	0	1.066
B2957-7	USDA	449	103	36	21	37	42	0	0	0	42	0	1.075
B2957-8	USDA	227	84	30	19	44	37	0	0	0	37	0	1.067
B2958-1	USDA	471	254	90	9	29	55	7	0	0	61	0	1.057
B2958-2	USDA	440	332	117	3	13	61	23	0	0	84	0	1.063
B2958-3	USDA	451	271	96	5	22	61	12	0	0	73	0	1.064
B2958-4	USDA	481	390	137	3	12	62	22	0	0	85	0	1.068
B2958-6	USDA	536	401	142	4	9	54	34	0	0	88	0	1.058
B2958-10	USDA	500	316	111	4	26	61	8	0	0	70	0	1.063
B2958-12	USDA	518	397	140	4	11	59	27	0	0	86	0	1.068
B2958-13	USDA	377	260	92	9	21	56	15	0	0	71	0	1.061
B2958-16	USDA	446	250	88	14	22	64	0	0	0	64	0	1.062
B2958-17	USDA	347	232	82	6	20	57	17	0	0	74	0	1.073
B2958-18	USDA	442	334	118	6	12	32	50	0	0	82	0	1.059
B2959-2	USDA	455	251	88	6	28	66	0	0	0	66	0	1.082

Table 15 (cont'd). Production facts for USDA Early Generation potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
B2959-3	USDA	300	117	41	16	43	41	0	0	0	41	0	1.083
B2959-4	USDA	332	136	48	9	41	50	0	0	0	50	0	1.074
B2959-5	USDA	514	284	100	12	30	58	0	0	0	58	0	1.082
B2959-6	USDA	297	99	35	11	52	37	0	0	0	37	0	1.084
B2960-1	USDA	444	201	71	9	36	56	0	0	0	56	0	1.078
B2960-2	USDA	490	295	104	3	29	67	0	0	0	67	0	1.077
B2960-3	USDA	450	292	103	5	20	75	0	0	0	75	0	1.077
B2960-4	USDA	522	419	148	5	12	76	8	0	0	83	0	1.074
B2960-5	USDA	323	184	65	4	30	66	0	0	0	66	0	1.075
B2960-6	USDA	570	435	154	4	18	77	0	0	0	77	0	1.082
B2960-7	USDA	341	241	85	5	25	71	0	0	0	71	0	1.076
B2960-8	USDA	515	285	101	8	30	63	0	0	0	63	0	1.072
B2960-9	USDA	397	262	92	5	19	76	0	0	0	76	0	1.068
B2960-10	USDA	286	117	41	6	45	48	0	0	0	48	0	1.068
B2960-11	USDA	399	198	70	7	39	54	0	0	0	54	0	1.073
B2960-12	USDA	410	271	95	2	23	75	0	0	0	75	0	1.081
B2960-13	USDA	275	110	39	18	27	55	0	0	0	55	0	1.081
B2960-14	USDA	403	270	95	5	18	77	0	0	0	77	0	1.074
B2960-15	USDA	513	279	98	8	22	70	0	0	0	70	0	1.080
B2960-16	USDA	458	218	77	10	34	57	0	0	0	57	0	1.083

Table 15 (cont'd). Production facts for USDA Early Generation potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
B2960-18	USDA	416	246	87	8	26	67	0	0	0	67	0	1.082
B2965-1	USDA	615	472	166	3	17	29	29	22	0	80	22	1.078
B2966-1	USDA	602	264	93	6	21	73	0	0	0	73	0	1.067
B2967-1	USDA	397	250	88	6	19	75	0	0	0	75	0	1.063
B2967-2	USDA	468	317	112	3	14	52	17	14	0	84	14	1.076
B2967-3	USDA	636	415	146	1	11	28	4	56	0	88	56	1.059
B2967-4	USDA	390	289	102	4	8	88	0	0	0	88	0	1.065
B2967-5	USDA	489	345	122	4	7	73	16	0	0	89	0	1.069
B2967-6	USDA	441	309	109	1	14	85	0	0	0	85	0	1.064
B2968-1	USDA	222	121	43	3	27	70	0	0	0	70	0	1.069
B2968-2	USDA	368	252	89	2	20	78	0	0	0	78	0	1.069
B2968-3	USDA	489	394	139	4	10	49	14	23	0	86	23	1.067
B2969-1	USDA	400	293	103	4	14	82	0	0	0	82	0	1.076
B2969-2	USDA	451	362	128	4	6	51	39	0	0	90	0	1.068
B2971-1	USDA	464	220	78	5	24	62	9	0	0	72	0	1.068
B2971-2	USDA	587	501	177	2	6	57	35	0	0	92	0	1.065
B2971-3	USDA	400	345	122	2	4	93	0	0	0	93	0	1.069
B2971-4	USDA	481	115	41	9	32	59	0	0	0	59	0	1.071
B2972-2	USDA	445	304	107	6	20	73	0	0	0	73	0	1.069
B2974-1	USDA	447	287	101	6	23	71	0	0	0	71	0	1.075

Table 15 (cont'd). Production facts for USDA Early Generation potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
B2976-1	USDA	415	255	90	9	19	72	0	0	0	72	0	1.079
BNC301-1	USDA	304	239	84	3	9	70	19	0	0	88	0	1.070
BNC301-2	USDA	329	245	86	3	13	84	0	0	0	84	0	1.066
BNC301-3	USDA	91	63	22	7	24	69	0	0	0	69	0	1.060
BNC301-4	USDA	260	141	22	1	17	81	0	0	0	81	0	1.069
BNC301-5	USDA	351	290	102	2	14	49	14	21	0	84	21	1.084
BNC301-6	USDA	290	239	84	4	9	88	0	0	0	88	0	1.073
BNC301-9	USDA	531	389	137	1	15	72	0	12	0	84	12	1.081
BNC304-1	USDA	440	321	113	5	19	76	0	0	0	76	0	1.070
BNC304-2	USDA	497	397	140	4	11	64	10	11	0	85	11	1.070
BNC304-3	USDA	424	344	121	1	11	73	16	0	0	89	0	1.066
BNC304-4	USDA	408	225	79	6	25	69	0	0	0	69	0	1.071
BNC306-1	USDA	355	201	71	3	26	72	0	0	0	72	0	1.075
BNC306-2	USDA	332	223	79	7	15	78	0	0	0	78	0	1.074
BNC306-3	USDA	391	263	93	6	23	71	0	0	0	71	0	1.068
BNC307-3	USDA	411	291	103	7	18	74	0	0	0	74	0	1.070
BNC307-6	USDA	432	183	65	5	28	67	0	0	0	67	0	1.079
BNC307-7	USDA	579	319	113	5	22	73	0	0	0	73	0	1.074
BNC307-8	USDA	477	324	114	3	14	58	25	0	0	83	0	1.086
BNC308-1	USDA	479	210	74	9	33	57	0	0	0	57	0	1.072

Table 15 (cont'd). Production facts for USDA Early Generation potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
BNC308-2	USDA	267	147	52	6	28	66	0	0	0	66	0	1.071
BNC308-3	USDA	406	298	105	6	18	76	0	0	0	76	0	1.071
BNC308-4	USDA	467	321	113	3	13	84	0	0	0	84	0	1.073
BNC308-5	USDA	445	254	90	3	18	79	0	0	0	79	0	1.081
BNC309-1	USDA	420	172	61	10	34	56	0	0	0	56	0	1.079
BNC309-3	USDA	388	213	75	7	27	65	0	0	0	65	0	1.072
BNC309-4	USDA	344	160	57	10	33	57	0	0	0	57	0	1.081
BNC309-5	USDA	520	385	136	2	9	66	23	0	0	88	23	1.070
BNC309-6	USDA	413	277	98	4	15	60	21	0	0	81	21	1.074
BNC309-8	USDA	336	124	44	16	38	46	0	0	0	46	0	1.084
BNC309-9	USDA	286	166	58	14	22	64	0	0	0	64	0	1.086
BNC309-10	USDA	433	279	98	4	16	80	0	0	0	80	0	1.072
BNC309-11	USDA	580	402	142	4	10	43	42	0	0	85	42	1.073
BNC309-12	USDA	431	360	127	2	9	83	0	6	0	89	6	1.085
BNC309-13	USDA	385	313	110	4	9	87	0	0	0	87	0	1.073
BNC310-2	USDA	291	232	82	2	15	83	0	0	0	83	0	1.067
BNC310-3	USDA	366	259	91	8	12	80	0	0	0	80	0	1.058
BNC310-5	USDA	563	458	162	1	9	63	27	0	0	90	27	1.060
BNC310-6	USDA	437	360	127	6	10	64	20	0	0	83	20	1.060
BNC311-2	USDA	575	505	178	2	6	29	21	42	0	92	63	1.069

Table 15 (cont'd). Production facts for USDA Early Generation potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
BNC311-4	USDA	571	351	124	5	11	76	8	0	0	84	8	1.071
BNC311-5	USDA	541	426	150	4	14	56	26	0	0	82	26	1.061
BNC311-6	USDA	548	386	136	4	8	46	23	19	0	89	42	1.079
BNC311-9	USDA	376	276	97	5	16	79	0	0	0	79	0	1.063
BNC311-10	USDA	460	316	111	4	16	81	0	0	0	81	0	1.074
BNC311-11	USDA	418	287	101	6	20	75	0	0	0	75	0	1.070
BNC311-13	USDA	532	426	150	2	10	29	22	38	0	89	60	1.069
BNC311-14	USDA	565	374	132	3	13	50	14	20	0	84	34	1.060
BNC311-15	USDA	603	549	194	1	2	71	18	8	0	97	26	1.070
BNC311-16	USDA	443	316	111	4	7	39	50	0	0	89	50	1.081
BNC311-17	USDA	565	409	144	6	11	46	15	21	0	83	36	1.070
BNC311-18	USDA	467	366	129	3	10	55	33	0	0	88	33	1.066
BNC311-19	USDA	482	329	116	2	12	59	21	7	0	87	28	1.072
BNC312-1	USDA	457	356	125	4	13	83	0	0	0	83	0	1.075
BNC312-2	USDA	464	321	113	3	13	84	0	0	0	84	0	1.072
BNC312-3	USDA	467	402	142	3	8	71	18	0	0	89	18	1.060
BNC312-4	USDA	403	273	96	5	19	76	0	0	0	76	0	1.065
BNC312-5	USDA	592	539	190	0	1	28	13	58	0	99	71	1.068
BNC312-6	USDA	356	251	88	4	22	75	0	0	0	75	0	1.070
BNC312-7	USDA	481	425	150	2	3	30	29	36	0	95	65	1.068

Table 15 (cont'd). Production facts for USDA Early Generation potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
BNC313-2	USDA	561	398	141	4	20	76	0	0	0	76	0	1.073
BNC313-3	USDA	488	399	141	2	11	87	0	0	0	87	0	1.086
BNC313-4	USDA	523	395	139	5	15	79	0	0	0	79	0	1.058
BNC313-5	USDA	581	451	159	1	13	86	0	0	0	86	0	1.070
BNC314-1	USDA	480	313	110	6	20	74	0	0	0	74	0	1.073
BNC314-2	USDA	432	293	103	5	27	68	0	0	0	68	0	1.072
BNC314-3	USDA	398	281	99	1	22	76	0	0	0	76	0	1.066
BNC314-4	USDA	492	298	105	5	26	69	0	0	0	69	0	1.060
BNC314-5	USDA	519	433	153	3	9	67	11	11	0	89	21	1.065
BNC314-6	USDA	484	392	138	2	14	83	0	0	0	83	0	1.068
BNC314-7	USDA	456	349	123	2	22	77	0	0	0	77	0	1.073
BNC314-8	USDA	380	244	86	6	25	69	0	0	0	69	0	1.054
BNC314-9	USDA	588	430	151	2	16	82	0	0	0	82	0	1.056
BNC314-10	USDA	449	361	127	2	12	86	0	0	0	86	0	1.067
BNC315-1	USDA	576	421	148	4	21	75	0	0	0	75	0	1.060
BNC315-2	USDA	482	369	130	3	8	77	12	0	0	89	12	1.068
BNC315-3	USDA	515	343	121	4	26	71	0	0	0	71	0	1.049
BNC315-4	USDA	750	590	208	2	16	75	3	4	0	82	8	1.052
BNC315-5	USDA	474	310	109	10	20	66	4	0	0	70	4	1.044
BNC315-6	USDA	381	328	116	2	4	94	0	0	0	94	0	1.036

Table 15 (cont'd). Production facts for USDA Early Generation potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
BNC316-1	USDA	435	368	130	3	12	84	0	0	0	84	0	1.059
BNC316-3	USDA	312	209	74	5	28	63	4	0	0	67	4	1.057
BNC316-4	USDA	398	134	47	9	57	34	0	0	0	34	0	1.051
BNC316-5	USDA	400	323	114	2	8	91	0	0	0	91	0	1.050
BNC316-6	USDA	328	144	51	8	48	44	0	0	0	44	0	1.060
BNC316-7	USDA	365	251	89	4	25	71	0	0	0	71	0	1.063
BNC316-8	USDA	304	137	48	7	41	52	0	0	0	52	0	1.052
BNC316-9	USDA	288	197	69	8	18	69	6	0	0	74	6	1.064
BNC317-2	USDA	321	239	84	3	12	84	0	0	0	84	0	1.071
BNC317-3	USDA	295	232	82	3	16	81	0	0	0	81	0	1.079
BNC317-6	USDA	353	253	89	4	14	82	0	0	0	82	0	1.071
BNC317-7	USDA	353	152	54	14	37	49	0	0	0	49	0	1.072
BNC317-8	USDA	274	159	56	10	21	64	5	0	0	69	5	1.072
BNC317-9	USDA	333	222	78	6	23	71	0	0	0	71	0	1.077
BNC318-1	USDA	401	338	119	2	9	67	6	17	0	89	22	1.074
BNC318-2	USDA	447	338	119	3	5	48	43	0	0	92	43	1.070
BNC318-3	USDA	352	324	114	3	5	63	30	0	0	92	30	1.075
BNC318-4	USDA	351	294	104	3	10	86	0	0	0	86	0	1.066
BNC318-5	USDA	402	326	115	1	8	60	25	6	0	91	31	1.078
BNC318-6	USDA	453	394	139	3	10	38	16	34	0	87	49	1.059

Table 15 (cont'd). Production facts for USDA Early Generation potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
BNC318-7	USDA	447	422	149	1	4	38	42	15	0	94	57	1.051
BNC318-8	USDA	424	294	104	3	16	67	15	0	0	82	15	1.070
BNC318-9	USDA	427	368	130	2	10	77	7	5	0	88	11	1.070
BNC318-12	USDA	268	213	75	2	19	79	0	0	0	79	0	1.079
BNC319-4	USDA	435	282	99	6	18	71	4	0	0	75	4	1.074
BNC319-5	USDA	350	194	68	4	40	55	0	0	0	55	0	1.073
BNC320-1	USDA	464	281	99	4	29	67	0	0	0	67	0	1.067
BNC320-2	USDA	469	328	116	3	25	71	0	0	0	71	0	1.069
BNC321-1	USDA	430	321	113	5	18	77	0	0	0	77	0	1.061
BNC321-2	USDA	369	233	82	9	25	66	0	0	0	66	0	1.068
BNC322-1	USDA	440	86	30	19	30	52	0	0	0	52	0	1.055
BNC322-2	USDA	368	238	84	3	13	84	0	0	0	84	0	1.061
BNC322-3	USDA	350	176	62	8	42	50	0	0	0	50	0	1.068
BNC322-4	USDA	287	217	77	3	12	85	0	0	0	85	0	1.059
BNC323-1	USDA	411	233	82	6	31	63	0	0	0	63	0	1.062
BNC323-2	USDA	390	280	99	6	16	78	0	0	0	78	0	1.073
BNC324-2	USDA	412	287	101	2	26	60	12	0	0	72	0	1.065
BNC324-4	USDA	497	367	130	2	10	66	17	4	0	87	4	1.071
BNC326-1	USDA	431	309	109	1	8	66	25	0	0	91	0	1.071
BNC326-2	USDA	378	326	115	2	7	74	18	0	0	91	0	1.075

Table 15 (cont'd). Production facts for USDA Early Generation potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
BNC326-3	USDA	445	332	117	3	7	58	19	14	0	90	14	1.070
BNC326-4	USDA	452	317	112	3	10	52	35	0	0	87	0	1.072
BNC326-5	USDA	445	389	137	1	11	79	10	0	0	89	0	1.078
BNC326-6	USDA	301	243	86	4	15	73	8	0	0	81	0	1.073
BNC326-7	USDA	432	335	118	2	9	89	0	0	0	89	0	1.077
BNC326-8	USDA	457	305	107	5	14	71	4	5	0	81	5	1.074
BNC326-10	USDA	471	384	135	3	10	88	0	0	0	88	0	1.081
BNC326-12	USDA	264	230	81	4	5	71	21	0	0	91	0	1.072
BNC326-14	USDA	400	301	106	1	16	71	11	0	0	82	0	1.070
BNC326-15	USDA	316	243	86	3	10	87	0	0	0	87	0	1.080
BNC327-1	USDA	261	145	51	8	19	73	0	0	0	73	0	1.077
BNC327-2	USDA	354	232	82	5	25	62	8	0	0	70	0	1.072
BNC327-3	USDA	441	318	112	2	7	91	0	0	0	91	0	1.078
BNC327-6	USDA	243	145	51	2	20	77	0	0	0	77	0	1.073
BNC327-8	USDA	281	144	51	9	38	54	0	0	0	54	0	1.080
BNC327-10	USDA	310	206	73	3	19	78	0	0	0	78	0	1.066
BNC328-1	USDA	16	5	2	50	16	34	0	0	0	34	0	md
BNC328-2	USDA	276	111	39	9	48	38	5	0	0	43	0	1.068

¹Marketable Yield: size classes A1 to A3.

²Size classes: C = 0.5 to 1.5", B = 1.5 to 1.88", A1 = 1.88 to 2.5", A2 = 2.5 to 3.25", A3 = 3.25 to 4", A4 = >4"

Table 16. Plant growth and tuber appearance of USDA Early Generation potato selections.

Clone	Plant Growth Characteristics ¹				APP	Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity		
Atlantic	100	6	8	4	6	decent
Belrus	75	5	8	3	6	not bad
Goldrush	88	5	9	3	6	nice russet
Harley Blackwell	100	5	8	3	7	very nice
LaChipper	100	5	9-6	3	7	attractive
Peter Wilcox (B1816-5)	100	5	8	3	6	okay
Red LaSoda	88	5	9	4	5	ugly red
Yukon Gold	100	5	8	2	6	not bad
B1992-106	100	5	8	6	7	large tubers/ high specific gravity
B2923-1	100	5	8	3	3	pointy
B2923-2	100	5	9-6	3	3	pointy too many shapes
B2923-3	100	5	6-9	6	3	irregular shapes
B2923-4	100	5	8	3	5	low marketable yield
B2923-5	100	5	8	5	4	ugly red
B2923-6	100	5	9	5	3	ugly/ irregular shapes
B2923-7	88	5	7	5	3	ugly/ irregular red color
B2924-4	100	4	7	3	5	dark purple/ low marketable yield
B2924-5	100	6	7	1	4	irregular purple
B2926-1	100	6	8	2	3	too many shapes
B2926-2	100	7	9	1	5	irregular shapes

Table 16 (cont'd). Plant growth and tuber appearance of USDA Early Generation potato selections.

Clone	Plant Growth Characteristics ¹				APP	Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity		
B2926-3	100	6	8	2	5	dark purple/ low marketable yield
B2926-4	100	6	7	2	5	irregular shapes
B2926-5	100	6	8	3	5	okay
B2927-1	100	6	8	1	5	nothing fancy
B2927-2	100	7	7-4	1	5	low total yield
B2928-1	100	6	8	3	6	dark purple
B2928-2	100	6	9	3	4	pointy purple
B2928-3	100	6	8	3	5	too many shapes
B2928-4	100	7	8	2	5	irregular shapes
B2928-5	100	5	7	2	6	not bad
B2928-6	100	5	8	2	6	very dark purple/ almost black
B2928-8	100	6	8-5	1	5	lite skin color
B2928-9	100	6	8-5	3	5	okay
B2928-10	100	5	8	1	3	ugly - too many shapes
B2928-11	100	6	8	2	6	decent purple
B2929-1	100	7	9	3	4	CRS
B2929-2	88	5	7	6	5	pointy/ flat purple
B2929-3	100	6	9	3	5	nothing fancy
B2929-4	100	7	9	3	5	nothing fancy
B2930-1	100	6	8-5	2	1	CRS/ ugly

Table 16 (cont'd). Plant growth and tuber appearance of USDA Early Generation potato selections.

Clone	Plant Growth Characteristics ¹				APP	Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity		
B2930-2	100	6	8	3	3	ugly red/ CRS
B2930-3	100	6	8-5	1	3	ugly/ CRS
B2930-4	100	6	8	2	4	ugly
B2930-5	100	7	8-5	3	5	nothing fancy
B2932-1	100	6	8	2	5	okay
B2932-2	100	6	8	2	5	nothing fancy
B2932-3	100	7	6-9	2	5	okay
B2932-4	63	2	7	3	5-6	not bad
B2932-5	100	7	7	3	5	too many shapes
B2932-6	100	5	8	2	4	ugly
B2932-7	100	7	8-5	3	1	very ugly
B2932-8	100	6	8	3	3	ugly red
B2932-9	100	6	8-5	2	4	low marketable yield
B2932-10	100	5	9	3	5	nothing fancy
B2935-1	100	6	9-6	3	6	not bad
B2935-2	100	6	9	4	4	fair appearance/ high specific gravity
B2935-3	100	5	8	5	5	large tubers/ okay red
B2936-1	100	6	9-6	3	5	irregular shapes
B2936-2	100	6	9-6	6	5	nothing fancy/ high specific gravity
B2937-1	100	6	8	3	5	irregular shapes

Table 16 (cont'd). Plant growth and tuber appearance of USDA Early Generation potato selections.

Clone	Plant Growth Characteristics ¹				APP	Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity		
B2937-2	100	6	9-6	1	3	poor purple color
B2937-3	100	6	9	3	5	flat
B2938-1	100	7	9-6	1	4	very low marketable yield
B2938-2	100	7	9	2	5	nothing fancy
B2938-3	100	7	9-6	1	5	nothing fancy
B2938-4	100	8	8-5	1	3	pointy reds
B2938-5	100	7	5	2	5	low marketable yield
B2938-6	100	7	9	2	5	okay/ lite color
B2938-7	100	7	9	1	3	CRS/ ugly
B2938-8	100	7	9	1	6	decent color
B2938-9	100	5	8	1	5	nice red color
B2938-10	100	7	9-6	1	5	okay
B2938-11	100	7	9	1	3	bad rot
B2941-1	88	7	9-6	4	3	ugly
B2942-1	100	5	7	1	5	too much net
B2942-2	100	7	8-5	1	5	okay yield
B2942-3	100	6	7	1	5	very low marketable yield
B2942-5	100	7	8	1	5	low marketable yield
B2942-6	100	7	9-6	1	3	CRS/ low marketable yield
B2942-7	100	7	5-8	1	5	very low marketable yield

Table 16 (cont'd). Plant growth and tuber appearance of USDA Early Generation potato selections.

Clone	Plant Growth Characteristics ¹				APP	Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity		
B2943-1	100	7	8	3	4	ugly/ low marketable yield
B2943-2	100	7	8	1	3	too many shapes
B2944-1	100	7	8	1	5	low marketable yield
B2944-2	100	7	5-8	1	4	small tubers
B2944-3	100	5	8	2	5	nothing fancy
B2944-4	100	6	8-5	1	4	irregular
B2945-1	100	5	8	2	5	okay
B2945-2	100	6	9	2	5	nothing fancy
B2945-3	100	6	8-5	2	4	irregular shapes
B2945-4	88	6	9	3	4	irregular shapes
B2947-1	100	5	9	3	5	nothing fancy
B2947-2	63	2	7	4	5	nothing fancy/ high specific gravity
B2947-3	63	5	7	3	5	okay
B2947-4	100	6	9	3	5	nothing fancy
B2947-5	100	7	9-6	3	5	irregular shapes
B2947-6	100	5	9	3	4	too many shapes/ high specific gravity
B2947-7	100	6	9	2	5	big yield
B2947-8	100	7	9	3	5	okay
B2947-9	100	4	8	3	5	very low marketable yield
B2947-10	100	4	7	5	5	very low marketable yield

Table 16 (cont'd). Plant growth and tuber appearance of USDA Early Generation potato selections.

Clone	Plant Growth Characteristics ¹				APP	Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity		
B2947-11	100	4	8	3	5	high specific gravity
B2947-12	100	4	9	3	5	nothing fancy
B2948-1	100	7	8	3	5	irregular shapes
B2948-7	100	7	8	3	3	ugly/ high specific gravity
B2948-8	100	6	7	2	5	nothing fancy
B2948-9	100	7	7	2	4	irregular shapes
B2950-1	100	6	8-5	2	3	ugly
B2950-2	88	5	8	3	5	okay
B2950-3	100	7	9-6	3	5	nothing fancy
B2950-4	100	6	7	2	5	nothing fancy
B2950-6	100	7	8-5	3	4	irregular shapes
B2950-8	88	7	9-6	2	5	low yield
B2950-9	100	7	8-5	2	5	nothing fancy
B2951-1	75	4	7	5	4	too many shapes
B2951-4	88	5	8	3	5	low yield
B2951-5	100	6	8	3	5	very low marketable yield
B2951-6	100	4	8	5	5	nothing fancy/ high specific gravity
B2951-7	100	8	8	3	5	nothing fancy/ high specific gravity
B2951-8	100	6	8	2	6	not bad
B2951-9	100	6	8	2	5	low marketable yield/ high specific gravity

Table 16 (cont'd). Plant growth and tuber appearance of USDA Early Generation potato selections.

Clone	Plant Growth Characteristics ¹				APP	Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity		
B2952-1	100	6	8	2	5	nothing fancy
B2952-2	100	6	9-6	3	5	low marketable yield/ high specific gravity
B2952-3	100	6	8	2	6	okay
B2952-4	100	5	9	3	5	too many shapes/ high specific gravity
B2952-5	100	7	8-5	2	6	okay
B2952-6	100	6	8	4	5	nothing fancy
B2952-7	100	6	8-5	2	7	attractive
B2952-8	88	7	8	3	5	nothing fancy
B2952-9	100	7	9	1	3	ugly
B2952-11	100	5	8	4	5	nothing fancy
B2952-12	100	5	8	2	3	ugly
B2952-13	100	6	9	3	6	not bad
B2952-14	100	6	9	3	5	nothing fancy
B2953-3	88	6	8	3	5	okay
B2953-4	100	6	9	4	4	not nice/ high specific gravity
B2953-5	100	6	9	1	4	low marketable yield
B2953-6	100	6	8	2	5	okay
B2954-1	100	6	8	3	4	too many shapes
B2954-2	100	7	9	3	5	nothing fancy
B2954-3	100	6	8	3	3	too many shapes

Table 16 (cont'd). Plant growth and tuber appearance of USDA Early Generation potato selections.

Clone	Plant Growth Characteristics ¹				APP	Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity		
B2954-4	100	5	8-5	3	3	ugly
B2954-5	88	6	7	3	5	nothing fancy
B2954-6	100	6	7	3	5	too many shapes
B2954-7	100	7	8	4	3	ugly
B2954-10	100	6	9	3	5	nothing fancy
B2954-11	100	6	8	3	6	slightly irregular/ large tubers
B2954-12	100	6	5-8	2	5	nothing fancy
B2954-13	100	7	8	2	5	nothing fancy
B2954-14	100	6	8	3	3	not nice
B2954-17	100	6	8-5	3	4	nothing fancy
B2954-18	100	6	7-4	2	3	ugly/ low yield
B2954-19	100	5	8	3	5	nothing fancy
B2954-20	100	6	7-4	3	6	not bad
B2954-23	100	6	9-6	2	5	okay
B2954-25	100	6	8	5	5	nothing fancy
B2954-26	100	5	9	5	3	ugly
B2954-27	100	5	8	5	4	too many shapes
B2954-28	100	7	8-5	3	5	okay
B2955-3	63	2	8	3	5	nothing fancy
B2955-5	100	6	8	5	1	bad CRS

Table 16 (cont'd). Plant growth and tuber appearance of USDA Early Generation potato selections.

Clone	Plant Growth Characteristics ¹				APP	Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity		
B2956-3	100	6	8-5	3	5	large/ too many shapes
B2956-4	100	6	8-5	2	4	too irregular
B2957-3	100	7	8	3	5	nothing fancy
B2957-4	100	7	8-5	3	6	okay
B2957-5	100	6	8	3	3	ugly
B2957-6	100	6	8	3	3	ugly
B2957-7	100	6	9	4	1	knobs/ second growth
B2957-8	100	6	8	2	3	not nice
B2958-1	100	6	5-8	2	5	nothing fancy
B2958-2	100	4	7	3	6	not bad
B2958-3	100	6	7	2	3	ugly
B2958-4	100	6	8	2	6	not bad
B2958-6	100	5	7	3	5	nothing fancy
B2958-10	100	6	8-5	2	4	too many shapes
B2958-12	50	5	8	4	5	nothing fancy
B2958-13	100	6	7-4	1	5	okay
B2958-16	100	6	8-5	3	5	okay
B2958-17	100	7	8-5	3	5	low marketable yield
B2958-18	100	6	8	4	5	okay
B2959-2	100	7	7-4	3	4	irregular shapes/ high specific gravity

Table 16 (cont'd). Plant growth and tuber appearance of USDA Early Generation potato selections.

Clone	Plant Growth Characteristics ¹				APP	Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity		
B2959-3	100	7	9-6	1	5	nothing fancy/ high specific gravity
B2959-4	100	7	9-6	2	4	irregular shapes
B2959-5	100	6	9	3	4	irregular shapes/ high specific gravity
B2959-6	100	6	8	2	4	too many shapes/ high specific gravity
B2960-1	100	6	6	2	5	nothing fancy
B2960-2	100	6	5	3	5	nothing fancy
B2960-3	100	6	6	2	5	nothing fancy
B2960-4	100	6	8-5	4	6	decent
B2960-5	100	7	2	1	6	okay
B2960-6	88	6	6-9	6	6	okay/ high specific gravity
B2960-7	100	6	2	2	5	nothing fancy
B2960-8	100	7	8-5	4	5	irregular shapes
B2960-9	88	7	5	1	4	irregular shapes
B2960-10	100	7	8	1	5	nothing fancy
B2960-11	100	6	8-5	2	5	nothing fancy
B2960-12	100	6	8-5	3	5	okay
B2960-13	100	6	8	2	4	irregular shapes
B2960-14	100	6	8	3	5	okay
B2960-15	100	7	6-9	2	5	big total yield
B2960-16	100	7	9-6	4	5	okay/ high specific gravity

Table 16 (cont'd). Plant growth and tuber appearance of USDA Early Generation potato selections.

Clone	Plant Growth Characteristics ¹				APP	Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity		
B2960-18	100	7	9-6	2	5	nothing fancy/ high specific gravity
B2965-1	100	6	5-2	2	4	small irregular tubers
B2966-1	100	6	8-5	1	5	okay
B2967-1	100	6	9	3	5	nothing fancy
B2967-2	100	6	9	3	5	nothing fancy
B2967-3	100	7	9-6	3	5	very large tubers/ irregular shapes
B2967-4	100	6	8	1	5	irregular shapes
B2967-5	100	6	9-6	3	6	okay
B2967-6	100	6	8	2	5	okay
B2968-1	75	6	7	3	5	okay
B2968-2	100	6	8	3	5	irregular shapes
B2968-3	100	6	9-6	2	6	decent tubers
B2969-1	100	6	9	3	5	nothing fancy
B2969-2	100	6	8	2	6	not bad
B2971-1	100	6	9	2	3	GC
B2971-2	100	6	8	3	6	nice large tubers
B2971-3	100	6	9	3	6	okay
B2971-4	100	6	9	2	1	CRS - bad
B2972-2	100	6	8	2	3	irregular shapes
B2974-1	100	5	8-5	5	5	okay

Table 16 (cont'd). Plant growth and tuber appearance of USDA Early Generation potato selections.

Clone	Plant Growth Characteristics ¹				APP	Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity		
B2976-1	100	6	9	3	4	irregular shapes
BNC301-1	100	1	7	5	6	not bad
BNC301-2	100	6	7	3	5	nothing fancy
BNC301-3	na	1	-	8	5	very low yield
BNC301-4	25	2	7	9	4	irregular large tubers
BNC301-5	88	4	7	5	5	large tubers
BNC301-6	75	1	7	8	6	nice round tubers
BNC301-9	88	4	8	5	5	okay
BNC304-1	100	6	8	3	6	nice color/ some irregular
BNC304-2	100	6	7-4	3	5	okay red/ big yield
BNC304-3	100	6	8-5	3	6	okay red
BNC304-4	100	7	8	3	4	lite red skin
BNC306-1	100	5	8	3	6	decent purple
BNC306-2	100	6	8	1	5	irregular shapes
BNC306-3	100	6	8	2	6	attractive dark purple - uniform
BNC307-3	100	7	6	1	5	irregular shapes
BNC307-6	100	6	8	5	3	irregular shapes/ ugly
BNC307-7	100	7	9-6	5	5	okay
BNC307-8	100	7	8	3	5	okay/ high specific gravity
BNC308-1	100	6	7	3	3	irregular shapes

Table 16 (cont'd). Plant growth and tuber appearance of USDA Early Generation potato selections.

Clone	Plant Growth Characteristics ¹				APP	Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity		
BNC308-2	100	6	8	1	5	low marketable yield
BNC308-3	100	6	9-6	3	5	big total yield
BNC308-4	100	6	9	3	5	too many shapes
BNC308-5	100	6	8	4	4	too many shapes
BNC309-1	100	6	9	3	5	low marketable yield
BNC309-3	100	6	9	3	5	low marketable yield
BNC309-4	100	5	9	2	4	low marketable yield
BNC309-5	100	5	9	4	6	decent shape and size/ huge yield
BNC309-6	100	5	8	3	5	some CRS
BNC309-8	100	6	5	2	5	low marketable yield
BNC309-9	100	5	8	2	5	too many shapes/ low marketable yield
BNC309-10	100	5	8	4	4	GC/ mishapes
BNC309-11	100	5	8	7	6	decent
BNC309-12	100	6	8	6	5	few star cracks
BNC309-13	100	6	9	3	5	some CRS
BNC310-2	100	6	8	2	3	alligator skin/ lite color
BNC310-3	100	7	9	3	5	deep eyes/ lite color
BNC310-5	100	7	8-5	3	6	not bad/ salmon skin/ huge yield
BNC310-6	100	6	8	5	5	salmon color/ deep eyes
BNC311-2	100	6	9	5	6	very large tubers

Table 16 (cont'd). Plant growth and tuber appearance of USDA Early Generation potato selections.

Clone	Plant Growth Characteristics ¹				APP	Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity		
BNC311-4	100	6	9	3	5	some CRS
BNC311-5	100	6	9	5	6	decent
BNC311-6	100	6	9	3	4	too many shapes
BNC311-9	100	6	9	3	5	low yield
BNC311-10	100	5	8	3	6	okay shape and size/ decent yield
BNC311-11	100	5	9	4	5	irregular shapes
BNC311-13	100	6	9	5	6	not bad
BNC311-14	100	7	9-6	3	4	irregular shapes
BNC311-15	75	5	9	3	6	large tubers/ decent appearance
BNC311-16	88	6	8	4	6	too many GC's
BNC311-17	100	7	9	4	5	too many shapes
BNC311-18	100	6	8	3	5	okay
BNC311-19	100	6	9	3	5	okay
BNC312-1	100	5	9	3	6	flat tubers
BNC312-2	75	4	8	4	5	CRS
BNC312-3	100	6	9	3	5	too many shapes
BNC312-4	100	6	9	2	5	too many shapes
BNC312-5	88	3	8	7	6	huge yield/ slighty flat
BNC312-6	100	6	9	2	6	okay, blocky/long
BNC312-7	100	5	8	3	6	huge tubers

Table 16 (cont'd). Plant growth and tuber appearance of USDA Early Generation potato selections.

Clone	Plant Growth Characteristics ¹				APP	Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity		
BNC313-2	100	5	9	3	6	oblong/long purple
BNC313-3	100	6	8	3	5	alligator skin/ purple
BNC313-4	100	7	6-9	3	6	okay purple/ long
BNC313-5	100	7	8-5	2	6	dark purple
BNC314-1	100	6	5-8	2	4	too many shapes
BNC314-2	100	5	8	3	4	milkbuckles
BNC314-3	100	5	8	2	5	oblong/ long, red
BNC314-4	100	7	8-5	2	6	oblong/ long, purple
BNC314-5	100	7	9	2	6	okay red/ big yield
BNC314-6	100	6	8	2	6	nice purple/ big yield
BNC314-7	100	6	8	3	6	decent yield and size/ nice red color
BNC314-8	100	6	8-5	2	6	dark purple/ not bad
BNC314-9	100	6	8	3	6	dark purple/ blocky and long
BNC314-10	100	6	8	3	6	nice purple/ some mishapes
BNC315-1	100	5	8	5	6	nice color/ too many shapes
BNC315-2	88	4	7	5	6	dark purple/ some mishapes
BNC315-3	88	4	7	5	5	crescent/ long/ lite color
BNC315-4	100	5	8	5	5	nice purple/ too pointy
BNC315-5	100	6	8	3	6	similar to Red LaSoda
BNC315-6	100	6	7	3	6	dark purple

Table 16 (cont'd). Plant growth and tuber appearance of USDA Early Generation potato selections.

Clone	Plant Growth Characteristics ¹				APP	Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity		
BNC316-1	100	6	8-5	3	6	dark purple
BNC316-3	100	7	6	4	6	nice color
BNC316-4	100	6	8	3	6	crescent shapes
BNC316-5	100	6	8	3	6	dark purple
BNC316-6	100	6	5	3	5	low marketable yield/ Pink skin
BNC316-7	100	6	8	3	5	pointy/ nice purple color
BNC316-8	100	7	9	1	6	nice color/ low marketable yield
BNC316-9	100	6	9	1	6	nice color/ low marketable yield
BNC317-2	100	7	8	1	6	not bad
BNC317-3	100	6	8	1	6	okay
BNC317-6	100	6	9	1	3	ugly
BNC317-7	100	6	9	1	5	low marketable yield
BNC317-8	100	6	8	1	3	ugly/ low marketable yield
BNC317-9	100	5	9	3	6	low marketable yield
BNC318-1	88	5	8	3	6	okay
BNC318-2	88	5	8	3	7	nice size and yield/ large, round
BNC318-3	88	5	8	3	6	decent yield/ too pink
BNC318-4	100	5	8	3	6	decent looking
BNC318-5	100	4	7	5	6	nice size
BNC318-6	100	6	9	3	6	nice yield/ couple star cracks

Table 16 (cont'd). Plant growth and tuber appearance of USDA Early Generation potato selections.

Clone	Plant Growth Characteristics ¹				APP	Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity		
BNC318-7	100	5	7	4	6	nice yield and size
BNC318-8	100	6	0	3	6	decent
BNC318-9	100	5	9	2	6	decent
BNC318-12	100	4	7	2	6	low marketable yield
BNC319-4	100	6	9	2	3	ugly
BNC319-5	100	6	9	1	5	low marketable yield
BNC320-1	100	6	9	1	7	nice purple/ slightly flat
BNC320-2	100	6	6-9	2	7	beautiful purple
BNC321-1	100	7	6-9	1	6	nice color/ decent yield
BNC321-2	100	6	9	1	6	nice color
BNC322-1	100	6	8	2	1	rot/ GC/ complete mess
BNC322-2	88	6	7	3	3	star cracks/ ugly
BNC322-3	100	6	9	1	6	nice color/ lenticels
BNC322-4	88	3	7	2	5	lenticels/ CRS
BNC323-1	100	7	8	3	6	nice color
BNC323-2	100	6	8	3	5	star cracks
BNC324-2	100	6	8	2	3	star cracks/ lenticels
BNC324-4	100	6	8-5	2	6	decent yield/ too pink
BNC326-1	100	5	8	5	7	nice size
BNC326-2	100	5	8	3	6	

Table 16 (cont'd). Plant growth and tuber appearance of USDA Early Generation potato selections.

Clone	Plant Growth Characteristics ¹				APP	Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity		
BNC326-3	100	6	8	4	6	nice yield and size
BNC326-4	100	5	9	2	5	lenticels/ decent yield
BNC326-5	100	5	7	3	5	okay
BNC326-6	100	6	8	2	5	low marketable yield
BNC326-7	100	4	7	3	6	nice yield/ shape
BNC326-8	100	6	8	3	6	not bad
BNC326-10	100	6	8	3	7	nice/ attractive/ big yield
BNC326-12	75	4	7	3	5	some lenticels
BNC326-14	100	6	7	3	6	oblong to long/ nice yield
BNC326-15	100	6	7	2	6	decent yield/ pink skin
BNC327-1	100	6	7	2	4	low marketable yield
BNC327-2	100	6	8	1	3	low marketable yield/ ugly
BNC327-3	100	6	7	3	5	too many shapes
BNC327-6	100	6	7	2	6	low marketable yield
BNC327-8	100	6	7	2	6	low marketable yield/ too many shapes
BNC327-10	100	8	8	2	6	
BNC328-1	100	6	-	1	-	-
BNC328-2	100	6	7	2	6	

¹See rating system outlined in Table 1 (page 10).

²See rating system outlined in Table 2 (page 11).

Table 17. External and internal defects of USDA Early Generation potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
Atlantic	0	3	0	0	3	0	0	0	0	0	0	0
Belrus	0	0	0	0	0	0	0	0	0	0	0	0
Goldrush	0	0	0	0	0	0	0	0	0	0	0	0
Harley Blackwell	0	0	0	5	5	0	0	0	0	0	0	0
LaChipper	0	0	0	0	0	0	0	20	0	0	0	0
Peter Wilcox (B1816-5)	0	0	5	5	10	0	0	0	0	0	0	0
Red LaSoda	4	0	1	5	10	0	0	0	0	0	0	0
Yukon Gold	0	0	4	4	8	0	0	0	0	0	0	0
B1992-106	0	0	4	1	4	0	0	0	0	0	0	0
B2923-1	0	0	0	0	0	0	0	0	0	0	0	0
B2923-2	0	2	2	0	4	0	0	0	0	0	0	0
B2923-3	0	12	0	1	13	0	0	0	0	0	0	0
B2923-4	0	0	0	6	6	0	0	40	0	0	0	0
B2923-5	0	5	0	3	9	0	0	0	0	0	0	0
B2923-6	0	5	0	4	9	0	0	0	0	0	0	0
B2923-7	0	6	0	2	8	0	0	0	0	0	0	0
B2924-4	2	4	4	0	11	0	0	0	0	0	0	0
B2924-5	0	0	3	5	8	0	0	0	0	0	0	0
B2926-1	6	8	0	3	18	0	0	0	0	0	0	0
B2926-2	0	1	0	2	2	0	0	0	0	0	0	0

Table 17 (cont'd). External and internal defects of USDA Early Generation potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
B2926-3	0	0	4	2	6	0	0	0	0	0	0	0
B2926-4	0	0	5	0	5	0	0	0	0	0	0	0
B2926-5	0	4	0	2	6	0	0	0	0	0	0	0
B2927-1	1	0	0	3	4	0	0	0	0	0	0	0
B2927-2	3	0	0	4	8	0	0	0	0	0	0	0
B2928-1	0	0	0	8	8	0	0	0	0	0	0	0
B2928-2	0	0	0	0	0	0	0	20	0	0	0	0
B2928-3	0	7	0	0	7	0	0	0	0	0	0	0
B2928-4	0	2	0	0	2	0	0	0	0	0	0	0
B2928-5	0	3	5	0	8	0	0	0	0	0	0	0
B2928-6	2	5	0	0	7	0	0	0	0	0	0	0
B2928-8	0	0	2	3	5	0	0	0	0	0	0	0
B2928-9	0	5	2	2	9	0	0	0	0	0	0	0
B2928-10	0	0	0	3	3	0	0	0	0	0	0	0
B2928-11	0	0	3	5	8	0	0	0	0	0	0	0
B2929-1	0	6	1	5	12	0	0	0	0	0	0	0
B2929-2	5	0	3	0	7	0	0	0	0	0	20	0
B2929-3	0	2	2	6	9	0	0	0	0	0	0	0
B2929-4	1	0	10	1	13	0	0	20	0	0	0	0
B2930-1	0	3	7	17	27	0	0	20	0	0	0	0

Table 17 (cont'd). External and internal defects of USDA Early Generation potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
B2930-2	0	5	4	7	16	0	0	20	0	0	0	0
B2930-3	0	0	7	4	11	20	0	0	0	20	40	20
B2930-4	0	0	3	19	22	0	0	0	0	0	0	0
B2930-5	0	5	7	2	15	0	0	40	0	0	0	0
B2932-1	0	0	0	0	0	0	0	0	0	0	0	0
B2932-2	0	0	10	0	10	0	0	0	0	0	0	0
B2932-3	0	0	5	0	5	0	0	0	0	20	0	0
B2932-4	0	0	0	0	0	0	0	0	0	0	0	0
B2932-5	2	0	0	2	4	0	0	0	0	0	0	0
B2932-6	0	8	0	5	13	0	0	0	0	0	0	0
B2932-7	14	3	6	7	29	0	0	0	0	0	0	0
B2932-8	2	2	6	3	13	0	0	0	0	0	0	0
B2932-9	0	0	10	3	13	0	0	0	0	0	0	0
B2932-10	0	0	7	5	12	0	0	0	0	0	0	0
B2935-1	0	0	12	1	13	0	0	0	0	0	0	0
B2935-2	0	0	2	2	5	0	0	0	0	0	0	0
B2935-3	0	11	2	2	14	0	0	0	0	0	0	0
B2936-1	0	3	0	2	6	0	0	0	0	0	0	0
B2936-2	3	0	4	0	6	0	0	0	0	0	0	0
B2937-1	0	0	7	7	14	0	0	0	0	0	0	0

Table 17 (cont'd). External and internal defects of USDA Early Generation potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
B2937-2	2	0	5	2	9	0	0	0	0	0	0	0
B2937-3	0	0	14	3	17	0	0	0	0	0	20	0
B2938-1	0	4	11	0	15	0	0	0	0	0	0	0
B2938-2	0	0	6	2	8	0	0	0	0	0	0	0
B2938-3	0	0	8	0	8	0	0	0	0	0	0	0
B2938-4	0	7	8	2	16	0	0	0	0	0	0	0
B2938-5	0	0	7	0	7	0	0	20	0	0	0	0
B2938-6	0	3	0	3	7	0	0	0	0	0	0	0
B2938-7	0	0	13	13	26	0	0	0	0	0	20	0
B2938-8	3	4	8	2	16	0	0	0	0	0	0	0
B2938-9	0	0	0	9	9	0	0	0	0	0	0	0
B2938-10	0	0	4	4	8	0	0	0	0	0	0	20
B2938-11	0	1	1	37	39	0	0	0	0	40	0	0
B2941-1	0	1	5	0	6	0	0	0	0	0	0	0
B2942-1	0	0	2	3	5	0	0	0	0	0	0	0
B2942-2	0	0	0	0	0	0	0	0	0	0	0	0
B2942-3	0	0	1	4	5	0	0	0	0	0	0	0
B2942-5	0	0	5	13	18	0	0	0	0	0	0	0
B2942-6	0	4	3	17	24	0	0	0	0	0	0	0
B2942-7	0	2	0	0	2	0	0	0	0	0	0	0

Table 17 (cont'd). External and internal defects of USDA Early Generation potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
B2943-1	5	4	1	5	14	0	0	40	0	0	0	0
B2943-2	0	3	0	2	5	0	0	0	0	0	0	0
B2944-1	0	0	6	4	10	0	0	0	0	0	0	0
B2944-2	0	0	7	3	10	0	0	40	0	0	0	0
B2944-3	2	3	4	2	11	0	0	20	0	0	0	0
B2944-4	0	7	3	0	10	0	0	0	0	0	0	0
B2945-1	0	5	13	3	21	0	0	40	0	0	0	0
B2945-2	0	0	3	7	10	0	0	0	0	0	0	0
B2945-3	0	1	0	4	5	0	0	0	0	0	0	0
B2945-4	0	0	8	0	8	0	0	20	0	0	0	0
B2947-1	0	1	3	1	6	0	0	40	0	40	0	0
B2947-2	5	0	2	0	7	0	0	20	0	0	0	0
B2947-3	0	0	0	0	0	0	0	0	0	0	0	0
B2947-4	2	3	1	0	6	0	0	0	0	0	0	0
B2947-5	0	4	4	0	8	0	0	0	0	0	0	0
B2947-6	0	1	0	3	4	0	0	0	0	0	0	0
B2947-7	0	0	1	0	1	0	0	0	0	0	0	0
B2947-8	0	0	6	0	6	0	0	0	0	0	0	0
B2947-9	30	0	0	0	30	0	0	0	0	0	0	0
B2947-10	0	11	0	0	11	0	0	60	0	0	0	0

Table 17 (cont'd). External and internal defects of USDA Early Generation potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
B2947-11	0	13	0	0	13	0	0	20	0	0	0	0
B2947-12	0	7	2	2	12	0	0	20	20	20	20	0
B2948-1	3	0	5	0	8	0	0	0	0	0	20	0
B2948-7	0	6	7	0	13	60	0	60	0	0	0	0
B2948-8	2	0	11	0	13	0	0	0	0	0	0	0
B2948-9	11	2	3	4	20	0	0	0	0	0	0	0
B2950-1	0	2	3	8	13	0	0	80	0	0	0	0
B2950-2	0	2	0	2	4	0	0	0	0	0	0	0
B2950-3	0	0	1	0	1	0	0	0	0	0	0	0
B2950-4	0	0	8	0	8	0	0	0	0	0	0	0
B2950-6	0	0	5	1	6	0	0	0	0	0	0	0
B2950-8	0	0	3	0	3	0	0	0	0	0	0	0
B2950-9	0	2	5	3	10	0	0	0	0	0	0	0
B2951-1	0	1	3	2	6	40	0	40	0	0	0	0
B2951-4	0	2	2	0	4	0	0	0	0	0	0	0
B2951-5	0	2	10	0	13	20	0	0	0	0	0	0
B2951-6	0	0	3	0	3	0	0	0	0	20	0	0
B2951-7	2	0	11	2	14	0	0	0	0	0	0	0
B2951-8	1	5	2	0	8	0	0	0	0	40	0	20
B2951-9	4	4	9	0	17	20	0	0	0	0	0	0

Table 17 (cont'd). External and internal defects of USDA Early Generation potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
										L	M	H
B2952-1	0	0	2	0	2	0	0	0	0	0	0	0
B2952-2	0	0	8	0	8	0	0	0	0	0	0	0
B2952-3	0	0	2	5	7	0	0	0	0	0	0	0
B2952-4	0	10	0	0	10	0	0	0	0	0	0	0
B2952-5	0	2	4	5	10	0	0	0	0	20	40	0
B2952-6	1	4	5	3	13	0	0	0	0	0	0	0
B2952-7	0	0	2	0	2	20	0	0	0	0	0	0
B2952-8	0	0	8	2	9	0	0	0	0	0	0	0
B2952-9	0	2	7	2	11	0	0	0	0	0	0	0
B2952-11	3	3	7	8	21	0	0	0	0	40	0	0
B2952-12	4	12	3	3	23	0	0	0	20	0	0	0
B2952-13	0	0	5	2	6	0	0	0	0	0	0	0
B2952-14	0	1	2	2	6	0	0	0	0	0	0	0
B2953-3	0	0	3	0	3	0	0	0	0	0	0	0
B2953-4	0	0	6	3	8	0	0	0	0	60	0	0
B2953-5	0	0	6	0	6	0	0	0	0	0	0	0
B2953-6	0	0	5	0	5	0	0	20	0	0	0	0
B2954-1	0	3	4	3	10	0	0	0	0	0	0	0
B2954-2	0	3	6	3	12	0	0	0	0	0	20	20
B2954-3	0	8	4	5	17	0	0	0	0	0	0	0

Table 17 (cont'd). External and internal defects of USDA Early Generation potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
										L	M	H
B2954-4	8	8	4	4	24	0	0	20	0	20	0	0
B2954-5	2	13	3	5	23	0	0	0	0	0	0	0
B2954-6	0	6	3	0	9	0	0	0	0	20	0	0
B2954-7	0	8	4	6	18	0	0	0	0	40	0	0
B2954-10	7	5	1	1	15	40	0	0	0	0	0	20
B2954-11	0	0	0	1	1	0	0	0	0	20	0	0
B2954-12	2	1	0	2	6	0	0	0	0	0	0	0
B2954-13	3	0	2	2	6	0	0	0	0	20	0	20
B2954-14	0	0	2	8	11	0	0	0	0	0	20	0
B2954-17	0	4	4	1	9	20	0	0	0	80	0	0
B2954-18	0	0	0	0	0	0	0	0	0	50	25	0
B2954-19	0	0	3	5	8	0	0	0	0	50	0	25
B2954-20	1	2	0	2	5	0	0	40	0	20	0	0
B2954-23	2	2	3	2	10	0	0	0	0	40	0	0
B2954-25	0	1	4	2	7	0	0	40	0	20	0	0
B2954-26	2	0	5	2	9	0	0	0	0	20	0	0
B2954-27	0	8	4	0	12	0	0	0	0	0	0	0
B2954-28	2	1	4	2	9	0	0	0	0	20	20	40
B2955-3	0	0	10	1	11	0	0	0	0	80	0	0
B2955-5	0	5	2	19	25	0	0	40	0	0	0	0

Table 17 (cont'd). External and internal defects of USDA Early Generation potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
B2956-3	0	35	0	3	38	0	0	0	0	0	0	0
B2956-4	6	2	3	13	23	80	0	0	0	0	0	0
B2957-3	0	2	3	22	27	0	0	20	0	0	0	0
B2957-4	0	8	0	4	11	0	0	0	0	0	0	0
B2957-5	0	17	3	5	24	0	0	80	0	0	0	0
B2957-6	0	0	0	16	16	0	0	40	0	0	0	0
B2957-7	0	32	1	12	46	0	0	60	0	0	0	0
B2957-8	0	0	0	0	0	0	0	0	0	0	0	0
B2958-1	0	3	7	2	12	0	0	0	0	0	0	0
B2958-2	0	0	6	4	10	0	0	0	0	0	0	0
B2958-3	5	3	4	6	18	20	0	0	0	0	0	0
B2958-4	0	0	5	0	5	0	0	80	0	0	20	0
B2958-6	0	0	7	8	15	0	0	0	0	0	0	0
B2958-10	0	3	5	1	9	0	0	0	0	0	0	0
B2958-12	0	0	5	6	10	0	0	0	0	0	0	0
B2958-13	0	0	2	1	3	0	0	0	0	20	0	0
B2958-16	7	0	6	0	13	0	0	0	0	0	0	0
B2958-17	0	3	0	7	10	20	0	0	0	0	0	0
B2958-18	0	2	5	0	8	0	0	0	0	0	0	0
B2959-2	0	2	6	9	17	0	0	0	0	0	0	0

Table 17 (cont'd). External and internal defects of USDA Early Generation potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
B2959-3	0	0	5	0	5	0	0	0	0	0	0	0
B2959-4	5	0	14	0	19	0	0	0	0	0	0	0
B2959-5	0	2	3	0	4	0	0	0	0	0	0	0
B2959-6	0	0	11	0	11	0	0	0	0	0	0	0
B2960-1	4	0	13	2	19	0	0	0	0	0	0	0
B2960-2	0	0	8	3	11	0	0	0	0	0	0	0
B2960-3	2	0	11	0	13	0	0	0	0	0	0	0
B2960-4	0	0	3	0	3	0	0	0	0	0	0	0
B2960-5	0	0	14	0	14	0	0	0	0	0	0	0
B2960-6	0	0	1	0	1	0	0	0	0	0	0	0
B2960-7	0	0	0	0	0	0	0	0	0	0	0	0
B2960-8	0	3	6	3	12	20	0	0	0	0	0	0
B2960-9	8	2	3	0	13	0	0	0	0	0	0	0
B2960-10	0	0	15	0	15	0	0	0	0	0	0	0
B2960-11	0	0	7	1	8	0	0	0	0	0	0	0
B2960-12	0	0	12	0	12	0	0	0	0	0	0	0
B2960-13	0	7	14	7	28	0	0	0	0	0	0	0
B2960-14	0	0	11	2	13	0	0	0	0	0	0	0
B2960-15	6	0	14	3	23	0	0	0	0	0	0	0
B2960-16	4	0	9	3	16	0	0	20	20	0	0	0

Table 17 (cont'd). External and internal defects of USDA Early Generation potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
B2960-18	0	0	12	0	12	0	0	0	0	0	0	0
B2965-1	0	3	1	0	4	0	0	0	0	0	0	0
B2966-1	33	0	1	6	40	0	0	0	0	0	0	0
B2967-1	0	3	13	0	16	0	0	0	0	0	0	0
B2967-2	0	0	19	0	19	0	0	0	0	0	0	0
B2967-3	4	0	20	1	26	0	0	0	0	0	0	0
B2967-4	4	0	12	0	15	0	0	0	0	0	0	0
B2967-5	2	0	14	5	21	0	0	0	0	0	0	0
B2967-6	5	2	10	0	17	0	0	0	0	0	0	0
B2968-1	1	0	22	0	22	0	0	0	0	0	0	0
B2968-2	2	0	10	0	12	0	0	0	0	0	0	0
B2968-3	0	0	6	1	7	0	0	0	0	0	0	0
B2969-1	0	0	7	4	10	0	0	0	0	0	0	0
B2969-2	1	4	3	2	11	0	0	0	0	60	20	0
B2971-1	29	0	5	0	34	0	0	0	0	0	0	0
B2971-2	0	0	3	5	8	20	0	0	0	0	0	0
B2971-3	0	0	5	2	8	0	0	0	0	0	0	0
B2971-4	0	0	12	47	59	0	0	40	0	0	0	0
B2972-2	0	4	2	1	7	0	0	20	20	0	0	0
B2974-1	3	0	6	0	10	0	0	20	0	0	0	0

Table 17 (cont'd). External and internal defects of USDA Early Generation potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
										L	M	H
B2976-1	2	2	8	3	15	0	0	0	0	20	0	0
BNC301-1	0	0	11	0	11	0	0	0	0	0	0	0
BNC301-2	2	1	8	0	11	0	0	40	0	0	0	0
BNC301-3	0	0	0	0	0	0	0	0	0	0	0	0
BNC301-4	10	0	24	0	34	0	0	0	0	0	0	0
BNC301-5	0	0	2	0	2	20	0	0	0	0	0	0
BNC301-6	0	0	6	0	6	0	0	0	0	0	0	0
BNC301-9	0	0	8	4	13	0	0	0	0	0	0	0
BNC304-1	3	0	1	0	5	0	0	0	0	0	0	0
BNC304-2	0	0	6	0	6	0	0	0	0	0	0	0
BNC304-3	3	0	4	2	8	0	0	0	0	20	0	0
BNC304-4	1	5	11	3	20	0	0	0	0	0	0	0
BNC306-1	0	9	3	10	21	0	0	0	0	20	0	0
BNC306-2	2	0	2	10	14	0	0	0	0	0	0	0
BNC306-3	0	0	3	2	5	0	0	0	0	0	0	0
BNC307-3	4	0	0	0	4	0	0	0	0	0	0	0
BNC307-6	6	8	13	10	37	0	0	0	0	20	20	0
BNC307-7	10	0	15	0	24	40	0	0	20	0	0	0
BNC307-8	4	0	8	6	18	0	0	0	0	0	0	0
BNC308-1	14	5	2	3	24	0	0	0	0	0	0	0

Table 17 (cont'd). External and internal defects of USDA Early Generation potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
BNC308-2	2	0	13	3	17	0	0	0	0	0	0	0
BNC308-3	0	2	2	0	3	0	0	0	0	0	0	0
BNC308-4	1	0	6	11	18	0	0	0	0	0	0	0
BNC308-5	16	0	6	7	28	0	0	0	0	0	0	0
BNC309-1	1	0	16	9	27	0	0	0	0	0	0	0
BNC309-3	0	0	16	0	16	0	0	0	0	0	0	0
BNC309-4	4	0	12	3	18	0	0	0	0	0	0	0
BNC309-5	0	1	3	12	16	0	0	0	0	0	0	0
BNC309-6	5	4	2	6	17	0	0	0	0	0	0	0
BNC309-8	0	0	2	18	20	0	0	0	0	0	0	0
BNC309-9	0	0	9	0	9	0	0	0	0	0	0	0
BNC309-10	4	3	9	3	20	0	0	0	0	0	0	0
BNC309-11	16	0	3	0	19	0	0	40	0	20	0	0
BNC309-12	0	0	2	4	6	0	0	0	0	0	0	0
BNC309-13	1	0	1	4	6	0	0	0	0	0	0	0
BNC310-2	0	0	4	0	4	0	0	0	0	0	0	0
BNC310-3	2	0	8	1	11	0	0	0	0	0	0	0
BNC310-5	1	0	8	0	9	0	0	0	0	0	0	0
BNC310-6	0	0	1	0	1	0	0	0	0	0	0	0
BNC311-2	2	0	2	1	4	0	0	40	0	0	0	0

Table 17 (cont'd). External and internal defects of USDA Early Generation potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
BNC311-4	2	0	0	24	27	25	0	0	0	0	0	0
BNC311-5	0	0	3	1	4	0	0	0	0	0	0	0
BNC311-6	0	0	13	8	21	40	0	0	0	0	0	0
BNC311-9	0	1	3	2	7	0	0	20	0	0	0	0
BNC311-10	0	0	6	8	15	0	0	0	0	0	0	0
BNC311-11	3	0	5	0	8	0	0	0	0	0	0	0
BNC311-13	0	0	10	0	10	0	0	20	20	20	0	0
BNC311-14	5	0	16	0	21	0	0	20	0	0	0	0
BNC311-15	0	0	3	3	6	0	0	0	0	0	0	0
BNC311-16	13	2	1	3	20	0	0	0	20	20	0	0
BNC311-17	7	1	4	0	12	40	0	0	0	40	0	0
BNC311-18	2	0	4	4	10	0	0	0	0	0	0	0
BNC311-19	0	0	6	15	21	0	0	20	0	0	0	0
BNC312-1	0	0	4	2	6	0	0	20	0	0	0	0
BNC312-2	0	0	10	8	18	0	0	40	0	0	0	0
BNC312-3	4	0	0	0	4	0	0	0	0	0	0	0
BNC312-4	0	0	2	9	11	0	0	0	0	0	0	0
BNC312-5	5	0	3	0	8	0	0	0	0	0	0	0
BNC312-6	0	0	0	6	6	0	0	0	0	0	0	0
BNC312-7	4	0	0	3	7	0	0	40	40	20	0	0

Table 17 (cont'd). External and internal defects of USDA Early Generation potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
BNC313-2	1	4	0	1	6	0	0	100	0	0	0	0
BNC313-3	0	0	3	3	6	0	0	0	0	0	0	0
BNC313-4	0	0	3	2	5	0	0	0	0	0	0	0
BNC313-5	0	0	1	9	10	0	0	0	0	0	0	0
BNC314-1	0	5	0	6	12	0	0	0	0	0	0	20
BNC314-2	0	0	0	0	0	0	0	0	0	0	0	20
BNC314-3	1	0	6	0	8	0	0	0	0	0	0	0
BNC314-4	0	0	3	9	12	0	0	0	0	0	0	0
BNC314-5	0	0	3	3	6	0	0	0	0	0	0	0
BNC314-6	0	0	3	0	3	0	0	0	0	0	0	0
BNC314-7	0	0	0	0	0	0	0	0	0	0	0	0
BNC314-8	2	0	2	2	7	0	0	0	0	0	0	0
BNC314-9	2	2	2	6	11	0	0	20	60	0	20	0
BNC314-10	1	0	3	2	6	0	0	0	0	0	0	0
BNC315-1	0	0	3	0	3	0	0	0	0	0	0	0
BNC315-2	0	11	3	0	14	0	0	0	0	0	0	0
BNC315-3	0	0	4	1	5	0	0	0	0	0	0	0
BNC315-4	0	0	5	0	5	0	0	0	0	0	0	0
BNC315-5	0	2	4	0	6	20	0	0	0	20	0	0
BNC315-6	0	0	2	7	9	0	0	0	0	0	0	0

Table 17 (cont'd). External and internal defects of USDA Early Generation potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
BNC318-7	0	0	0	0	0	0	0	0	0	0	0	0
BNC318-8	3	0	8	3	15	0	0	60	0	0	0	0
BNC318-9	0	0	2	0	2	0	0	0	0	0	0	0
BNC318-12	0	0	0	0	0	0	0	0	0	0	0	0
BNC319-4	0	0	9	6	14	0	0	0	0	0	0	0
BNC319-5	0	0	0	0	0	0	0	0	0	0	0	0
BNC320-1	0	0	3	7	10	0	0	0	0	0	0	0
BNC320-2	0	0	0	2	2	0	0	0	0	0	0	0
BNC321-1	0	0	2	2	3	0	0	40	0	0	0	20
BNC321-2	0	0	1	4	5	0	0	0	40	0	0	0
BNC322-1	20	0	4	38	62	0	0	0	0	20	0	0
BNC322-2	3	4	7	10	23	0	0	0	80	0	0	0
BNC322-3	0	0	0	0	0	0	0	20	0	0	0	0
BNC322-4	4	0	3	4	11	0	0	20	0	0	0	0
BNC323-1	7	0	0	3	9	0	0	20	0	0	0	0
BNC323-2	0	2	0	6	8	0	0	20	0	0	0	0
BNC324-2	0	0	2	2	4	0	0	0	0	0	0	0
BNC324-4	5	0	3	8	15	0	0	0	0	0	0	0
BNC326-1	10	0	7	4	21	0	0	0	0	0	0	0
BNC326-2	0	0	0	6	6	0	0	0	0	20	0	0

Table 17 (cont'd). External and internal defects of USDA Early Generation potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
										L	M	H
BNC326-3	0	0	10	7	17	0	0	25	50	0	0	0
BNC326-4	0	0	9	11	19	0	0	0	0	0	0	0
BNC326-5	0	0	1	0	1	0	0	20	20	0	0	0
BNC326-6	0	0	0	0	0	0	0	0	0	0	0	0
BNC326-7	0	0	9	4	13	0	0	0	0	0	0	0
BNC326-8	0	0	8	10	17	0	0	20	0	0	0	0
BNC326-10	2	0	3	1	7	0	0	20	20	0	0	0
BNC326-12	4	0	0	0	4	0	0	40	20	0	0	0
BNC326-14	0	0	0	9	9	0	0	0	0	0	0	0
BNC326-15	0	0	6	5	11	0	0	0	0	0	0	0
BNC327-1	0	7	13	4	23	0	0	0	0	0	0	0
BNC327-2	0	0	6	0	6	0	0	0	0	0	0	0
BNC327-3	2	5	12	2	21	0	0	0	0	0	0	0
BNC327-6	0	0	4	18	23	0	0	0	0	0	0	0
BNC327-8	0	3	0	1	4	0	0	0	0	0	0	0
BNC327-10	0	3	2	10	15	0	0	0	0	0	0	0
BNC328-1	0	0	0	0	0	md	md	md	md	md	md	md
BNC328-2	4	0	2	0	6	0	0	0	0	0	0	0

¹Percent of Total Yield. Total culls include the sum of growth cracks, misshapen, sunburned and rotten/misc.

²Percent tubers; HH, hollow heart; BR, brown rot; CRS, corky ring spot; IHN, internal heat necrosis.

Brown Center: L = Light, M = Moderate, H = Heavy

CHAPTER 7. UNIV. OF MAINE ADVANCED-LINE TRIAL, 2011

General Comments

A goal of the University of Maine replicated potato variety trial is to continue gathering data on advanced potato selections for Florida production. Established varieties were included to provide a baseline for comparison.

Planting Information

Planting Site	PWACS - Hastings Farm, Hastings, FL
Planting Date	January 24, 2011
Vine Kill Dates	N/A
Harvest Dates	May 4, 2011 and May 5, 2011
Season Length	101 & 102 days planting to harvest
Fertilizer Program	pre-plant, 50-100-150 lb/A; 1 st side-dress, 75-0-125 lb/A 2 nd side-dress, 75-0-0 lb/A
Irrigation Program	seepage

Experimental Design

Number of Varieties	1 (Standard: Atlantic)
Number of Clones	23
Within Row Spacing	8 in (20 cm)
Between Row Spacing	40 in (102 cm)
Replications and Design	4 replications, Randomized Complete Block design
Plot Size	16 ft (4.8 m)

Production Statistics- Based over all sites

Early Vigor Ratings	44 days after planting
Highest Total Yield	AF4360-5 (437 cwt or 48.9 T/ha)
Highest Marketable Yield	AF4360-5 (376 cwt or 42.08 T/ha)

Table 18. Production facts for University of Maine advanced potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
Atlantic	MFV	375	286	100	4	15	63	17	1	0	81	18	1.077
AF0338-17	Univ. of Maine	397	323	113	3	14	74	10	0	0	84	10	1.074
AF4139-1	Univ. of Maine	366	249	87	5	23	55	7	10	0	72	17	1.066
AF4172-2	Univ. of Maine	299	232	81	2	19	79	0	0	0	79	0	1.078
AF4203-4	Univ. of Maine	258	201	70	3	17	74	5	1	0	80	6	1.076
AF4222-4	Univ. of Maine	310	265	93	2	9	63	22	5	0	90	26	1.072
AF4347-1	Univ. of Maine	326	186	65	5	36	59	0	0	0	59	0	1.068
AF4147-1	Univ. of Maine	392	312	109	4	15	72	9	0	0	80	9	1.072
AF4272-4	Univ. of Maine	389	276	96	2	16	71	9	1	0	82	11	1.064
AF4322-5	Univ. of Maine	233	145	51	3	32	64	0	0	0	64	0	1.072
AF4185-1	Univ. of Maine	298	192	67	4	29	67	0	0	0	67	0	1.068
AF4130-7	Univ. of Maine	328	285	99	1	10	74	13	1	0	88	14	1.072
AF4254-2	Univ. of Maine	324	237	83	4	17	67	10	1	0	78	11	1.070
AF4125-1	Univ. of Maine	308	256	89	2	14	76	9	0	0	84	9	1.077
AF4167-1	Univ. of Maine	310	127	44	10	48	42	0	0	0	42	0	1.073
AF4157-6	Univ. of Maine	331	287	100	2	10	76	5	8	0	89	13	1.075
AF4363-5	Univ. of Maine	325	275	96	2	11	73	10	3	0	87	14	1.074
AF3011-34	Univ. of Maine	278	147	51	6	37	57	0	0	0	57	0	1.072
AF4320-17	Univ. of Maine	349	216	76	5	32	63	0	0	0	63	0	1.073
AF4360-5	Univ. of Maine	437	376	132	1	7	52	22	18	0	92	40	1.065
AF4320-15	Univ. of Maine	326	210	74	4	27	68	0	0	0	68	0	1.068
AF4220-4	Univ. of Maine	378	301	105	2	15	66	15	1	0	83	17	1.068
AF4013-3	Univ. of Maine	333	225	78	6	24	69	1	0	0	70	1	1.079
AF4130-13	Univ. of Maine	251	211	74	2	10	67	18	3	0	88	21	1.066
<i>MSD</i> ³		84	92		4	14	26	16	16	ns	16	24	0.009
<i>P Value</i>		<.0001	<.0001		<.0001	<.0001	<.0001	<.0001	0.0125	*	<.0001	<.0001	<.0001

¹Marketable Yield: size classes A1 to A3.

²Size classes: C = 0.5 to 1.5", B = 1.5 to 1.88", A1 = 1.88 to 2.5", A2 = 2.5 to 3.25", A3 = 3.25 to 4", A4 = >4"

Table 19. Plant growth and tuber characteristics of University of Maine advanced potato selections.

Clone	Plant Growth Characteristics ¹				Tuber Characteristics ²						Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity	IFC	SC	ST	TS	ED	APP	
Atlantic	99	7.0	8.8	4.5	1	6	5	3	4	6	
AF0338-17	100	6.8	8-5	4.8	1	6	5	3	4	6	
AF4139-1	100	6.0	8-5	3.3	1	6	5	3	3	6	
AF4172-2	93	5.0	8	5.0	2	5	3	6	4	6	
AF4203-4	98	6.0	7.7	3.5	1	7	5	6	4	7	
AF4222-4	99	6.0	8	3.5	1	7	5	3	4	5	
AF4347-1	96	5.8	8.5	3.8	1	5	3	4	5	5	too many shapes
AF4147-1	100	7.0	9-6	3.5	1	7	5	2	5	6	
AF4272-4	98	6.3	8	3.3	1	7	5	3	5	6	too many shapes
AF4322-5	98	5.8	8	3.3	1	5	3	4	5	5	
AF4185-1	97	4.8	8.3	5.0	1	5	3	6	4	6	
AF4130-7	81	4.3	8	9.0	1	6	5	6	5	6	
AF4254-2	97	6.5	9-6	3.0	1	6	5	6	5	6	
AF4125-1	99	5.8	8	5.0	1	6	5	3	5	6	
AF4167-1	95	5.3	8.3	3.8	1	5	3	4	5	5	too many shapes
AF4157-6	93	5.0	7.8	4.5	1	6	5	3	5	5	
AF4363-5	88	5.5	8	5.8	1	7	6	3	4	6	
AF3011-34	96	6.3	7.7	4.0	1	5	3	4	5	7	
AF4320-17	99	6.0	8-5	3.5	1	5	7	4	3	5	too many shapes
AF4360-5	95	7.0	6-9	3.3	1	7	6	4	5	6	very large tubers
AF4320-15	100	6.0	8.8	3.3	1	5	3	4	5	6	very white flesh
AF4220-4	100	6.0	8-5	4.0	1	7	6	2	6	5	
AF4013-3	96	6.0	9-6	4.5	4	7	6	4	4	6	
AF4130-13	83	5.5	7.3	5.3	1	6	5	3	4	6	

¹See rating system outlined in Table 1 (page 10).

²See rating system outlined in Table 2 (page 11).

Table 20. External and internal defects of University of Maine advanced potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
Atlantic	2	1	2	0	5	4	0	0	4	9	4	1
AF0338-17	1	0	1	1	3	0	0	0	0	0	0	0
AF4139-1	3	0	2	1	6	1	0	3	0	0	1	0
AF4172-2	0	0	0	0	1	0	0	0	0	1	0	0
AF4203-4	1	0	2	0	3	0	0	6	0	0	4	3
AF4222-4	1	2	1	0	4	0	0	0	10	3	1	0
AF4347-1	0	2	2	0	4	0	0	10	3	1	0	0
AF4147-1	0	0	1	0	1	1	0	1	0	0	0	0
AF4272-4	13	0	1	1	15	3	0	0	0	0	4	1
AF4322-5	0	0	2	0	3	0	0	0	0	1	0	0
AF4185-1	2	0	0	1	3	0	0	3	0	0	0	0
AF4130-7	0	1	1	0	2	0	0	0	0	0	0	0
AF4254-2	2	0	2	2	7	0	0	0	0	0	0	0
AF4125-1	0	0	1	0	1	0	0	0	0	4	0	0
AF4167-1	3	0	1	0	4	0	0	0	0	0	0	0
AF4157-6	1	0	1	0	2	0	0	4	0	0	0	0
AF4363-5	0	0	2	0	3	0	0	0	0	0	0	0
AF3011-34	4	1	0	0	6	0	0	0	0	0	1	1
AF4320-17	0	1	1	0	3	0	0	0	6	0	0	0
AF4360-5	3	0	3	1	6	0	0	0	0	0	0	0
AF4320-15	2	3	0	1	6	0	0	0	0	0	1	0
AF4220-4	0	0	2	2	4	0	0	0	3	3	0	0
AF4013-3	1	0	1	1	3	0	0	1	0	0	0	0
AF4130-13	2	0	2	1	5	3	0	0	0	0	0	0
<i>MSD</i> ³	9	ns	ns	2	10	ns	ns	ns	9	6	ns	ns
<i>P Value</i>	0.0007	0.0648	0.1293	0.0114	0.0007	0.0637	*	0.4610	0.0053	<.0001	0.1507	0.5986

¹Percent of Total Yield. Total culls include the sum of growth cracks, misshapen, sunburned and rotten/misc.

²Percent tubers; HH, hollow heart; BR, brown rot; CRS, corky ring spot; IHN, internal heat necrosis.

Brown Center: L = Light, M = Moderate, H = Heavy

³Means separated within columns by Tukey's Studentized Range (HSD) Test.

UNIVERSITY OF MAINE EARLY GENERATION Trial, 2011

General Comments

The University of Maine Early Generation gives us an opportunity to look at the newest breeding clones for the first time. The plot size is limited to 8 hills, as seed supply is limited. This trial was harvested by hand, and only total yields were calculated. This trial was limited to red-skinned selections only.

Planting Information

Planting Site	PWACS - Hastings Farm, Hastings, FL
Planting Date	January 24, 2011
Vine Kill Dates	N/A
Harvest Date	May 11, 2011
Season Length	108 days planting to harvest
Fertilizer Program	pre-plant, 50-100-150 lb/A; 1 st side-dress, 75-0-125 lb/A; 2 nd side-dress, 75-0-0 lb/A
Irrigation Program	seepage

Experimental Design

Number of Varieties	7 (Standard: Atlantic)
Number of Clones	41
Within Row Spacing	8 in (20.3 cm)
Between Row Spacing	40 in (101.6)
Replications and Design	1 non-replicated, single row, 8 hill plot
Plot Size	5.3 ft (1.6 m)

Production Statistics

Early Vigor Ratings	40 days after planting
Highest Total Yield	AF4963-5 (613 cwt or 68.6 T/ha)

Table 24. Production facts for University of Maine Early Generation red-skinned potato selections.

Clone	Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
Red LaSoda	MFX	433	273	100	3	12	54	30	0	0	84	30	1.057
Adirondack Blue	MFX	341	227	83	6	13	81	0	0	0	81	0	1.060
Atlantic	MFX	370	285	104	4	12	44	20	20	0	85	40	1.068
Chieftain	Univ. of Maine	443	312	114	3	12	54	4	26	0	85	30	1.053
Dark Red Norland	Univ. of Maine	301	183	67	8	15	77	0	0	0	77	0	1.063
Michigan Purple	MSU	495	470	172	2	3	73	7	15	0	95	22	1.060
Peter Wilcox	MFX	446	332	122	4	15	81	0	0	0	81	0	1.060
Red Maria (NY 129)	Cornell	233	186	68	2	11	86	0	0	0	86	0	1.055
NY 136	Univ. of Maine	348	177	65	6	33	61	0	0	0	61	0	1.062
AF0338-17	Univ. of Maine	382	316	116	1	13	73	13	0	0	86	13	1.060
AF4739-3	Univ. of Maine	195	133	49	3	18	79	0	0	0	79	0	1.070
AF4748-3	Univ. of Maine	232	127	46	7	29	64	0	0	0	64	0	1.057
AF4748-7	Univ. of Maine	456	352	129	4	15	68	14	0	0	81	14	1.064
AF4783-1	Univ. of Maine	327	97	35	10	57	33	0	0	0	33	0	1.057
AF4809-2	Univ. of Maine	354	234	86	3	26	71	0	0	0	71	0	1.071
AF4815-1	Univ. of Maine	337	182	67	3	30	66	0	0	0	66	0	1.056
AF4816-1	Univ. of Maine	386	173	63	9	39	52	0	0	0	52	0	1.065
AF4817-2	Univ. of Maine	337	98	36	19	51	30	0	0	0	30	0	1.051
AF4818-3	Univ. of Maine	554	392	143	6	16	56	12	10	0	77	22	1.049
AF4818-4	Univ. of Maine	607	438	160	2	6	68	24	0	0	92	24	1.050
AF4827-1	Univ. of Maine	348	181	66	10	29	62	0	0	0	62	0	1.054
AF4831-1	Univ. of Maine	491	301	110	3	15	82	0	0	0	82	0	1.048
AF4831-2	Univ. of Maine	469	232	85	6	43	51	0	0	0	51	0	1.058
AF4831-3	Univ. of Maine	380	251	92	6	17	78	0	0	0	78	0	1.052

Table 24 (cont'd). Production facts for University of Maine Early Generation red-skinned potato selections.

Clone	Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
AF4834-2	Univ. of Maine	441	318	116	4	21	76	0	0	0	76	0	1.055
AF4834-4	Univ. of Maine	350	187	68	3	22	76	0	0	0	76	0	1.051
AF4834-5	Univ. of Maine	424	269	98	6	23	71	0	0	0	71	0	1.057
AF4835-2	Univ. of Maine	449	223	82	10	27	63	0	0	0	63	0	1.063
AF4841-1	Univ. of Maine	395	235	86	4	33	58	5	0	0	63	5	1.059
AF4832-2	Univ. of Maine	426	211	77	7	25	68	0	0	0	68	0	1.046
AF4842-3	Univ. of Maine	439	267	98	6	19	69	5	0	0	74	5	1.052
AF4845-2	Univ. of Maine	422	273	100	4	24	62	9	0	0	71	9	1.053
AF4845-3	Univ. of Maine	454	302	110	5	17	78	0	0	0	78	0	1.051
AF4930-2	Univ. of Maine	328	180	66	7	27	66	0	0	0	66	0	1.051
AF4933-2	Univ. of Maine	302	204	75	7	18	75	0	0	0	75	0	1.058
AF4559-2	Univ. of Maine	423	223	82	8	20	63	0	9	0	72	9	1.047
AF4961-3	Univ. of Maine	404	131	48	10	38	52	0	0	0	52	0	1.053
AF4962-2	Univ. of Maine	360	205	75	7	22	71	0	0	0	71	0	1.063
AF4963-4	Univ. of Maine	403	173	63	13	26	61	0	0	0	61	0	1.052
AF4963-5	Univ. of Maine	613	422	154	5	13	48	21	12	0	82	34	1.051
AF4963-6	Univ. of Maine	371	208	76	7	22	71	0	0	0	71	0	1.045
AF4963-9	Univ. of Maine	356	233	85	5	18	77	0	0	0	77	0	1.050
AF4963-10	Univ. of Maine	418	263	96	7	21	72	0	0	0	72	0	1.053
AF4985-1	Univ. of Maine	484	408	149	2	6	92	0	0	0	92	0	1.052
AF4987-2	Univ. of Maine	289	73	27	10	55	35	0	0	0	35	0	1.059
AF5016-1	Univ. of Maine	365	193	71	9	30	62	0	0	0	62	0	1.065
AF5019-1	Univ. of Maine	316	153	56	8	32	61	0	0	0	61	0	1.057
AF5175-3	Univ. of Maine	358	237	87	2	29	69	0	0	0	69	0	1.058

¹Marketable Yield: size classes A1 to A3.

²Size classes: C = 0.5 to 1.5", B = 1.5 to 1.88", A1 = 1.88 to 2.5", A2 = 2.5 to 3.25", A3 = 3.25 to 4", A4 = >4"

Table 25. Plant growth and tuber characteristics of University of Maine Early Generation red-skinned potato selections.

Clone	Plant Growth Characteristics ¹				APP	Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity		
Red LaSoda	75	5	8-5	8	6	light skin color
Adirondack Blue	100	5	7	7	5	dark purple, too many pointy shapes
Atlantic	100	6	8	7	6	nice
Chieftain	100	6	8	8	5	big tubers
Dark Red Norland	100	6	8	6	6	not bad, slight netting
Michigan Purple	100	6	7-4	9	7	big yield/ nice purple
Peter Wilcox	100	5	8-5	8	6	attractive
Red Maria (NY 129)	100	5	7	8	5	nothing fancy
NY 136	100	6	8	6	7	beautiful color
AF0338-17	100	6	8	8	6	netted skin
AF4739-3	100	5	8	5	6	nice purple color/ low yield
AF4748-3	100	5	8	7	5	fair
AF4748-7	100	5	9	9	5	very lite pink color, big yield
AF4783-1	100	6	8	6	5	very lite color
AF4809-2	100	6	8	7	6	nice color, too flat and mishapen
AF4815-1	88	6	8	7	6	not bad, small tubers
AF4816-1	100	5	9	7	6	nice color, slightly flat
AF4817-2	100	6	8	7	4	not nice
AF4818-3	100	6	9-6	9	6	okay, big yield
AF4818-4	100	4	9	9	5	big yield, too many shapes
AF4827-1	100	4	8	7	5	very dark color, netted skin
AF4831-1	100	6	9-6	6	5	oblong, some pointy tubers, nice color
AF4831-2	100	6	9-6	6	6	attractive, oblong
AF4831-3	100	6	8	7	7	very attractive

Table 25 (cont'd). Plant growth and tuber characteristics of University of Maine Early Generation red-skinned potato selections.

Clone	Plant Growth Characteristics ¹				APP	Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity		
AF4834-2	100	6	9-6	5	7	very nice color and shape
AF4834-4	100	5	8	9	5	nothing fancy
AF4834-5	100	6	8-5	7	6	not bad
AF4835-2	100	6	9-6	7	6	not bad
AF4841-1	100	6	8	7	6	decent color and yield
AF4832-2	100	6	8-5	7	5	flat, some points
AF4842-3	100	6	8-5	7	5	nothing fancy
AF4845-2	100	5	8	7	6	decent
AF4845-3	100	7	8	7	6	decent color
AF4930-2	100	5	7	8	5	nothing fancy
AF4933-2	100	6	7	7	6	not bad
AF4559-2	100	7	8	8	6	okay
AF4961-3	100	6	8	8	5	pointy
AF4962-2	100	5	8	7	5	nothing fancy
AF4963-4	100	5	8	7	6	nice color and shape
AF4963-5	100	5	9-6	7	6	decent, big yield
AF4963-6	100	5	7	7	6	a few points
AF4963-9	88	4	8	6	6	not bad
AF4963-10	75	4	8	5	6	attractive, decent yield
AF4985-1	100	5	9	7	6	decent color and yield
AF4987-2	100	5	7	9	5	low yield
AF5016-1	88	6	8-5	6	6	okay
AF5019-1	100	6	7	7	5	nothing fancy
AF5175-3	100	6	8	5	6	not bad, oblong purple

¹See rating system outlined in Table 1 (page 10).

²See rating system outlined in Table 2 (page 11).

Table 26. External and internal defects of University of Maine Early Generation red-skinned potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
										L	M	H
Red LaSoda	0	4	10	11	25	0	0	0	0	20	0	0
Adirondack Blue	0	0	11	7	18	0	0	0	0	0	0	0
Atlantic	0	0	7	2	9	0	0	0	0	0	20	0
Chieftain	0	0	13	3	17	0	0	0	0	0	20	0
Dark Red Norland	5	0	12	3	20	0	0	0	0	0	0	0
Michigan Purple	0	0	0	0	0	0	0	0	0	0	0	0
Peter Wilcox	0	0	6	2	8	0	0	0	0	0	0	0
Red Maria (NY 129)	0	0	5	3	7	0	0	0	0	0	0	0
NY 136	2	0	7	8	17	0	0	0	0	0	0	0
AF0338-17	0	0	3	1	4	0	0	0	0	0	0	0
AF4739-3	8	0	0	6	14	0	0	0	0	20	60	0
AF4748-3	0	0	5	10	15	0	0	0	0	0	20	20
AF4748-7	0	3	2	0	5	0	0	0	0	20	0	0
AF4783-1	0	1	9	0	10	0	0	0	0	0	0	0
AF4809-2	0	0	5	2	7	0	0	0	0	0	0	0
AF4815-1	2	0	6	10	18	0	0	0	0	0	0	0
AF4816-1	0	0	8	7	14	0	0	0	0	0	0	0
AF4817-2	0	0	1	1	2	0	0	0	0	0	0	0
AF4818-3	0	0	5	3	9	0	0	0	0	0	0	0
AF4818-4	0	0	14	7	21	0	0	0	0	0	0	0
AF4827-1	1	0	0	15	16	0	0	0	0	0	0	0
AF4831-1	12	2	8	4	25	0	0	0	0	0	0	0
AF4831-2	0	0	3	0	3	0	0	0	0	0	0	0
AF4831-3	0	5	5	5	15	0	0	0	0	0	0	0

Table 26 (cont'd). External and internal defects of University of Maine Early Generation red-skinned potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
AF4834-2	0	0	5	0	5	0	0	0	0	0	0	0
AF4834-4	3	1	11	14	29	0	0	0	0	0	0	0
AF4834-5	0	0	6	5	11	0	0	0	0	0	0	0
AF4835-2	6	0	14	2	21	0	0	0	0	0	0	0
AF4841-1	3	0	2	0	5	0	0	0	0	0	0	0
AF4832-2	0	2	10	16	27	0	0	0	0	40	0	0
AF4842-3	1	1	7	9	18	0	0	0	0	0	0	20
AF4845-2	0	0	8	1	9	0	0	0	0	0	0	0
AF4845-3	0	0	0	14	14	0	0	0	0	0	0	0
AF4930-2	2	4	12	0	17	0	0	0	0	0	0	0
AF4933-2	0	0	9	1	10	0	0	0	0	0	0	0
AF4559-2	4	0	14	9	26	0	0	0	0	20	0	0
AF4961-3	6	7	9	16	37	0	0	0	0	0	0	0
AF4962-2	0	0	11	9	20	20	0	0	0	0	0	20
AF4963-4	3	2	9	16	30	0	0	0	0	0	0	0
AF4963-5	0	0	4	12	16	0	0	0	0	0	0	0
AF4963-6	3	0	11	8	21	0	0	0	0	0	0	0
AF4963-9	6	0	3	6	16	0	0	0	0	0	0	0
AF4963-10	0	0	11	1	12	0	0	0	0	0	0	0
AF4985-1	0	2	1	5	8	0	0	0	0	0	0	0
AF4987-2	0	0	15	14	29	0	0	0	0	0	0	0
AF5016-1	0	0	2	12	14	0	0	0	0	0	0	0
AF5019-1	0	0	4	16	20	0	0	0	0	0	0	0
AF5175-3	0	0	2	3	5	0	0	0	0	0	0	0

¹Percent of Total Yield. Total culls include the sum of growth cracks, misshapen, sunburned and rotten/misc.

²Percent tubers; HH, hollow heart; BR, brown rot; CRS, corky ring spot; IHN, internal heat necrosis.

Brown Center: L = Light, M = Moderate, H = Heavy

CHAPTER 8. UNIVERSITY OF MAINE EARLY LINE & EARLY GENERATION Trials, 2011

General Comments

A goal of the University of Maine Early Line potato variety trial is to gathering data on early potato selections for Florida production. This trial includes white and russet-skinned selections.

Planting Information

Planting Site	PWACS - Hastings Farm, Hastings, FL
Planting Date	January 28, 2011
Vine Kill Dates	N/A
Harvest Date	May 9, 2011
Season Length	102 days planting to harvest
Fertilizer Program	pre-plant, 50-100-150 lb/A; 1 st side-dress, 75-0-125 lb/A; 2 nd side-dress, 75-0-0 lb/A
Irrigation Program	seepage

Experimental Design

Number of Varieties	8 (Standard: Atlantic)
Number of Clones	56
Within Row Spacing	8 in (20.3 cm)
Between Row Spacing	40 in (101.6)
Replications and Design	1 non-replicated, single row, 24 hill plot
Plot Size	16 ft (4.8 m)

Production Statistics

Early Vigor Ratings	40 days after planting
Highest Total Yield	AF4430-1 (576 cwt or 64.5 T/ha)
Highest Marketable Yield	AF4449-1 (406 cwt or 45.4 T/ha)

Table 21. Production facts for University of Maine Early Line potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
Atlantic	MFX	349	292	100	2	9	45	22	21	0	88	43	1.084
Goldrush	MFX	368	273	94	3	15	76	6	0	0	83	6	1.070
Harley Blackwell	MFX	366	320	110	2	10	52	22	14	0	88	36	1.076
LaChipper	MFX	378	342	117	2	7	54	16	22	0	91	38	1.069
Red LaSoda	MFX	369	310	106	1	7	47	31	15	0	92	46	1.064
Snowden	MFX	378	335	115	1	7	72	20	0	0	92	20	1.082
Yukon Gold	MFX	447	392	134	2	9	80	9	0	0	89	9	1.081
AF0338-17	Univ. of Maine	327	284	97	2	8	60	30	0	0	90	30	1.074
AF4376-2	Univ. of Maine	408	201	69	4	16	70	11	0	0	80	11	1.065
AF4376-3	Univ. of Maine	311	266	91	2	7	81	10	0	0	91	10	1.071
AF4376-9	Univ. of Maine	273	91	31	10	26	55	9	0	0	64	9	1.075
AF4386-5	Univ. of Maine	362	300	103	4	12	77	8	0	0	85	8	1.091
AF4386-16	Univ. of Maine	420	368	126	2	9	70	16	2	0	89	18	1.079
AF4404-1	Univ. of Maine	380	294	101	2	17	73	8	0	0	81	8	1.081
AF4412-2	Univ. of Maine	195	164	56	4	12	85	0	0	0	85	0	1.071
AF4421-2	Univ. of Maine	315	234	80	7	16	68	8	0	0	77	8	1.076
AF4421-4	Univ. of Maine	347	291	100	2	12	78	7	0	0	86	7	1.070
AF4430-1	Univ. of Maine	576	151	52	5	20	59	15	0	0	74	15	1.059
AF4430-2	Univ. of Maine	480	354	121	3	13	80	5	0	0	84	5	1.061
AF4437-1	Univ. of Maine	358	262	90	1	23	76	0	0	0	76	0	1.078

Table 21 (cont'd). Production facts for University of Maine Early Line potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
AF4437-5	Univ. of Maine	394	341	117	2	12	83	4	0	0	86	4	1.078
AF4441-8	Univ. of Maine	366	298	102	2	17	71	11	0	0	82	11	1.076
AF4441-9	Univ. of Maine	447	385	132	1	8	76	7	7	0	91	14	1.070
AF4441-14	Univ. of Maine	351	264	90	2	20	77	0	0	0	77	0	1.068
AF4442-1	Univ. of Maine	302	233	80	4	19	50	8	20	0	77	27	1.080
AF4442-4	Univ. of Maine	331	283	97	3	8	79	10	0	0	89	10	1.066
AF4447-2	Univ. of Maine	287	245	84	1	7	86	6	0	0	91	6	1.068
AF4449-1	Univ. of Maine	439	406	139	1	6	70	23	0	0	93	23	1.061
AF4449-2	Univ. of Maine	303	279	95	1	3	37	56	3	0	96	59	1.053
AF4454-3	Univ. of Maine	182	139	48	1	18	63	18	0	0	81	18	1.064
AF4458-2	Univ. of Maine	261	239	82	1	6	68	14	11	0	93	25	1.067
AF4463-7	Univ. of Maine	434	376	129	1	8	76	15	0	0	91	15	1.071
AF4463-8	Univ. of Maine	261	244	83	0	3	97	0	0	0	97	0	1.069
AF4467-2	Univ. of Maine	357	272	93	1	1	32	66	0	0	98	66	1.072
AF4518-1	Univ. of Maine	394	300	103	3	18	79	0	0	0	79	0	1.077
AF4521-1	Univ. of Maine	367	307	105	3	9	75	14	0	0	88	14	1.068
AF4551-1	Univ. of Maine	323	290	99	2	8	83	7	0	0	90	7	1.080
AF4561-1	Univ. of Maine	326	312	107	1	4	71	25	0	0	95	25	1.086
AF4592-1	Univ. of Maine	332	231	79	5	22	70	3	0	0	73	3	1.071
AF4387-8	Univ. of Maine	321	271	93	1	7	55	27	10	0	92	37	1.065

Table 21 (cont'd). Production facts for University of Maine Early Line potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
AF4408-3	Univ. of Maine	301	236	81	3	15	82	0	0	0	82	0	1.068
AF4408-5	Univ. of Maine	290	192	66	3	29	68	0	0	0	68	0	1.076
AF4540-2	Univ. of Maine	248	126	43	7	41	52	0	0	0	52	0	1.056
AF4540-3	Univ. of Maine	293	205	70	4	21	75	0	0	0	75	0	1.053
AF4543-2	Univ. of Maine	280	150	51	5	39	55	0	0	0	55	0	1.057
AF4543-3	Univ. of Maine	368	240	82	3	28	69	0	0	0	69	0	1.060
AF4545-1	Univ. of Maine	356	196	67	7	36	41	15	0	0	56	15	1.054
AF4547-1	Univ. of Maine	344	209	71	4	26	71	0	0	0	71	0	1.069
AF4550-2	Univ. of Maine	267	178	61	4	25	71	0	0	0	71	0	1.068
AF4565-1	Univ. of Maine	361	250	86	4	24	72	0	0	0	72	0	1.061
AF4423-5	Univ. of Maine	302	252	86	1	14	81	4	0	0	85	4	1.075
AF4445-3	Univ. of Maine	180	141	48	3	19	78	0	0	0	78	0	1.067
AF4526-2	Univ. of Maine	393	350	120	1	7	70	22	0	0	92	22	1.072
AF4532-8	Univ. of Maine	309	246	84	2	18	79	0	0	0	79	0	1.071
AF4534-3	Univ. of Maine	282	246	84	2	9	71	14	3	0	88	17	1.059
AF4538-3	Univ. of Maine	291	197	68	6	21	73	0	0	0	73	0	1.064
AF4597-1	Univ. of Maine	199	136	47	5	27	69	0	0	0	69	0	1.075
AF4669-3	Univ. of Maine	296	240	82	2	16	81	2	0	0	82	2	1.071
AF4565-2	Univ. of Maine	338	112	38	5	20	75	0	0	0	75	0	1.066
AF4565-4	Univ. of Maine	379	81	28	8	16	61	15	0	0	76	15	1.072
AF4566-4	Univ. of Maine	335	263	90	3	18	79	0	0	0	79	0	1.065
AF4587-2	Univ. of Maine	381	186	64	3	22	75	0	0	0	75	0	1.058
AF4593-1	Univ. of Maine	321	250	86	3	16	82	0	0	0	82	0	1.061
AF4594-1	Univ. of Maine	389	325	111	2	12	81	4	0	0	85	4	1.058

¹Marketable Yield: size classes A1 to A3.

²Size classes: C = 0.5 to 1.5" , B = 1.5 to 1.88", A1 = 1.88 to 2.5", A2 = 2.5 to 3.25", A3 = 3.25 to 4", A4 = >4"

Table 22. Plant growth and tuber characteristics of University of Maine Early Line potato selections

Clone	Plant Growth Characteristics ¹				APP	Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity		
Atlantic	100	6	9	4	6	okay
Goldrush	100	6	9	3	6	crs
Harley Blackwell	100	6	8	4	6	crs
LaChipper	100	6	9	3	6	crs
Red LaSoda	100	5	9-6	3	6	crs
Snowden	100	6	9	4	6	okay
Yukon Gold	96	5	8	2	7	attractive
AF0338-17	100	6	8-5	5	6	okay
AF4376-2	100	6	9	4	6	crs
AF4376-3	100	5	8	4	6	crs
AF4376-9	100	5	8	4	6	crs
AF4386-5	100	5	9	5	6	crs
AF4386-16	100	6	9-6	3	6	crs
AF4404-1	92	6	8	3	6	crs
AF4412-2	96	6	7	2	6	crs
AF4421-2	100	6	8	3	6	okay
AF4421-4	100	6	9	2	6	crs
AF4430-1	100	6	9-6	3	6	crs
AF4430-2	100	6	9	3	6	crs
AF4437-1	96	3	8	8	6	okay

Table 22 (cont'd). Plant growth and tuber characteristics of University of Maine Early Line potato selections

Clone	Plant Growth Characteristics ¹				APP	Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity		
AF4437-5	100	5	8-9	3	7	bright tubers
AF4441-8	88	1	8	4	6	decent
AF4441-9	96	6	8	4	6	okay
AF4441-14	100	6	9	3	6	decent
AF4442-1	100	6	9	3	5	star cracks
AF4442-4	100	6	8	3	6	crs
AF4447-2	100	6	7	4	5	crs
AF4449-1	100	6	8-7	3	6	attractive
AF4449-2	100	6	8	3	6	okay
AF4454-3	54	2	-	8	6	low yield
AF4458-2	63	3	-	8	6	okay
AF4463-7	92	5	9	6	6	nice yield and appearance
AF4463-8	96	3	-	7	6	okay
AF4467-2	96	6	8	6	6	crs
AF4518-1	100	6	6-9	2	6	decent
AF4521-1	100	6	8	4	5	too many shapes
AF4551-1	100	7	8	3	7	attractive
AF4561-1	96	4	8	6	6	decent
AF4592-1	100	7	5-8	2	7	attractive
AF4387-8	83	5	8	5	6	some netting

Table 22 (cont'd). Plant growth and tuber characteristics of University of Maine Early Line potato selections

Clone	Plant Growth Characteristics ¹				APP	Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity		
AF4408-3	88	5	8	4	5	alligator skin, some crs
AF4408-5	100	7	8	4	6	some crs
AF4540-2	96	6	8	1	6	nice skin color
AF4540-3	100	7	8	1	6	light skin color
AF4543-2	100	7	5	1	7	attractive
AF4543-3	100	7	6-9	1	7	some crs
AF4545-1	100	5	8-5	1	7	attractive
AF4547-1	100	7	8	1	6	okay
AF4550-2	100	6	8	1	7	nice dark purple skin
AF4565-1	100	7	8-5	1	6	okay
AF4423-5	79	2	-	9	6	some crs
AF4445-3	71	2	-	9	6	low yield
AF4526-2	100	6	9	3	6	nice size and yield
AF4532-8	100	5	8	3	7	very attractive russet
AF4534-3	96	5	8	3	7	too much IHN
AF4538-3	100	7	8-5	2	7	nice russet
AF4597-1	100	5	7	1	6	low yield
AF4669-3	100	5	8	3	6	crs
AF4565-2	100	6	9	3	5	fair
AF4565-4	100	6	9	3	5	fair
AF4566-4	100	7	6-9	1	7	very nice color
AF4587-2	100	7	5	1	6	decent red
AF4593-1	100	6	8	3	6	nice color
AF4594-1	100	7	9-6	2	5	light skin color

¹See rating system outlined in Table 1 (page 10).

²See rating system outlined in Table 2 (page 11).

Table 23. External and internal defects of University of Maine Early Line potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
										L	M	H
Atlantic	0	0	5	0	5	5	0	11	5	5	0	0
Goldrush	1	4	2	3	10	0	0	30	5	0	0	0
Harley Blackwell	0	0	0	0	0	0	0	50	0	0	0	0
LaChipper	0	0	0	1	1	0	0	25	0	0	0	0
Red LaSoda	0	3	5	0	9	5	0	20	0	0	0	0
Snowden	0	0	3	0	3	0	0	5	0	0	0	0
Yukon Gold	0	0	0	1	1	0	0	0	0	0	0	0
AF0338-17	0	0	1	3	3	0	0	0	0	0	0	0
AF4376-2	0	0	0	39	39	0	0	25	0	0	0	0
AF4376-3	2	0	0	4	6	0	0	40	5	0	0	0
AF4376-9	0	0	0	48	48	0	0	25	0	0	0	0
AF4386-5	0	0	0	2	3	0	0	70	15	0	0	0
AF4386-16	0	0	1	0	1	0	0	30	0	0	0	0
AF4404-1	0	0	3	1	4	0	0	20	0	0	0	0
AF4412-2	0	0	0	1	1	0	0	10	5	0	0	0
AF4421-2	1	0	2	0	3	0	0	0	0	0	0	0
AF4421-4	0	0	0	2	2	0	0	10	0	0	0	0
AF4430-1	0	0	0	64	65	0	0	40	0	0	0	0
AF4430-2	0	0	1	11	13	0	0	90	5	0	0	0
AF4437-1	0	1	2	1	4	0	0	5	0	0	0	0

Table 23 (cont'd). External and internal defects of University of Maine Early Line potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
										L	M	H
AF4437-5	0	0	0	0	0	0	0	0	0	0	0	0
AF4441-8	0	0	0	0	0	0	0	0	0	0	0	0
AF4441-9	0	2	1	1	5	0	0	0	0	10	0	0
AF4441-14	1	0	0	1	3	0	0	0	0	0	0	0
AF4442-1	0	0	0	0	0	0	0	0	0	0	0	0
AF4442-4	0	2	0	2	4	0	0	20	5	0	5	0
AF4447-2	0	0	1	5	6	0	0	75	0	0	0	0
AF4449-1	0	0	0	0	0	0	0	0	0	0	0	0
AF4449-2	3	0	1	0	4	0	0	0	0	0	0	0
AF4454-3	0	0	6	0	6	0	0	0	0	0	0	0
AF4458-2	0	0	0	2	2	0	0	0	0	0	0	0
AF4463-7	0	1	1	2	5	0	0	0	0	0	0	0
AF4463-8	0	2	2	0	4	0	0	0	0	0	0	0
AF4467-2	0	0	1	21	22	0	0	45	0	0	0	0
AF4518-1	1	0	0	3	3	0	0	0	0	0	0	0
AF4521-1	4	0	2	0	6	0	0	0	0	0	0	0
AF4551-1	0	0	0	0	0	0	0	0	0	0	0	0
AF4561-1	0	0	0	0	0	0	0	0	0	0	0	0
AF4592-1	0	0	1	3	4	0	0	0	0	0	0	0
AF4387-8	0	0	7	1	8	0	0	0	0	0	0	0

Table 23 (cont'd). External and internal defects of University of Maine Early Line potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
AF4408-3	0	0	1	4	5	0	0	0	5	0	0	0
AF4408-5	0	2	1	0	2	0	0	0	0	0	0	0
AF4540-2	0	0	0	2	2	0	0	0	0	0	0	0
AF4540-3	0	0	1	6	7	0	0	0	0	0	0	0
AF4543-2	0	0	0	3	3	0	0	0	0	0	0	0
AF4543-3	0	0	1	5	5	0	0	0	0	0	0	0
AF4545-1	0	0	0	2	2	0	0	0	0	0	0	0
AF4547-1	0	0	5	9	14	0	0	0	0	0	0	0
AF4550-2	0	0	0	5	6	0	0	0	0	0	0	0
AF4565-1	0	0	0	4	4	0	0	0	0	0	0	0
AF4423-5	0	0	2	0	2	15	0	0	0	15	0	0
AF4445-3	0	0	0	0	0	0	0	0	0	0	0	0
AF4526-2	0	2	1	0	3	0	0	0	0	0	0	0
AF4532-8	0	0	0	0	0	0	0	0	0	0	0	0
AF4534-3	0	0	0	1	1	0	0	0	70	0	0	0
AF4538-3	5	2	0	1	7	0	0	0	0	0	0	0
AF4597-1	0	1	0	0	1	0	0	0	15	0	0	0
AF4669-3	0	0	0	1	1	0	0	30	15	0	0	0
AF4565-2	6	1	0	49	56	0	0	5	0	0	0	0
AF4565-4	2	0	0	69	72	0	0	5	0	0	0	0
AF4566-4	0	0	0	1	1	0	0	0	5	0	0	0
AF4587-2	0	1	0	33	35	0	0	0	5	0	0	0
AF4593-1	0	1	0	4	5	0	0	0	0	0	0	0
AF4594-1	0	0	0	2	2	0	0	0	0	0	0	0

¹Percent of Total Yield. Total culls include the sum of growth cracks, misshapen, sunburned and rotten/misc.

²Percent tubers; HH, hollow heart; BR, brown rot; CRS, corky ring spot; IHN, internal heat necrosis.

Brown Center: L = Light, M = Moderate, H = Heavy

Chapter 9. NATIONAL CHIP PROCESSING TRIAL, 2011

General Comments

In the past, many clones from breeding programs may have been eliminated before they have had an opportunity to be looked at in many production areas. This study has been set up to evaluate the earliest breeding selections from public breeding programs. These selections are evaluated in several other locations across the US. Clones that performed the best at each location are then compared and kept for further evaluation.

Planting Information

Planting Site	PWACS - Hastings Farm, Hastings, FL
Planting Date	February 4, 2011
Vine Kill Dates	N/A
Harvest Date	May 15, 2011
Season Length	101 days planting to harvest
Fertilizer Program	pre-plant, 50-100-150 lb/A; 1 st side-dress, 75-0-125 lb/A; 2 nd side-dress, 75-0-0 lb/A
Irrigation Program	seepage

Experimental Design

Number of Varieties	6 (Standard: Atlantic)
Number of Clones	197
Within Row Spacing	8 in (20 cm)
Between Row Spacing	40 in (102 cm)
Replications and Design	1 or 2 replications, non-randomized, single row, 15 hill plot
Plot Size	10 ft (3.0 m)

Production Statistics

Early Vigor Ratings	33 days after planting
Highest Total Yield	ACO3452-2W (473 cwt or 52.9 T/ha)
Highest Marketable Yield	MSH228-6 (354 cwt or 39.6 T/ha)

Table 27. Production facts for the USPB National Chip Processing Trial potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
Atlantic	MFX	268	232	100	1	8	73	18	0	0	90	18	1.076
Harley Blackwell	MFX	240	188	81	3	17	80	0	0	0	80	0	1.072
Marcy	MFX	301	258	111	1	12	64	23	0	0	87	23	1.071
Snowden	USDA	293	182	78	5	18	77	0	0	0	77	0	1.078
B1992-106	USDA	335	279	120	2	10	62	9	17	0	88	25	1.077
BNC177-5	USDA	337	254	109	4	20	61	15	0	0	76	15	1.082
BNC182-5	USDA	387	285	123	6	16	56	22	0	0	78	22	1.082
NYH1-2	Cornell	340	258	111	4	17	68	11	0	0	79	11	1.081
NYH15-1	Cornell	253	135	58	11	26	63	0	0	0	63	0	1.070
NYH15-17	Cornell	389	303	130	1	17	81	0	0	0	81	0	1.081
NYH15-5	Cornell	379	306	132	1	12	82	5	0	0	87	5	1.080
NYH15-6	Cornell	365	212	91	7	21	72	0	0	0	72	0	1.083
NYH15-9	Cornell	344	284	122	2	5	59	22	11	0	93	33	1.080
NYH23-16	Cornell	317	243	104	3	15	66	15	0	0	81	15	1.079
NYH23-6	Cornell	396	301	130	2	16	82	0	0	0	82	0	1.085
NYH25-2	Cornell	341	186	80	5	35	60	0	0	0	60	0	1.080
NYH25-4	Cornell	370	273	117	3	14	69	15	0	0	83	15	1.079
NYH25-8	Cornell	285	195	84	3	10	82	0	5	0	87	5	1.082
NYH28-1	Cornell	389	313	135	3	7	44	25	22	0	90	46	1.072
NYH6-3	Cornell	368	204	88	11	27	57	4	0	0	62	4	1.082

Table 27 (cont'd). Production facts for the USPB National Chip Processing Trial potato selections.

Clone		Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
NY 146 (NYD40-50)	Cornell	281	238	102	2	8	59	19	13	0	90	31	1.079
NY 146 (NYD40-50)	Cornell	233	38	16	1	80	19	0	0	0	19	0	1.079
NYE106-4	Cornell	418	277	119	4	20	70	6	0	0	76	6	1.085
NYE106-4	Cornell	273	140	60	7	32	60	0	0	0	60	0	1.081
NYG89-2	Cornell	373	261	112	3	19	75	3	0	0	78	3	1.084
NYG89-2	Cornell	281	199	86	3	18	79	0	0	0	79	0	1.079
ACO0206-2W	CSU	341	215	93	6	19	74	0	0	0	74	0	1.080
ACO3452-2W	CSU	473	304	131	5	17	60	13	5	0	78	18	1.059
CO02033-1W	CSU	389	326	140	1	10	63	16	10	0	89	26	1.082
CO03243-3W	CSU	399	252	109	3	14	55	9	20	0	84	29	1.068
AC00180-2W	CSU	336	194	84	9	30	61	0	0	0	61	0	1.077
AC05153-1W	CSU	354	237	102	5	17	52	17	9	0	78	26	1.071
CO05061-2P	CSU	316	148	64	7	36	57	0	0	0	57	0	1.077
CO05061-6W	CSU	199	92	40	8	42	50	0	0	0	50	0	1.062
CO05061-7W	CSU	233	129	55	9	28	63	0	0	0	63	0	1.076
ACO1151-5W	CSU	341	151	65	12	39	49	0	0	0	49	0	1.068
ACO1151-5W	CSU	300	147	63	7	39	53	0	0	0	53	0	1.067
ACO3433-1W	CSU	284	205	88	3	17	56	24	0	0	80	24	1.067
ACO3433-1W	CSU	274	179	77	3	16	55	9	18	0	81	27	1.067
CO00270-7W	CSU	301	202	87	4	27	69	0	0	0	69	0	1.061

Table 27 (cont'd). Production facts for the USPB National Chip Processing Trial potato selections.

Clone		Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
CO00270-7W	CSU	257	175	75	5	20	75	0	0	0	75	0	1.064
CO02024-9W	CSU	354	220	95	5	26	69	0	0	0	69	0	1.073
CO02024-9W	CSU	294	197	85	3	23	75	0	0	0	75	0	1.071
CO02321-4W	CSU	356	279	120	5	12	62	17	4	0	82	21	1.076
CO02321-4W	CSU	204	108	47	6	30	64	0	0	0	64	0	1.069
MSH228-6	MSU	420	354	152	3	9	66	15	8	0	89	22	md
MSL292-A	MSU	322	229	98	2	16	60	23	0	0	83	23	1.077
MSP459-5	MSU	366	291	125	0	3	88	10	0	0	97	10	1.077
MSQ035-3	MSU	353	281	121	5	10	70	15	0	0	85	15	1.072
MSQ070-1	MSU	459	278	120	6	30	64	0	0	0	64	0	1.077
MSQ279-1	MSU	303	246	106	2	6	65	27	0	0	92	27	1.073
MSR036-5	MSU	386	322	138	1	14	85	0	0	0	85	0	1.079
MSR131-2	MSU	237	130	56	6	31	63	0	0	0	63	0	1.071
MSS927-1	MSU	299	217	94	2	21	76	0	0	0	76	0	1.075
MSM102-A	MSU	239	134	57	7	26	66	0	0	0	66	0	1.085
MSM108-A	MSU	325	207	89	3	30	67	0	0	0	67	0	1.087
MSN191-2Y	MSU	319	288	124	2	6	92	0	0	0	92	0	1.078
MSQ086-3	MSU	368	257	111	5	18	65	11	0	0	76	11	1.075
MSQ131-A	MSU	416	312	134	1	4	20	26	49	0	95	75	1.061
MSR054-7	MSU	310	234	101	3	14	84	0	0	0	84	0	1.072

Table 27 (cont'd). Production facts for the USPB National Chip Processing Trial potato selections.

Clone		Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
MSR109-1	MSU	386	337	145	0	4	58	38	0	0	96	38	1.073
MSR157-1Y	MSU	420	335	144	2	7	65	18	7	0	90	26	1.080
MSR159-02	MSU	407	351	151	2	6	69	18	5	0	92	23	1.082
MSS297-3	MSU	424	308	132	4	19	77	0	0	0	77	0	1.077
MSS483-1	MSU	419	307	132	3	18	78	0	0	0	78	0	1.066
Beacon Chipper	MSU	380	330	142	1	8	72	18	0	0	91	18	1.080
Beacon Chipper	MSU	241	186	80	3	14	72	10	0	0	82	10	1.079
MSK061-4	MSU	304	196	84	6	27	67	0	0	0	67	0	1.079
MSK061-4	MSU	176	39	17	15	62	23	0	0	0	23	0	1.079
MSK409-1	MSU	345	262	113	3	20	77	0	0	0	77	0	1.086
MSK409-1	MSU	174	78	34	5	46	48	0	0	0	48	0	1.074
MSL007-B	MSU	118	18	8	8	76	16	0	0	0	16	0	1.075
MSL007-B	MSU	117	21	9	16	66	18	0	0	0	18	0	1.071
MSM246-B	MSU	287	218	94	2	15	83	0	0	0	83	0	1.080
MSM246-B	MSU	232	146	63	5	24	72	0	0	0	72	0	1.084
MSQ089-1	MSU	246	148	64	5	24	71	0	0	0	71	0	1.068
MSQ089-1	MSU	193	114	49	4	27	69	0	0	0	69	0	1.067
MSQ130-4	MSU	222	155	67	5	25	70	0	0	0	70	0	1.073
MSQ130-4	MSU	206	122	53	4	30	65	0	0	0	65	0	1.075
MSR058-1	MSU	363	276	119	3	20	77	0	0	0	77	0	1.078

Table 27 (cont'd). Production facts for the USPB National Chip Processing Trial potato selections.

Clone		Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
MSR058-1	MSU	268	162	70	8	30	63	0	0	0	63	0	1.079
MSR127-2	MSU	327	249	107	2	11	87	0	0	0	87	0	1.075
MSR127-2	MSU	259	195	84	3	17	80	0	0	0	80	0	1.070
MSR128-4Y	MSU	246	101	44	8	49	43	0	0	0	43	0	1.075
MSR128-4Y	MSU	182	54	23	15	55	30	0	0	0	30	0	1.073
MSR148-4	MSU	343	223	96	4	29	67	0	0	0	67	0	1.065
MSR148-4	MSU	217	93	40	14	42	44	0	0	0	44	0	1.070
MSR169-8Y	MSU	256	221	95	1	10	64	25	0	0	89	0	1.074
MSR169-8Y	MSU	md	md	md	md	md	md	md	md	md	md	md	md
MSS165-2Y	MSU	336	112	48	10	49	41	0	0	0	41	0	1.074
MSS165-2Y	MSU	md	md	md	md	md	md	md	md	md	md	md	md
ND060838C-3	NDSU	402	345	149	2	9	88	0	0	0	88	0	1.083
ND060838C-5	NDSU	284	219	94	1	18	81	0	0	0	81	0	1.078
ND060839C-7	NDSU	332	197	85	5	36	60	0	0	0	60	0	1.081
ND060847CB-1	NDSU	323	290	125	1	9	61	26	3	0	90	3	1.066
ND071031B-2Y	NDSU	281	81	35	12	53	35	0	0	0	35	0	1.065
ND071155CB-1	NDSU	301	188	81	6	25	68	0	0	0	68	0	1.071
ND071184B-2	NDSU	216	134	57	1	25	74	0	0	0	74	0	1.076
ND071215CB-1	NDSU	322	239	103	4	16	81	0	0	0	81	0	1.075
ND071280B-11	NDSU	290	87	37	17	52	31	0	0	0	31	0	1.073

Table 27 (cont'd). Production facts for the USPB National Chip Processing Trial potato selections.

Clone		Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
ND071280B-9	NDSU	249	83	36	11	53	36	0	0	0	36	0	1.076
ND7381B-17	NDSU	358	298	128	1	4	65	12	18	0	95	18	1.072
ND7550c-1	NDSU	257	111	48	9	43	48	0	0	0	48	0	1.075
ND7799c-1	NDSU	300	251	108	2	10	57	15	15	0	88	15	1.066
ND7799c-1	NDSU	235	192	82	2	14	84	0	0	0	84	0	1.064
AOTX95295-1W	Texas A&M	276	155	67	7	35	58	0	0	0	58	0	1.064
COTX02377-1W	Texas A&M	209	93	40	7	33	60	0	0	0	60	0	1.068
COTX03270-1W	Texas A&M	306	200	86	3	31	66	0	0	0	66	0	1.071
NDTX059997-2W	Texas A&M	159	65	28	12	46	42	0	0	0	42	0	1.066
NDTX059997-6W	Texas A&M	128	105	45	0	6	38	56	0	0	94	0	1.068
TX03196-1W	Texas A&M	202	164	71	4	12	84	0	0	0	84	0	1.070
ATTX03474-1W	Texas A&M	233	182	78	1	14	84	0	0	0	84	0	1.072
ATTX03474-3W	Texas A&M	195	130	56	3	20	77	0	0	0	77	0	1.077
ATTX03475-2W	Texas A&M	226	144	62	4	31	65	0	0	0	65	0	1.077
ATTX03475-6W	Texas A&M	153	107	46	4	26	70	0	0	0	70	0	1.067
ATTX03476-2W	Texas A&M	243	209	90	1	11	88	0	0	0	88	0	1.074
AF4139-1	U of Maine	222	140	0	4	33	63	0	0	0	63	0	1.057
AF4147-1	U of Maine	303	182	78	5	33	62	0	0	0	62	0	1.071
AF4240-3	U of Maine	245	213	0	2	6	92	0	0	0	92	0	1.073
AF4254-2	U of Maine	213	149	64	5	21	74	0	0	0	74	0	1.067

Table 27 (cont'd). Production facts for the USPB National Chip Processing Trial potato selections.

Clone		Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
AF4363-5	U of Maine	277	220	95	2	11	87	0	0	0	87	0	1.081
AF4125-1	U of Maine	304	226	97	2	21	78	0	0	0	78	0	1.077
AF4130-3	U of Maine	354	275	118	3	18	79	0	0	0	79	0	1.074
AF4130-7	U of Maine	325	277	119	0	10	62	16	11	0	89	11	1.086
AF4145-1	U of Maine	348	254	109	4	16	64	16	0	0	80	0	1.072
AF4222-4	U of Maine	284	251	108	0	4	76	20	0	0	96	0	1.067
AF4227-4	U of Maine	208	138	59	4	25	72	0	0	0	72	0	1.074
AF4372-2	U of Maine	307	242	104	1	17	82	0	0	0	82	0	1.071
AF4386-16	U of Maine	339	240	103	4	23	73	0	0	0	73	0	1.081
AF4421-2	U of Maine	236	148	64	11	24	65	0	0	0	65	0	1.072
AF4421-4	U of Maine	266	177	76	5	28	68	0	0	0	68	0	1.064
AF4423-5	U of Maine	237	200	86	1	10	89	0	0	0	89	0	1.082
AF4437-1	U of Maine	358	90	39	2	69	28	0	0	0	28	0	1.074
AF4441-9	U of Maine	325	221	95	2	28	70	0	0	0	70	0	1.069
AF4442-1	U of Maine	283	235	101	2	11	87	0	0	0	87	0	1.080
AF4442-4	U of Maine	308	262	113	1	9	90	0	0	0	90	0	1.070
AF4458-2	U of Maine	248	238	103	1	3	75	17	4	0	96	4	1.065
AF4463-7	U of Maine	412	345	148	2	7	80	11	0	0	92	0	1.072
AF4463-8	U of Maine	376	317	136	1	8	80	11	0	0	90	0	1.071
AF4518-1	U of Maine	373	205	88	4	40	57	0	0	0	57	0	1.076

Table 27 (cont'd). Production facts for the USPB National Chip Processing Trial potato selections.

Clone		Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
AF4521-1	U of Maine	344	278	120	2	11	83	5	0	0	87	0	1.076
AF4526-2	U of Maine	439	314	135	3	17	59	14	7	0	80	7	1.069
AF4551-1	U of Maine	206	97	42	8	45	47	0	0	0	47	0	1.067
AF4552-4	U of Maine	186	122	53	5	29	62	4	0	0	66	0	1.073
AF4552-5	U of Maine	261	202	87	2	17	81	0	0	0	81	0	1.073
AF4561-1	U of Maine	176	116	50	2	23	74	0	0	0	74	0	1.076
AF4573-2	U of Maine	353	263	113	3	14	74	9	0	0	83	0	1.081
AF4592-1	U of Maine	189	83	36	11	43	46	0	0	0	46	0	1.062
AF4640-1	U of Maine	275	183	79	5	24	71	0	0	0	71	0	1.072
AF4648-2	U of Maine	267	211	91	2	7	83	8	0	0	92	0	1.078
AF4709-2	U of Maine	227	142	61	6	27	67	0	0	0	67	0	1.067
AF4157-6	U of Maine	244	211	91	2	10	85	3	0	0	88	0	1.075
AF4157-6	U of Maine	235	167	72	3	22	74	0	0	0	74	0	1.078
B-166	UW	316	254	109	2	11	52	25	9	0	86	9	1.075
B-258	UW	237	156	67	4	29	67	0	0	0	67	0	1.075
B-70	UW	255	159	68	6	29	66	0	0	0	66	0	1.083
A-32	UW	260	196	84	3	18	78	0	0	0	78	0	1.075
A-32	UW	223	154	66	5	19	76	0	0	0	76	0	1.078
C-172	UW	186	70	30	9	52	39	0	0	0	39	0	1.085
C-27	UW	200	168	72	4	11	86	0	0	0	86	0	1.076

Table 27 (cont'd). Production facts for the USPB National Chip Processing Trial potato selections.

Clone		Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
W2978-3	UW	281	191	82	3	25	72	0	0	0	72	0	1.069
W4980-1	UW	290	243	105	2	11	87	0	0	0	87	0	1.071
W5955-1	UW	275	232	100	3	7	83	7	0	0	90	0	1.069
W6609-3	UW	226	145	62	4	24	72	0	0	0	72	0	1.078
W8639-3	UW	186	63	27	13	52	35	0	0	0	35	0	1.067
B-19	UW	245	107	46	6	44	50	0	0	0	50	0	1.073
B-27	UW	209	154	66	0	21	79	0	0	0	79	0	1.079
B-56	UW	294	218	94	1	16	69	6	9	0	83	9	1.073
B-89	UW	257	228	98	0	8	90	3	0	0	92	0	1.078
A-67	UW	267	201	87	4	11	78	6	0	0	84	0	1.075
Atlantic	UW	374	306	132	2	8	69	11	10	0	91	10	1.082
Atlantic	UW	228	169	73	3	16	81	0	0	0	81	0	1.084
B-139	UW	285	210	90	3	19	75	3	0	0	78	0	1.076
B-153	UW	310	254	109	2	13	80	5	0	0	85	0	1.085
B-163	UW	264	207	89	4	18	78	0	0	0	78	0	1.084
B-184	UW	222	183	79	2	15	83	0	0	0	83	0	1.073
B-190	UW	168	90	39	7	35	58	0	0	0	58	0	1.087
B-191	UW	174	99	42	7	31	63	0	0	0	63	0	1.084
B-212	UW	223	187	81	2	13	85	0	0	0	85	0	1.074
B-26	UW	214	147	63	3	23	74	0	0	0	74	0	1.075

Table 27 (cont'd). Production facts for the USPB National Chip Processing Trial potato selections.

Clone		Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
B-227	UW	308	246	106	2	14	84	0	0	0	84	0	1.084
B-248	UW	208	132	57	6	16	78	0	0	0	78	0	1.074
B-282	UW	181	85	37	4	45	51	0	0	0	51	0	1.074
B-290	UW	183	114	49	4	33	63	0	0	0	63	0	1.079
C-10	UW	232	178	77	1	3	96	0	0	0	96	0	1.084
C-59	UW	290	205	88	2	8	77	14	0	0	90	0	1.075
C-112	UW	218	140	60	2	26	72	0	0	0	72	0	1.081
C-118	UW	212	106	45	6	25	69	0	0	0	69	0	1.081
C-122	UW	249	185	80	3	16	81	0	0	0	81	0	1.087
C-156	UW	216	149	64	3	13	72	12	0	0	84	0	1.075
W5015-5	UW	282	184	79	4	22	74	0	0	0	74	0	1.069
W8436-1	UW	220	85	36	14	44	42	0	0	0	42	0	1.071
W8822-1	UW	225	118	51	7	27	66	0	0	0	66	0	1.077
W8822-2	UW	212	67	29	7	54	40	0	0	0	40	0	1.080
W8822-3	UW	210	95	41	7	38	55	0	0	0	55	0	1.087
W8832-1	UW	227	21	9	13	76	11	0	0	0	11	0	1.072
W8848-3	UW	223	165	71	4	15	81	0	0	0	81	0	1.074
W8850-1	UW	186	102	44	9	31	59	0	0	0	59	0	1.077
W8857-1	UW	272	173	75	4	24	72	0	0	0	72	0	1.076
W8867-5	UW	285	205	88	4	24	72	0	0	0	72	0	1.072

Table 27 (cont'd). Production facts for the USPB National Chip Processing Trial potato selections.

Clone		Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
W8867-7	UW	321	230	99	4	21	62	4	9	0	75	9	1.082
W8875-2	UW	239	167	72	3	20	77	0	0	0	77	0	1.077
W8877-3	UW	230	64	28	12	55	33	0	0	0	33	0	1.075
W9632-1	UW	299	170	73	3	37	60	0	0	0	60	0	1.071
W9636-5	UW	244	148	64	9	18	73	0	0	0	73	0	1.067
W9652-1	UW	224	100	43	4	47	49	0	0	0	49	0	1.085
W9682-1	UW	343	57	25	10	53	37	0	0	0	37	0	1.076
W9684-2	UW	190	95	41	4	42	54	0	0	0	54	0	1.072
W9696-1	UW	220	117	51	8	34	59	0	0	0	59	0	1.072
W9704-2	UW	216	105	45	8	40	52	0	0	0	52	0	1.071
W9705-1	UW	184	100	43	5	24	71	0	0	0	71	0	1.074
W9705-4	UW	201	79	34	13	45	42	0	0	0	42	0	1.061
W9707-1	UW	215	77	33	12	47	41	0	0	0	41	0	1.084
W2324-1	UW	247	180	78	2	18	76	3	0	0	79	0	1.075
W2324-1	UW	255	142	61	4	29	68	0	0	0	68	0	1.075
W8539-2	UW	186	65	28	12	53	36	0	0	0	36	0	1.074
W8539-2	UW	173	31	13	18	61	21	0	0	0	21	0	1.074
W8603-1	UW	228	99	43	9	45	46	0	0	0	46	0	1.070
W8603-1	UW	210	51	22	20	54	26	0	0	0	26	0	1.069
W8615-5	UW	266	119	51	10	41	49	0	0	0	49	0	1.071

Table 27 (cont'd). Production facts for the USPB National Chip Processing Trial potato selections.

Clone		Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
W8615-5	UW	241	105	45	10	46	44	0	0	0	44	0	1.071
A00206-1C	USDA	290	204	88	6	17	78	0	0	0	78	0	1.069
A03449-2C	USDA	262	141	61	7	30	63	0	0	0	63	0	1.084
A05158-2C	USDA	77	18	8	4	53	43	0	0	0	43	0	md
A05158-3C	USDA	281	232	100	2	9	73	16	0	0	89	0	1.065
A01143-3C	USDA	231	143	62	5	29	66	0	0	0	66	0	1.075
A01143-3C	USDA	250	157	67	5	32	63	0	0	0	63	0	1.074
B2628-10	USDA	252	197	85	3	12	85	0	0	0	85	0	1.073
BNC182-5	USDA	232	121	52	5	37	58	0	0	0	58	0	1.080
B1992-106	USDA	300	247	106	3	12	69	16	0	0	85	0	1.075
B1992-106	USDA	300	253	109	3	9	78	10	0	0	88	0	1.081
B2727-2	USDA	236	196	84	1	11	88	0	0	0	88	0	1.084
B2727-2	USDA	230	172	74	2	18	74	6	0	0	81	0	1.083
B2735-2	USDA	195	85	36	5	43	52	0	0	0	52	0	1.078
B2735-2	USDA	221	135	58	3	31	66	0	0	0	66	0	1.073
BNC202-7	USDA	195	111	48	7	27	65	0	0	0	65	0	1.074
BNC202-7	USDA	236	82	35	10	23	67	0	0	0	67	0	1.077

¹Marketable Yield: size classes A1 to A3.

²Size classes: C = 0.5 to 1.5", B = 1.5 to 1.88", A1 = 1.88 to 2.5", A2 = 2.5 to 3.25", A3 = 3.25 to 4", A4 = >4"

Table 28. Plant growth, tuber characteristics, and chip ratings of the USPB National Chip Processing Trial potato selections.

Clone	Plant Growth Characteristics ¹				Chip Rating ²		Tuber Characteristics			
	% Stand	Early Vigor	Vine Type	Vine Maturity	Chip Score	Chip Comments	Flesh Color ³	Tuber Shape ⁴	Appearance ⁵	Merit Rating ⁶
Atlantic	100	6	9-6	2	3	SED	4	2	6	2
Harley Blackwell	100	5	8-5	1	2.5		1	2	6	2
Marcy	87	5	8	3	1.5		1	3	6	2
Snowden	100	6	9-6	2	1.5	SED	1	2	5	3
B1992-106	100	6	6-9	4	2	SED	1	3	6	2
BNC177-5	100	6	5-8	6	1.5		1	3	6	2
BNC182-5	100	6	9-6	7	2	SED	1	1	6	2
NYH1-2	93	6	8-5	3	2	Slight SED	4	3	6	2
NYH15-1	100	5	8	1	1.5		1	3	5	3
NYH15-17	87	6	8-5	3	2	VD	4	4	5	2
NYH15-5	100	5	8-5	3	1	Slight SED	1	3	6	2
NYH15-6	100	6	8-5	3	1		4	2	5	3
NYH15-9	93	5	8-5	3	1.5	VD	4	4	6	2
NYH23-16	100	5	8	2	2		4	5	5	3
NYH23-6	80	4	9	3	1.5		1	3	6	2
NYH25-2	100	5	8-9	3	2		4	4	5	3
NYH25-4	0	5	9	3	1.5		1	1	6	2
NYH25-8	87	3	7	4	1.5	VD	1	2	5	3
NYH28-1	100	5	9-6	4	2.5		1	1	6	2
NYH6-3	100	5	5-6	1	2		1	2	6	2

Table 28 (cont'd). Plant growth, tuber characteristics, and chip ratings of the USPB National Chip Processing Trial potato selections.

Clone	Plant Growth Characteristics ¹				Chip Rating ²		Tuber Characteristics			
	% Stand	Early Vigor	Vine Type	Vine Maturity	Chip Score	Chip Comments	Flesh Color ³	Tuber Shape ⁴	Appearance ⁵	Merit Rating ⁶
NY 146 (NYD40-50)	80	4	7	3	1.5		4	2	7	2
NY 146 (NYD40-50)	73	2	7	3	1		2	2	5	3
NYE106-4	100	6	5	2	1		2	2	6	3
NYE106-4	100	6	5-8	2	1		2	2	6	2
NYG89-2	87	6	9-6	6	1.5		4	3	6	3
NYG89-2	100	5	9-6	2	2		4	4	5	3
ACO0206-2W	100	5	8-5	4	2	Slight SED	1	2	5	3
ACO3452-2W	100	6	9-6	3	1.5		1	1	5	2
CO02033-1W	87	4	8-5	2	2	SED	1	4	5	3
CO03243-3W	100	5	9-8	3	2.5		1	2	6	2
AC00180-2W	100	5	6-9	1	2	SED	1	3	5	3
AC05153-1W	100	5	6	1	2		1	2	5	2
CO05061-2P	87	5	8-5	1	2	SED	1	3	5	3
CO05061-6W	100	6	8-9	1	1.5		1	2	6	3
CO05061-7W	100	6	5	1	2.5		2	2	6	3
ACO1151-5W	100	5	9-6	2	1		1	2	6	2
ACO1151-5W	100	5	8-9	2	2		1	2	5	2
ACO3433-1W	100	5	9	3	1		1	2	6	3
ACO3433-1W	87	5	8	3	2		4	3	5	3
CO00270-7W	100	6	7-4	2	2		4	2	6	2

Table 28 (cont'd). Plant growth, tuber characteristics, and chip ratings of the USPB National Chip Processing Trial potato selections.

Clone	Plant Growth Characteristics ¹				Chip Rating ²		Tuber Characteristics			
	% Stand	Early Vigor	Vine Type	Vine Maturity	Chip Score	Chip Comments	Flesh Color ³	Tuber Shape ⁴	Appearance ⁵	Merit Rating ⁶
CO00270-7W	100	6	7-4	2	2.5		4	2	6	2
CO02024-9W	100	5	8-5	3	1.5		4	3	5	3
CO02024-9W	100	4	8-5	2	1.5		1	3	5	2
CO02321-4W	100	5	8-5	1	2		4	2	6	3
CO02321-4W	93	6	7-4	2	2.5	Slight SED	4	2	7	2
MSH228-6	100	6	9-6	2	2.5		md	md	md	md
MSL292-A	47	4	8	4	2		4	2	6	2
MSP459-5	100	5	8-5	1	1.5		1	2	6	2
MSQ035-3	100	5	8-5	2	1.5		1	3	6	2
MSQ070-1	100	5	9-6	3	2		2	2	6	2
MSQ279-1	93	5	8-9	3	1.5		4	4	6	2
MSR036-5	100	5	8-5	6	2.5		1	1	6	2
MSR131-2	100	5	5-8	1	1.5		1	3	6	2
MSS927-1	100	5	8-5	1	2		1	3	6	2
MSM102-A	80	2	8	2	1.5		1	2	6	3
MSM108-A	100	4	9	1	2		4	3	5	3
MSN191-2Y	87	4	8	3	2		3	2	6	1
MSQ086-3	100	5	8-5	3	1		4	3	6	2
MSQ131-A	93	4	8-7	3	2		1	2	6	2
MSR054-7	100	6	8	2	1		1	2	7	2

Table 28 (cont'd). Plant growth, tuber characteristics, and chip ratings of the USPB National Chip Processing Trial potato selections.

Clone	Plant Growth Characteristics ¹				Chip Rating ²		Tuber Characteristics			Merit Rating ⁶
	% Stand	Early Vigor	Vine Type	Vine Maturity	Chip Score	Chip Comments	Flesh Color ³	Tuber Shape ⁴	Appearance ⁵	
MSR109-1	67	4	8	7	1.5		1	1	5	2
MSR157-1Y	100	6	9-6	3	1.5		4	3	6	2
MSR159-02	100	5	9-6	4	1.5		1	2	6	1
MSS297-3	100	5	9-6	3	2		2	3	6	2
MSS483-1	100	4	8-5	2	2		4	2	6	2
Beacon Chipper	100	5	8-5	3	1.5		1	3	6	2
Beacon Chipper	100	5	8-5	3	2		1	4	6	2
MSK061-4	100	5	8	2	1.5		1	3	5	3
MSK061-4	100	5	8	1	2.5		1	2	6	4
MSK409-1	100	5	8-5	2	1		4	3	6	4
MSK409-1	100	5	8-5	1	1.5		4	3	6	2
MSL007-B	100	4	7	2	1.5		4	2	6	4
MSL007-B	100	5	7	1	2		2	2	6	4
MSM246-B	100	5	8	3	1		4	2	5	3
MSM246-B	93	5	8	2	1.5		4	2	6	2
MSQ089-1	100	6	5-4	2	2		1	2	6	3
MSQ089-1	100	6	7	1	2		1	2	6	3
MSQ130-4	80	6	8	1	1.5		4	2	6	3
MSQ130-4	100	6	8	1	2		1	2	6	3
MSR058-1	100	5	8-5	3	2		4	3	6	3

Table 28 (cont'd). Plant growth, tuber characteristics, and chip ratings of the USPB National Chip Processing Trial potato selections.

Clone	Plant Growth Characteristics ¹				Chip Rating ²		Tuber Characteristics			
	% Stand	Early Vigor	Vine Type	Vine Maturity	Chip Score	Chip Comments	Flesh Color ³	Tuber Shape ⁴	Appearance ⁵	Merit Rating ⁶
MSR058-1	93	6	8-5	3	1.5		1	2	6	2
MSR127-2	100	6	9-6	3	1		4	1	6	2
MSR127-2	100	5	8	2	2.5	SED	4	2	6	2
MSR128-4Y	100	6	5-8	1	1		2	2	6	4
MSR128-4Y	100	6	4	1	2		2	2	6	3
MSR148-4	100	6	8	2	1.5	Slight SED	1	2	6	3
MSR148-4	100	6	8-5	1	2	SED	1	2	6	2
MSR169-8Y	80	5	8	4	1.5		2	2	6	1
MSR169-8Y	87	4	8	3	md		md	md	md	md
MSS165-2Y	100	6	6	1	1	Slight VD	2	2	6	3
MSS165-2Y	100	6	6-9	1	md		md	md	md	md
ND060838C-3	100	6	9-6	1	1		1	2	6	2
ND060838C-5	100	5	9	2	1.5		4	2	6	2
ND060839C-7	100	6	9-6	2	1		1	3	6	2
ND060847CB-1	100	5	8	2	1.5		1	1	6	2
ND071031B-2Y	100	5	5-8	1	1.5		3	2	6	3
ND071155CB-1	100	6	5-8	1	1.5		1	2	6	2
ND071184B-2	100	5	8-9	1	1.5	SED	4	3	5	3
ND071215CB-1	100	6	6-9	2	1.5		1	1	6	2
ND071280B-11	100	6	5-8	1	1	SED	1	2	6	2

Table 28 (cont'd). Plant growth, tuber characteristics, and chip ratings of the USPB National Chip Processing Trial potato selections.

Clone	Plant Growth Characteristics ¹				Chip Rating ²		Tuber Characteristics			
	% Stand	Early Vigor	Vine Type	Vine Maturity	Chip Score	Chip Comments	Flesh Color ³	Tuber Shape ⁴	Appearance ⁵	Merit Rating ⁶
ND071280B-9	100	6	8	1	1.5		4	2	6	3
ND7381B-17	100	4	8	2	2	Slight SED	1	1	6	2
ND7550c-1	100	6	5-8	1	1.5	SED	1	2	6	3
ND7799c-1	100	5	7	3	2		1	2	6	3
ND7799c-1	93	4	8-7	2	1.5	VD	1	2	6	2
AOTX95295-1W	93	6	5-8	1	1		4	3	6	2
COTX02377-1W	100	5	7-4	1	2.5	SED	1	3	5	4
COTX03270-1W	100	5	5-8	1	1.5		1	3	6	2
NDTX059997-2W	100	5	7	1	1.5		1	2	7	3
NDTX059997-6W	40	4	-	6	1.5		1	1	4	4
TX03196-1W	93	4	7	3	1		1	2	6	2
ATTX03474-1W	80	5	4	1	1.5		1	3	6	2
ATTX03474-3W	93	5	8-7	3	1.5		1	3	6	3
ATTX03475-2W	100	5	8-9	1	1		1	3	5	3
ATTX03475-6W	100	5	7	2	2.5	SED	1	3	5	3
ATTX03476-2W	33	2	7	2	2	SED	1	2	6	2
AF4139-1	100	5	8-5	1	1	SED	1	2	6	2
AF4147-1	93	6	9-6	1	1		1	2	6	2
AF4240-3	100	5	8	1	2.5		1	2	6	2
AF4254-2	100	6	8	1	1.5		1	2	6	2

Table 28 (cont'd). Plant growth, tuber characteristics, and chip ratings of the USPB National Chip Processing Trial potato selections.

Clone	Plant Growth Characteristics ¹				Chip Rating ²		Tuber Characteristics			
	% Stand	Early Vigor	Vine Type	Vine Maturity	Chip Score	Chip Comments	Flesh Color ³	Tuber Shape ⁴	Appearance ⁵	Merit Rating ⁶
AF4363-5	80	4	8	3	2	VD	1	3	6	2
AF4125-1	100	5	8	1	3		1	2	6	2
AF4130-3	100	6	8-5	2	2.5	SED	1	2	6	2
AF4130-7	73	3	9	7	2	SED	1	1	6	2
AF4145-1	100	6	5-8	2	1		1	2	6	2
AF4222-4	100	5	8	1	2		1	3	6	2
AF4227-4	100	5	8-9	2	1.5		1	2	5	3
AF4372-2	87	6	7-4	1	1.5		1	3	5	2
AF4386-16	100	5	9-6	3	1.5		1	2	6	2
AF4421-2	93	6	7-4	1	1.5	SED	1	2	6	3
AF4421-4	100	6	8-5	1	1.5		1	2	6	2
AF4423-5	87	2	7	6	1.5		1	4	5	3
AF4437-1	87	2	8	3	1.5		1	2	6	2
AF4441-9	100	6	5-8	1	1.5		1	2	5	2
AF4442-1	100	5	7	2	1.5		2	2	5	2
AF4442-4	100	5	8	1	2		1	3	6	2
AF4458-2	80	3	7	6	2.5	VD	1	2	6	3
AF4463-7	93	5	9-8	2	1.5		1	3	6	2
AF4463-8	87	4	8-9	2	2	SED	1	2	6	2
AF4518-1	100	5	9-6	1	1		1	3	6	2

Table 28 (cont'd). Plant growth, tuber characteristics, and chip ratings of the USPB National Chip Processing Trial potato selections.

Clone	Plant Growth Characteristics ¹				Chip Rating ²		Tuber Characteristics			
	% Stand	Early Vigor	Vine Type	Vine Maturity	Chip Score	Chip Comments	Flesh Color ³	Tuber Shape ⁴	Appearance ⁵	Merit Rating ⁶
AF4521-1	100	5	8-5	2	1	SED	1	3	6	2
AF4526-2	100	6	9-6	1	1.5	VD	1	4	5	2
AF4551-1	100	6	5-8	1	1		1	2	5	3
AF4552-4	93	5	7-4	1	1.5		1	2	5	3
AF4552-5	100	5	8-5	1	2		1	2	6	2
AF4561-1	100	5	8-7	1	1.5		1	2	5	3
AF4573-2	100	6	8-5	5	1.5		1	1	5	3
AF4592-1	100	6	5-2	1	1.5		1	2	6	3
AF4640-1	100	5	6-9	1	1		1	3	6	2
AF4648-2	100	5	6	1	1.5	VD	1	3	6	3
AF4709-2	100	6	5-8	1	2		1	3	6	2
AF4157-6	67	3	7	1	1.5		4	3	6	3
AF4157-6	80	3	8	2	2		1	2	6	2
B-166	100	6	6-9	4	2		1	2	5	2
B-258	100	6	5	1	2	VD	1	2	5	3
B-70	100	5	8	2	2	VD	1	3	6	2
A-32	100	5	7	8	1.5		4	2	6	3
A-32	100	5	8	5	1.5		1	3	6	2
C-172	100	5	8	1	1.5		1	3	5	3
C-27	100	5	7	1	1.5		1	3	6	3

Table 28 (cont'd). Plant growth, tuber characteristics, and chip ratings of the USPB National Chip Processing Trial potato selections.

Clone	Plant Growth Characteristics ¹				Chip Rating ²		Tuber Characteristics			
	% Stand	Early Vigor	Vine Type	Vine Maturity	Chip Score	Chip Comments	Flesh Color ³	Tuber Shape ⁴	Appearance ⁵	Merit Rating ⁶
W2978-3	93	5	7-4	1	1.5		1	3	6	2
W4980-1	100	6	8-5	1	1.5		1	2	6	2
W5955-1	100	5	8	1	2.5	VD	4	2	5	2
W6609-3	100	5	5-8	2	1.5		4	2	5	3
W8639-3	100	6	5-8	1	1		4	2	6	3
B-19	100	5	9-6	1	1.5		1	2	5	3
B-27	100	5	7	1	2	SED	1	2	6	3
B-56	100	5	5-8	2	2		1	3	5	3
B-89	100	5	8-5	1	1.5		1	2	6	2
A-67	100	5	8-5	1	2		1	2	5	3
Atlantic	100	6	9-6	2	1		4	2	6	3
Atlantic	100	6	8-5	1	1	Slight VD	1	3	6	2
B-139	100	6	5-2	1	1.5		1	3	5	3
B-153	100	4	8-9	3	2	SED	4	2	6	2
B-163	100	5	5	1	1.5		1	2	6	2
B-184	100	5	5	3	2		1	4	6	3
B-190	100	5	8	2	1.5		2	2	6	3
B-191	93	5	8	2	2.5		2	2	5	3
B-212	100	5	8-5	2	2		1	2	7	2
B-26	100	5	8	1	1.5		1	2	6	3

Table 28 (cont'd). Plant growth, tuber characteristics, and chip ratings of the USPB National Chip Processing Trial potato selections.

Clone	Plant Growth Characteristics ¹				Chip Rating ²		Tuber Characteristics			
	% Stand	Early Vigor	Vine Type	Vine Maturity	Chip Score	Chip Comments	Flesh Color ³	Tuber Shape ⁴	Appearance ⁵	Merit Rating ⁶
B-227	93	5	9	6	2.5		1	2	6	2
B-248	100	5	8	0	2		1	2	6	3
B-282	100	5	8	1	1.5	SED	1	2	6	4
B-290	100	5	8	1	1.5		1	2	6	2
C-10	100	5	8-7	1	1		1	2	6	2
C-59	87	5	9	3	2.5	SED	1	2	5	3
C-112	100	6	8-9	1	1.5		1	4	5	3
C-118	100	5	8	1	1.5	VD	4	2	5	3
C-122	100	5	8	2	1		1	3	5	3
C-156	100	6	7-4	1	1		1	3	5	3
W5015-5	100	6	9	1	2		1	2	6	2
W8436-1	100	6	5	1	1.5	Slight SED	4	2	6	3
W8822-1	93	5	8	1	1.5		2	2	6	3
W8822-2	100	5	8	1	1		2	2	6	3
W8822-3	100	4	7	2	1.5		2	2	5	3
W8832-1	93	5	5	1	1		3	3	6	3
W8848-3	93	5	9-8	1	1.5		1	2	6	2
W8850-1	93	6	8	1	1.5		1	3	6	3
W8857-1	87	5	8-9	1	1.5		1	2	7	2
W8867-5	93	5	7-4	1	1.5		1	2	7	2

Table 28 (cont'd). Plant growth, tuber characteristics, and chip ratings of the USPB National Chip Processing Trial potato selections.

Clone	Plant Growth Characteristics ¹				Chip Rating ²		Tuber Characteristics			Merit Rating ⁶
	% Stand	Early Vigor	Vine Type	Vine Maturity	Chip Score	Chip Comments	Flesh Color ³	Tuber Shape ⁴	Appearance ⁵	
W8867-7	100	5	8-5	2	1.5		1	1	6	2
W8875-2	100	6	4-7	1	1.5		1	3	6	2
W8877-3	100	5	8-5	1	2		2	2	5	3
W9632-1	100	6	8	2	1.5	VD	1	3	5	3
W9636-5	100	6	7-4	1	1		1	4	5	3
W9652-1	100	6	8	2	2		2	3	6	3
W9682-1	100	6	6	1	2	SED	2	2	5	3
W9684-2	100	5	8	2	2		4	3	5	3
W9696-1	100	6	7-4	1	1.5		4	3	6	2
W9704-2	100	5	5-8	1	1.5		1	2	7	2
W9705-1	100	5	8	2	2		1	2	6	3
W9705-4	100	6	5	1	1		4	2	6	3
W9707-1	100	5	9	2	2		3	2	6	3
W2324-1	100	6	6-9	1	1.5	SED	1	2	5	3
W2324-1	100	6	5	1	1.5		1	2	6	3
W8539-2	100	5	9-6	1	1		3	2	6	4
W8539-2	100	5	8-5	2	1.5	Slight SED	2	3	6	3
W8603-1	100	6	5-2	1	1		1	3	6	3
W8603-1	100	6	5-4	1	2		1	2	6	4
W8615-5	100	6	5-8	1	2		1	2	6	3

Table 28 (cont'd). Plant growth, tuber characteristics, and chip ratings of the USPB National Chip Processing Trial potato selections.

Clone	Plant Growth Characteristics ¹				Chip Rating ²		Tuber Characteristics			
	% Stand	Early Vigor	Vine Type	Vine Maturity	Chip Score	Chip Comments	Flesh Color ³	Tuber Shape ⁴	Appearance ⁵	Merit Rating ⁶
W8615-5	100	6	5-2	1	2	SED	1	2	6	3
A00206-1C	100	6	8-5	1	2.5		1	2	6	2
A03449-2C	100	6	8-5	2	1		1	3	6	2
A05158-2C	87	3	8	8	2.5	SED	md	md	md	md
A05158-3C	100	5	7-4	7	2		4	2	6	2
A01143-3C	100	5	8-5	2	2		1	2	6	3
A01143-3C	100	5	7-4	2	3		1	2	6	3
B2628-10	100	4	8	3	1	Best in trial	1	3	5	3
BNC182-5	93	6	9-6	5	1.5		1	2	6	3
B1992-106	100	5	8-9	3	2		4	2	6	3
B1992-106	100	5	8	2	2		4	2	6	2
B2727-2	100	5	8-7	2	2		1	2	6	3
B2727-2	87	4	7	2	1.5		1	2	7	2
B2735-2	100	5	8	1	2		4	3	5	3
B2735-2	100	4	8	1	1.5	Slight SED	1	4	5	3
BNC202-7	100	6	8	1	1		2	2	6	4
BNC202-7	100	6	8-5	1	2	Slight SED	3	2	5	3

¹See rating system outlined in Table 1 (page 10).

²Rated on 1-5 scale: 1 = outstanding, no blemishes and color variations, 2 = very good, minimal blemishes and color variations, 3 = good, acceptable blemishes and color variations; 4 = marginal acceptance, high levels of blemishes and color variations, 5 = not acceptable, high blemish and color variations.

Chip Comments: SED = stem end decay, VD = vascular discoloration.

³Tuber Flesh Color Scale: 1 = white, 2 = light yellow, 3 = yellow, 4 = buff.

⁴Tuber Shape Scale: 1 = compressed, 2 = round, 3 = oval, 4 = oblong, 5 = long.

⁵Appearance: 1 = very poor, 3 = poor, 5 = fair, 7 = good, 9 = excellent.

⁶Merit Rating Scale 1-4: 1 = outstanding, 2 = keep, 3 = marginal, 4 = drop.

Table 29. External and internal defects of the USPB National Chip Processing Trial potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
Atlantic	0	0	4	0	4	0	0	0	0	0	0	0
Harley Blackwell	0	0	0	3	3	0	0	0	0	0	0	0
Marcy	0	0	1	0	1	0	0	0	0	0	0	0
Snowden	0	0	19	0	19	0	0	0	0	0	0	0
B1992-106	0	0	3	2	5	0	0	0	0	0	0	0
BNC177-5	0	0	1	0	1	0	0	0	0	0	0	0
BNC182-5	0	0	5	0	5	0	0	0	0	0	0	0
NYH1-2	0	3	2	0	5	0	0	0	0	0	0	0
NYH15-1	0	0	15	0	16	0	0	0	0	0	0	0
NYH15-17	0	0	4	0	4	0	0	0	0	0	0	0
NYH15-5	0	0	4	3	7	0	0	0	0	20	0	0
NYH15-6	0	2	15	1	19	0	0	0	0	0	0	0
NYH15-9	0	0	9	2	11	0	0	0	0	0	0	0
NYH23-16	1	0	5	0	6	0	0	0	0	0	0	0
NYH23-6	0	0	6	1	7	0	0	0	0	0	0	0
NYH25-2	1	1	5	1	9	0	0	0	0	0	0	0
NYH25-4	0	0	8	3	12	0	0	0	0	0	0	0
NYH25-8	0	5	13	3	21	0	0	0	0	20	0	0
NYH28-1	0	4	4	3	11	0	0	0	0	0	0	0
NYH6-3	2	0	7	0	10	0	0	0	0	0	0	0

Table 29 (cont'd). External and internal defects of the USBP National Chip Processing Trial potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
NY 146 (NYD40-50)	0	0	6	0	6	0	0	0	0	0	0	0
NY 146 (NYD40-50)	0	0	12	1	13	0	0	0	0	0	0	0
NYE106-4	0	0	13	0	13	0	0	0	0	0	0	0
NYE106-4	1	0	14	0	15	0	0	0	0	0	0	0
NYG89-2	0	1	8	0	10	0	0	0	0	0	0	0
NYG89-2	1	5	3	2	10	0	0	0	20	0	0	0
ACO0206-2W	0	0	9	6	15	0	0	0	0	0	0	0
ACO3452-2W	1	0	10	6	17	0	0	0	0	0	0	0
CO02033-1W	0	0	6	0	6	0	0	0	0	0	0	0
CO03243-3W	0	0	9	15	25	0	0	0	0	0	0	0
AC00180-2W	2	0	3	0	5	0	0	0	0	0	0	0
AC05153-1W	0	0	3	11	14	0	0	0	0	0	0	0
CO05061-2P	1	0	15	1	17	0	0	0	0	0	0	0
CO05061-6W	0	0	6	2	7	0	0	0	0	0	0	0
CO05061-7W	0	0	7	6	13	0	0	0	0	0	0	0
ACO1151-5W	0	0	6	4	10	0	0	0	0	0	0	0
ACO1151-5W	0	0	7	1	8	0	0	0	0	0	0	0
ACO3433-1W	2	2	4	3	10	0	0	0	0	0	0	0
ACO3433-1W	6	0	14	0	20	0	0	0	0	0	0	0
CO00270-7W	1	1	0	0	3	0	0	0	0	0	0	0

Table 29 (cont'd). External and internal defects of the USBP National Chip Processing Trial potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
CO00270-7W	0	0	3	6	9	0	0	0	0	0	0	0
CO02024-9W	0	0	10	1	10	0	0	0	0	0	0	0
CO02024-9W	0	0	8	3	10	0	0	0	0	0	0	0
CO02321-4W	0	0	5	0	5	0	0	0	0	0	0	0
CO02321-4W	1	0	9	7	17	0	0	0	0	0	0	0
MSH228-6	2	1	2	0	5	0	0	0	0	0	0	0
MSL292-A	0	0	14	0	14	0	0	0	0	0	0	0
MSP459-5	0	0	3	16	18	0	0	0	0	0	0	0
MSQ035-3	0	2	4	0	6	0	0	0	0	0	0	0
MSQ070-1	0	0	5	0	5	0	0	0	0	0	0	0
MSQ279-1	0	6	6	0	12	0	0	0	0	0	0	0
MSR036-5	0	0	2	0	2	0	0	0	0	0	0	0
MSR131-2	0	4	1	7	12	0	0	0	0	0	0	0
MSS927-1	0	0	5	0	5	0	0	0	0	0	0	0
MSM102-A	0	0	12	4	16	0	0	0	0	0	0	0
MSM108-A	0	0	4	1	5	0	0	0	0	0	0	0
MSN191-2Y	0	1	0	0	1	0	0	0	0	0	0	0
MSQ086-3	0	0	5	3	8	0	0	0	0	0	0	0
MSQ131-A	0	0	11	10	21	0	0	0	0	0	0	0
MSR054-7	0	0	9	1	10	0	0	0	0	0	0	0

Table 29 (cont'd). External and internal defects of the USBP National Chip Processing Trial potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
MSR109-1	0	5	4	0	9	0	0	0	0	0	0	0
MSR157-1Y	0	4	8	0	12	0	0	0	0	0	0	0
MSR159-02	0	0	4	1	6	0	0	0	0	0	0	0
MSS297-3	0	1	5	0	6	0	0	0	0	0	0	0
MSS483-1	0	1	3	3	6	0	0	0	0	0	0	0
Beacon Chipper	0	0	3	1	4	0	0	0	0	0	0	0
Beacon Chipper	0	0	2	5	6	0	0	0	0	0	0	0
MSK061-4	0	0	3	1	4	0	0	0	0	0	0	0
MSK061-4	0	0	4	0	4	0	0	0	0	0	0	0
MSK409-1	0	0	2	0	2	0	0	0	0	0	0	0
MSK409-1	0	0	6	2	8	0	0	0	0	0	0	0
MSL007-B	0	0	7	0	7	0	0	0	0	0	0	0
MSL007-B	0	0	0	0	0	0	0	0	0	0	0	0
MSM246-B	0	0	8	1	9	0	0	0	0	0	0	0
MSM246-B	0	0	10	2	12	0	0	0	0	0	0	0
MSQ089-1	4	2	10	0	15	0	0	0	20	0	0	0
MSQ089-1	0	0	10	4	14	0	0	0	0	0	0	0
MSQ130-4	0	0	0	0	0	0	0	0	0	0	0	0
MSQ130-4	0	0	5	4	9	0	0	0	0	0	0	0
MSR058-1	0	0	1	0	1	0	0	0	0	0	0	0

Table 29 (cont'd). External and internal defects of the USBP National Chip Processing Trial potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
MSR058-1	0	0	2	1	4	0	0	0	0	0	0	0
MSR127-2	1	2	10	0	13	0	0	0	0	0	0	0
MSR127-2	0	0	4	2	6	0	0	0	0	0	0	0
MSR128-4Y	0	0	2	1	4	0	0	0	0	0	0	0
MSR128-4Y	0	0	3	0	3	0	0	0	0	0	0	0
MSR148-4	0	0	2	1	3	0	0	0	0	0	0	0
MSR148-4	0	0	2	0	2	0	0	0	0	0	0	0
MSR169-8Y	0	0	1	2	3	0	0	0	0	0	0	0
MSR169-8Y	md	md	md	md	md	md	md	md	md	md	md	md
MSS165-2Y	0	1	19	0	20	0	0	0	0	0	0	0
MSS165-2Y	md	md	md	md	md	md	md	md	md	md	md	md
ND060838C-3	0	0	2	1	3	0	0	0	0	0	0	0
ND060838C-5	0	0	5	0	5	0	0	0	0	0	0	0
ND060839C-7	0	0	0	0	0	0	0	0	0	0	0	0
ND060847CB-1	0	0	0	0	0	0	0	0	40	0	0	0
ND071031B-2Y	0	1	17	0	18	0	0	0	0	0	0	0
ND071155CB-1	0	0	9	0	9	0	0	0	0	0	0	0
ND071184B-2	0	3	10	4	17	0	0	0	0	0	0	0
ND071215CB-1	1	0	7	0	8	0	0	0	0	0	0	0
ND071280B-11	1	0	2	0	3	0	0	0	0	0	0	0

Table 29 (cont'd). External and internal defects of the USPB National Chip Processing Trial potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
ND071280B-9	0	5	2	0	8	0	0	0	0	0	0	0
ND7381B-17	0	0	12	0	12	0	0	0	0	0	0	0
ND7550c-1	1	0	2	6	9	0	0	0	0	0	0	0
ND7799c-1	1	2	2	0	5	0	0	0	0	0	0	0
ND7799c-1	0	0	3	0	3	0	0	0	0	0	0	0
AOTX95295-1W	2	0	1	0	3	0	0	0	0	0	0	0
COTX02377-1W	0	3	17	5	25	0	0	0	0	0	0	0
COTX03270-1W	0	0	1	0	1	0	0	0	0	0	0	0
NDTX059997-2W	0	0	0	1	1	0	0	0	0	0	0	0
NDTX059997-6W	0	4	3	6	13	0	0	0	0	0	0	0
TX03196-1W	0	0	3	0	3	25	0	0	0	0	0	0
ATTX03474-1W	4	0	3	0	8	0	0	0	0	0	0	0
ATTX03474-3W	0	0	4	8	13	0	0	0	0	0	0	0
ATTX03475-2W	0	0	2	0	2	0	0	0	0	0	0	0
ATTX03475-6W	0	0	0	0	0	0	0	0	0	0	0	0
ATTX03476-2W	0	0	2	0	2	0	0	0	0	0	0	0
AF4139-1	0	0	0	0	0	0	0	0	0	0	0	0
AF4147-1	0	0	1	1	3	0	0	0	0	0	0	0
AF4240-3	3	0	2	0	5	0	0	0	20	0	0	0
AF4254-2	0	2	2	2	6	0	0	0	0	0	0	0

Table 29 (cont'd). External and internal defects of the USBP National Chip Processing Trial potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
AF4363-5	1	0	2	6	9	0	0	0	0	0	0	0
AF4125-1	0	0	2	2	4	0	0	0	0	0	0	0
AF4130-3	0	0	1	1	1	0	0	0	0	0	0	0
AF4130-7	0	0	2	2	4	0	0	0	0	0	0	0
AF4145-1	0	0	6	3	9	0	0	0	0	0	0	0
AF4222-4	0	0	3	4	7	0	0	0	0	0	0	0
AF4227-4	1	0	4	3	8	0	0	0	0	0	0	0
AF4372-2	0	0	2	2	4	0	0	0	0	0	0	0
AF4386-16	1	0	1	0	2	0	0	0	0	0	0	0
AF4421-2	0	0	2	2	4	0	0	0	0	0	0	0
AF4421-4	0	0	0	1	2	0	0	0	0	0	0	0
AF4423-5	0	4	0	1	5	0	0	0	0	0	0	0
AF4437-1	2	0	5	4	10	0	0	0	0	0	0	0
AF4441-9	0	1	0	1	3	0	0	0	0	0	0	0
AF4442-1	0	0	4	0	4	0	0	0	0	0	0	0
AF4442-4	0	0	4	1	6	0	0	0	0	0	0	0
AF4458-2	0	0	0	0	0	0	0	0	0	0	0	0
AF4463-7	0	0	1	8	9	0	0	0	0	0	0	0
AF4463-8	0	0	2	5	7	0	0	0	0	0	0	0
AF4518-1	0	0	1	2	3	0	0	0	0	0	0	0

Table 29 (cont'd). External and internal defects of the USBP National Chip Processing Trial potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
AF4521-1	0	0	2	5	7	0	0	0	0	0	0	0
AF4526-2	1	0	7	2	11	0	0	0	0	0	0	0
AF4551-1	0	0	1	0	1	0	0	0	0	0	0	0
AF4552-4	0	0	0	0	0	0	0	0	0	0	0	0
AF4552-5	0	3	1	1	5	0	0	0	0	0	0	0
AF4561-1	0	0	8	4	12	0	0	0	0	0	0	0
AF4573-2	0	0	4	7	11	0	0	0	0	0	0	0
AF4592-1	0	0	5	0	5	0	0	0	0	0	0	0
AF4640-1	2	0	0	4	6	0	0	0	20	0	0	0
AF4648-2	1	0	7	6	14	0	0	0	0	0	0	0
AF4709-2	1	1	3	2	7	0	0	0	0	0	0	0
AF4157-6	0	0	0	1	1	0	0	0	0	0	0	0
AF4157-6	0	0	5	0	5	0	0	0	0	0	0	0
B-166	0	2	4	1	7	0	0	0	0	0	0	0
B-258	0	0	0	1	2	0	0	0	0	0	0	0
B-70	2	0	3	0	5	0	0	0	0	0	0	0
A-32	0	0	2	2	4	0	0	0	0	0	0	0
A-32	0	0	8	1	9	0	0	0	0	0	0	0
C-172	0	0	4	0	4	0	0	0	0	0	0	0
C-27	0	0	2	0	2	0	0	0	0	0	0	0

Table 29 (cont'd). External and internal defects of the USBP National Chip Processing Trial potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
W2978-3	0	0	2	4	6	0	0	0	0	0	0	0
W4980-1	0	0	4	0	4	0	0	0	0	0	0	0
W5955-1	0	0	4	2	6	0	0	0	0	0	0	0
W6609-3	0	0	8	3	11	0	0	0	0	0	0	0
W8639-3	0	0	0	3	3	20	0	0	0	0	0	0
B-19	0	6	6	0	12	0	0	0	0	0	0	0
B-27	0	0	4	2	7	0	0	0	0	0	0	0
B-56	0	0	8	3	11	0	0	0	0	0	0	0
B-89	0	0	3	1	4	0	0	0	0	0	0	0
A-67	0	0	10	1	11	0	0	0	0	0	0	0
Atlantic	0	0	6	3	10	0	0	0	0	0	0	0
Atlantic	0	0	8	0	8	0	0	0	0	0	0	0
B-139	0	0	3	3	6	0	0	0	0	0	0	0
B-153	0	0	4	0	4	0	0	0	0	0	0	0
B-163	0	0	0	0	0	0	0	0	0	0	0	0
B-184	0	0	0	0	0	0	0	0	0	0	0	0
B-190	0	0	8	0	8	0	0	0	0	0	0	0
B-191	0	0	8	1	9	0	0	0	20	0	0	0
B-212	0	0	1	0	1	0	0	0	0	0	0	0
B-26	1	0	4	2	7	0	0	0	0	0	0	0

Table 29 (cont'd). External and internal defects of the USBP National Chip Processing Trial potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
B-227	0	2	3	0	5	0	0	0	0	0	0	0
B-248	0	0	19	0	19	0	0	0	0	0	0	0
B-282	1	0	5	0	7	0	0	0	0	0	0	0
B-290	0	0	0	1	1	0	0	0	0	0	0	0
C-10	0	0	19	0	20	0	0	0	0	0	0	0
C-59	0	0	19	3	22	0	0	0	0	0	0	0
C-112	0	0	6	6	11	0	0	0	0	0	0	0
C-118	0	0	28	0	28	0	0	0	0	0	0	0
C-122	1	0	5	2	8	0	0	0	0	0	0	0
C-156	0	0	7	11	18	0	0	0	0	0	0	0
W5015-5	0	0	12	1	12	0	0	0	0	0	0	0
W8436-1	0	0	3	6	9	0	0	0	0	0	0	0
W8822-1	0	0	21	0	21	0	0	0	0	0	0	0
W8822-2	0	0	20	0	20	0	0	0	0	0	0	0
W8822-3	0	0	17	0	17	0	0	0	0	0	0	0
W8832-1	0	0	12	1	13	0	0	0	0	0	0	0
W8848-3	0	0	9	0	9	0	0	0	0	0	0	0
W8850-1	3	0	3	2	7	0	0	0	0	0	0	0
W8857-1	2	2	1	7	11	0	0	0	20	0	0	0
W8867-5	0	0	0	0	0	0	0	0	0	0	0	0

Table 29 (cont'd). External and internal defects of the USBP National Chip Processing Trial potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
W8867-7	0	0	4	0	4	0	0	0	0	0	0	0
W8875-2	0	0	3	6	9	0	0	0	0	0	0	0
W8877-3	0	0	16	1	17	0	0	0	0	0	0	0
W9632-1	0	0	5	0	5	0	0	0	0	0	0	0
W9636-5	3	0	3	11	17	0	0	0	0	0	0	0
W9652-1	0	0	8	0	8	0	0	0	0	0	0	0
W9682-1	0	0	3	52	55	0	0	0	0	0	0	0
W9684-2	0	4	2	2	7	0	0	0	0	0	0	0
W9696-1	0	2	4	2	9	0	0	0	0	0	0	0
W9704-2	0	0	2	4	6	0	0	0	0	0	0	0
W9705-1	1	0	11	12	24	0	0	0	0	0	0	0
W9705-4	1	0	5	0	6	0	0	0	0	0	0	0
W9707-1	0	0	12	1	13	0	0	0	0	0	0	0
W2324-1	0	0	4	4	8	0	0	0	0	0	0	0
W2324-1	0	0	13	4	17	0	0	0	0	0	0	0
W8539-2	1	0	2	0	3	0	0	0	0	0	0	0
W8539-2	0	0	12	0	12	0	0	0	0	0	0	0
W8603-1	0	0	3	2	6	0	0	0	0	0	0	0
W8603-1	0	1	4	0	5	0	0	0	0	0	0	0
W8615-5	0	0	6	2	8	0	0	0	0	0	0	0

Table 29 (cont'd). External and internal defects of the USPB National Chip Processing Trial potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
										L	M	H
W8615-5	0	0	2	0	2	0	0	0	0	0	0	0
A00206-1C	0	0	5	4	9	0	0	0	0	0	0	0
A03449-2C	0	8	4	3	15	0	0	0	0	0	0	0
A05158-2C	5	16	1	23	45	md	md	md	md	md	md	md
A05158-3C	0	2	3	2	8	0	0	0	0	0	0	0
A01143-3C	0	0	2	4	6	0	0	0	0	0	0	0
A01143-3C	0	0	1	0	1	0	0	0	0	0	0	0
B2628-10	0	0	6	2	8	0	0	0	0	0	0	0
BNC182-5	0	0	10	0	10	0	0	0	0	0	0	0
B1992-106	0	0	0	3	3	0	0	0	0	0	0	0
B1992-106	0	0	4	1	5	0	0	0	0	0	0	0
B2727-2	0	0	5	0	5	0	0	0	0	0	0	0
B2727-2	0	0	5	3	7	0	0	0	0	0	0	0
B2735-2	0	0	17	0	17	0	0	0	0	0	0	0
B2735-2	0	0	7	0	7	0	0	0	0	0	0	0
BNC202-7	0	0	14	0	14	0	0	0	0	0	0	0
BNC202-7	0	0	49	0	49	0	0	0	0	0	0	0

¹Percent of Total Yield. Total culls include the sum of growth cracks, misshapen, sunburned and rotten/misc.

²Percent tubers; HH, hollow heart; BR, brown rot; CRS, corky ring spot; IHN, internal heat necrosis.

Brown Center: L = Light, M = Moderate, H = Heavy

CHAPTER 10. USDA EARLY-LINE VARIETY TRIAL, 2011

General Comments

Potato clones in this trial are new to the variety evaluation program. Because of limited seed availability, this trial is only 1 replication planted with 24 hills. This is a mixed trial with round white, red, and russet varieties.

Planting Information

Planting Site	PWACS - Hastings Farm, Hastings, FL
Planting Date	January 28, 2011
Vine Kill Dates	N/A
Harvest Dates	May 9, 2011
Season Length	102 days planting to harvest
Fertilizer Program	pre-plant, 50-100-150 lb/A; 1 st side-dress, 75-0-125 lb/A; 2 nd side-dress 75-0-0 lb/A
Irrigation Program	seepage

Experimental Design

Number of Varieties	7 (Standard: Atlantic)
Number of Clones	13
Within Row Spacing	8 in (20 cm)
Between Row Spacing	40 in (102 cm)
Replications and Design	1 non-replicated, single row, 24 hill plot
Plot Size	16 ft (4.8 m)

Production Statistics

Early Vigor Ratings	40 days after planting
Highest Total Yield	Atlantic (400 cwt or 44.8 T/ha)
Highest Marketable Yield	Fabula and B2878-30 (342 cwt or 38.3 T/ha)
Best Appearance Rating	Fabula, Harley Blackwell, and AF0338-17 (7.0, good)

Table 30. Production facts for USDA Early Line potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
Atlantic	MFX	400	326	100	2	12	47	27	13	0	86	40	1.085
Adora	HZPC	266	145	44	4	17	66	13	0	0	79	13	1.057
Fabula	MFX	375	342	105	0	3	54	43	0	0	97	43	1.066
Goldrush	MFX	341	272	83	4	14	80	2	0	0	82	2	1.066
Harley Blackwell	MFX	349	306	94	2	8	53	25	13	0	91	38	1.072
LaChipper	MFX	357	307	94	2	8	52	20	19	0	90	38	1.070
Yukon Gold	MFX	283	239	73	2	11	60	27	0	0	87	27	1.072
AF0338-17	Univ. of Maine	335	276	85	3	13	79	5	0	0	84	5	1.076
B2877-313	USDA	179	102	31	12	30	58	0	0	0	58	0	1.072
B2878-9	USDA	224	156	48	7	22	71	0	0	0	71	0	1.081
B2878-30	USDA	386	342	105	1	10	68	21	0	0	89	21	1.067
B2878-53	USDA	343	299	92	2	9	86	4	0	0	89	4	1.072
B2878-68	USDA	252	199	61	4	16	80	0	0	0	80	0	1.076
B2878-91	USDA	254	168	52	8	25	63	5	0	0	67	5	1.072
B2878-119	USDA	280	251	77	1	8	62	28	0	0	90	28	1.062
B2878-200	USDA	328	262	80	3	15	80	1	0	0	82	1	1.067
B2879-82	USDA	320	217	66	9	23	68	0	0	0	68	0	1.064
B2879-163	USDA	264	208	64	2	16	82	0	0	0	82	0	1.061
B2880-63	USDA	346	247	76	4	23	66	7	0	0	73	7	1.061
B2880-74	USDA	217	155	47	4	24	72	0	0	0	72	0	1.066

¹Marketable Yield: size classes A1 to A3.

²Size classes: C = 0.5 to 1.5", B = 1.5 to 1.88", A1 = 1.88 to 2.5", A2 = 2.5 to 3.25", A3 = 3.25 to 4", A4 = >4"

Table 31. Plant growth and tuber appearance of USDA Early Line potato selections.

Clone	Plant Growth Characteristics ¹				APP	Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity		
Atlantic	100	6	9	5	6	okay
Adora	83	6	8	2	5	crs
Fabula	79	4	7	5	7	crs
Goldrush	100	6	9	3	6	crs
Harley Blackwell	100	6	8	4	7	attractive
LaChipper	100	6	9-6	3	6	crs
Yukon Gold	100	6	8	2	6	okay
AF0338-17	100	6	8-5	3	7	attractive
B2877-313	100	5	7	3	5	low yield
B2878-9	100	5	8	3	6	okay
B2878-30	96	5	9-6	3	6	nice yield and size
B2878-53	79	5	8-7	6	6	okay
B2878-68	100	6	8	3	5	fair
B2878-91	100	7	8	2	5	low yield
B2878-119	92	6	8	4	6	okay
B2878-200	92	5	8	3	6	okay
B2879-82	100	7	9-6	3	6	bright tubers
B2879-163	92	6	8	3	6	bright tubers
B2880-63	100	6	9-6	3	6	crs
B2880-74	100	6	8	3	6	some crs

¹See rating system outlined in Table 1 (page 10).

²See rating system outlined in Table 2 (page 11).

Table 32. External and internal defects of USDA Early Line potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
Atlantic	1	3	2	0	6	0	0	0	0	10	0	0
Adora	5	0	1	26	31	0	0	40	0	0	0	0
Fabula	0	1	1	4	6	0	0	40	0	0	0	0
Goldrush	0	2	0	0	3	0	0	40	5	5	0	0
Harley Blackwell	0	1	0	2	3	0	0	5	0	0	0	0
LaChipper	0	0	0	4	4	0	0	40	0	0	0	0
Yukon Gold	0	0	1	2	3	0	0	5	0	0	0	0
AF0338-17	0	1	0	1	2	0	0	0	0	0	0	0
B2877-313	0	2	0	0	2	0	0	0	0	0	0	0
B2878-9	0	1	0	0	1	0	0	5	5	0	0	0
B2878-30	0	0	0	0	0	0	0	0	5	0	0	0
B2878-53	0	1	0	1	2	0	0	0	5	0	0	0
B2878-68	0	0	1	0	1	0	0	0	0	0	0	0
B2878-91	0	1	0	0	1	0	0	0	0	0	0	0
B2878-119	0	0	0	0	0	0	0	0	0	0	0	0
B2878-200	0	0	0	2	2	0	0	0	0	0	0	0
B2879-82	0	1	0	0	1	0	0	0	0	0	0	0
B2879-163	1	0	0	3	4	0	0	0	0	0	0	0
B2880-63	0	0	1	0	2	0	0	15	0	0	0	0
B2880-74	0	1	0	0	1	0	0	10	0	0	0	0

¹Percent of Total Yield. Total culls include the sum of growth cracks, misshapen, sunburned and rotten/misc.

²Percent tubers; HH, hollow heart; BR, brown rot; CRS, corky ring spot; IHN, internal heat necrosis.

Brown Center: L = Light, M = Moderate, H = Heavy

CHAPTER 11. CHIPPING POTATO VARIETY TRIAL, 2011

General Comments

A goal of the Chipping Potato Variety trial is to identify a short-season chip processing potato variety with better production and quality characteristics than Atlantic, the current standard. Potatoes were fried and chip scores are noted in table 28.

Planting Information

Planting Site	PWACS - Hastings Farm, Hastings, FL
Planting Date	January 28, 2011
Harvest Date	May 10, 2011
Season Length	103 days planting to harvest
Fertilizer Program	pre-plant, 50-100-150 lb/A; 1 st side-dress, 75-0-125 lb/A; 2 nd side-dress, 75-0-0 lb/A
Irrigation Program	seepage

Experimental Design

Number of Varieties	5 (Standard: Atlantic)
Number of Clones	25
Within Row Spacing	8 in (20 cm)
Between Row Spacing	40 in (102 cm)
Replications and Design	4 replications, Randomized Complete Block design
Plot Size	16 ft (4.8 m)

Production Statistics

Early Vigor Ratings	40 days after planting
Highest Total Yield	B2728-5 (410 cwt or 45.9 T/ha)
Highest Marketable Yield	B2728-5 (342 cwt or 38.3 T/ha)
Highest Specific Gravity	B2815-8 (1.087)

Table 33. Production facts for Chipping potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
Atlantic	MFX	321	279	100	2	8	58	24	7	0	90	32	1.084
Beacon Chipper	MFX	305	265	95	2	7	69	19	2	0	90	21	1.079
Harley Blackwell	MFX	317	265	95	3	11	60	22	3	0	86	25	1.073
Marcy	MFX	308	270	97	2	10	78	10	0	0	88	10	1.069
Snowden	MFX	291	228	82	2	17	77	3	0	0	80	3	1.070
AF0338-17	Univ. of Maine	363	302	108	2	12	78	8	0	0	86	8	1.077
B1992-106	USDA	341	294	106	2	8	52	31	7	0	91	38	1.077
B2724-8	USDA	249	177	64	5	17	62	16	1	0	79	17	1.075
B2727-1	USDA	344	296	106	2	10	59	26	3	0	88	29	1.070
B2727-2	USDA	336	297	107	1	8	69	20	2	0	91	22	1.082
B2728-2	USDA	284	235	84	1	12	84	2	0	0	86	2	1.080
B2728-5	USDA	410	342	123	2	7	62	17	12	0	92	29	1.074
B2731-11	USDA	277	253	91	2	6	56	34	2	0	92	36	1.070
B2735-10	USDA	399	309	111	2	9	54	29	5	0	89	35	1.078
B2737-2	USDA	352	255	91	6	19	54	20	1	0	75	22	1.076
B2738-3	USDA	344	291	104	3	11	71	14	1	0	86	15	1.066
B2749-11	USDA	358	240	86	5	24	71	0	0	0	71	0	1.075
B2753-1	USDA	234	120	43	9	35	56	1	0	0	56	1	1.076
BNC177-5	USDA	395	312	112	2	16	70	11	0	0	82	11	1.076
BNC182-5	USDA	399	322	116	3	15	65	17	0	0	82	17	1.077

Table 33 (cont'd). Production facts for Chipping potato selections.

Clone		Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
BNC202-3	USDA	328	238	86	4	16	64	14	2	0	80	16	1.081
BNC202-9	USDA	312	232	83	3	14	56	23	4	0	83	27	1.077
B2814-8	USDA	305	234	84	3	15	69	13	1	0	82	14	1.070
B2814-14	USDA	365	304	109	3	8	42	34	13	0	89	47	1.068
B2815-7	USDA	315	104	37	11	41	46	2	0	0	48	2	1.077
B2815-8	USDA	375	189	68	6	31	64	0	0	0	64	0	1.087
B2817-9	USDA	357	253	91	5	20	66	9	0	0	75	9	1.076
B2817-16	USDA	221	151	54	4	25	72	0	0	0	72	0	1.075
B2820-3	USDA	315	233	83	4	21	68	7	0	0	75	7	1.062
B2821-1	USDA	302	241	87	4	15	67	14	0	0	80	14	1.083
<i>MSD</i> ³		121	123		3	11	23	22	14	ns	13	24	0.008
<i>P Value</i>		<.0001	<.0001		<.0001	<.0001	<.0001	<.0001	0.0166	*	<.0001	<.0001	<.0001

¹Marketable Yield: size classes A1 to A3.

²Size classes: C = 0.5 to 1.5", B = 1.5 to 1.88", A1 = 1.88 to 2.5", A2 = 2.5 to 3.25", A3 = 3.25 to 4", A4 = >4"

³Means separated within columns by Tukey's Studentized Range (HSD) Test.

Table 34. Plant growth and tuber characteristics of Chipping potato selections.

Clone	Plant Growth Characteristics ¹				Tuber Characteristics ²						Chip Rating ³ 1-5
	% Stand	Early Vigor	Vine Type	Vine Maturity	IFC	SC	ST	TS	ED	APP	
Atlantic	98	6.3	8.3	3.5	2.0	6.0	5.0	3.0	5.0	6.0	3 +
Beacon Chipper	96	6.0	8	4.5	1.0	6.0	5.0	3.0	5.0	5.0	5
Harley Blackwell	100	6.0	8	3.3	1.0	6.0	5.0	2.0	5.0	7.0	3
Marcy	94	6.0	8	3.8	1.0	5.0	5.0	4.0	4.0	6.0	2
Snowden	100	6.0	9	3.3	1.0	6.0	5.0	3.0	4.0	6.0	3
AF0338-17	100	6.8	8-5	3.8	1.0	6.0	5.0	3.0	6.0	6.0	3
B1992-106	95	6.0	8.3	5.0	2.0	6.0	5.0	4.0	6.0	7.0	2
B2724-8	75	6.5	8-7	2.5	1.0	6.0	5.0	3.0	4.0	6.0	3
B2727-1	99	6.0	8-5	3.5	2.0	6.0	5.0	3.0	4.0	6.0	4
B2727-2	99	6.0	8	4.3	2.0	7.0	5.0	4.0	6.0	6.0	1
B2728-2	100	5.3	8.3	5.3	2.0	7.0	6.0	3.0	6.0	6.0	4
B2728-5	99	6.0	8-5	5.8	2.0	6.0	5.0	4.0	5.0	6.0	4
B2731-11	99	6.0	8.3	3.0	2.0	6.0	5.0	2.0	5.0	6.0	5
B2735-10	99	6.0	8.7	4.3	2.0	6.0	5.0	2.0	6.0	6.0	5
B2737-2	98	6.8	9	5.8	1.0	7.0	6.0	2.0	5.0	7.0	3
B2738-3	95	7.3	8-5	3.8	4.0	7.0	6.0	3.0	4.0	6.0	3
B2749-11	98	6.5	6-9	3.0	1.0	7.0	6.0	4.0	6.0	5.0	4
B2753-1	99	6.5	8.3	2.3	4.0	7.0	7.0	3.0	4.0	6.0	5
BNC177-5	97	6.5	8-7	7.0	2.0	6.0	5.0	3.0	5.0	6.0	2
BNC182-5	99	6.8	9	4.5	1.0	6.0	5.0	2.0	5.0	6.0	4

Table 34 (cont'd). Plant growth and tuber characteristics of Chipping potato selections.

Clone	Plant Growth Characteristics ¹				Tuber Characteristics ²						Chip Rating ³ 1-5
	% Stand	Early Vigor	Vine Type	Vine Maturity	IFC	SC	ST	TS	ED	APP	
BNC202-3	97	6.5	9-6	3.0	3.0	6.0	5.0	3.0	5.0	5.0	2
BNC202-9	98	6.8	8	4.8	4.0	6.0	5.0	3.0	7.0	5.0	3
B2814-8	96	6.5	8	4.5	2.0	6.0	5.0	3.0	4.0	5.0	3
B2814-14	89	7.0	9-6	2.8	3.0	6.0	5.0	3.0	5.0	6.0	2
B2815-7	98	6.5	8-7	4.0	2.0	7.0	6.0	4.0	4.0	5.0	3
B2815-8	99	7.0	7-4	5.5	1.0	7.0	5.0	3.0	4.0	5.0	2
B2817-9	98	7.5	8-5	1.8	2.0	7.0	6.0	3.0	3.0	6.0	4
B2817-16	99	6.3	7.5	1.3	2.0	7.0	6.0	3.0	5.0	6.0	4
B2820-3	99	7.0	8-5	1.0	2.0	7.0	7.0	3.0	3.0	7.0	1
B2821-1	100	6.8	8.5	3.5	1.0	6.0	5.0	2.0	5.0	7.0	5

¹See rating system outlined in Table 1 (page 10).

²See rating system outlined in Table 2 (page 11).

³Chips fried by Wise Snacks Inc, Berwick, PA. 1 = outstanding, no blemishes and color variations; 2 = very good, minimal blemishes and color variations; 3 = good, acceptable blemishes and color variations; 4 = marginal acceptance, high levels of blemishes and color variations; 5 = not acceptable, high blemish and color variations.

Table 35. External and internal defects of Chipping potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
Atlantic	1	0	0	2	4	1	0	3	4	1	0	0
Beacon Chipper	0	0	1	3	4	0	0	16	1	0	0	0
Harley Blackwell	1	0	0	2	3	0	0	11	0	0	0	0
Marcy	0	0	0	0	0	0	0	29	3	3	1	0
Snowden	0	0	2	1	3	0	0	4	0	1	0	0
AF0338-17	0	0	1	2	3	0	0	1	0	0	0	0
B1992-106	0	0	0	5	5	0	0	10	5	0	0	0
B2724-8	0	1	6	2	9	0	0	4	14	0	0	0
B2727-1	0	0	1	1	2	0	0	15	3	0	0	0
B2727-2	0	0	1	0	2	5	0	0	0	0	0	0
B2728-2	0	0	3	1	4	0	0	8	13	1	0	0
B2728-5	4	0	4	1	9	0	0	28	4	0	0	0
B2731-11	0	0	0	1	1	0	0	0	3	0	0	0
B2735-10	6	0	3	3	12	1	0	26	5	1	0	0
B2737-2	1	0	2	1	4	0	0	0	0	0	0	0
B2738-3	0	1	1	0	2	0	0	0	1	0	1	0
B2749-11	1	3	1	1	6	0	0	5	7	0	0	0
B2753-1	0	0	2	7	9	0	0	33	1	0	0	0
BNC177-5	1	0	0	1	2	0	0	0	0	0	0	0
BNC182-5	0	0	2	2	4	0	0	23	8	3	0	0

Table 35 (cont'd). External and internal defects of Chipping potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
BNC202-3	1	1	3	5	9	0	0	9	4	0	0	0
BNC202-9	4	1	3	3	10	0	0	4	5	0	0	0
B2814-8	0	0	1	5	6	0	0	6	1	0	0	0
B2814-14	0	0	2	5	7	0	0	0	0	0	0	0
B2815-7	0	0	1	33	34	0	0	10	5	0	0	1
B2815-8	0	1	1	20	22	0	0	10	0	0	0	3
B2817-9	0	2	3	1	6	0	0	11	6	0	0	0
B2817-16	0	1	2	2	5	0	0	11	1	0	0	0
B2820-3	1	0	1	2	3	0	0	0	0	0	0	0
B2821-1	0	0	1	0	1	0	0	0	0	0	0	0
<i>MSD</i> ³	5	2	4	15	16	ns	ns	28	13	ns	ns	ns
<i>P Value</i>	0.0013	<.0001	0.0003	<.0001	<.0001	0.5139	*	<.0001	0.0028	0.3460	0.5404	0.4798

¹Percent of Total Yield. Total culls include the sum of growth cracks, misshapen, sunburned and rotten/misc.

²Percent tubers; HH, hollow heart; BR, brown rot; CRS, corky ring spot; IHN, internal heat necrosis.

Brown Center: L = Light, M = Moderate, H = Heavy

³Means separated within columns by Tukey's Studentized Range (HSD) Test.

CHAPTER 12. USPB/SNACK FOOD ASSOCIATION POTATO VARIETY TRIAL, 2011

General Comments

A goal of the Snack Food Association trial is to identify a short-season chip processing potato variety with wide adaptability and better production and quality characteristics than Atlantic, the current standard. Potatoes were fried and chip scores are noted in Table 31.

Planting Information

Planting Site	PWACS - Hastings Farm, Hastings, FL
Planting Date	February 1, 2011
Harvest Date	May 16, 2011
Season Length	105 days planting to harvest
Fertilizer Program	pre-plant, 50-100-150 lb/A; 1 st side-dress, 75-0-125 lb/A; 2 nd side-dress, 75-0-0 lb/A
Irrigation Program	seepage

Experimental Design

Number of Varieties	2 (Standard: Atlantic)
Number of Clones	12
Within Row Spacing	Approx. 8 in (20.3 cm)
Between Row Spacing	40 in (102 cm)
Replications and Design	4 replications, single row, non-Randomized Design
Plot Size	Single 250 ft row (75 m) planted for each variety. Four, 20 ft (6.0 m) plots harvested from each row to determine production and quality facts

Production Statistics

Early Vigor Ratings	N/A
Highest Total Yield	NY140 (477 cwt or 53.4 T/ha)
Highest Marketable Yield	W4980-1 (356 cwt or 39.8 T/ha)
Highest Specific Gravity	ND8305-1 and W2310-3 (1.089)

Table 36. Production facts for USPB/SFA potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
Atlantic	MFX	407	303	100	3	17	46	19	15	0	80	34	1.080
Snowden	MFX	357	307	101	1	6	58	20	14	0	93	34	1.076
AF0338-17	Univ. of Maine	381	291	96	2	15	72	11	0	0	83	11	1.079
CO00188-4W	CSU	297	138	46	9	34	57	0	0	0	57	0	1.071
CO00197-3W	CSU	402	228	75	6	31	60	2	0	0	63	2	1.079
MSL292-A	MSU	378	275	91	3	20	56	15	6	0	77	21	1.075
MSQ086-3	MSU	451	260	86	9	28	59	3	0	0	62	4	1.075
NY140	Cornell	477	327	108	5	22	64	9	1	0	73	9	1.074
ND7519-1	NDS	406	296	98	4	16	65	13	2	0	80	15	1.080
ND8305-1	NDS	345	233	77	3	27	69	1	0	0	70	1	1.089
ND8331cb-2	NDS	243	113	37	9	43	49	0	0	0	49	0	1.079
W2310-3	Rhineland	301	239	79	2	14	79	5	0	0	84	5	1.089
W2978-3	Rhineland	423	336	111	5	13	68	10	4	0	82	14	1.072
W4980-1	Rhineland	437	356	118	1	8	66	21	3	0	91	24	1.074
Average		379	264										1.078

¹Marketable Yield: size classes A1 to A3.

²Size classes: C = 0.5 to 1.5" , B = 1.5 to 1.88", A1 = 1.88 to 2.5", A2 = 2.5 to 3.25", A3 = 3.25 to 4", A4 = >4"

Table 37. Plant growth, tuber characteristics and chip ratings of USPB/SFA potato selections.

Clone	Plant Growth Characteristics ¹				Tuber Characteristics ²						Chip Rating	Defects Description
	% Stand	Early Vigor	Vine Type	Vine Maturity	IFC	SC	ST	TS	ED	APP	Hunter Lab ³	
Atlantic	83	na	9	3	2	6	5	3	5	7	59.4	
Snowden	72	na	8	4.5	2	6	5	3	4	7	60.3	internal discoloration/stem-end brown
AF0338-17	82	na	8-5	5.5	1	6	5	3	4	7	60.8	stem-end brown
CO00188-4W	73	na	8-5	1	1	7	5	3	5	6	59.6	internal discoloration (light)
CO00197-3W	83	na	8-5	1	2	7	6	4	5	5	61.2	stem-end brown
MSL292-A	89	na	8	4.5	1	6	5	3	5	6	59.4	external discoloration
MSQ086-3	87	na	7-4	5.5	1	7	5	3	5	6	61.9	internal discoloration/stem-end brown
NY140	90	na	9-6	3.5	1	7	6	3	5	7	61.3	stem-end brown
ND7519-1	78	na	8	2.5	1	6	6	4	6	7	62.0	
ND8305-1	57	na	8	7	2	7	6	4	3	5	61.2	external discoloration??(dark)
ND8331cb-2	na	na	na	8	1	6	5	3	3	5	60.8	
W2310-3	76	na	9	4.5	2	6	5	4	6	6	61.8	
W2978-3	67	na	8-7	5	2	7	6	4	5	7	62.9	external discoloration (rot??)
W4980-1	76	na	9-6	3.5	2	6	5	3	3	7	60.1	internal discoloration (light)

¹See rating system outlined in Table 1 (page 10).

²See rating system outlined in Table 2 (page 11).

³Chips fried by Utz Quality Foods, Inc. Hanover, PA

Table 38. External and internal defects of USDA/SFA potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
Atlantic	1	0	4	2	7	6	0	0	5	4	1	0
Snowden	0	0	3	3	7	1	0	0	0	0	3	1
AF0338-17	2	0	4	3	9	1	0	0	3	1	0	0
CO00188-4W	2	2	9	5	18	0	0	0	0	3	0	0
CO00197-3W	0	1	5	3	10	0	0	0	0	4	3	0
MSL292-A	0	0	3	3	6	0	0	0	0	0	0	1
MSQ086-3	3	1	3	2	9	0	0	0	0	1	0	0
NY140	0	0	4	1	6	1	0	3	0	0	0	0
ND7519-1	1	2	5	2	9	0	0	1	0	6	1	4
ND8305-1	0	0	2	2	4	0	0	3	0	9	0	0
ND8331cb-2	0	2	2	1	4	0	0	0	0	1	0	0
W2310-3	0	1	4	1	6	0	0	0	0	0	0	0
W2978-3	0	1	1	1	3	0	0	0	0	3	0	0
W4980-1	1	0	9	0	10	0	0	0	51	3	0	0

¹Percent of Total Yield. Total culls include the sum of growth cracks, misshapen, sunburned and rotten/misc.

²Percent tubers; HH, hollow heart; BR, brown rot; CRS, corky ring spot; IHN, internal heat necrosis.

Brown Center: L = Light, M = Moderate, H = Heavy

CHAPTER 13. NE1031 REGIONAL PROJECT POTATO VARIETY TRIAL, 2011

General Comments

The NE1031 Regional Project is a multi-state potato evaluation program developed to identify new potato clones. The production, adaptation, and performance stability of new potato clones is documented under a wide range of geographic, climatic, soil, and cultural conditions. The University of Maine produces and supplies all cooperators with similar seed.

Planting Information

Planting Site	PWACS - Hastings Farm, Hastings, FL
Planting Date	January 24, 2011
Vine Kill Dates	April 22, 2011
Harvest Date	May 9, 2011
Season Length	89 days planting to vine kill; 106 days planting to harvest
Fertilizer Program	pre-plant, 50-100-150 lb/A; 1 st side-dress, 75-0-125 lb/A; 2 nd side-dress, 75-0-0 lb/A
Irrigation Program	seepage

Experimental Design

Number of Varieties	15 (Standard: Atlantic)
Number of Clones	13
Within Row Spacing	8 in (20 cm)
Between Row Spacing	40 in (102 cm)
Replications and Design	4 replications, Randomized Complete Block design
Plot Size	16 ft (4.8 m)

Production Statistics

Early Vigor Ratings	44 days after planting
Highest Total Yield	NY144 (430 cwt/acre or 48.1 T/ha)
Highest Marketable Yield	B1992-106 and BNC182-5 (333 cwt/acre or 37.3 T/ha)
Highest Specific Gravity	BNC202-7 (1.075)
Best Overall Appearance	Classic Russet, Snowden, Superior, AF0338-17, BNC202-7 (7.0, good)

Table 39. Production facts for NE1031 potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
Atlantic	NE	364	304	100	3	9	61	23	5	0	89	28	1.071
Alpine Russet	NE	225	139	46	4	27	69	0	0	0	69	0	1.057
Chieftain	NE	341	275	90	3	12	70	15	0	0	85	15	1.057
Classic Russet	NE	328	268	88	2	12	79	8	0	0	86	8	1.061
Joma	NE	364	274	90	3	13	66	18	1	0	84	18	1.064
Katahdin	NE	290	197	65	4	23	72	1	0	0	73	1	1.063
Kennebec	NE	280	223	73	2	12	74	13	0	0	87	13	1.065
Modoc	NE	322	198	65	7	32	61	0	0	0	61	0	1.056
Premier Russet	NE	293	227	75	3	15	76	6	0	0	82	6	1.069
Red Sunset	NE	217	114	38	8	38	54	0	0	0	54	0	1.060
RioGrande Russet	NE	250	193	64	2	20	76	1	0	0	78	1	1.068
Snowden	NE	306	240	79	2	18	69	11	0	0	80	11	1.072
Superior	NE	267	205	67	3	18	79	0	0	0	79	0	1.069
Yukon Gem	NE	370	291	96	2	17	79	2	0	0	81	2	1.060
Yukon Gold	NE	299	246	81	1	10	74	15	0	0	89	15	1.066
AF0338-17	NE	352	295	97	2	11	73	14	0	0	87	14	1.069
AF2866-3	NE	318	266	88	3	13	81	4	0	0	85	4	1.056
AF3362-1	NE	253	177	58	2	23	75	0	0	0	75	0	1.060
AF4047-2	NE	314	279	92	2	6	67	21	3	0	91	24	1.064
B1992-106	NE	386	333	109	2	11	51	25	12	0	88	36	1.068

Table 39 (cont'd). Production facts for NE1031 potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
BNC182-5	NE	408	333	110	2	13	75	9	0	0	84	9	1.066
BNC202-7	NE	309	226	74	4	18	75	3	1	0	79	3	1.075
NY143	NE	295	199	66	5	23	68	4	0	0	72	4	1.060
NY144	NE	430	275	90	6	28	66	0	0	0	66	0	1.056
NY145	NE	269	145	48	7	39	54	0	0	0	54	0	1.073
NYB13-1	NE	357	230	76	6	31	63	0	0	0	63	0	1.055
NYE106-4	NE	330	245	80	4	20	69	7	0	0	76	7	1.072
NYE43-10	NE	377	227	75	6	34	60	0	0	0	60	0	1.055
<i>MSD</i> ³		87	99		4	18	28	18	7	ns	19	20	0.006
<i>P Value</i>		<.0001	<.0001		<.0001	<.0001	0.0007	<.0001	<.0001	*	<.0001	<.0001	<.0001

¹Marketable Yield: size classes A1 to A3.

²Size classes: C = 0.5 to 1.5", B = 1.5 to 1.88", A1 = 1.88 to 2.5", A2 = 2.5 to 3.25", A3 = 3.25 to 4", A4 = >4"

³Means separated within columns by Tukey's Studentized Range (HSD) Test.

Table 40. Plant growth and tuber characteristics of NE1031 potato selections.

Clone	Plant Growth Characteristics ¹				Tuber Characteristics ²						
	% Stand	Early Vigor	Vine Type	Vine Maturity	IFC	SC	ST	TS	ED	APP	Tuber Comments
Atlantic	100	6.5	9	7.0	2	6	5	3	5	6	decent tubers
Alpine Russet	93	5.3	7	9.0	1	6	5	4	4	5	too many shapes
Chieftain	99	5.5	8.5	7.5	1	3	6	3	3	5	pink skin color
Classic Russet	95	5.8	8	8.8	1	5	3	4	5	7	nice russet
Joma	99	5.0	9	8.5	1	7	6	4	5	6	flat tubers
Katahdin	100	6.0	8-5	6.5	1	7	6	4	5	6	okay
Kennebec	94	5.5	8.3	8.3	1	7	5	4	5	5	too many shapes
Modoc	96	6.8	8.3	6.0	1	2	6	3	5	6	nice skin color
Premier Russet	96	5.8	8	8.3	1	5	3	3	4	6	too round for russet
Red Sunset	98	6.3	5-8	5.3	1	2	7	3	6	6	nice skin color
RioGrande Russet	98	5.3	7.8	9.0	1	5	4	3	4	5	too many shapes
Snowden	100	6.3	8.8	6.5	1	6	5	3	4	7	attractive
Superior	100	6.3	8	7.3	1	7	5	3	4	7	attractive
Yukon Gem	95	6.8	8-5	6.0	3	7	7	4	6	6	flat tubers
Yukon Gold	99	6.0	7.8	6.8	4	7	7	3	5	6	okay
AF0338-17	98	6.3	8-5	6.8	1	6	5	3	5	7	attractive
AF2866-3	99	6.0	8	6.8	1	8	7	4	5	6	bright tubers
AF3362-1	93	6.3	7.3	6.0	1	5	3	7-8	3	6	large russet
AF4047-2	100	7.0	8-5	7.0	1	7	5	3	3	6	okay
B1992-106	98	6.3	9-6	8.0	1	6	5	3	5	6	okay

Table 40 (cont'd). Plant growth and tuber characteristics of NE1031 potato selections.

Clone	Plant Growth Characteristics ¹				Tuber Characteristics ²						
	% Stand	Early Vigor	Vine Type	Vine Maturity	IFC	SC	ST	TS	ED	APP	Tuber Comments
BNC182-5	98	6.5	9-6	8.0	1	7	5	3	4	6	okay
BNC202-7	99	6.8	9-6	5.8	4	6	5	3	5	7	attractive
NY143	99	6.3	8-5	6.5	1	7	6	3	4	6	okay
NY144	99	6.3	9-6	6.8	1	2	7	3	4	6	nice skin color
NY145	97	6.5	8-5	7.5	1	7	6	3	5	6	small tubers
NYB13-1	100	6.3	9-6	6.0	1	2	6	4	4	6	nice skin color
NYE106-4	100	6.0	8-5	7.5	2	6	5	2	5	6	okay
NYE43-10	98	7.3	8-5	6.8	1	8	6	3	5	6	bright tubers

¹See rating system outlined in Table 1 (page 10).

²See rating system outlined in Table 2 (page 11).

Table 41. External and internal defects of NE1031 potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
Atlantic	1	0	4	1	6	8	0	0	0	6	0	0
Alpine Russet	1	4	1	3	9	0	0	0	0	1	4	1
Chieftain	2	0	2	2	5	0	0	0	0	1	0	0
Classic Russet	3	1	2	1	6	3	0	0	0	0	0	0
Joma	2	2	4	3	11	0	0	0	1	0	0	0
Katahdin	1	0	3	3	7	0	0	0	3	1	1	3
Kennebec	1	2	3	2	8	0	0	0	3	1	0	0
Modoc	0	0	1	1	1	0	0	0	0	0	0	0
Premier Russet	1	1	1	2	6	0	0	0	0	0	0	0
Red Sunset	0	0	1	3	4	0	0	1	0	0	0	0
RioGrande Russet	0	0	1	0	1	0	0	0	1	0	0	0
Snowden	1	0	4	0	5	0	0	0	3	0	3	0
Superior	1	0	1	1	4	1	0	0	0	3	0	0
Yukon Gem	0	1	2	0	4	0	0	0	4	0	4	0
Yukon Gold	2	1	3	2	8	1	0	0	4	6	1	0
AF0338-17	0	1	1	1	3	0	0	0	0	0	0	0
AF2866-3	0	0	1	1	2	0	0	0	0	0	0	0
AF3362-1	2	1	3	2	8	0	0	0	0	0	0	0
AF4047-2	0	0	2	1	3	1	0	1	0	20	1	0
B1992-106	0	0	1	1	2	0	0	0	1	1	0	0

Table 41 (cont'd). External and internal defects of NE1031 potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
BNC182-5	0	0	2	1	3	0	0	0	1	1	0	0
BNC202-7	2	0	5	0	8	0	0	0	0	6	1	1
NY143	3	0	2	1	6	0	0	0	0	1	0	0
NY144	0	1	1	2	3	0	0	0	0	0	0	0
NY145	0	0	3	0	3	0	0	0	0	1	0	0
NYB13-1	0	0	0	2	2	0	0	0	0	0	0	0
NYE106-4	0	1	2	1	3	0	0	0	0	0	0	0
NYE43-10	0	0	1	0	1	0	0	0	0	0	0	0
<i>MSD</i> ³	ns	4	5	ns	9	6	ns	ns	ns	10	ns	ns
<i>P Value</i>	0.0932	0.0326	0.0242	0.0752	0.0004	0.0166	*	0.5418	0.5233	<.0001	0.4441	0.5639

¹Percent of Total Yield. Total culls include the sum of growth cracks, misshapen, sunburned and rotten/misc.

²Percent tubers; HH, hollow heart; BR, brown rot; CRS, corky ring spot; IHN, internal heat necrosis.

Brown Center: L = Light, M = Moderate, H = Heavy

³Means separated within columns by Tukey's Studentized Range (HSD) Test.

CHAPTER 14. FRITO-LAY VARIETY TRIALS, 2011

General Comments

A goal of the Frito-Lay potato trial is to identify clones that perform well under Florida growing conditions. Two trials were conducted in 2011. The results of the replicated trial are reported in Tables 42-44. The results of the observational trial are reported in Tables 45-47.

Planting Information

Planting Site	Hastings Demonstration Unit Research Farm, Hastings, FL
Planting Date	February 1, 2011
Harvest Date	May 31, 2011
Season Length	120 days planting to harvest
Fertilizer Program	pre-plant, 50-100-150 lb/A; 1 st side-dress, 75-0-125 lb/A; 2 nd side-dress, 75-0-0 lb/A
Irrigation Program	seepage

Experimental Design

Number of Varieties	Area Trial: 2 (Standard: Atlantic); 4 th Year Trial: 6 (Standard: Atlantic)
Number of Clones	Area Trial: 23; 4 th year Trial: 59
Within Row Spacing	8 in (20 cm)
Between Row Spacing	40 in (102 cm)
Replications and Design	4 replications, Randomized Complete Block design for Area Trial; 1 non-replicated, single row, 24 hill plot for 4 th Year Trial
Plot Size	3 rows x 16 ft (4.8 M) for Area Trial (1 center row used for harvest data) 1 row x 16 ft (4.8M) for 4 th Year Trial

Production Statistics

Early Vigor Ratings	36 days after planting
Highest Total Yield	Area Trial RH18 (357 cwt/A or 40 t/ha); 4 th Year Trial clone 219.01 (408 cwt/A or 45.7 T/ha)
Highest Marketable Yield	Area Trial RH21 (284 cwt/A or 31.8 T/ha); 4 th Year Trial clone 219.01 (369 cwt/A or 41.3 T/ha)
Highest Specific Gravity	Area Trial RH5 (1.087); 4 th Year Trial clone 600.02 (1.087)

Table 42. Production facts for Frito Lay Area Trial potato selections.

Clone	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
		(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
Atlantic	301	247	100	2	9	69	18	1	0	89	19	1.080
Harley Blackwell	291	229	93	4	15	69	11	0	0	81	11	1.075
RH-1	286	253	102	2	9	67	20	3	0	89	23	1.079
RH-2	283	249	101	1	9	80	11	0	0	90	11	1.080
RH-3	276	199	81	3	22	74	1	0	0	75	1	1.076
RH-4	286	219	89	2	21	77	0	0	0	77	0	1.083
RH-5	240	181	73	2	18	80	0	0	0	80	0	1.087
RH-6	277	194	79	4	21	75	1	0	0	75	1	1.084
RH-7	260	219	89	1	5	59	22	13	0	94	35	1.073
RH-8	283	216	87	2	10	72	15	1	0	88	16	1.071
RH-9	282	196	79	4	22	71	2	0	0	73	2	1.081
RH-10	173	85	34	7	44	49	0	0	0	49	0	1.070
RH-11	231	158	64	5	26	69	0	0	0	69	0	1.083
RH-12	308	239	97	2	15	78	5	0	0	83	5	1.076
RH-13	169	126	51	4	19	77	0	0	0	77	0	1.079
RH-14	207	147	59	3	25	72	0	0	0	72	0	1.078
RH-15	320	196	79	2	15	79	4	0	0	83	4	1.069
RH-16	284	145	59	4	38	58	0	0	0	58	0	1.078
RH-17	296	234	95	3	15	80	2	0	0	82	2	1.078
RH-18	357	275	112	3	14	70	9	4	0	83	13	1.076

Table 42 (cont'd). Production facts for Frito Lay Area Trial potato selections.

Clone	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
		(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
RH-19	274	227	92	3	9	81	7	0	0	88	7	1.071
RH-20	284	251	102	1	6	72	20	0	0	93	20	1.073
RH-21	319	284	115	1	6	55	20	17	0	92	37	1.080
RH-22	214	181	74	2	10	75	10	4	0	89	14	1.076
RH-23	297	227	92	2	16	78	4	0	0	82	4	1.077
<i>MSD</i> ³	70	88		3	14	22	16	10	ns	16	18	0.007
<i>P Value</i>	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001	<.0001	*	<.0001	<.0001	<.0001

¹Marketable Yield: size classes A1 to A3.

²Size classes: C = 0.5 to 1.5", B = 1.5 to 1.88", A1 = 1.88 to 2.5", A2 = 2.5 to 3.25", A3 = 3.25 to 4", A4 = >4"

³Means separated within columns by Tukey's Studentized Range (HSD) Test.

Table 43. Plant growth and tuber characteristics of Frito Lay Area Trial potato selections.

Clone	Plant Growth Characteristics ¹				Tuber Characteristics ²						
	% Stand	Early Vigor	Vine Type	Vine Maturity	IFC	SC	ST	TS	ED	APP	Tuber Comments
Atlantic	96	5.8	8.5	1.0	1.5	6	5	3	5	6	okay
Harley Blackwell	99	5.8	8	1.0	1	6	5	3	5	7	attractive
RH-1	100	5.5	8.3	1.0	1	6	5	3	5	6	okay
RH-2	95	4.0	8	1.0	1	6	6	3	5	6	decent tubers
RH-3	94	4.8	8-5	1.0	1	5.5	5	3	5	6	okay
RH-4	97	4.5	8.5	1.0	2	6	6	3	5	5	variable shapes
RH-5	91	3.0	7.3	1.0	2	7	6	3	5	6	bright tubers
RH-6	93	3.8	8	1.0	3	6	5	2	6	6	decent tubers
RH-7	91	3.3	7.7	1.0	2	6	5	3	6	7	nice
RH-8	97	3.0	8-7	1.0	2	6	5	3	5	6	slightly flat
RH-9	100	4.0	8	1.0	2	6	5	3	5	6	okay
RH-10	95	5.0	7.3	1.0	1.5	6	6	2	6	6	small tubers
RH-11	92	3.5	8	1.0	2	6	5	3	5	5	variable shapes
RH-12	100	5.0	9-6	1.0	2	6	5	3	6	5	variable shapes
RH-13	88	4.0	7	1.0	3	6	5	3	6	6	okay
RH-14	88	4.0	7	1.0	3	7	6	3	5	6	okay
RH-15	97	4.3	8-5	1.0	3	6	5	3	5	6	okay
RH-16	100	5.0	8	1.0	3	6	6	3	5	6	decent tubers
RH-17	95	3.8	8-7	1.0	3	6	5	3	5	6	decent tubers
RH-18	100	4.8	8.7	1.0	1.5	6	6	3	5	6	okay

Table 43 (cont'd). Plant growth and tuber characteristics of Frito Lay Area Trial potato selections.

Clone	Plant Growth Characteristics ¹				Tuber Characteristics ²						
	% Stand	Early Vigor	Vine Type	Vine Maturity	IFC	SC	ST	TS	ED	APP	Tuber Comments
RH-19	83	4.0	8-7	1.0	2	6	5	3	5	6	decent tubers
RH-20	97	3.3	8-7	1.0	1	6	5	3	5	7	nice
RH-21	98	5.0	9-6	1.0	4	7	6.5	3	5	6	variable shapes
RH-22	94	4.3	7.8	1.0	1.5	7	5	3	6	6	okay
RH-23	93	4.0	7.7	1.0	1	7	5	3	5	6	okay

¹See rating system outlined in Table 1 (page 10).

²See rating system outlined in Table 2 (page 11).

Table 44. External and internal defects of Frito Lay Area Trial potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
Atlantic	0	0	0	7	7	1	0	0	5	4	0	0
Harley Blackwell	0	0	0	2	3	0	0	1	0	0	0	0
RH-1	0	0	0	1	1	0	0	1	3	0	0	0
RH-2	0	0	0	2	2	0	0	0	0	0	0	0
RH-3	1	0	0	2	3	0	0	0	0	0	0	0
RH-4	0	0	0	1	1	0	0	0	0	0	0	0
RH-5	0	1	1	4	6	0	0	0	0	0	0	0
RH-6	0	0	0	7	7	0	0	0	0	0	0	0
RH-7	0	0	0	10	10	0	0	1	0	0	0	0
RH-8	0	0	1	13	14	1	0	0	0	0	0	0
RH-9	2	0	0	3	5	0	0	1	0	0	0	0
RH-10	0	0	0	1	2	0	0	0	0	0	0	0
RH-11	0	0	0	1	2	0	0	3	0	0	0	0
RH-12	2	0	0	4	7	0	0	0	0	0	0	0
RH-13	0	0	0	3	3	0	0	1	0	0	0	0
RH-14	1	0	0	3	4	0	0	0	0	0	0	0
RH-15	0	0	0	26	27	0	0	0	0	0	0	0
RH-16	0	0	0	14	15	0	0	3	6	1	0	0
RH-17	0	0	0	4	4	0	0	1	3	0	0	0
RH-18	1	0	1	6	7	0	0	4	0	0	0	0

Table 44 (cont'd). External and internal defects of Frito Lay Area Trial potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
RH-19	0	0	1	5	6	0	0	3	0	0	0	0
RH-20	1	0	0	3	4	0	0	0	0	0	0	1
RH-21	1	0	0	2	3	0	0	0	0	0	0	0
RH-22	0	0	1	4	5	1	0	1	3	0	1	0
RH-23	0	0	0	6	6	0	0	0	0	0	0	0
<i>MSD</i> ³	2	ns	ns	15	15	na	na	na	7	na	na	na
<i>P Value</i>	0.0020	0.1990	0.7930	<.0001	<.0001	0.5693	*	0.8613	0.0318	0.5176	0.4778	0.4778

¹Percent of Total Yield. Total culls include the sum of growth cracks, misshapen, sunburned and rotten/misc.

²Percent tubers; HH, hollow heart; BR, brown rot; CRS, corky ring spot; IHN, internal heat necrosis.

Brown Center: L = Light, M = Moderate, H = Heavy

³Means separated within columns by Tukey's Studentized Range (HSD) Test.

Table 45. Production facts for Frito Lay 4th Year Trial potato selections.

Clone	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
		(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
Atlantic	250	199	100	2	9	75	13	0	0	89	13	1.078
Harley Blackwell	245	180	90	4	16	74	7	0	0	80	7	1.067
Snowden	246	165	83	3	28	69	0	0	0	69	0	1.070
2.02	190	84	42	14	41	45	0	0	0	45	0	1.068
2.16	94	4	2	22	74	4	0	0	0	4	0	1.065
2.42	106	14	7	13	73	14	0	0	0	14	0	1.055
6.02	120	53	26	5	44	51	0	0	0	51	0	1.072
6.03	286	256	128	1	8	87	4	0	0	91	4	1.085
9.01	252	39	20	17	65	18	0	0	0	18	0	1.083
13.01	170	103	52	5	22	68	5	0	0	73	5	1.070
20.05	210	130	65	4	7	89	0	0	0	89	0	1.077
43.03	127	19	9	15	69	16	0	0	0	16	0	1.067
47.01	261	218	109	2	8	81	9	0	0	90	9	1.068
48.02	265	165	83	3	12	85	0	0	0	85	0	1.082
50.01	267	158	79	2	20	78	0	0	0	78	0	1.068
52.01	174	107	54	7	29	64	0	0	0	64	0	1.073
58.02	189	103	52	6	30	64	0	0	0	64	0	1.071
60.01	302	246	124	2	10	65	10	13	0	87	22	1.072
69.02	299	227	114	2	19	74	5	0	0	79	5	1.075
86.01	238	211	106	1	6	84	10	0	0	93	10	1.077

Table 45 (cont'd). Production facts for Frito Lay 4th Year Trial potato selections.

Clone	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
		(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
91.01	162	28	14	26	56	18	0	0	0	18	0	1.059
107.07	170	35	17	3	26	71	0	0	0	71	0	1.062
111.01	364	237	119	6	29	66	0	0	0	66	0	1.071
117.01	332	186	93	2	21	76	0	0	0	76	0	1.073
120.01	195	151	76	3	17	79	0	0	0	79	0	1.075
124.01	210	114	57	6	37	57	0	0	0	57	0	1.066
151.01	153	115	58	1	9	57	32	0	0	90	32	1.070
159.01	280	157	79	4	36	60	0	0	0	60	0	1.071
163.01	296	207	104	2	20	77	0	0	0	77	0	1.076
177.01	305	245	123	1	5	61	9	24	0	94	33	1.077
180.01	182	113	56	3	21	76	0	0	0	76	0	1.080
182.01	155	52	26	11	52	38	0	0	0	38	0	1.079
196.01	260	174	87	1	6	63	29	0	0	93	29	1.076
197.01	323	283	142	1	4	57	38	0	0	95	38	1.083
199.02	287	163	82	2	11	87	0	0	0	87	0	1.066
199.04	168	51	25	14	47	38	0	0	0	38	0	1.064
203.01	214	92	46	7	41	53	0	0	0	53	0	1.062
204.02	255	115	58	5	48	47	0	0	0	47	0	1.078
204.03	309	209	105	2	21	75	2	0	0	77	2	1.081
205.04	245	148	74	6	32	62	0	0	0	62	0	1.075

Table 45 (cont'd). Production facts for Frito Lay 4th Year Trial potato selections.

Clone	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
		(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
208.02	272	200	100	1	8	75	16	0	0	91	16	1.072
209.02	270	138	69	5	38	57	0	0	0	57	0	1.066
213.01	325	265	133	2	13	64	21	0	0	85	21	1.082
219.01	408	369	185	0	5	66	29	0	0	94	29	1.082
220.04	342	308	154	2	8	90	0	0	0	90	0	1.082
228.01	273	142	71	8	32	59	0	0	0	59	0	1.078
267.01	192	35	18	6	51	43	0	0	0	43	0	1.057
316.02	261	139	70	3	19	68	10	0	0	78	10	1.078
333.01	244	88	44	8	32	60	0	0	0	60	0	1.080
358.02	286	238	119	1	12	82	4	0	0	87	4	1.076
431.01	261	194	97	2	13	85	0	0	0	85	0	1.085
500.01	295	244	122	1	7	73	18	0	0	92	18	1.080
500.02	337	322	161	1	3	77	19	0	0	96	19	1.083
500.03	263	149	75	2	13	74	11	0	0	86	11	1.073
600.01	244	201	101	2	9	81	8	0	0	90	8	1.079
600.02	258	188	94	1	7	77	15	0	0	91	15	1.087
600.03	273	99	50	9	53	38	0	0	0	38	0	1.076
600.04	255	184	92	1	10	69	21	0	0	89	21	1.080
600.05	329	239	120	3	10	73	14	0	0	87	14	1.073
600.06	293	171	86	0	19	81	0	0	0	81	0	1.073
600.07	201	171	86	0	6	94	0	0	0	94	0	1.081

¹Marketable Yield: size classes A1 to A3.

²Size classes: C = 0.5 to 1.5", B = 1.5 to 1.88", A1 = 1.88 to 2.5", A2 = 2.5 to 3.25", A3 = 3.25 to 4", A4 = >4"

Table 46. Plant growth and tuber characteristics of Frito Lay 4th Year Trial potato selections.

Clone	Plant Growth Characteristics ¹				Tuber Characteristics ²							Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity	IFC	SC	ST	TS	ED	APP		
Atlantic	100	6	8	1	2	6	5	3	4	6	nice	
Harley Blackwell	100	6	8	1	2	6	5	3	5	6	nice	
Snowden	100	6	9	1	1	6	5	2	4	6	nice	
2.02	100	5	8-7	1	6	2	5	3	7	5	alligator skin, dark pink flesh	
2.16	100	4	8	1	6	2	5	3	5	5	alligator skin, small tubers	
2.42	100	5	8	1	6	2	5	4	7	5	alligator skin, small tubers	
6.02	100	4	8-7	1	2	6	5	3	5	6	okay	
6.03	92	4	7	1	1	7	5	3	5	6	decent	
9.01	100	5	9-6	1	4	7	6	2	4	5	small tubers	
13.01	96	0	-	1	2	6	5	3	6	5	okay	
20.05	92	3	8-7	1	1	6	5	3	5	6	okay	
43.03	79	5	8	1	4	7	6	3	4	5	small tubers, pointy	
47.01	100	5	7	1	1	6	5	3	5	5	some mishapes	
48.02	100	2	7	1	2	6	5	3	6	6	decent	
50.01	88	3	8	1	1	6	5	3	6	6	nice	
52.01	88	4	8	1	4	7	6.5	3	4	5	some mishapes	
58.02	88	2	8-7	1	4	7	6.5	3	6	5	small tubers	
60.01	83	4	8	1	4	7	7	2	6	6	bright tubers	
69.02	100	5	8	1	4	6	5	3	5	6	okay	
86.01	88	2	8	1	2	7	5	3	4	6	decent	

Table 46 (cont'd). Plant growth and tuber characteristics of Frito Lay 4th Year Trial potato selections.

Clone	Plant Growth Characteristics ¹				Tuber Characteristics ²							Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity	IFC	SC	ST	TS	ED	APP		
91.01	100	5	8	1	4	6	5	2	5	6	small tubers	
107.07	75	3	8-7	1	1	na	na	na	na	na	not enough to rate	
111.01	100	4	9	1	4	7	7	4	5	6	slightly flat	
117.01	100	5	8	1	1	7	6	3	5	6	bright tubers	
120.01	100	4	8-7	1	1	7	7	3	5	6	okay	
124.01	100	5	8	1	3	6	5	3	5	6	okay	
151.01	67	0	-	1	2	6	5	3	5	5	large tubers	
159.01	96	4	8	1	4	7	7	4	6	5	too many shapes	
163.01	100	4	8	1	1	7	5	3	5	6	decent	
177.01	100	3	8	1	3	6	5	3	5	6	slightly flat	
180.01	83	1	-	1	1	7	5	2	7	6	small tubers	
182.01	96	4	8	1	3	7	5	3	5	5	low yield	
196.01	100	2	7	1	4	7	6	3	5	6	decent	
197.01	96	3	8	1	4	6	6	3	4	7	attractive	
199.02	88	3	8	1	4	7	6	3	3	7	nice	
199.04	92	5	8	1	5	6	5	2	5	6	small tubers	
203.01	100	5	8	1	4	6	5	2	5	6	small tubers	
204.02	100	5	9	1	1	7	6	3	6	6	purple blush around eyes	
204.03	96	4	9	1	2	6	5	3	7	6	okay	
205.04	100	4	8	1	2	6	5	3	6	6	okay	

Table 46 (cont'd). Plant growth and tuber characteristics of Frito Lay 4th Year Trial potato selections.

Clone	Plant Growth Characteristics ¹				Tuber Characteristics ²							Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity	IFC	SC	ST	TS	ED	APP		
208.02	100	5	9	1	1	6	5	3	5	6	decent	
209.02	100	5	8	1	2	6	5	3	5	6	decent	
213.01	100	5	9	1	2.5	7	6	3	6	6	decent	
219.01	100	5	8	1	1	6	5	3	5	7	slightly flat, large tubers	
220.04	100	5	8-5	1	3	6	5	3	4	6	some variable shapes	
228.01	100	5	9	1	4	7	5	2	5	6	decent	
267.01	88	3	7	1	2	na	na	na	na	na	not enough to rate	
316.02	88	4	8	1	3	7	5	2	5	6	okay	
333.01	100	4	8	1	1	6	5	2	5	6	okay	
358.02	92	4	8	1	1	6	5	3	7	6	some variable shapes	
431.01	88	4	8	1	2	6	5	3	6	6	okay	
500.01	100	3	8	1	2	6	5	3	7	6	okay	
500.02	100	4	8	1	1	6	5	3	7	6	decent	
500.03	96	0	7	1	4	7	5	3	3	5	too many shapes	
600.01	71	1	7	1	4	6	5	3	6	7	nice shape	
600.02	67	3	7	1	2.5	6	5	4	4	6	slightly flat	
600.03	100	5	8-5	1	4	7	5.5	3	6	6	small tubers	
600.04	92	0	7	1	2	7	7	3	6	6	bright tubers	
600.05	96	0	8	1	3	7	6	3	6	6	slightly flat	
600.06	96	3	8	1	3	6	5	4	5	6	slightly flat	
600.07	92	1	-	1	1	6	5	3	7	6	okay	

¹See rating system outlined in Table 1 (page 10).²See rating system outlined in Table 2 (page 11).

Table 47. External and internal defects of Frito Lay 4th Year Trial potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
Atlantic	0	0	0	10	10	0	0	15	0	5	0	0
Harley Blackwell	0	0	0	9	9	0	0	0	0	0	0	0
Snowden	0	0	0	2	2	0	0	0	15	0	0	0
2.02	1	0	0	1	2	0	0	0	0	0	0	0
2.16	0	0	0	0	0	0	0	0	0	0	0	0
2.42	0	0	0	1	1	0	0	0	0	0	0	0
6.02	0	0	0	13	13	0	0	0	0	0	0	0
6.03	0	0	0	2	2	0	0	0	0	0	0	0
9.01	0	0	0	15	15	0	0	0	0	0	0	0
13.01	0	0	1	16	17	0	0	0	0	13	7	7
20.05	0	0	0	30	30	0	0	0	0	0	0	0
43.03	0	0	0	8	8	0	0	0	0	0	0	0
47.01	3	0	0	4	7	0	0	0	0	0	0	0
48.02	1	0	1	25	27	0	0	0	0	0	0	0
50.01	0	0	1	23	24	0	0	0	0	0	0	0
52.01	1	1	0	2	4	0	0	0	15	0	0	0
58.02	0	0	2	13	15	0	0	0	0	0	0	0
60.01	4	0	2	1	7	0	0	0	0	0	0	0
69.02	0	0	0	4	4	0	0	0	0	0	0	0
86.01	0	0	1	4	5	0	0	0	0	0	0	0

Table 47 (cont'd). External and internal defects of Frito Lay 4th Year Trial potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
91.01	0	0	0	5	5	0	0	0	0	0	0	0
107.07	0	0	0	71	71	md	md	md	md	md	md	md
111.01	0	0	0	1	1	0	0	0	0	0	0	0
117.01	0	0	0	27	27	0	0	0	0	0	0	0
120.01	0	0	1	1	2	0	0	0	0	0	0	0
124.01	0	0	0	5	5	0	0	0	0	0	0	0
151.01	0	0	0	16	16	0	0	0	0	0	15	0
159.01	0	1	2	4	6	0	0	0	0	0	0	0
163.01	0	0	0	10	10	0	0	0	0	0	0	0
177.01	0	0	0	14	14	0	0	0	0	0	0	0
180.01	0	0	0	19	19	0	0	0	0	0	0	0
182.01	0	0	0	10	10	0	0	0	0	0	0	0
196.01	0	1	6	22	28	0	0	0	0	0	0	0
197.01	3	0	3	2	8	0	0	0	0	0	0	0
199.02	7	0	1	26	35	0	0	0	0	0	0	0
199.04	0	0	0	21	21	0	0	0	0	0	0	0
203.01	0	0	0	18	18	0	0	0	0	0	0	0
204.02	0	1	0	2	4	0	0	0	0	0	0	0
204.03	0	0	2	10	12	0	0	0	0	0	0	0
205.04	0	0	1	1	2	0	0	0	0	0	0	0

Table 47 (cont'd). External and internal defects of Frito Lay 4th Year Trial potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
										L	M	H
208.02	10	0	1	8	19	0	0	0	0	0	0	0
209.02	0	0	0	10	10	0	0	0	0	0	0	0
213.01	0	0	2	2	4	0	0	0	0	0	0	0
219.01	0	1	0	3	4	0	0	0	0	0	0	0
220.04	0	0	0	0	0	0	0	0	0	0	0	0
228.01	0	0	0	12	12	0	0	0	0	0	0	0
267.01	0	0	0	58	58	md	md	md	md	md	md	md
316.02	2	1	1	28	32	15	0	0	0	20	0	0
333.01	0	0	2	39	40	0	0	0	0	0	0	0
358.02	0	0	0	4	4	0	0	0	0	0	0	0
431.01	0	1	0	12	12	0	0	0	0	0	0	0
500.01	0	0	3	6	10	0	0	0	0	0	0	0
500.02	0	0	1	0	1	0	0	0	0	0	0	0
500.03	0	0	5	29	34	0	0	0	0	0	0	0
600.01	3	0	1	4	8	0	0	0	0	0	0	0
600.02	1	7	1	12	20	0	0	0	0	0	0	0
600.03	0	0	0	4	5	0	0	0	0	0	0	0
600.04	2	0	4	14	19	0	0	0	45	20	0	0
600.05	0	0	3	14	17	0	0	5	5	0	0	0
600.06	0	0	5	23	28	0	0	0	0	0	0	0
600.07	1	0	1	7	9	0	0	0	0	5	0	0

¹Percent of Total Yield. Total culls include the sum of growth cracks, misshapen, sunburned and rotten/misc.

²Percent tubers; HH, hollow heart; BR, brown rot; CRS, corky ring spot; IHN, internal heat necrosis.

Brown Center: L = Light, M = Moderate, H = Heavy

CHAPTER 15. HZPC VARIETY TRIAL, 2011

General Comments

A goal of the HZPC potato trial is to identify clones that perform well under Florida growing conditions.

Planting Information

Planting Site	Hastings Demonstration Unit Research Farm, Hastings, FL
Planting Date	February 1, 2011
Vine Kill Dates	May 2, 2011
Harvest Date	May 23, 2011
Season Length	91 days planting to vine kill; 112 days planting to harvest
Fertilizer Program	preplant, 50-100-150 lb/A; 1 st side-dress, 75-0-125 lb/A; 2 nd side-dress, 75-0-0 lb/A
Irrigation Program	seepage

Experimental Design

Number of Varieties	34 (Standard: Adora)
Number of Clones	116
Within Row Spacing	8 in (20.3 cm)
Between Row Spacing	40 in (101.6 cm)
Replications and Design	2 replications, non-Randomized design, single row, 24 hill plots
Plot Size	16 ft (4.8 m)

Production Statistics

Early Vigor Ratings	37 days after planting
Highest Total Yield	Satina (451 cwt/A or 50.5 T/ha)
Highest Marketable Yield	Satina (393 cwt/A or 44.0 T/ha)

Table 48. Production statistics for HZPC potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
LaChipper	MFX	241	199	100	3	12	82	3	0	0	85	3	1.065
Adirondack Blue	MFX	235	140	70	5	33	62	0	0	0	62	0	1.056
Adora	HZPC	166	115	58	4	25	71	0	0	0	71	0	1.052
Ambra	HZPC	181	105	53	7	34	59	0	0	0	59	0	1.053
Annabelle	HZPC	247	91	45	15	54	31	0	0	0	31	0	1.056
Atlantic	MFX	288	239	120	3	13	72	13	0	0	84	13	1.075
Canberra	HZPC	305	212	106	2	16	78	4	0	0	82	4	1.059
Challenger	HZPC	271	94	47	8	57	35	0	0	0	35	0	1.069
Chieftain	NE	341	276	139	2	12	81	5	0	0	85	5	1.062
Chopin	HZPC	196	51	26	14	58	28	0	0	0	28	0	1.058
Dione	HZPC	228	153	76	6	26	68	0	0	0	68	0	1.067
Dark Red Norland	NE	264	174	87	7	28	65	0	0	0	65	0	1.058
Fabula	HZPC	305	232	116	2	16	66	16	0	0	82	16	1.057
Goldfinger	HZPC	261	54	27	22	60	18	0	0	0	18	0	1.064
Goldrush	MFX	276	211	106	4	20	76	0	0	0	76	0	1.060
Green Mountain	USDA	227	162	81	6	19	75	0	0	0	75	0	1.068
Innovator	HZPC	247	171	86	3	25	72	0	0	0	72	0	1.067
Kenita	HZPC	274	155	78	8	32	59	0	0	0	59	0	1.056
Marilyn	HZPC	233	16	8	23	70	7	0	0	0	7	0	1.058
Mozart	HZPC	328	222	111	4	24	59	13	0	0	72	13	1.061

Table 48 (cont'd). Production statistics for HZPC potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
Norwis	MFX	221	161	81	5	15	80	0	0	0	80	0	1.058
NY136	CORNELL	272	147	74	17	39	45	0	0	0	45	0	1.064
Opera	HZPC	224	67	33	14	57	29	0	0	0	29	0	1.077
Parella	HZPC	293	173	87	5	35	60	0	0	0	60	0	1.053
Red LaSoda	MFX	245	198	99	3	15	67	12	4	0	82	16	1.058
Red Maria (NY129)	CORNELL	232	178	89	4	17	79	0	0	0	79	0	1.060
Rodeo	HZPC	330	203	102	2	30	68	0	0	0	68	0	1.060
Satina	MFX	451	393	197	2	8	68	22	0	0	90	22	1.058
Sifra	HZPC	299	218	109	3	19	77	0	0	0	77	0	1.058
Smart	HZPC	242	92	46	11	52	37	0	0	0	37	0	1.057
Snowbird	HZPC	284	213	107	2	16	73	9	0	0	81	9	1.069
Superior	NE	254	193	97	4	19	77	0	0	0	77	0	1.067
Sylvana	HZPC	325	247	124	2	13	75	10	0	0	85	10	1.058
Vivaldi	HZPC	314	147	74	7	46	47	0	0	0	47	0	1.061
Yukon Gold	MFX	225	143	71	2	15	83	0	0	0	83	0	1.067
HZ 97-185	HZPC	244	103	52	13	49	38	0	0	0	38	0	1.069
HZC 01-6087	HZPC	206	127	64	5	25	70	0	0	0	70	0	1.059
HZC 02-6079	HZPC	231	130	65	5	39	57	0	0	0	57	0	1.054
HZC 03-6122	HZPC	172	98	49	8	32	60	0	0	0	60	0	1.059
HZC 04-6018	HZPC	269	151	76	6	38	56	0	0	0	56	0	1.052

Table 48 (cont'd). Production statistics for HZPC potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
HZC 04-6027	HZPC	293	152	76	6	40	55	0	0	0	55	0	1.064
HZC 04-6029	HZPC	284	230	115	3	13	78	7	0	0	85	7	1.060
HZC 04-6037	HZPC	247	15	8	21	73	6	0	0	0	6	0	1.060
HZC 05-6007	HZPC	204	122	61	7	31	61	0	0	0	61	0	1.058
HZC 05-6013	HZPC	229	138	69	9	32	59	0	0	0	59	0	1.066
HZC 05-6018	HZPC	240	102	51	8	50	42	0	0	0	42	0	1.066
HZC 05-6026	HZPC	165	43	21	9	64	27	0	0	0	27	0	1.060
HZC 05-6039	HZPC	216	94	47	12	51	37	0	0	0	37	0	1.062
HZC 05-6054	HZPC	209	124	62	5	32	63	0	0	0	63	0	1.060
HZC 05-6059	HZPC	234	138	69	4	37	59	0	0	0	59	0	1.062
HZC 05-6067	HZPC	159	42	21	18	56	26	0	0	0	26	0	1.072
HZC 05-6073	HZPC	333	219	110	4	30	66	0	0	0	66	0	1.064
HZC 05-6089	HZPC	260	92	46	14	52	34	0	0	0	34	0	1.052
HZC 06-6009	HZPC	305	169	85	8	40	52	0	0	0	52	0	1.071
HZC 06-6011	HZPC	199	124	62	5	25	70	0	0	0	70	0	1.056
HZC 06-6039	HZPC	263	136	68	9	43	47	0	0	0	47	0	1.058
HZC 06-6068	HZPC	326	227	114	5	19	76	0	0	0	76	0	1.052
HZC 06-6077	HZPC	200	114	57	5	33	62	0	0	0	62	0	1.055
HZC 06-6080	HZPC	274	54	27	15	67	18	0	0	0	18	0	1.066
HZC 06-6082	HZPC	259	35	17	21	65	14	0	0	0	14	0	1.065

Table 48 (cont'd). Production statistics for HZPC potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
HZC 06-6090	HZPC	253	179	90	5	22	68	5	0	0	73	5	1.057
HZC 06-6095	HZPC	206	70	35	10	55	35	0	0	0	35	0	1.058
HZC 06-6098	HZPC	166	33	17	18	62	20	0	0	0	20	0	1.056
<u>HZC 06-6109</u>	<u>HZPC</u>	<u>282</u>	<u>164</u>	<u>82</u>	<u>5</u>	<u>35</u>	<u>59</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>59</u>	<u>0</u>	<u>1.052</u>
HZC 06-6117	HZPC	246	135	68	6	38	55	0	0	0	55	0	1.054
HZC 07-6001	HZPC	205	80	40	9	51	40	0	0	0	40	0	1.053
HZC 07-6002	HZPC	303	253	127	1	11	67	21	0	0	88	21	1.053
<u>HZC 07-6005</u>	<u>HZPC</u>	<u>218</u>	<u>111</u>	<u>56</u>	<u>6</u>	<u>41</u>	<u>53</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>53</u>	<u>0</u>	<u>1.070</u>
HZC 07-6007	HZPC	174	69	34	12	49	39	0	0	0	39	0	1.072
HZC 07-6008	HZPC	170	92	46	5	37	57	0	0	0	57	0	1.074
HZC 07-6009	HZPC	224	168	84	2	20	75	3	0	0	78	3	1.068
<u>HZC 07-6010</u>	<u>HZPC</u>	<u>208</u>	<u>102</u>	<u>51</u>	<u>7</u>	<u>40</u>	<u>54</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>54</u>	<u>0</u>	<u>1.066</u>
HZC 07-6014	HZPC	193	109	54	6	37	57	0	0	0	57	0	1.068
HZC 07-6016	HZPC	266	178	89	3	27	70	0	0	0	70	0	1.066
HZC 07-6018	HZPC	231	134	67	4	37	59	0	0	0	59	0	1.064
<u>HZC 07-6019</u>	<u>HZPC</u>	<u>255</u>	<u>175</u>	<u>88</u>	<u>3</u>	<u>22</u>	<u>76</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>76</u>	<u>0</u>	<u>1.064</u>
HZC 07-6020	HZPC	170	68	34	10	46	44	0	0	0	44	0	1.056
HZC 07-6022	HZPC	298	226	113	3	18	79	0	0	0	79	0	1.057
HZC 07-6023	HZPC	307	232	116	3	18	79	0	0	0	79	0	1.065
<u>HZC 07-6024</u>	<u>HZPC</u>	<u>252</u>	<u>97</u>	<u>48</u>	<u>13</u>	<u>52</u>	<u>35</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>35</u>	<u>0</u>	<u>1.063</u>

Table 48 (cont'd). Production statistics for HZPC potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
HZC 07-6026	HZPC	187	110	55	6	36	58	0	0	0	58	0	1.060
HZC 07-6027	HZPC	168	44	22	14	60	26	0	0	0	26	0	1.062
HZC 07-6030	HZPC	243	132	66	7	37	56	0	0	0	56	0	1.064
HZC 07-6031	HZPC	246	158	79	5	30	65	0	0	0	65	0	1.065
HZC 07-6032	HZPC	273	189	95	6	23	71	0	0	0	71	0	1.068
HZC 07-6033	HZPC	224	113	57	2	48	51	0	0	0	51	0	1.063
HZC 07-6035	HZPC	198	105	52	12	40	49	0	0	0	49	0	1.052
HZC 07-6038	HZPC	294	241	121	3	14	83	0	0	0	83	0	1.055
HZC 07-6039	HZPC	243	118	59	10	40	50	0	0	0	50	0	1.055
HZC 07-6040	HZPC	311	171	86	8	31	61	0	0	0	61	0	1.056
HZC 07-6041	HZPC	241	91	46	11	52	37	0	0	0	37	0	1.051
HZC 07-6042	HZPC	208	111	55	10	37	53	0	0	0	53	0	1.055
HZC 07-6043	HZPC	300	142	71	8	41	51	0	0	0	51	0	1.052
HZC 07-6044	HZPC	263	64	32	20	62	18	0	0	0	18	0	1.050
HZC 07-6045	HZPC	287	154	77	7	41	52	0	0	0	52	0	1.052
HZC 07-6047	HZPC	294	95	48	13	57	30	0	0	0	30	0	1.045
HZC 07-6049	HZPC	250	101	51	6	54	40	0	0	0	40	0	1.057
HZC 07-6050	HZPC	364	253	127	3	19	78	0	0	0	78	0	1.057
HZC 07-6052	HZPC	257	120	60	9	43	48	0	0	0	48	0	1.054
HZC 07-6053	HZPC	233	166	83	3	24	73	0	0	0	73	0	1.056

Table 48 (cont'd). Production statistics for HZPC potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
HZC 07-6056	HZPC	263	93	47	15	57	28	0	0	0	28	0	1.065
HZC 07-6058	HZPC	311	240	120	2	18	80	0	0	0	80	0	1.057
HZC 07-6061	HZPC	180	34	17	17	65	18	0	0	0	18	0	1.048
HZC 07-6063	HZPC	266	124	62	11	44	44	0	0	0	44	0	1.058
HZC 07-6071	HZPC	217	141	71	6	27	67	0	0	0	67	0	1.047
HZC 07-6072	HZPC	195	63	32	4	58	37	0	0	0	37	0	1.058
HZC 07-6073	HZPC	156	89	45	7	29	63	0	0	0	63	0	1.057
HZC 07-6074	HZPC	255	160	80	9	28	63	0	0	0	63	0	1.059
HZC 07-6075	HZPC	187	120	60	4	28	67	0	0	0	67	0	1.064
HZC 07-6076	HZPC	207	58	29	13	59	28	0	0	0	28	0	1.060
HZC 07-6077	HZPC	229	183	92	3	18	79	0	0	0	79	0	1.059
HZC 07-6079	HZPC	246	123	62	9	39	51	0	0	0	51	0	1.056
HZC 07-6080	HZPC	214	95	47	8	47	46	0	0	0	46	0	1.066
HZC 07-6081	HZPC	235	174	87	3	18	79	0	0	0	79	0	1.065
HZC 07-6082	HZPC	155	18	9	22	67	11	0	0	0	11	0	1.067
HZC 07-6083	HZPC	160	0	0	55	45	0	0	0	0	0	0	1.060
HZC 07-6086	HZPC	279	172	86	6	32	55	7	0	0	62	7	1.061
HZC 07-6087	HZPC	196	68	34	15	53	32	0	0	0	32	0	1.062
HZC 07-6090	HZPC	279	196	98	6	22	72	0	0	0	72	0	1.050
HZC 07-6091	HZPC	269	190	95	6	20	74	0	0	0	74	0	1.061

Table 48 (cont'd). Production statistics for HZPC potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
HZC 07-6093	HZPC	269	194	97	5	24	71	0	0	0	71	0	1.061
HZC 07-6098	HZPC	263	55	28	18	62	20	0	0	0	20	0	1.055
HZC 07-6099	HZPC	215	101	51	8	43	50	0	0	0	50	0	1.043
HZC 07-6100	HZPC	261	171	86	3	27	70	0	0	0	70	0	1.051
HZC 07-6101	HZPC	252	107	54	11	51	38	0	0	0	38	0	1.059
HZC 07-6104	HZPC	279	119	59	8	47	45	0	0	0	45	0	1.059
HZC 07-6111	HZPC	279	218	109	3	16	81	0	0	0	81	0	1.062
HZC 07-6112	HZPC	325	176	88	5	37	57	0	0	0	57	0	1.056
HZC 07-6115	HZPC	263	168	84	3	32	65	0	0	0	65	0	1.050
HZC 07-6120	HZPC	286	200	100	4	24	72	0	0	0	72	0	1.052
HZC 07-6121	HZPC	376	241	121	5	28	66	0	0	0	66	0	1.047
HZC 07-6124	HZPC	226	133	67	8	35	57	0	0	0	57	0	1.059
HZC 07-6126	HZPC	260	128	64	9	41	49	0	0	0	49	0	1.056
HZC 07-6131	HZPC	287	115	58	10	50	40	0	0	0	40	0	1.057
HZC 07-6132	HZPC	149	9	4	30	64	6	0	0	0	6	0	1.070
HZC 07-6133	HZPC	149	51	26	14	55	31	0	0	0	31	0	1.074
HZC 07-6137	HZPC	287	157	79	7	39	54	0	0	0	54	0	1.055
HZC 07-6140	HZPC	244	5	2	25	73	2	0	0	0	2	0	1.060
HZC 07-6144	HZPC	223	73	36	7	55	38	0	0	0	38	0	1.065
HZC 07-6145	HZPC	226	129	65	7	41	53	0	0	0	53	0	1.067

Table 48 (cont'd). Production statistics for HZPC potato selections.

Clone	Seed Source	Total Yield (cwt/A)	Marketable Yield ¹		Size Distribution by Class (%) ²						Size Class Range (%)		Specific Gravity
			(cwt/A)	% of standard	C	B	A1	A2	A3	A4	A1 to A3	A2 to A3	
HZC 07-6146	HZPC	231	124	62	5	38	58	0	0	0	58	0	1.065
HZC 07-6147	HZPC	211	144	72	5	25	70	0	0	0	70	0	1.058
HZC 07-6148	HZPC	273	195	98	3	12	66	19	0	0	85	19	1.065
HZC 07-6150	HZPC	173	50	25	18	53	29	0	0	0	29	0	1.058
HZC 07-6154	HZPC	277	159	80	10	39	51	0	0	0	51	0	1.047
HZC 07-6155	HZPC	323	209	105	4	26	70	0	0	0	70	0	1.052
HZC 07-6157	HZPC	287	175	88	7	29	64	0	0	0	64	0	1.059
HZC 07-6159	HZPC	160	31	15	18	63	18	0	0	0	18	0	1.053
HZC 07-6160	HZPC	368	285	143	2	8	63	21	6	0	90	27	1.055
HZC 07-6161	HZPC	330	260	130	3	16	75	7	0	0	81	7	1.054

¹Marketable Yield: size classes A1 to A3.

²Size classes: C = 0.5 to 1.5", B = 1.5 to 1.88", A1 = 1.88 to 2.5", A2 = 2.5 to 3.25", A3 = 3.25 to 4", A4 = >4"

Table 49. Plant growth characteristics of HZPC potato selections.

Clone	Plant Growth Characteristics ¹			
	% Stand	Early Vigor	Vine Type	Vine Maturity
LaChipper	100	6.5	8-5	3.0
Adirondack Blue	100	6.0	6	2.5
Adora	100	5.5	8-5	2.0
Ambra	96	5.0	7-4	2.5
Annabelle	100	7.0	5-8	3.5
Atlantic	98	7.0	8-5	6.5
Canberra	73	3.5	8.5	5.5
Challenger	100	6.0	7-4	4.0
Chieftain	100	5.5	8-9	7.0
Chopin	98	6.0	7-4	3.0
Dione	100	5.5	8.5	3.5
Dark Red Norland	100	6.5	6-3	2.0
Fabula	81	4.0	7	8.0
Goldfinger	98	6.0	8-5	3.5
Goldrush	96	6.5	9-6	4.5
Green Mountain	98	6.0	8-5	2.5
Innovator	94	5.5	7.5	4.0
Kenita	96	6.0	8-5	4.0
Marilyn	96	6.5	8-5	3.5
Mozart	94	5.5	8	7.0

Table 49 (cont'd). Plant growth characteristics of HZPC potato selections.

Clone	Plant Growth Characteristics ¹			
	% Stand	Early Vigor	Vine Type	Vine Maturity
Norwis	98	5.5	7.5	4.0
NY136	100	6.0	8-5	2.0
Opera	100	5.5	9	6.0
Parella	100	6.0	8-5	2.5
Red LaSoda	98	5.0	8-5	5.0
Red Maria (NY129)	100	4.5	7.5	6.0
Rodeo	100	5.0	8-5	4.0
Satina	98	7.0	9-6	6.0
Sifra	100	5.0	9	5.0
Smart	98	5.0	7-4	2.3
Snowbird	100	5.0	8-9	7.0
Superior	100	6.0	8	2.3
Sylvana	75	4.5	8-5	6.0
Vivaldi	94	6.0	9-6	3.0
Yukon Gold	77	4.0	7	6.5
HZ 97-185	100	6.0	8-5	3.5
HZC 01-6087	100	6.0	7-4	2.5
HZC 02-6079	100	5.5	7-4	5.0
HZC 03-6122	100	6.0	8	4.0
HZC 04-6018	100	5.0	8-5	3.5

Table 49 (cont'd). Plant growth characteristics of HZPC potato selections.

Clone	Plant Growth Characteristics ¹			
	% Stand	Early Vigor	Vine Type	Vine Maturity
HZC 04-6027	100	4.5	8-9	5.0
HZC 04-6029	100	6.0	9-6	2.5
HZC 04-6037	92	5.0	8-5	4.5
HZC 05-6007	100	6.0	1.5	3.5
HZC 05-6013	100	6.0	5-8	2.5
HZC 05-6018	96	6.5	8-5	2.5
HZC 05-6026	83	5.0	7.5	2.5
HZC 05-6039	100	6.0	8-5	2.8
HZC 05-6054	98	5.0	7-4	2.5
HZC 05-6059	100	6.0	7-4	2.3
HZC 05-6067	96	4.0	8-7	6.0
HZC 05-6073	100	5.0	8.5	6.0
HZC 05-6089	100	6.0	5-2	2.5
HZC 06-6009	98	7.0	9-6	4.5
HZC 06-6011	92	4.5	8-7	3.5
HZC 06-6039	100	6.5	8-5	2.3
HZC 06-6068	96	6.0	7-4	2.3
HZC 06-6077	90	3.0	7	3.5
HZC 06-6080	100	5.5	8-5	4.5
HZC 06-6082	96	4.0	7.5	6.0

Table 49 (cont'd). Plant growth characteristics of HZPC potato selections.

Clone	Plant Growth Characteristics ¹			
	% Stand	Early Vigor	Vine Type	Vine Maturity
HZC 06-6090	96	5.0	8-7	6.0
HZC 06-6095	100	5.5	8-5	4.0
HZC 06-6098	98	6.0	4-1	1.5
HZC 06-6109	100	6.0	7-4	2.3
HZC 06-6117	100	6.5	7-4	1.3
HZC 07-6001	100	6.0	4-1	1.3
HZC 07-6002	96	6.0	8-5	3.0
HZC 07-6005	88	4.0	7	5.5
HZC 07-6007	100	6.0	8-9	4.5
HZC 07-6008	98	5.0	8-7	6.0
HZC 07-6009	100	5.5	8	4.5
HZC 07-6010	100	5.0	7.5	3.0
HZC 07-6014	98	5.5	7	2.5
HZC 07-6016	90	3.5	7.5	7.5
HZC 07-6018	98	5.0	8-7	3.5
HZC 07-6019	90	5.0	8-7	7.0
HZC 07-6020	98	6.0	7-4	1.0
HZC 07-6022	100	6.0	8-5	4.0
HZC 07-6023	79	4.0	8	7.5
HZC 07-6024	100	5.0	8.5	3.5

Table 49 (cont'd). Plant growth characteristics of HZPC potato selections.

Clone	Plant Growth Characteristics ¹			
	% Stand	Early Vigor	Vine Type	Vine Maturity
HZC 07-6026	98	5.5	7-4	3.3
HZC 07-6027	100	6.0	8-5	1.8
HZC 07-6030	96	6.0	8-5	4.0
HZC 07-6031	100	5.0	8	4.5
HZC 07-6032	96	6.0	9-6	5.5
HZC 07-6033	98	5.0	7	6.0
HZC 07-6035	100	5.0	8	3.0
HZC 07-6038	96	5.0	7	4.5
HZC 07-6039	100	6.5	5-2	1.3
HZC 07-6040	94	7.5	7-4	1.0
HZC 07-6041	94	6.5	2	1.5
HZC 07-6042	100	6.0	8-5	1.3
HZC 07-6043	100	7.0	1	1.5
HZC 07-6044	98	6.5	8-5	1.5
HZC 07-6045	100	6.5	4-7	2.3
HZC 07-6047	100	6.0	5-2	2.8
HZC 07-6049	100	6.0	7-4	3.0
HZC 07-6050	94	7.0	9-6	3.5
HZC 07-6052	96	6.5	7-4	1.8
HZC 07-6053	92	4.5	8-7	4.0

Table 49 (cont'd). Plant growth characteristics of HZPC potato selections.

Clone	Plant Growth Characteristics ¹			
	% Stand	Early Vigor	Vine Type	Vine Maturity
HZC 07-6056	98	7.0	8-5	2.0
HZC 07-6058	98	6.0	9-6	4.0
HZC 07-6061	100	5.5	6	1.3
HZC 07-6063	98	6.0	9-6	4.5
HZC 07-6071	100	6.0	8-5	1.8
HZC 07-6072	79	3.5	7	5.0
HZC 07-6073	94	5.0	7-4	3.0
HZC 07-6074	98	6.0	8-5	2.3
HZC 07-6075	83	4.0	7	6.0
HZC 07-6076	96	6.0	4-1	2.8
HZC 07-6077	98	6.0	8-5	3.0
HZC 07-6079	100	6.0	8-5	2.5
HZC 07-6080	98	5.0	8.5	6.0
HZC 07-6081	92	4.0	7	7.0
HZC 07-6082	100	5.5	8-5	2.5
HZC 07-6083	98	6.0	7-4	2.5
HZC 07-6086	98	5.0	8-5	5.5
HZC 07-6087	100	5.5	8-5	1.5
HZC 07-6090	100	5.5	9-6	2.5
HZC 07-6091	98	6.0	8.5	4.5

Table 49 (cont'd). Plant growth characteristics of HZPC potato selections.

Clone	Plant Growth Characteristics ¹			
	% Stand	Early Vigor	Vine Type	Vine Maturity
HZC 07-6093	98	6.5	5-6	4.0
HZC 07-6098	98	6.0	5-4	2.3
HZC 07-6099	100	6.0	8-5	1.0
HZC 07-6100	96	6.0	8-5	1.5
HZC 07-6101	100	5.5	9-6	2.8
HZC 07-6104	90	3.5	7.5	7.5
HZC 07-6111	85	4.0	7.5	6.5
HZC 07-6112	100	6.0	7-4	5.0
HZC 07-6115	100	7.0	8-5	1.8
HZC 07-6120	100	6.0	7-4	4.5
HZC 07-6121	96	6.5	5-8	3.5
HZC 07-6124	100	6.0	8-5	2.0
HZC 07-6126	98	6.0	8-5	3.5
HZC 07-6131	85	3.5	8-5	4.0
HZC 07-6132	88	3.0	7	3.5
HZC 07-6133	96	6.0	7	3.5
HZC 07-6137	96	6.0	8-5	3.5
HZC 07-6140	100	6.0	8-7	4.5
HZC 07-6144	98	6.0	8.5	5.5
HZC 07-6145	98	6.0	8-7	4.0

Table 49 (cont'd). Plant growth characteristics of HZPC potato selections.

Clone	Plant Growth Characteristics ¹			
	% Stand	Early Vigor	Vine Type	Vine Maturity
HZC 07-6146	88	5.5	8	6.0
HZC 07-6147	98	4.5	8	5.5
HZC 07-6148	85	4.5	8	8.0
HZC 07-6150	100	5.5	9-6	1.5
HZC 07-6154	100	6.5	5-2	3.3
HZC 07-6155	98	6.0	8-5	3.0
HZC 07-6157	96	6.5	9-6	3.5
HZC 07-6159	100	6.0	7-4	1.0
HZC 07-6160	100	5.5	8-9	5.0
HZC 07-6161	98	6.0	9-6	5.0

¹See rating system outlined in Table 1 (page 10).

Table 50. External and internal defects of HZPC potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
LaChipper	1	0	0	1	3	0	0	0	0	0	0	0
Adirondack Blue	1	0	1	5	6	0	0	0	0	0	0	0
Adora	0	1	0	2	3	0	0	0	0	0	0	0
Ambra	0	0	1	2	3	0	0	0	0	0	0	0
Annabelle	0	0	0	2	3	0	0	0	0	0	0	0
Atlantic	0	1	1	4	6	0	0	0	0	0	0	0
Canberra	3	1	4	8	15	0	0	0	0	0	0	0
Challenger	0	0	1	0	1	0	0	0	0	0	0	0
Chieftain	0	0	2	3	5	0	0	0	0	0	0	0
Chopin	0	0	0	7	7	0	0	0	0	0	0	0
Dione	0	1	1	0	2	0	0	0	0	0	0	0
Dark Red Norland	0	1	1	2	4	0	0	0	0	0	0	0
Fabula	0	0	0	7	7	0	0	0	0	5	0	0
Goldfinger	0	0	0	1	1	0	0	0	0	0	0	0
Goldrush	0	0	1	0	1	0	0	0	0	0	0	0
Green Mountain	0	0	0	5	6	0	0	0	0	5	0	0
Innovator	1	2	0	2	5	0	0	0	0	0	0	0
Kenita	1	1	0	3	5	0	0	0	0	0	0	0
Marilyn	0	0	0	0	1	0	0	0	0	0	0	0
Mozart	2	1	0	3	6	0	0	0	0	0	0	0

Table 50 (cont'd). External and internal defects of HZPC potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
Norwis	1	0	1	7	9	0	0	0	0	0	0	0
NY136	0	0	1	1	2	0	0	0	0	0	0	0
Opera	0	0	0	1	1	0	0	0	0	0	0	0
Parella	1	0	2	1	3	0	0	0	0	0	0	0
Red LaSoda	0	2	1	2	5	0	0	0	0	0	0	0
Red Maria (NY129)	0	0	0	3	3	0	0	0	0	0	0	0
Rodeo	0	0	4	6	10	0	0	0	0	0	0	0
Satina	0	1	1	2	3	0	0	0	5	0	0	0
Sifra	0	0	1	5	6	0	0	0	0	0	0	0
Smart	0	1	0	3	4	0	0	0	0	0	0	0
Snowbird	0	0	4	4	8	0	0	0	0	0	0	0
Superior	0	1	1	0	2	0	0	0	0	0	0	0
Sylvana	1	3	0	7	11	0	0	0	0	0	0	0
Vivaldi	0	0	0	1	1	0	0	0	0	0	0	0
Yukon Gold	0	1	2	20	23	0	0	0	0	0	0	0
HZ 97-185	0	1	0	1	2	0	0	0	0	0	0	0
HZC 01-6087	3	0	1	11	15	0	0	0	0	0	0	0
HZC 02-6079	0	0	3	6	10	0	0	0	0	0	0	0
HZC 03-6122	0	0	2	3	5	0	0	0	0	0	0	0
HZC 04-6018	0	0	1	4	4	0	0	0	0	0	0	0

Table 50 (cont'd). External and internal defects of HZPC potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
HZC 04-6027	3	0	1	0	5	0	0	0	0	0	0	0
HZC 04-6029	2	0	1	2	5	0	0	0	0	0	0	0
HZC 04-6037	0	0	0	4	5	0	0	5	0	0	0	0
HZC 05-6007	1	0	0	6	7	0	0	0	0	0	0	0
HZC 05-6013	0	0	0	1	1	0	0	0	0	0	0	0
HZC 05-6018	0	0	0	0	1	0	0	0	0	0	0	0
HZC 05-6026	0	0	3	1	3	0	0	0	0	0	0	0
HZC 05-6039	0	0	0	0	0	0	0	0	0	0	0	0
HZC 05-6054	0	0	0	6	7	0	0	0	0	0	0	0
HZC 05-6059	0	0	1	2	3	0	0	0	0	0	0	0
HZC 05-6067	0	2	1	3	6	0	0	0	0	5	0	0
HZC 05-6073	0	0	0	0	1	0	0	0	0	5	0	0
HZC 05-6089	1	0	1	3	5	0	0	0	0	0	0	0
HZC 06-6009	0	0	1	0	2	0	0	0	0	0	0	0
HZC 06-6011	9	0	0	1	11	0	0	0	0	0	0	0
HZC 06-6039	0	0	0	3	3	0	0	0	0	5	0	0
HZC 06-6068	0	1	1	7	8	0	0	0	0	0	0	0
HZC 06-6077	0	0	2	7	9	0	0	0	0	5	0	0
HZC 06-6080	0	0	0	1	2	0	0	0	0	0	0	0
HZC 06-6082	1	2	0	2	5	0	0	0	0	0	0	0

Table 50 (cont'd). External and internal defects of HZPC potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
HZC 06-6090	1	0	2	4	6	0	0	0	0	0	0	0
HZC 06-6095	0	0	0	2	3	0	0	0	0	0	0	0
HZC 06-6098	0	0	0	0	0	0	0	0	5	0	0	0
HZC 06-6109	0	0	1	3	4	0	0	0	0	0	0	0
HZC 06-6117	0	0	0	0	1	0	0	0	0	0	0	0
HZC 07-6001	0	0	0	3	3	0	0	0	0	0	0	0
HZC 07-6002	0	0	1	5	6	0	0	0	0	0	0	0
HZC 07-6005	1	0	0	5	6	0	0	0	0	0	0	0
HZC 07-6007	0	0	0	1	1	0	0	0	0	0	0	0
HZC 07-6008	1	0	1	5	7	0	0	0	0	0	0	0
HZC 07-6009	0	1	1	3	5	0	0	0	0	0	0	0
HZC 07-6010	0	1	2	5	8	0	0	0	0	0	0	0
HZC 07-6014	0	0	0	0	0	0	0	0	0	0	0	0
HZC 07-6016	0	0	2	3	4	0	0	0	0	0	0	0
HZC 07-6018	0	0	1	1	1	0	0	0	0	0	0	0
HZC 07-6019	1	1	1	6	9	0	0	0	0	0	0	0
HZC 07-6020	0	0	0	8	8	0	0	0	0	0	0	0
HZC 07-6022	2	1	0	1	4	0	0	0	0	0	0	0
HZC 07-6023	0	0	3	2	5	0	0	0	0	0	0	0
HZC 07-6024	0	0	0	1	1	0	0	0	0	0	0	0

Table 50 (cont'd). External and internal defects of HZPC potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
HZC 07-6026	2	2	0	2	6	0	0	0	0	0	0	0
HZC 07-6027	1	0	0	0	1	0	0	0	0	0	0	0
HZC 07-6030	0	0	2	7	9	0	0	0	15	5	0	0
HZC 07-6031	1	0	1	5	6	0	0	0	0	0	0	0
HZC 07-6032	0	0	1	1	2	5	0	0	0	0	0	0
HZC 07-6033	0	1	0	0	1	0	0	0	0	0	0	0
HZC 07-6035	0	0	1	2	2	0	0	0	0	0	0	0
HZC 07-6038	0	0	0	2	2	0	0	0	0	0	0	0
HZC 07-6039	0	4	2	0	6	0	0	0	0	0	0	0
HZC 07-6040	0	0	1	9	10	0	0	0	0	0	0	0
HZC 07-6041	0	0	2	2	3	0	0	0	0	0	0	0
HZC 07-6042	0	0	2	0	2	0	0	0	0	0	0	0
HZC 07-6043	0	0	3	3	7	0	0	0	0	0	0	0
HZC 07-6044	0	0	0	0	0	0	0	0	0	0	0	0
HZC 07-6045	1	1	2	1	4	0	0	0	0	0	0	0
HZC 07-6047	0	0	0	1	1	0	0	0	0	0	0	0
HZC 07-6049	0	0	0	1	1	0	0	0	0	0	0	0
HZC 07-6050	0	3	5	4	11	0	0	0	0	0	0	0
HZC 07-6052	0	1	0	0	1	0	0	0	0	0	0	0
HZC 07-6053	0	1	0	2	3	0	0	0	0	0	0	0

Table 50 (cont'd). External and internal defects of HZPC potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
HZC 07-6056	0	0	1	0	1	0	0	0	0	0	5	0
HZC 07-6058	0	0	1	2	3	0	0	0	0	0	0	0
HZC 07-6061	0	0	0	0	0	0	0	0	0	0	0	0
HZC 07-6063	0	0	1	1	2	0	0	0	0	0	0	0
HZC 07-6071	0	0	0	5	5	0	0	0	0	0	0	0
HZC 07-6072	0	1	0	9	10	0	0	0	0	0	0	0
HZC 07-6073	0	0	2	9	10	0	0	0	0	0	0	0
HZC 07-6074	0	0	0	4	4	0	0	0	0	0	0	0
HZC 07-6075	0	0	0	5	5	0	0	0	0	0	0	0
HZC 07-6076	0	1	0	1	2	0	0	0	0	0	0	0
HZC 07-6077	0	0	0	1	1	0	0	0	0	0	0	0
HZC 07-6079	0	0	0	2	2	0	0	0	0	0	0	0
HZC 07-6080	0	1	0	2	3	0	0	0	0	0	0	0
HZC 07-6081	0	0	0	6	6	0	0	0	0	5	0	0
HZC 07-6082	0	0	0	0	0	0	0	0	0	0	0	0
HZC 07-6083	0	0	0	0	0	0	0	0	0	0	0	0
HZC 07-6086	0	0	2	1	4	0	0	0	0	0	0	0
HZC 07-6087	0	0	0	5	5	0	0	0	0	0	0	0
HZC 07-6090	3	0	1	2	6	0	0	0	0	0	0	0
HZC 07-6091	0	0	1	4	5	0	0	0	0	0	0	0

Table 50 (cont'd). External and internal defects of HZPC potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
HZC 07-6093	0	0	0	1	1	0	0	0	0	0	0	0
HZC 07-6098	0	0	0	3	3	0	0	0	0	0	0	0
HZC 07-6099	0	0	0	5	5	0	0	0	0	0	0	0
HZC 07-6100	0	0	3	4	7	0	0	0	0	0	0	0
HZC 07-6101	0	0	0	1	1	0	0	0	0	0	0	0
HZC 07-6104	0	0	1	5	6	0	0	0	0	0	0	0
HZC 07-6111	0	0	1	3	3	0	0	0	0	0	0	0
HZC 07-6112	0	3	0	2	5	0	0	0	0	0	0	0
HZC 07-6115	0	0	1	1	2	0	0	0	0	0	0	0
HZC 07-6120	0	0	0	3	3	0	0	0	0	0	0	0
HZC 07-6121	0	1	0	4	5	0	0	0	0	0	0	0
HZC 07-6124	0	0	0	0	1	0	0	0	0	0	0	0
HZC 07-6126	0	0	0	0	0	0	0	0	0	0	0	0
HZC 07-6131	0	0	0	0	0	0	0	0	0	0	0	0
HZC 07-6132	0	0	2	2	4	0	0	0	0	0	0	0
HZC 07-6133	0	1	0	3	3	0	0	0	0	0	0	0
HZC 07-6137	0	1	0	1	2	0	0	0	0	0	0	0
HZC 07-6140	1	0	0	0	1	0	0	0	0	0	0	0
HZC 07-6144	0	3	0	3	6	0	0	0	0	0	0	0
HZC 07-6145	0	1	1	0	3	0	0	0	0	0	0	0

Table 50 (cont'd). External and internal defects of HZPC potato selections.

Clone	% External Tuber Defects					% Internal Defects ²						
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN	Brown Center		
						L	M	H				
HZC 07-6146	0	1	1	4	6	0	0	0	0	0	0	0
HZC 07-6147	0	0	0	5	5	0	0	0	0	0	0	0
HZC 07-6148	1	0	4	12	17	0	0	0	0	0	0	0
HZC 07-6150	0	0	2	0	2	0	0	0	0	0	0	0
HZC 07-6154	0	0	1	1	2	0	0	0	0	0	0	0
HZC 07-6155	0	0	1	6	7	0	0	0	0	0	0	0
HZC 07-6157	0	0	1	3	5	0	0	0	0	0	0	0
HZC 07-6159	0	0	0	1	1	0	5	0	0	0	0	0
HZC 07-6160	0	0	3	11	14	0	0	0	0	0	0	0
HZC 07-6161	0	2	1	1	4	0	0	0	0	0	0	0

¹Percent of Total Yield. Total culls include the sum of growth cracks, misshapen, sunburned and rotten/misc.

²Percent tubers; HH, hollow heart; BR, brown rot; CRS, corky ring spot; IHN, internal heat necrosis.

APPENDIX 1. POTATO SEASON WEATHER DATA FOR NORTH FLORIDA, 2011

Weather data obtained from the Florida Automated Weather Network (FAWN). FAWN provides up-to-date weather information through a system of automated weather stations distributed throughout the state of Florida. An automated FAWN weather station is located at the University of Florida/IFAS PWACS Research and Demonstration farm in Hastings, FL. Current and historical weather data can be obtained for many sites in Florida including Hastings at the FAWN website: <http://fawn.ifas.ufl.edu/>

Table 51. Daily rainfall amounts (inches) at the UF/IFAS Hastings Demonstration Unit Research Farm at Hastings, FL - Jan. 1 - May 31, 2011.

Day	January	February	March	April	May
1	0.00	0.00	0.52	0.00	0.00
2	0.08	0.10	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.04	0.00	0.00
5	0.57	0.00	0.00	0.48	0.00
6	0.07	0.04	0.00	0.00	0.12
7	0.00	2.29	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.41	0.00	0.00
10	0.00	0.14	0.34	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.03	0.02
13	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.12
15	0.00	0.00	0.00	0.00	0.11
16	0.00	0.04	0.00	0.00	0.00
17	0.66	0.00	0.00	0.00	0.00
18	0.07	0.00	0.00	0.00	0.00
19	0.03	0.00	0.00	0.00	0.00
20	0.14	0.00	0.00	0.00	0.00
21	0.24	0.00	0.00	0.00	0.00
22	0.00	0.00	0.02	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00
25	1.33	0.00	0.00	0.00	0.00
26	0.01	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.21
28	0.00	0.00	0.00	0.09	0.00
29	0.00		0.00	0.02	0.00
30	0.00		0.51	0.00	0.00
31	0.00		1.52		0.00
Total	3.20	2.61	3.36	0.62	0.58

Table 52. Daily Maximum and Minimum Temperatures (°F) at the UF/IFAS Hastings Demonstration Unit Research Farm at Hastings, FL - Jan.1 - May 31, 2011.

Day	January		February		March		April		May	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	76	52	77	51	70	59	75	52	82	56
2	77	60	73	65	68	55	81	50	83	58
3	61	40	66	53	71	55	78	53	86	59
4	70	40	72	50	71	55	87	54	82	59
5	61	49	72	55	74	58	74	46	77	53
6	63	48	61	53	77	57	70	42	82	58
7	62	38	62	52	62	47	82	50	84	55
8	67	47	55	40	72	44	89	59	91	53
9	50	37	67	37	76	60	91	62	92	64
10	72	50	56	47	68	50	91	61	90	63
11	52	42	57	42	62	42	91	60	94	67
12	50	35	59	38	71	35	82	60	90	65
13	47	28	63	33	76	39	83	53	96	68
14	57	30	70	35	78	43	83	50	90	65
15	63	36	68	43	78	49	80	58	83	61
16	62	39	68	54	80	53	89	68	79	56
17	63	48	74	56	77	50	76	53	80	55
18	66	52	79	52	83	52	83	48	82	51
19	66	47	75	49	85	51	92	60	85	57
20	70	41	76	51	76	52	90	67	90	63
21	60	50	81	55	77	55	89	61	96	68
22	53	38	82	59	85	54	87	62	96	67
23	55	31	68	57	84	54	87	59	94	69
24	64	35	79	55	83	64	84	64	94	70
25	74	47	81	61	80	53	86	60	93	63
26	64	48	81	59	84	47	91	66	93	63
27	58	36	83	61	87	57	93	72	89	68
28	64	40	83	61	72	62	92	73	89	66
29	70	40			69	59	77	55	89	68
30	71	41			81	61	82	49	87	65
31	73	52			71	64			88	65
AVG.	63	42	71	51	76	53	84	57	88	62

APPENDIX 2. AVERAGE YEARLY POTATO PRODUCTION STATISTICS FOR POTATOES PRODUCED AT THE UF/IFAS PWACS HASTINGS FARM.

Table 53. Average production statistics for all selections in the Chipping Potato Variety Trial grown at the UF/IFAS Hastings Demonstration Unit Research Farm in each year.

Year	Total Yield (cwt/A)	Marketable Yield ¹		Specific Gravity	Total Culls ²	HH ³	IHN ³	APP ⁴
		(cwt/A)	% of standard					
2001	287	250	84	1.076	<i>na</i>	1	1	5.6
2002	267	242	85	1.071	13	0	1	5.8
2003	427	362	87	1.076	3	4	1	5.8
2004	349	278	85	1.083	2	2	1	5.9
2005	308	254	89	1.077	2	0	1	5.8
2006	431	373	100	1.083	5	2	2	5.4
2007	403	345	102	1.080	1	0	0	6.6
2008	351	268	92	1.081	4	1	4	5.5
2009	384	295	85	1.062	14	1	0	5.2
2010	409	271	90	1.067	6	8	2	<i>na</i>
2011	327	251	90	1.075	6	0	3	5.9

Table 54. Average production statistics for all selections in the Fresh Market Potato Variety Trial grown at the UF/IFAS Hastings Demonstration Unit Research Farm in each year.

Year	Total Yield (cwt/A)	Marketable Yield ¹		Specific Gravity	Total Culls ²	HH ³	IHN ³	APP ⁴
		(cwt/A)	% of standard					
2001	289	254	84	1.070	<i>na</i>	0	2	4.8
2002	227	186	82	1.069	21	0	0	5.5
2003	439	363	112	1.065	6	1	0	6.1
2004	353	233	96	1.072	5	1	1	5.5
2005	271	196	78	1.063	3	0	0	5.6
2006	293	236	87	1.066	9	0	0	5.2
2007	332	280	96	1.068	2	0	0	5.9
2008	238	165	111	1.073	2	0	0	5.7
2009	362	247	97	1.060	19	0	0	6.0
2010	294	182	79	1.060	12	0	0	5.9
2011	385	252	89	1.061	12	2	2	5.6

Table 55. Average production statistics for all selections in the Red and Purple-Skinned Potato Variety Trial grown at the UF/IFAS Hastings Demonstration Unit Research Farm in each year.

Year	Total Yield (cwt/A)	Marketable Yield ¹		Specific Gravity	Total Culls ²	HH ³	IHN ³	APP ⁴
		(cwt/A)	% of standard					
2001	221	195	70	1.071	<i>na</i>	0	0	5.9
2002	269	233	68	1.065	11	1	1	5.6
2003	453	376	90	1.064	4	1	1	6.0
2004	333	227	70	1.072	2	1	0	5.9
2005	276	213	71	1.064	3	0	0	5.4
2006	330	272	68	1.065	3	0	0	5.7
2007	313	223	68	1.062	1	0	0	5.9
2008	190	93	48	1.069	2	0	0	6.4
2009	290	197	58	1.061	17	0	1	5.5
2010	269	146	62	1.056	6	2	1	6.2
2011	275	146	90	1.062	19	0	0	5.8

¹Marketable Yield: size classes A1 to A3.

²Percent of Total Yield. Total culls include the sum of growth cracks, misshapen, sunburned and rotten/misc.

³Percent tubers; HH, hollow heart; IHN, internal heat necrosis.

⁴See rating system outlined in Table 2 (page 11).

APPENDIX 3. POTATO SELECTIONS EVALUATED IN 2011

Potato Selection	Page No.	Potato Selection	Page No.
Adirondack Blue	29, 93, 189	AF4404-1	93
Adora	25, 149, 189	AF4408-3	93
Alpine Russet	165	AF4408-5	93
Ambra	189	AF4412-2	93
Annabelle	189	AF4421-2	93
Atlantic	13, 21, 33, 89, 93, 103, 149,	AF4421-4	93
	153, 161, 165, 173, 189	AF4423-5	93
AF0338-17	25, 89, 93, 103, 165, 149,	AF4430-1	93
	153, 161	AF4430-2	93
AF2866-3	165	AF4437-1	93
AF3011-34	89	AF4437-5	93
AF3362-1	165	AF4441-9	93
AF4013-3	89	AF4441-8	93
AF4047-2	165	AF4441-14	93
AF4125-1	89	AF4442-1	93
AF4130-7	89	AF4442-4	93
AF4130-13	89	AF4445-3	93
AF4139-1	89	AF4447-2	93
AF4147-1	89	AF4449-1	93
AF4157-6	89	AF4449-2	93
AF4167-1	89	AF4454-3	93
AF4172-2	89	AF4458-2	93
AF4185-1	89	AF4463-7	93
AF4203-4	89	AF4463-8	93
AF4220-4	89	AF4467-2	93
AF4222-4	89	AF4518-1	93
AF4254-2	89	AF4521-1	93
AF4272-4	89	AF4526-2	93
AF4320-15	89	AF4532-8	93
AF4320-17	89	AF4534-3	93
AF4322-5	89	AF4538-3	93
AF4347-1	89	AF4540-2	93
AF4360-5	89	AF4540-3	93
AF4363-5	89	AF4543-2	93
AF4376-2	93	AF4543-3	93
AF4376-3	93	AF4545-1	93
AF4376-9	93	AF4547-1	93
AF4386-5	93	AF4550-2	93
AF4386-16	93	AF4551-1	93
AF4387-8	93	AF4559-2	93

Potato Selection	Page No.	Potato Selection	Page No.
AF4561-1	93	AF4963-5	93
AF4565-1	93	AF4963-6	93
AF4565-2	93	AF4963-9	93
AF4565-4	93	AF4985-1	93
AF4566-4	93	AF4987-2	93
AF4587-2	93	AF5016-1	93
AF4592-1	93	AF5019-1	93
AF4593-1	93	AF5175-3	93
AF4594-1	93	B1992-106	33,165, 153
AF4597-1	93	B2152-17	29
AF4669-3	93	B2538-5	29
AF4739-3	93	B2676-2	29
AF4748-3	93	B2724-8	153
AF4748-7	93	B2727-1	153
AF4783-1	93	B2727-2	153
AF4809-2	93	B2728-2	153
AF4815-1	93	B2728-5	153
AF4816-1	93	B2731-11	153
AF4817-2	93	B2735-10	153
AF4818-3	93	B2737-2	153
AF4818-4	93	B2738-3	153
AF4827-1	93	B2749-11	153
AF4831-1	93	B2753-1	153
AF4831-2	93	B2810-2	29
AF4831-3	93	B2810-3	29
AF4832-2	93	B2810-4	29
AF4834-2	93	B2814-8	153
AF4834-4	93	B2814-14	153
AF4834-5	93	B2815-7	153
AF4835-2	93	B2815-8	153
AF4841-1	93	B2817-9	153
AF4842-3	93	B2817-16	153
AF4845-2	93	B2820-3	153
AF4845-3	93	B2821-1	153
AF4930-2	93	B2827-7	21
AF4933-2	93	B2827-9	21
AF4961-3	93	B2828-2	21
AF4962-2	93	B2832-1	21
AF4963-10	93	B2832-2	21
AF4963-4	93	B2832-12	21

Potato Selection	Page No.	Potato Selection	Page No.
B2832-14	21	B2904-11	13
B2832-16	21	B2906-2	13
B2832-17	21	B2923-1	33
B2832-18	21	B2923-2	33
B2832-21	21	B2923-3	33
B2833-1	21	B2923-4	33
B2833-6	21	B2923-5	33
B2833-9	21	B2923-6	33
B2842-1	13	B2923-7	33
B2844-3	13	B2924-4	33
B2845-1	13	B2924-5	33
B2850-1	13	B2926-1	33
B2854-2	13	B2926-2	33
B2863-8	13	B2926-3	33
B2869-29	13	B2926-4	33
B2872-16	13	B2926-5	33
B2873-1	13	B2927-1	33
B2874-1	13	B2927-2	33
B2877-313	149	B2928-1	33
B2878-9	149	B2928-2	33
B2878-30	149	B2928-3	33
B2878-53	149	B2928-4	33
B2878-68	149	B2928-5	33
B2878-91	149	B2928-6	33
B2878-119	149	B2928-8	33
B2878-200	149	B2928-9	33
B2879-82	149	B2928-10	33
B2879-163	149	B2928-11	33
B2880-63	149	B2929-1	33
B2880-74	149	B2929-2	33
B2884-4	13	B2929-3	33
B2890-11	13	B2929-4	33
B2895-2	13	B2930-1	33
B2897-1	13	B2930-2	33
B2897-2	13	B2930-3	33
B2897-5	13	B2930-4	33
B2897-7	13	B2930-5	33
B2903-2	13	B2932-1	33
B2903-10	13	B2932-2	33
B2904-2	13	B2932-3	33

Potato Selection	Page No.	Potato Selection	Page No.
B2932-4	33	B2945-2	33
B2932-5	33	B2945-3	33
B2932-6	33	B2945-4	33
B2932-7	33	B2947-1	33
B2932-8	33	B2947-2	33
B2932-9	33	B2947-3	33
B2932-10	33	B2947-4	33
B2935-1	33	B2947-5	33
B2935-2	33	B2947-6	33
B2935-3	33	B2947-7	33
B2936-1	33	B2947-8	33
B2936-2	33	B2947-9	33
B2937-1	33	B2947-10	33
B2937-2	33	B2947-11	33
B2937-3	33	B2947-12	33
B2938-1	33	B2948-1	33
B2938-2	33	B2948-7	33
B2938-3	33	B2948-8	33
B2938-4	33	B2948-9	33
B2938-5	33	B2950-1	33
B2938-6	33	B2950-2	33
B2938-7	33	B2950-3	33
B2938-8	33	B2950-4	33
B2938-9	33	B2950-6	33
B2938-10	33	B2950-8	33
B2938-11	33	B2950-9	33
B2941-1	33	B2951-1	33
B2942-1	33	B2951-4	33
B2942-2	33	B2951-5	33
B2942-3	33	B2951-6	33
B2942-5	33	B2951-7	33
B2942-6	33	B2951-8	33
B2942-7	33	B2951-9	33
B2943-1	33	B2952-1	33
B2943-2	33	B2952-2	33
B2944-1	33	B2952-3	33
B2944-2	33	B2952-4	33
B2944-3	33	B2952-5	33
B2944-4	33	B2952-6	33
B2945-1	33	B2952-7	33

Potato Selection	Page No.	Potato Selection	Page No.
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B2952-9	33	B2958-1	33
B2952-11	33	B2958-2	33
B2952-12	33	B2958-3	33
B2952-13	33	B2958-4	33
B2952-14	33	B2958-6	33
B2953-3	33	B2958-10	33
B2953-4	33	B2958-12	33
B2953-5	33	B2958-13	33
B2953-6	33	B2958-16	33
B2954-1	33	B2958-17	33
B2954-2	33	B2958-18	33
B2954-3	33	B2959-2	33
B2954-4	33	B2959-3	33
B2954-5	33	B2959-4	33
B2954-6	33	B2959-5	33
B2954-7	33	B2959-6	33
B2954-10	33	B2960-1	33
B2954-11	33	B2960-2	33
B2954-12	33	B2960-3	33
B2954-13	33	B2960-4	33
B2954-14	33	B2960-5	33
B2954-17	33	B2960-6	33
B2954-18	33	B2960-7	33
B2954-19	33	B2960-8	33
B2954-20	33	B2960-9	33
B2954-23	33	B2960-10	33
B2954-25	33	B2960-11	33
B2954-26	33	B2960-12	33
B2954-27	33	B2960-13	33
B2954-28	33	B2960-14	33
B2955-3	33	B2960-15	33
B2955-5	33	B2960-16	33
B2956-3	33	B2960-18	33
B2956-4	33	B2965-1	33
B2957-3	33	B2966-1	33
B2957-4	33	B2967-1	33
B2957-5	33	B2967-2	33
B2957-6	33	B2967-3	33
B2957-7	33	B2967-4	33

Potato Selection	Page No.	Potato Selection	Page No.
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B2967-6	33	BNC301-3	33
B2968-1	33	BNC301-4	33
B2968-2	33	BNC301-5	33
B2968-3	33	BNC301-6	33
B2969-1	33	BNC301-9	33
B2969-2	33	BNC304-1	33
B2971-1	33	BNC304-2	33
B2971-2	33	BNC304-3	33
B2971-3	33	BNC304-4	33
B2971-4	33	BNC306-1	33
B2972-2	33	BNC306-2	33
B2974-1	33	BNC306-3	33
B2976-1	33	BNC307-3	33
BCO01044-2	29	BNC307-6	33
BCO01306-2	29	BNC307-7	33
Beacon Chipper	153	BNC307-8	33
Belrus	13, 21, 25, 33	BNC308-1	33
BNC177-5	153	BNC308-2	33
BNC182-5	153, 163	BNC308-3	33
BNC193-1	29	BNC308-4	33
BNC202-3	153	BNC308-5	33
BNC202-7	165	BNC309-1	33
BNC202-9	153	BNC309-3	33
BNC234-6	21	BNC309-4	33
BNC236-13	21	BNC309-5	33
BNC244-2	21	BNC309-6	33
BNC244-4	21	BNC309-8	33
BNC244-5	21	BNC309-9	33
BNC244-8	21	BNC309-10	33
BNC244-16	21	BNC309-11	33
BNC245-6	21	BNC309-12	33
BNC260-1	13	BNC309-13	33
BNC266-2	13	BNC310-2	33
BNC266-6	13	BNC310-3	33
BNC267-3	13	BNC310-5	33
BNC272-2	13	BNC310-6	33
BNC275-1	13	BNC311-2	33
BNC276-1	13	BNC311-4	33
BNC301-1	33	BNC311-5	33

Potato Selection	Page No.	Potato Selection	Page No.
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BNC311-9	33	BNC316-5	33
BNC311-10	33	BNC316-6	33
BNC311-11	33	BNC316-7	33
BNC311-13	33	BNC316-8	33
BNC311-14	33	BNC316-9	33
BNC311-15	33	BNC317-2	33
BNC311-16	33	BNC317-3	33
BNC311-17	33	BNC317-6	33
BNC311-18	33	BNC317-7	33
BNC311-19	33	BNC317-8	33
BNC312-1	33	BNC317-9	33
BNC312-2	33	BNC318-1	33
BNC312-3	33	BNC318-2	33
BNC312-4	33	BNC318-3	33
BNC312-5	33	BNC318-4	33
BNC312-6	33	BNC318-5	33
BNC312-7	33	BNC318-6	33
BNC313-2	33	BNC318-7	33
BNC313-3	33	BNC318-8	33
BNC313-4	33	BNC318-9	33
BNC313-5	33	BNC318-12	33
BNC314-1	33	BNC319-4	33
BNC314-2	33	BNC319-5	33
BNC314-3	33	BNC320-1	33
BNC314-4	33	BNC320-2	33
BNC314-5	33	BNC321-1	33
BNC314-6	33	BNC321-2	33
BNC314-7	33	BNC322-1	33
BNC314-8	33	BNC322-2	33
BNC314-9	33	BNC322-3	33
BNC314-10	33	BNC322-4	33
BNC315-1	33	BNC323-1	33
BNC315-2	33	BNC323-2	33
BNC315-3	33	BNC324-2	33
BNC315-4	33	BNC324-4	33
BNC315-5	33	BNC326-1	33
BNC315-6	33	BNC326-2	33
BNC316-1	33	BNC326-3	33
BNC316-3	33	BNC326-4	33

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BNC326-6	33	HZC 05-6018	189
BNC326-7	33	HZC 05-6026	189
BNC326-8	33	HZC 05-6039	189
BNC326-10	33	HZC 05-6054	189
BNC326-12	33	HZC 05-6059	189
BNC326-14	33	HZC 05-6067	189
BNC326-15	33	HZC 05-6073	189
BNC327-1	33	HZC 05-6089	189
BNC327-2	33	HZC 06-6009	189
BNC327-3	33	HZC 06-6011	189
BNC327-6	33	HZC 06-6039	189
BNC327-8	33	HZC 06-6068	189
BNC327-10	33	HZC 06-6077	189
BNC328-1	33	HZC 06-6080	189
BNC328-2	33	HZC 06-6082	189
Canberra	189	HZC 06-6090	189
Challenger	189	HZC 06-6095	189
Chieftain	93, 165, 189	HZC 06-6098	189
Chopin	189	HZC 06-6109	189
Classic Russet	165	HZC 06-6117	189
CO00188-4W	161	HZC 07-6001	189
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Dark Red Norland	93, 189	HZC 07-6005	189
Dione	189	HZC 07-6007	189
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French Fingerling	25	HZC 07-6009	189
Goldfinger	189	HZC 07-6010	189
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Harley Blackwell	13, 21, 25, 33, 93, 149, 153, 173	HZC 07-6018	189
HZ 97-185	189	HZC 07-6019	189
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HZC 02-6079	189	HZC 07-6022	189
HZC 03-6122	189	HZC 07-6023	189
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