

CHAPTER 2. EARLY-LINE POTATO VARIETY TRIAL, 2006

General Comments

Potato clones in this trial are new to the variety evaluation program. At this stage, seed supplies are usually limited. To maintain a replicated trial with a small seed lot, plot size is reduced to twelve seed pieces. This is a mixed trial with round white, red, and russet varieties.

Planting Information

Planting Site	PSREU - Hastings Farm, Hastings, FL
Planting Date	January 31, 2006
Vine Kill Date	April 28, 2006
Harvest Date	May 15, 2006
Season Length	87 days planting to vine kill; 104 days planting to harvest
Fertilizer Program	preplant, 100-43-86 lb/A; sidedress, 65-0-56 lb/A (2 appl.)
Irrigation Program	seepage

Experimental Design

Number of Varieties	6 (Standard: Atlantic)
Number of Clones	88
Within Row Spacing	8 in (20 cm)
Between Row Spacing	40 in (102 cm)
Replications	3
Plot Size	8 ft (2.4 m)

Production Statistics

Early Vigor Ratings	41 days after planting
Highest Total Yield	ND8331Cb-3 (550 cwt/acre or 61.6 MT/ha)
Highest Marketable Yield	ND8331Cb-3 (414 cwt/acre or 46.4 MT/ha)
Best Appearance Rating	LaChipper, AF3318-13, AF3327-27 and B2529-3 (7.0, good to excellent)

Table 3. Production statistics for early-line 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	342	301	100	1	3	78	13	5	0	96	18	1.077
LaChipper	395	346	115	1	7	66	22	4	0	91	26	1.070
Goldrush	393	337	112	1	11	75	13	1	0	88	13	1.063
Red LaSoda	435	341	113	1	4	63	24	9	0	95	32	1.062
Sebago	416	334	111	2	13	74	11	1	0	86	12	1.066
Yukon Gold	394	307	102	1	11	61	24	2	0	87	27	1.078
AF0337-4	472	280	93	2	23	74	1	0	0	75	1	1.056
AF0338-17	327	282	94	1	9	79	11	0	0	90	11	1.076
AF0339-28	340	262	87	1	17	78	4	0	0	82	4	1.056
AF0339-39	296	214	71	2	19	71	7	0	0	79	7	1.058
AF2543-6	329	232	77	1	27	70	2	0	0	72	2	1.060
AF2596-3	386	243	81	2	23	74	2	0	0	76	2	1.068
AF2598-1	167	125	42	1	21	77	1	0	0	78	1	1.055
AF2607-2	295	214	71	2	15	81	2	0	0	82	2	1.062
AF2698-2	325	268	89	2	7	59	29	3	0	91	32	1.067
AF3310-1	345	273	90	2	6	70	19	3	0	92	22	1.068
AF3310-3	273	211	70	2	13	81	4	0	0	85	4	1.071
AF3310-5	310	228	76	3	21	76	0	0	0	76	0	1.064
AF3310-12	245	198	66	1	9	81	8	0	0	90	8	1.072
AF3310-13	345	293	97	1	11	76	12	0	0	88	12	1.069
AF3310-16	272	196	65	2	20	67	11	0	0	79	11	1.063
AF3310-17	394	290	96	1	20	76	3	0	0	79	3	1.068
AF3317-15	332	232	77	3	26	71	0	0	0	71	0	1.071
AF3318-1	311	286	95	1	2	49	43	4	0	97	48	1.073

Table 3 (cont'd). Production statistics for early-line 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	
AF3318-2	311	262	87	1	8	76	15	0	0	91	15	1.075
AF3318-6	288	218	72	2	17	78	3	0	0	81	3	1.080
AF3318-13	365	205	68	3	36	61	1	0	0	61	1	1.067
AF3325-2	188	116	38	3	34	63	0	0	0	63	0	1.063
AF3326-7	306	271	90	1	5	78	16	1	0	95	17	1.067
AF3327-24	93	52	17	3	35	56	5	0	0	61	5	1.045
AF3327-27	336	255	85	1	18	80	0	0	0	80	0	1.068
AF3327-28	284	236	78	1	11	77	11	0	0	88	11	1.060
AF3329-16	515	354	118	1	12	78	7	1	0	87	8	1.061
AF3331-11	252	197	65	1	15	61	23	0	0	84	23	1.067
AF3331-5	338	214	71	3	27	66	5	0	0	71	5	1.059
AF3332-6	310	227	75	1	11	72	11	5	0	88	16	1.067
AF3346-2	183	125	42	4	28	58	8	2	0	68	10	1.042
AF3350-2	283	248	82	1	8	73	17	0	0	91	17	1.068
AF3353-1	293	170	56	3	35	60	1	0	0	61	1	1.060
AF3360-1	464	373	124	1	15	77	7	0	0	84	7	1.078
AF3362-1	439	384	127	1	8	81	10	0	0	92	10	1.065
AND00272-1R	441	308	102	1	18	77	4	0	0	81	4	1.064
B2111-80	269	245	81	1	6	60	24	9	0	94	34	1.075
B2133-81	299	263	87	1	9	86	3	0	0	89	3	1.073
B2460-23	354	313	104	1	6	63	21	9	0	92	29	1.075
B2483-4	372	263	87	3	23	71	4	0	0	75	4	1.082
B2483-20	326	226	75	2	28	68	2	0	0	71	2	1.078
B2485-2	391	315	104	1	9	67	20	2	0	90	22	1.075

Table 3 (cont'd). Production statistics for early-line 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	
B2487-1	317	248	82	1	15	77	7	0	0	83	7	1.074
B2487-17	189	117	39	2	36	60	2	0	0	62	2	1.068
B2489-3	320	256	85	2	16	72	9	1	0	82	10	1.080
B2489-7	364	273	90	1	19	78	3	0	0	80	3	1.078
B2491-5	241	180	60	1	21	76	2	0	0	77	2	1.080
B2491-19	330	275	91	2	12	85	2	0	0	87	2	1.072
B2491-22	347	285	95	2	15	78	4	1	0	83	5	1.069
B2492-7	434	358	119	1	5	54	33	7	0	94	40	1.059
B2494-7	221	158	52	2	13	71	11	3	0	85	14	1.074
B2494-18	264	219	73	1	14	70	11	3	0	84	14	1.072
B2495-6	286	213	71	2	13	70	14	1	0	85	15	1.058
B2497-3	278	223	74	1	13	81	6	0	0	86	6	1.075
B2497-17	354	314	104	2	6	73	18	1	0	93	20	1.064
B2500-3	367	282	94	2	19	74	3	2	0	78	4	1.074
B2500-5	300	213	71	2	20	76	0	1	0	77	1	1.072
B2500-6	369	311	103	1	12	81	4	1	0	86	5	1.071
B2501-8	429	321	107	2	11	72	12	3	0	87	15	1.061
B2501-14	412	318	105	1	14	77	8	0	0	85	8	1.070
B2502-6	375	331	110	1	6	76	15	2	0	93	17	1.065
B2504-3	313	199	66	2	33	64	0	0	0	64	0	1.068
B2506-12	328	239	79	1	23	75	2	0	0	77	2	1.079
B2509-1	183	102	34	4	39	57	0	0	0	57	0	1.066
B2514-14	242	120	40	3	45	52	0	0	0	52	0	1.065
B2527-9	410	211	70	4	42	54	0	0	0	54	0	1.076

Table 3 (cont'd). Production statistics for early-line 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	
B2528-2	403	249	82	2	24	65	8	0	0	74	8	1.065
B2528-3	311	122	40	7	47	45	1	0	0	46	1	1.076
B2529-3	167	73	24	8	48	44	0	0	0	44	0	1.064
B2530-2	427	317	105	3	17	73	7	1	0	80	8	1.090
B2533-3	436	272	90	3	22	73	1	0	0	74	1	1.078
BCO01283-2	125	29	10	17	64	19	0	0	0	19	0	1.061
BCO01283-3	466	343	114	1	23	74	1	0	0	76	1	1.063
BCO01389-1	317	228	76	3	22	75	1	0	0	75	1	1.065
BCO01401-2	161	96	32	3	34	63	0	0	0	63	0	1.068
ND028601-4R	400	281	93	1	24	73	2	0	0	75	2	1.059
ND028674-4R	297	219	73	2	7	71	19	2	0	92	21	1.054
ND4659-5R	348	250	83	2	22	71	4	0	0	75	4	1.069
ND4756-1R	364	313	104	1	8	75	16	0	0	91	16	1.068
ND5002-3R	227	149	49	6	30	62	3	0	0	64	3	1.055
ND5255-59	391	308	102	1	15	84	0	0	0	88	0	1.072
ND5775-3	392	314	104	2	14	76	8	1	0	85	8	1.075
ND6095-1	347	202	67	3	36	60	1	0	0	61	1	1.073
ND7196c-18	364	220	73	4	29	64	3	0	0	67	3	1.073
ND7799C-1	231	186	62	2	13	63	21	1	0	85	22	1.061

ND8229-3	321	239	79	1	19	78	2	0	0	80	2	1.073
ND7818-1Y	419	282	94	2	27	68	2	1	0	71	3	1.070
ND8331Cb-3	550	414	137	2	17	79	2	0	0	82	2	1.071
<i>MSD</i> ³	54	54		3	8	13	9	4	0	9	9	0.004
<i>P Value</i>	0.0001	0.0001		0.0001	0.0001	0.0001	0.0001	0.0001	-	0.0001	0.0001	0.0001

¹Marketable yield:

size classes A1 to A3.

²Size classes: C = .5 to 1.5 inches , B = 1.5 to 1 7/8 inches, A1 = 1 7/8 to 2.5 inches, A2 = 2.5 to 3.25 inches, A3 = 3.25 to 4 inches, A4 = greater than 4 inches

³Means separated within columns by Waller

Duncan's K- ratio t test.

Table 4. Plant growth and tuber characteristics of early-line potato selections.

Clone	Plant Growth Characteristics ¹				Tuber Characteristics ²							Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity	IF C	SC	ST	TS	ED	APP		
Atlantic	97	5.3	8.3	9.0	2.0	5.5	5.0	3.0	6.0	6.5	some scab	
LaChipper	100	6.3	9.0	7.0	1.0	8.0	8.0	3.5	6.0	7.0	flat tubers	
Goldrush	97	5.0	9.0	8.7	2.0	4.0	2.0	5.0	6.5	6.5	attractive skin	
Red LaSoda	97	6.7	8.5	8.0	1.5	2.5	7.0	3.0	4.0	5.5	deep eyes	
Sebago	89	6.0	8.3	8.3	2.0	7.0	7.0	3.5	5.5	5.0	lenticels	
Yukon Gold	92	6.0	8.3	7.3	3.0	7.0	7.0	3.5	5.5	5.5	okay	
AF0337-4	97	6.3	9-6	7.3	1.5	7.0	6.5	3.5	4.5	4.0	irregular shapes, lumpy	
AF0338-17	100	5.7	8.0	8.0	1.0	6.0	5.5	2.5	7.0	6.0	slightly flat	
AF0339-28	97	4.7	8.3	9.0	1.0	7.0	6.5	3.5	5.5	5.5	good size	
AF0339-39	97	4.0	8.0	8.7	1.5	7.0	6.5	2.0	5.0	6.0	deep eyes, round shape	
AF2543-6	97	4.0	8.0	8.0	1.5	7.0	7.0	3.0	7.0	5.0	lenticels, some scab	
AF2596-3	81	6.0	8.0	8.3	1.5	5.0	5.0	5.0	7.0	5.5	some scab	
AF2598-1	72	3.0	8.0	7.7	1.5	7.0	7.0	3.5	7.0	5.0	air cracks	
AF2607-2	100	4.7	8.0	7.0	1.5	7.0	7.0	3.5	5.0	5.5	lenticels, slightly flat some skinning, scab, irregular shapes	
AF2698-2	94	4.0	8.0	9.0	1.5	6.5	6.0	3.0	6.5	5.0	irregular shapes and flat	
AF3310-1	100	5.3	8.0	9.0	1.5	7.0	6.5	2.5	6.5	6.0	nice round shape	
AF3310-3	100	4.7	7.7	9.0	1.5	6.0	5.5	2.5	7.0	6.0	some scab	
AF3310-5	100	3.7	8.0	9.0	1.5	6.5	5.5	2.0	6.5	5.5	some lenticels	
AF3310-12	94	5.7	7.7	7.0	2.0	8.0	7.5	3.0	7.5	6.5	slightly flat	
AF3310-13	100	5.3	8.3	8.0	1.5	6.5	5.5	2.5	7.0	6.0	slightly irregular shape	
AF3310-16	94	5.0	8.3	8.0	1.5	6.5	5.5	2.5	6.5	5.5	very white flesh	
AF3310-17	97	6.3	9.0	7.7	1.5	7.5	6.5	3.5	7.5	6.0	irregular shape	
AF3317-15	94	5.3	8.0	9.0	1.0	4.0	2.5	5.5	6.5	5.0	slightly flat	
AF3318-1	94	4.7	7.7	9.0	1.0	7.0	5.5	3.0	6.0	5.5		

Table 4 (cont'd). Plant growth and tuber characteristics of early-line potato selections.

Clone	Plant Growth Characteristics ¹				Tuber Characteristics ²							Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity	IF C	SC	ST	TS	ED	APP		
AF3318-2	97	5.3	8.0	7.7	1.5	8.0	7.5	3.5	6.0	5.5	irregular shapes, slightly flat	
AF3318-6	97	5.7	8.0	8.0	1.5	8.0	6.5	2.0	6.0	6.0	nice round shape	
AF3318-13	100	6.7	9.0	7.7	1.0	8.0	6.5	3.0	7.5	7.0	nice round shape, size and color	
AF3325-2	94	3.7	7.0	7.7	1.0	5.0	2.0	5.0	6.5	5.5	very nice skin	
AF3326-7	97	5.3	7.7	7.3	2.0	4.5	3.5	4.0	7.0	6.0	slightly skinning	
AF3327-24	100	5.0	8.0	2.7	-	-	-	-	-	-	severe herbicide damage	
AF3327-27	97	5.3	9.0	8.3	1.0	4.0	2.5	5.0	7.5	7.0	nice appearance	
AF3327-28	100	5.0	8.0	8.7	2.0	4.5	2.5	5.0	7.0	5.5	slightly skinning, irregular shapes	
AF3329-16	100	6.0	8.0	9.0	1.5	7.0	6.5	6.0	6.5	3.5	lenticels, lumpy shapes	
AF3331-11	89	3.7	7.3	9.0	1.5	2.5	5.5	2.5	5.5	5.0	netted skin	
AF3331-5	97	6.3	8.0	6.3	1.5	7.0	6.5	4.0	7.0	5.5	slightly skinning	
AF3332-6	97	3.7	7.7	8.7	1.0	6.5	6.0	3.0	4.5	4.0	lenticels, deep eyes	
AF3346-2	44	3.0	7.0	9.0	1.0	6.5	6.5	3.5	5.5	4.5	slightly skinning, irregular shapes	
AF3350-2	83	6.0	8.0	8.0	1.0	5.5	6.0	3.5	6.5	4.5	skinning	
AF3353-1	100	5.3	8.7	5.7	1.5	4.5	2.5	5.0	6.5	6.0	slightly skinning	
AF3360-1	100	6.0	9.0	9.0	1.5	6.0	6.0	2.5	5.0	6.0	slightly flat, purple bud end	
AF3362-1	97	6.7	8.7	8.7	2.0	5.0	3.5	5.5	5.5	4.5	irregular shapes, slightly flat pointy shapes, external corky ring spot	
AND00272-1R	89	6.0	9-6	7.0	1.5	2.0	7.0	4.0	6.5	4.5	spot	
B2111-80	97	5.7	7.5	7.0	1.5	5.5	5.0	2.0	6.0	6.5	decent appearance	
B2133-81	92	4.7	8.0	9.0	1.5	6.0	5.5	3.5	7.0	5.5	scab	
B2460-23	97	8.0	8.7	9.0	1.5	6.0	5.0	3.5	7.5	6.0	decent appearance	
B2483-4	100	7.7	9-6	7.7	2.0	6.0	5.0	2.0	7.5	6.0	decent appearance	
B2483-20	100	7.7	9-6	7.7	1.0	6.0	5.0	2.0	6.5	5.5	scab, slightly flat	
B2485-2	100	8.7	9.0	8.7	2.0	6.0	5.5	3.0	6.0	6.5	slightly flat	

Table 4 (cont'd). Plant growth and tuber characteristics of early-line potato selections.

Clone	Plant Growth Characteristics ¹				Tuber Characteristics ²							Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity	IF C	SC	ST	TS	ED	APP		
B2487-1	100	7.7	8.0	7.7	2.0	5.0	5.0	2.5	7.0	6.5	decent appearance	
B2487-17	97	5.7	7.5	7.7	2.0	6.5	6.0	2.5	7.0	6.0	slightly fat, some herbicide damage	
B2489-3	100	6.7	9.0	8.0	2.0	6.0	5.0	2.5	6.5	5.0	scab	
B2489-7	97	8.7	9-6	7.3	1.5	7.0	7.0	2.0	7.5	6.5	some lenticels	
B2491-5	100	5.3	8.7	8.7	1.5	7.0	6.5	2.5	6.0	5.5	irregular shapes, lenticels	
B2491-19	100	7.0	9.0	8.7	1.0	6.0	5.0	3.5	7.0	6.0	nice white flesh	
B2491-22	97	6.3	8.3	9.0	1.5	7.0	7.0	3.0	7.0	3.5	scab	
B2492-7	100	7.7	9.0	8.0	2.0	6.5	6.0	2.5	6.5	5.0	lenticels	
B2494-7	86	4.3	8.0	9.0	1.5	5.5	5.0	2.5	7.0	5.0	scab	
B2494-18	89	5.3	7.7	6.7	1.5	7.5	7.0	3.0	7.0	5.0	lenticels, slightly flat	
B2495-6	97	4.0	7.3	7.0	1.5	6.5	6.0	2.5	6.5	5.5	skinning	
B2497-3	89	5.3	8.3	7.7	1.0	8.0	7.5	3.5	7.0	5.5	some lenticels and scab	
B2497-17	92	5.3	8.3	8.3	1.5	7.5	7.0	3.5	7.0	6.0	some scab	
B2500-3	97	6.3	9.0	8.3	1.5	6.5	5.5	3.0	6.5	5.0	skinning	
B2500-5	89	6.0	8.7	7.7	2.0	8.0	6.5	2.5	7.0	5.5	some lenticels	
B2500-6	100	6.0	8.0	8.3	1.0	5.0	4.5	4.0	6.5	6.0	some skinning	
B2501-8	100	9.0	8.0	7.3	2.0	6.0	5.5	2.5	7.0	6.0	scab	
B2501-14	100	8.7	9.0	7.7	2.0	6.0	6.0	3.0	6.5	5.0	flat tubers	
B2502-6	100	6.3	8.3	8.0	1.5	5.5	5.0	2.5	7.0	5.5	scab, possibly chip	
B2504-3	100	5.0	8.7	9.0	1.0	4.0	2.5	3.5	8.0	5.5	small size, nice skin, round russet	
B2506-12	92	6.0	8.5	7.0	1.5	6.5	5.5	4.0	7.5	5.0	irregular shapes, pointy	
B2509-1	100	4.0	7.5	9.0	1.0	4.0	3.0	4.0	8.0	5.0	small set	
B2514-14	94	4.0	7.7	9.0	1.5	4.0	2.5	4.0	8.0	5.5	small size, nice skin	
B2527-9	100	8.3	9-6	8.3	4.0	3.0	7.5	3.0	6.0	6.5	flat tubers, lenticels	

Table 4 (cont'd). Plant growth and tuber characteristics of early-line potato selections.

Clone	Plant Growth Characteristics ¹				Tuber Characteristics ²							Tuber Comments
	% Stand	Early Vigor	Vine Type	Vine Maturity	IF C	SC	ST	TS	ED	APP		
B2528-2	100	8.0	9-6	6.3	2.0	3.0	7.0	2.5	6.5	5.5	irregular shapes	
B2528-3	92	7.7	6.0	5.7	6.0	2.0	6.0	2.5	7.0	5.0	mottled pink flesh, flat	
B2529-3	97	8.7	8-5	1.7	1.5	2.0	7.5	1.0	7.0	7.0	very small	
B2530-2	94	8.7	9.0	7.7	3.0	6.5	5.5	2.5	7.0	5.0	irregular shapes, scab	
B2533-3	100	9.0	9.0	8.0	4.0	7.0	7.0	3.5	6.0	6.0	deep yellow flesh very white flesh, small size, herb. damage	
BCO01283-2	97	6.3	8-5	6.7	1.0	2.5	7.5	3.0	6.5	6.5	irregular shapes, slightly flat	
BCO01283-3	100	6.0	9-6	6.7	1.0	2.5	7.5	3.5	6.5	6.0	stolons, flat tubers	
BCO01389-1	97	5.3	9.0	9.0	1.0	2.5	7.5	2.5	6.0	5.5	some skinning, slightly flat	
BCO01401-2	100	5.0	7.7	7.7	4.0	1.0	6.5	3.0	6.0	6.0	some deep eyes	
ND028601-4R	97	8.3	8-5	6.7	1.0	2.5	7.5	4.5	5.0	6.5	lenticels	
ND028674-4R	58	6.7	8-5	6.3	2.0	2.5	7.5	4.0	6.0	5.5	slightly irregular shape, nice color	
ND4659-5R	97	6.0	9.0	7.0	1.5	2.5	7.5	2.5	6.5	6.5	slightly irregular shape	
ND4756-1R	83	5.3	8.3	7.0	1.0	2.5	6.0	2.5	6.0	6.0	irregular shapes, skinning	
ND5002-3R	100	5.7	8.0	5.3	1.0	2.5	6.0	3.0	5.5	5.5	irregular shapes	
ND5255-59	100	5.7	9.0	8.7	1.5	5.5	4.0	4.0	6.0	5.0	some lenticels	
ND5775-3	81	4.3	8.0	9.0	1.5	7.0	6.0	2.5	6.0	6.0	some lenticels	
ND6095-1	94	7.7	9.0	7.3	1.5	7.5	6.5	3.0	7.0	6.0	some lenticels, flat tubers	
ND7196c-18	100	6.7	8-5	6.7	2.0	7.0	6.5	3.5	7.0	5.5	irregular shapes, lenticels	
ND7799C-1	69	5.3	7.5	8.3	1.5	6.5	6.5	3.0	7.5	5.5	decent appearance	
ND8229-3	97	4.3	7.7	8.3	1.0	6.0	5.5	5.0	7.5	5.5	some lenticels	
ND7818-1Y	100	6.7	8.0	8.7	3.0	7.0	6.5	4.0	7.0	5.5	some lenticels, irregular shapes	
ND8331Cb-3	97	7.3	9-6	9.0	1.5	8.0	6.5	3.5	6.5	6.0		

¹See rating system outlined in Table 1 (page 8).

²See rating system outlined in Table 2 (page 9).

Table 5. External and internal defects of 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	6	2	8	2	0	0	3	0	0	0
LaChipper	0	1	1	2	4	0	0	0	0	0	0	0
Goldrush	0	2	1	1	3	0	0	0	0	0	0	0
Red LaSoda	2	3	1	13	18	0	0	3	0	0	0	0
Sebago	0	1	3	3	6	0	0	0	2	2	0	0
Yukon Gold	0	2	7	2	11	0	0	3	2	5	0	0
AF0337-4	0	7	1	13	21	0	0	5	0	0	0	0
AF0338-17	1	1	2	1	4	0	0	0	0	0	0	0
AF0339-28	0	1	4	0	6	0	0	0	0	0	0	0
AF0339-39	3	3	1	1	8	0	0	0	0	0	0	0
AF2543-6	0	0	1	0	1	2	0	5	13	12	13	5
AF2596-3	0	0	6	10	16	2	0	0	2	0	0	0
AF2598-1	0	0	3	1	4	0	0	0	0	3	0	0
AF2607-2	1	2	4	7	13	5	0	0	0	0	0	0
AF2698-2	2	1	6	1	10	2	0	0	0	0	0	2
AF3310-1	0	1	5	8	14	0	0	15	0	0	0	0
AF3310-3	0	2	5	2	9	0	0	0	0	0	0	0
AF3310-5	0	0	2	1	3	2	0	0	0	0	2	0
AF3310-12	0	0	9	1	10	0	0	0	0	0	0	0
AF3310-13	0	0	2	1	3	2	0	0	0	2	0	0
AF3310-16	0	2	3	3	8	2	0	0	0	0	0	0
AF3310-17	0	0	2	4	7	0	0	0	0	0	0	0
AF3317-15	0	1	1	0	1	0	0	0	0	0	0	0
AF3318-1	0	0	1	4	6	0	0	0	0	0	0	0

Table 5 (cont'd). External and internal defects of 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				
AF3318-2	0	1	2	5	8	0	0	3	0	10	0	0
AF3318-6	0	0	2	5	6	0	0	10	0	0	2	0
AF3318-13	0	0	2	6	8	0	0	0	0	0	0	0
AF3325-2	0	0	1	2	3	0	0	0	0	0	0	0
AF3326-7	0	0	2	4	7	2	0	0	0	2	0	2
AF3327-24	0	3	0	1	4	0	0	0	0	0	0	0
AF3327-27	0	0	2	4	6	0	0	0	0	0	0	0
AF3327-28	1	0	4	1	5	0	0	7	0	0	0	0
AF3329-16	0	4	15	2	21	0	0	0	0	0	0	0
AF3331-11	0	0	6	0	7	0	0	2	0	0	0	0
AF3331-5	0	1	5	5	11	0	0	2	0	0	2	0
AF3332-6	0	3	9	5	17	0	0	0	0	0	0	0
AF3346-2	1	0	1	2	4	0	0	3	0	3	0	0
AF3350-2	0	0	1	2	3	0	0	0	0	0	0	0
AF3353-1	0	0	3	4	7	0	0	8	0	0	0	0
AF3360-1	0	0	4	0	4	0	0	0	0	0	0	0
AF3362-1	0	1	1	2	5	0	0	2	7	0	0	0
AND00272-1R	0	3	1	9	13	0	0	20	0	0	0	0
B2111-80	1	0	0	2	3	2	0	18	0	0	0	0
B2133-81	0	0	1	1	2	0	0	2	0	0	0	0
B2460-23	0	0	2	2	4	0	0	0	0	0	2	0
B2483-4	0	0	5	1	6	0	0	0	0	0	0	0
B2483-20	0	0	0	1	2	0	0	0	0	0	0	0
B2485-2	0	0	3	7	10	0	0	3	0	0	0	0

Table 5 (cont'd). External and internal defects of 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
B2487-1	0	0	5	2	7	0	0	22	0	2	0	0
B2487-17	0	0	0	2	2	0	0	0	0	0	0	0
B2489-3	0	0	2	1	3	2	0	0	0	2	0	0
B2489-7	0	0	4	3	7	0	0	3	0	0	0	0
B2491-5	0	0	0	4	4	0	0	0	0	0	0	0
B2491-19	0	1	0	3	4	0	0	0	0	0	0	0
B2491-22	0	0	1	0	1	0	0	0	2	0	0	0
B2492-7	0	0	4	8	12	0	0	0	0	0	0	2
B2494-7	0	0	8	9	17	0	0	3	0	0	0	0
B2494-18	0	0	2	1	3	0	0	0	0	0	0	0
B2495-6	0	1	6	4	12	0	0	0	0	2	0	0
B2497-3	0	0	2	5	7	0	0	0	0	0	0	0
B2497-17	0	0	4	0	4	0	0	10	0	2	0	0
B2500-3	0	0	1	1	2	0	0	2	0	0	2	0
B2500-5	0	1	3	4	8	3	0	0	0	0	0	0
B2500-6	0	0	1	1	2	0	0	0	2	3	0	0
B2501-8	0	0	1	13	14	0	0	3	0	0	0	0
B2501-14	0	1	1	8	10	0	0	18	0	0	0	0
B2502-6	0	1	2	2	5	2	0	0	0	0	0	0
B2504-3	0	0	0	3	3	0	0	0	0	0	0	0
B2506-12	0	2	1	3	6	0	0	0	2	0	0	0
B2509-1	0	1	1	1	3	0	0	0	0	0	0	0
B2514-14	1	0	0	2	4	0	0	0	0	0	0	0
B2527-9	0	1	0	5	6	0	0	3	0	0	0	0

Table 5 (cont'd). External and internal defects of 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				
B2528-2	0	4	2	11	17	0	0	0	0	23	7	10
B2528-3	0	0	0	17	17	0	0	2	0	0	0	0
B2529-3	0	2	0	0	2	0	0	0	0	0	0	0
B2530-2	0	0	2	5	8	0	0	12	0	0	0	0
B2533-3	0	1	4	11	16	0	0	0	0	0	2	0
BCO01283-2	0	0	0	5	5	0	0	0	0	0	0	0
BCO01283-3	0	0	1	1	2	0	0	0	0	0	2	0
BCO01389-1	2	2	0	0	4	0	0	0	0	0	0	0
BCO01401-2	0	0	0	5	5	0	0	0	0	0	0	0
ND028601-4R	1	1	1	3	6	0	0	0	0	0	0	0
ND028674-4R	4	0	5	12	20	0	0	2	7	0	0	0
ND4659-5R	0	1	0	4	5	0	0	2	0	0	0	0
ND4756-1R	0	4	0	2	7	0	0	0	0	0	0	0
ND5002-3R	0	1	0	0	1	0	0	0	0	0	0	0
ND5255-59	0	5	1	1	7	0	0	2	2	0	2	0
ND5775-3	1	1	2	2	5	0	0	5	0	2	2	2
ND6095-1	0	0	0	4	5	0	0	0	0	0	0	0
ND7196c-18	0	0	1	9	10	0	0	0	2	0	0	0

ND7799C-1	0	0	1	3	4	0	0	0	0	0	0	0
ND8229-3	0	1	4	2	7	0	0	0	0	0	0	0
ND7818-1Y	1	1	1	3	6	0	0	0	0	0	2	0
ND8331Cb-3	0	5	0	2	8	0	0	0	0	0	0	0
<i>MSD</i> ³	2	3	4	14	14	ns	0	ns	4	6	3	2
<i>P Value</i>	0.0016	0.0001	0.0001	0.0237	0.0008	0.7599	-	0.5246	0.0001	0.0001	0.0001	0.0001

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's K- ratio t test.