



Potato Show & Tell, 3 December 2014





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**Description of Advanced Selections From Cornell Breeding Program**  
**Based on Cornell trials in 2013 and prior years**  
**Last updated: 23 November 2014**

**NY140 (Y36-4) = NY121 x NY115 (1998).** Late season, dual purpose chip and tablestock. High yields of large tubers, lightly textured skin. Resistant to races Ro1 and Ro2 of the golden nematode.

- Marketable yields in Tompkins County over the past 12 years have averaged 115% of Atlantic (29 trials).
- Yields in Steuben and Wyoming County trials averaged 111% of Atlantic in 2006, 119% in 2007, 117% in 2008, 119% in 2009, 102% in 2010, 106% in 2011, 105% in 2012, and 101% of Atlantic in 2013. Eight year average: 111%.
- Yield in Wayne County was 129% of Atlantic in 2008, 123% in 2009, and 112% of Atlantic in 2012.
- Yields on Long Island were 108% of Norwis in 2004. Yields were 103% of Reba in 2005, 116% in 2006, 91% in 2007, 105% in 2008, 128% in 2009, 139% in 2010, 126% in 2011, 120% in 2012, and 153% of Reba in 2014.
- In PA yields averaged 106% of Atlantic in 2005 (3 trials), 124% in 2007 (4 trials), 119% in 2008 (2 trials), 104% in 2009 (3 trials), 112% in 2010 (3 trials), 107% in 2011 (2 trials), and 129% of Atlantic in 2012 (3 trials).
- Yield in North Carolina averaged 117% of Atlantic in 2009 (3 trials) and 96% of Atlantic in 2010 (2 trials).

A low frequency of pickouts due to knobs, misshapes and growth cracks. Some internal defects, most commonly hollow heart and internal necrosis, have been observed. Tuber size is unmistakably large, averaging 6.2 ounces per tuber (19 trials). Even at 6 inch spacing, tuber size remains large (2009 and 2010 trials). Specific gravity has averaged 0.012 less than Atlantic (39 trials). This will limit the locations where it could be grown for chips. Chip quality has generally been very good: over the past ten years it has averaged 3.4, somewhat better than Snowden, which averaged 3.7 in the same trials (lower is better). Susceptible to common scab, comparable to Katahdin. Tubers remain white after boiling, and do not slough significantly. Tuber dormancy is about six weeks longer than Atlantic. Nice vines, white flowers, few fruit. Exhibited moderate resistance to late blight as well as early blight in PA trials in 2007 - 2009. Good resistance to blackspot bruise. Resistant to races Ro1 and **Ro2** of the golden nematode.

**NY141 (Y41-67) = R6-4 x NY115 (1998).** Early to mid season tablestock, attractive tubers.

- Marketable yields in Tompkins County over the past 12 years have averaged 99% of Atlantic (32 trials).
- Yield in Wayne County was 107% of Atlantic in 2008, 106% in 2009, 78% in 2011, and 108% of Atlantic in 2012.
- Yields on Long Island were 82% of Norwis in 2004. Yields were 95% of Reba in 2005, 100% in 2006, 81% in 2007, 111% in 2008, 110% in 2009, 118% in 2010, 110% in 2011, 102% in 2012, 109% in 2013, and 143% of Reba in 2014.
- Yield in PA in 2005 was 107% of Atlantic in 2005 (1 trial), 92% in 2007 (4 trials), 79% in 2008 (2 trials), 94% in 2009 (3 trials), 115% in 2010 (3 trials), 91% in 2011 (2 trials), and 97% of Atlantic in 2012 (3 trials).

Typically 2 to 3% of tubers have knobs. A low frequency of internal defects, mostly brown center, have also been observed. Has set an average of 7.0 tubers per foot, with an average weight of 6.1 ounces (14 trials). Early yield, assessed at the end of July in Ithaca, has been good: 112% of Superior in 2010, 110% of Atlantic in 2009, 101% of Superior in 2006, and 122% of Superior in 2005. Specific gravity has averaged 0.011 less than Atlantic (33 trials). Does not chip. Good resistance to common scab. Tubers remain white after boiling, and do not slough significantly. Tuber dormancy is about two weeks longer than Atlantic. Nice vines, white flowers, some fruit. Very good resistance to blackspot bruise. Resistant to race Ro1 of the golden nematode.

**NY148 (E106-4) = NY128 x Marcy (2003).** Late season, high gravity chipstock.

- In 16 Tompkins County trials over the past seven years, marketable yields averaged 112% of Atlantic.
- In trials in Wyoming and Steuben Counties, yield averaged 112% of Atlantic in 2009, 81% in 2010, 108% in 2011, 90% in 2012, and 90% of Atlantic in 2013. Five year average: 96%
- Yield on Long Island was 98% of Reba in 2010, 106% in 2011, 113% in 2012, 108% in 2013, and 147% of Reba in 2014.
- Yield in PA was 113% of Atlantic in 2011 (1 trial), 132% in 2012 (4 trials), and 123% in 2013 (2 trials).

In general, few pickouts or internal defects have been observed – but in 2010, two-thirds of tubers exhibited internal necrosis in one yield trial (Harford). Heat necrosis has also been observed on Long Island in 2013 and in small-scale NCPT trials in southern states. Tuber size is similar to Snowden. Scurfy tuber skin. Specific gravity is high and has averaged equal to Atlantic (28 trials). Tubers are quite susceptible to blackspot bruise. Chip color from 44F storage is reasonable, but not as good as Snowden. In 2008, chip color from December, January and February averaged 3.5, not as good as Snowden at 2.3 in the same trials. In 2009, chip color averaged 3.8, better than Snowden at 4.5. In 2010 chip color averaged 3.3 compared to Snowden at 2.5. In 2011 chip color averaged 3.8 versus 3.7 for Snowden. In 2012 chip color averaged 4.3 compared to Snowden at 3.7. In 2013, color was 5.3 compared to 4.7 for Snowden. [Six year average: 4.0 versus 3.6 for Snowden]. Tubers darken slightly after boiling, and slough moderately. Tuber dormancy is comparable to Atlantic. Many white flowers. Has exhibited good resistance to common scab to date. Resistant to potato virus Y. Tests in PA in 2012 uncovered some resistance to both early and late blight as well. Resistant to race Ro1 of the golden nematode.

**NY149 (F11-1) = Yukon Gold x Keuka Gold (2004).** Mid-late season yellow-fleshed tablestock, with slightly-textured skin and pink eyes.

{This clone will resume testing in 2015, as we have ample virus-free seed again}.

**NY150 (F52-1) = NY121 x Jacqueline Lee (2004).** Niche-market, early season tablestock. Produces many small tubers with bright white skin.

- In 13 Tompkins County trials over the past six years, yields of tubers between 1 and 1.875 inches averaged 171 cwt/acre, while yields of tubers between 1.875 and 2.5 inches in diameter averaged 152 cwt/acre. In the same trials yield of tubers greater than 2.5 inches averaged only 17 cwt/acre. For comparison, marketable yield of Atlantic (>1.875 inches) in the same trials averaged 404 cwt/acre.
- Yield in Wayne County in 2014 was 128, 181 and 20 cwt/acre for the less than 2 inch, 2 to 2.5 inch, and greater than 2.5 inch size categories, respectively.
- Yield on Long Island in 2014 was 63, 207 and 21 cwt/acre for the less than 2 inch, 2 to 2.5 inch, and greater than 2.5 inch size categories, respectively.
- Yield in PA in 2013 averaged 143, 185 and 43 cwt/acre for the less than 2 inch, 2 to 2.5 inch, and greater than 2.5 inch size categories, respectively (2 trials).

Few pickouts (mostly misshapes) or internal defects have been observed. Specific gravity has averaged 0.010 less than Atlantic (11 trials). Tubers do not darken or slough appreciably after boiling, and retain attractive appearance after long term storage. Tuber dormancy is about 2 weeks longer than Atlantic. Intermediate reaction to common scab. Resistant to potato virus Y. Exhibited some resistance to late blight in PA in 2012 and 2013. Resistant to race Ro1 of the golden nematode.

**NY151 (G73-1) = NY121 x Salem (2005).** Late season, white tablestock with relatively smooth skin.

- In nine Tompkins County trials over the past five years, marketable yields averaged 106% of Atlantic.
- Yield in Wayne County was 114% of Atlantic in 2014.
- Yield on Long Island was 116% of Reba in 2011, 118% in 2012, and 141% of Reba in 2014.
- Yield in PA was 117% of Atlantic in 2011 (1 trial) and 114% of Atlantic in 2012 (3 trials).

In general, low levels of pickouts (mostly growth cracks) or internal defects (brown center) have been observed, although 23% brown center was observed in one trial in 2014. Specific gravity is low and has averaged 0.023 less than Atlantic (9 trials). Moderate resistance to common scab. Tubers do not darken or slough appreciably after boiling. Tuber dormancy is comparable to Atlantic. Resistant to race Ro1 of the golden nematode.

**NY152 (H15-5) = B38-14 x Marcy (2006).** Late season chipstock, excellent chip color.

- In seven Tompkins County trials over the past four years, marketable yields averaged 103% of Atlantic.
- Yield in PA was 106% of Atlantic in 2011 (1 trial).
- In trials in Wyoming and Steuben Counties, yield averaged 97% of Atlantic in 2012 and 133% in 2014.
- Yield on Long Island was 164% of Reba in 2014.

Low levels of pickouts (growth cracks) or internal defects (hollow heart) have been observed. Specific gravity has averaged 0.008 less than Atlantic (10 trials). Chip color from 44F storage in December, January and February (2011 crop season) averaged 3.0 compared to 4.0 for Snowden (lower is better). Chip color in 2012 averaged 3.3 versus 3.7 for Snowden. Chip color in 2013 averaged 3.0 versus 4.7 for Snowden. Moderate to good resistance to common scab. Tuber dormancy is about 4 weeks longer than Atlantic. Susceptible to race Ro1 of the golden nematode.

**NY153 (H25-4) = Waneta x Pike (2006).** Late season chipstock, high specific gravity, promising chip color.

- In six Tompkins County trials over the past four years, marketable yields averaged 96% of Atlantic.
- Yield in PA was 71% of Atlantic in 2011 (1 trial).
- In trials in Wyoming and Steuben Counties, yield averaged 94% of Atlantic in 2012.

Low levels of pickouts (growth cracks and knobs) have been observed. The frequency of hollow heart to date is nevertheless of concern, e.g. 23% in one trial in 2013. Specific gravity has averaged 0.002 less than Atlantic (7 trials). Chip color from 44F storage in December, January and February (2011 crop season) averaged 2.0 compared to 4.0 for Snowden (lower is better). Chip color in 2012 averaged 2.7 versus 3.7 for Snowden. Chip color in 2013 averaged 3.3 versus 4.7 for Snowden. Moderate resistance to common scab. Tuber dormancy is about 6 weeks longer than Atlantic. Resistant to race Ro1 of the golden nematode.

**NY154 (H15-17) = B38-14 x Marcy (2006).** Late season chipstock, promising chip color.

- In six Tompkins County trials over the past four years, marketable yields averaged 120% of Atlantic.
- Yield in PA was 91% of Atlantic in 2011 (1 trial).
- In trials in Wyoming and Steuben Counties, yield averaged 122% of Atlantic in 2012 and 150% of Atlantic in 2014.
- Yield on Long Island was 125% of Atlantic in 2014.

Low levels of pickouts (knobs) or internal defects (hollow heart) have been observed. Specific gravity has averaged 0.007 less than Atlantic (9 trials). Chip color from 44F storage in December, January and February (2011 crop season) averaged 3.3 compared to 4.0 for Snowden (lower is better). In 2012, chip color averaged 3.0 versus 3.7 for Snowden. Chip color in 2013 averaged 3.0 versus 4.7 for Snowden. Good resistance to common scab. Tuber dormancy is about 1 week longer than Atlantic. Susceptible to race Ro1 of the golden nematode.

**NY155 (H122-4) = NY136 x Nordonna (2006).** Early maturing, pink-skinned tablestock.

- In five Tompkins County trials over the past four years, marketable yields averaged 102% of Chieftain.
- Yield in Wayne County was 84% of Atlantic in 2014.
- Yield on Long Island was 76% of Chieftain in 2012 and 151% of Reba in 2014.
- Yield in PA was 115% of Chieftain in 2011 (2 trials).

Tubers are uniform, large (5.8 ounce average, 3 trials) and have an oblong, flattened shape with shallow eyes and – even though both its parents have deep red skin – **very light pink skin**. Low levels of pickouts (secondary growth) or internal defects (internal necrosis and brown center) have been observed. Moderate resistance to common scab. Tubers do not darken or slough appreciably after boiling. Tuber dormancy is two weeks longer than Atlantic. Unclear reaction to race Ro1 of the golden nematode.



**NY156 (J104-3) = White Pearl x Marcy (2007).** Late maturity chipstock. Outstanding chip color.

- In three Tompkins County trials over the past three years, marketable yields averaged 87% of Atlantic.

Low levels of pickouts (secondary growth) or internal defects (internal necrosis) have been observed. Specific gravity has averaged 0.008 less than Atlantic (3 trials). Chip color from 44F storage in December, January and February (2012 crop season) averaged 2.0 compared to 4.0 for Snowden (lower is better). Chip color from the 2013 crop averaged 2.0 compared to 5.7 for Snowden in the same trial. Moderately resistant to common scab. Tuber dormancy is similar to Atlantic. Susceptible to race Ro1 of the golden nematode.

NY156 had considerable virus in 2014. We will resume testing in several years, once clean seed becomes available.

**NY157 (J105-10) = White Pearl x NY115 (2007).** Mid-season chipstock.

- In five Tompkins County trials over the past three years, marketable yields averaged 91% of Atlantic.
- In trials in Wyoming and Steuben Counties, yield averaged 100% of Atlantic in 2014.
- On Long Island, yield was 114% of Reba in 2014.

Low levels of pickouts (knobs, growth cracks) or internal defects (internal necrosis) have been observed. Specific gravity has averaged 0.006 less than Atlantic (7 trials). Chip color from 44F storage in December, January and February (2012 crop season) averaged 4.0 compared to 4.0 for Snowden (lower is better). Chip color in 2013 averaged 3.7 vs 5.7 for Snowden. Moderately resistant to common scab. Tuber dormancy is similar to Atlantic. Resistant to race Ro1 of the golden nematode.

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**2014 Summary of Yield Trials**  
 Marketable yield larger than 1 7/8" (including green tubers).  
 Performance given as % of check variety.

	Ellis Hollow			Freeville				Wayne Marion	Steuben Arkport	Wyoming Bliss
	Advanced Trial	Intermed. Trial	Red Trial	CU Trial	Early Trial	Late Trial	Red Trial			
Atlantic	<b>100</b>	<b>100</b>		<b>100</b>	<b>100</b>	<b>100</b>		<b>100</b>	<b>100</b>	<b>100</b>
Snowden	93	101		<b>121</b>		127		134	92	
Andover	82				93					
Lamoka	82	104				106		130	87	
Waneta	84	96				107		134	125	
Reba	97	94								
NY140	113					123				
NY141	95				96					
NY148	106					123				
NY150 *	66				85			94		
NY151	98					126		114		
NY152	98					120		150	116	
NY153	91									
NY154	109					139		162	139	
NY156 (J104-3)	79									
NY157 (J105-10)	87			91				105	95	
J15-7	100			104				155	156	
J17-1	89			90						
J21-5	91			101				38		
J112-2	77			68				116	73	
K11-2		92		80				94		
K23-13		95								
K27-1		89		100				74	96	
K27-3		85		99				110	137	
K28-7		111		85				109	120	
K28-14		92								
K28-18		90		110	96			112	116	
K31-4		92		84				124	118	
Chieftain			<b>100</b>				<b>100</b>	<b>100</b>		
Nordonna			92				106			
Red Maria			93				104	115		
Adirondack Blue			59							
Strawberry Paw			88				90	103		
NY155			98		102					
H52-1 (long purple flesh)			43							
H73-1			89							
K100-3			97				84	105		
L27-2 (bright pink)			61				118	79		
L29-3 (purple eyes, yellow flesh)			90					142		

\*includes tubers less than 1.875 inches; this clone produces many small tubers

### 2014 Summary of Specific Gravities

Entries show differences (in units of 0.001) from Atlantic or Snowden

	Ellis Hollow		Freeville			County	
	Advanced Trial	Intermed. Trial	CU Trial	Early Trial	Late Trial	Steuben Arkport	Wyoming Bliss
Atlantic	<b>1.091</b>	<b>1.093</b>	<b>1.098</b>	<b>1.096</b>	<b>1.097</b>	<b>1.104</b>	<b>1.096</b>
Snowden	-2	-4	-1		-1	+1	0
Andover	-4			-15			
Lamoka	-4	-3			-1	-2	-9
Waneta	-14	-13			-14	-11	-16
Reba	-14	-16					
NY140	-11				-12		
NY141	-8			-13			
NY148	+3				+3		
NY150	-7			-17			
NY151	-22				-27		
NY152	-6				-11	-5	-9
NY153	0						
NY154	-5				-3	-4	-12
NY156 (J104-3)	-8						
NY157 (J105-10)	-5		-12			-3	-12
J15-7	-7		-10			-11	-13
J17-1	-7		-4				
J21-5	-10		-14				
J112-2	-2		-2			-4	-9
K11-2		-19	-23				
K23-13		+1					
K27-1		-6	-9			-11	-10
K27-3		-4	-2			-5	-7
K28-7		-4	0			-3	-3
K28-14		-3					
K28-18		+8	+10	+9		0	0
K31-4		-5	-5			-13	-14

**Results from Cornell Breeding Program Trials**

**Walter De Jong and Robert Plaisted**



### 2014 Advanced Stage Yield Trial, Ellis Hollow

Plots 2 rows x 20', hills spaced at 8.2"

4 Replicates (unless indicated otherwise in parentheses)

Planted May 6, vines burned down on September 3, harvested Sept 19

	cwt/acre		%	pickout		% internal defects			appear.	specific gravity
	>1 7/8"	>2 1/2"	>2 1/2"	cwt/A	type	HHT	IN	BC	score	
Andover	406	261	64	0	-	10	0	3	3.6	1.087
Atlantic	495	360	73	9	gc	3	0	0	3.4	1.091
Lamoka	404	323	80	2	k	5	0	3	3.4	1.087
Marcy	548	435	79	0	-	10	0	0	3.7	1.087
Reba	478	376	79	0	-	0	3	10	3.1	1.077
Snowden	462	259	56	0	-	8	0	3	3.0	1.089
Waneta	417	340	82	1	gc	5	0	3	3.7	1.077
NY140	561	468	83	2	gc	3	3	3	3.4	1.080
NY141	471	358	76	11	k	0	0	8	3.4	1.083
NY148	525	333	63	0	-	0	5	0	3.1	1.094
NY150	136	13	10	0	-	0	0	0	3.3	1.084
NY151	485	373	77	2	k	0	0	23	3.5	1.069
NY152	487	264	54	0	-	0	0	3	3.4	1.085
NY153	450	307	68	1	gc	10	0	0	3.3	1.091
NY154 (H15-7)	539	387	72	0	-	3	0	0	3.4	1.086
J15-7	493	363	74	0	-	7.5	0	0	3.4	1.084
J17-1	441	316	72	2	k	0	0	0	3.4	1.084
J21-5	450	285	63	14	gc, k	0	0	0	3.6	1.081
J104-3	391	299	76	0	-	2.5	0	0	3.3	1.083
J105-10	431	268	62	0	-	0	0	0	3.4	1.086
J112-2	382	254	66	6	gc	0	0	0	3.5	1.089

\*\*NY150 also produced an additional 192 cwt/acre of tubers less than 1.875 inches in diameter

### 2014 Intermediate Stage Yield Trial, Ellis Hollow

Plots 2 rows x 20', hills spaced at 8.2".

Three replicates, unless indicated otherwise following clone name

Planted May 6, harvested September 19. Vines burned down on September 3.

	cwt/acre		%	pickout		% internal defects			appear. score	specific gravity
	>1 7/8"	>2 1/2"	>2 1/2"	cwt/A	type	HHT	IN	BC		
Atlantic	504	369	73	4	gc	0	13	40	3.5	1.093
Eva	448	382	85	4	k	7	0	13	3.5	1.077
Lamoka	524	412	79	6	k	0	3	0	3.3	1.090
Reba	476	396	83	2	gc	3	7	13	3.0	1.077
Snowden	509	340	67	0	-	0	3	0	3.0	1.089
Waneta	482	404	84	2	mis	0	0	0	3.7	1.080
K11-2	463	320	69	5	k, mis	0	0	0	3.4	1.074
K23-13	478	357	75	3	k	23	0	3	3.4	1.094
K27-1	451	312	69	8	gc	7	0	3	3.4	1.087
K27-3	430	279	65	0	-	0	0	0	3.3	1.089
K28-7	562	400	71	1	mis	7	0	0	3.3	1.089
K28-14	464	374	81	8	k, gc	7	0	7	3.3	1.090
K28-18	455	239	53	4	gc	0	0	0	3.3	1.101
K31-4	463	329	71	2	k	0	0	0	3.5	1.088

## 2014 First Stage Yield Trial, Ellis Hollow

Plots 2 rows x 15', hills spaced at 8.2"

3 Replicates (unless indicated otherwise in parentheses)

Planted May 7, harvested September 17. Vines burned down on September 3.

	cwt/acre		%	pickout		% internal defects			appear. score	specific gravity
	>1 7/8"	>2 1/2"	>2 1/2"	cwt/A	type	HHT	IN	BC		
Atlantic	468	337	72	9	gc, k	10	3	0	3.5	1.091
Eva	459	360	78	9	k	3	0	3	3.5	1.076
Keuka Gold	530	407	77	1	mis	0	23	13	3.4	1.075
Lamoka	415	345	83	2	k	0	0	0	3.4	1.085
Reba	466	371	80	1	mis	7	3	3	3.0	1.077
Snowden	471	256	54	0	-	0	3	0	3.0	1.087
Waneta	406	315	77	0	-	3	0	3	3.6	1.079
L1-7	431	292	61	2	k, gc	3	3	0	3.3	1.082
L1-8	333	117	35	0	-	0	0	0	3.3	1.085
L2-3	309	211	68	9	gc	17	0	0	3.5	1.083
L2-12	349	187	54	2	gc	7	0	0	3.5	1.092
L2-16	432	283	66	3	gc	0	0	3	3.5	1.087
L4-23	409	253	62	9	gc	0	0	0	3.5	1.082
L6-4	388	182	47	7	2°g	0	0	0	3.1	1.088
L7-2	428	217	51	4	k	0	0	0	3.4	1.086
L7-3	369	166	45	3	k, mis	0	0	3	3.2	1.092
L7-5	346	157	46	3	k, gc	0	0	0	3.3	1.088
L7-10	449	213	48	3	gc	0	0	0	3.2	1.093
L7-13	448	361	81	5	k, mis	0	3	0	3.2	1.086
L8-7	402	152	38	0	-	3	0	0	3.7	1.084
L8-12	472	382	81	3	k	3	0	0	3.4	1.086
L8-14	400	125	31	1	mis	0	0	3	3.6	1.091
L8-24	363	227	63	1	gc	0	0	0	3.3	1.090
L9-6	417	271	65	1	k	0	0	0	3.3	1.084
L9-10	395	218	55	0	-	0	80	0	3.2	1.093
L10-2	356	240	68	5	sprouts	0	0	0	3.5	1.089
L12-1	446	356	80	3	k	0	0	0	3.3	1.081
L12-2	482	310	64	0	-	0	0	0	3.5	1.085
L14-1	459	293	64	1	k	0	3	0	3.4	1.074
L14-4	403	217	54	0	-	0	0	0	3.4	1.084
L15-7	376	273	73	3	gc	0	10	0	3.4	1.089
L17-1	403	300	74	7	k, gc	13	0	0	3.2	1.087
L17-3	390	192	49	4	gc	3	0	0	3.6	1.091
L18-1	403	312	77	0	-	47	0	0	3.6	1.073
L30-5	408	141	34	2	k	0	0	3	3.6	1.084

### 2014 Red Trial, Ellis Hollow

Plots 2 rows x 15', hills spaced at 8.2"

3 replicates (unless indicated otherwise in parentheses)

Planted May 7, harvested September 18. Vine killer applied September 3.

	cwt/acre		%	pickout		% internal defects			appear.	specific
	>1 7/8"	>2 1/2"	>2 1/2"	cwt/A	type	HHT	IN	BC	score	gravity
AD Blue	318	148	47	1	mis	0	0	0	2.9	1.075
AD Red	339	103	30	3	gc	0	0	0	3.6	1.072
Chieftain	539	429	80	2	mis, gc	0	13	3	3.5	1.073
Magic Molly	270	81	30	1	k	3	0	0	3.2	1.076
Nordonna	495	358	72	7	mis	0	0	0	3.3	1.072
Norland, DR	358	184	52	1	gc	0	0	0	3.4	1.069
Red Maria	503	436	87	2	mis	0	13	0	3.5	1.069
Strawberry Paw	476	347	73	2	mis	0	0	0	3.5	1.078
NY155 (H122-4)	531	431	81	7	k	0	10	7	3.5	1.067
H52-1	234	110	47	1	2°g	10	0	0	3.2	1.072
H73-1	479	325	68	5	gc, k	0	13	0	3.5	1.067
K100-3	521	345	66	5	2°g	0	13	0	3.6	1.064
L26-4	213	35	17	2	mis	0	0	0	3.6	1.072
L26-6	461	362	78	17	gc	0	0	0	3.3	1.073
L26-7	406	279	69	22	2°g	0	0	0	3.3	1.065
L27-2	327	90	27	0	-	0	0	0	3.5	1.077
L29-1	277	61	22	1	sprouts	0	0	0	3.2	1.086
L29-3	484	288	60	7	mis, gc	3	3	3	3.4	1.080
L31-1	400	210	52	1	2°g	0	20	0	2.3	1.084
L31-2	382	203	53	0	-	0	0	0	2.2	1.085
L33-1	235	81	35	0	-	0	43	0	2.3	1.078

## 2013 Crop Season Chip Color Scores - University Trials

44F Storage

Potatoes grown in Ellis Hollow

### VISUAL SCORES

	DEC	JAN	FEB	Average 3 MONTHS
SNOWDEN	5.0	5.0	4.0	4.7
WANETA	5.0	3.0	4.0	4.0
LAMOKA	3.0	3.0	3.0	3.0
NY140	2.0	3.0	3.0	2.7
NY148	4.0	7.0	5.0	5.3
NY152	3.0	3.0	3.0	3.0
NY153	3.0	4.0	3.0	3.3
NY154	4.0	3.0	2.0	3.0

VISUAL CHIP SCALE: 1 - 10

1 = best

4 = marginal

5 and over = not acceptable

Samples were not reconditioned before chipping



### Average Chip Color over Two Years - University Trials

Out of 44F storage: 2012 - 2013 crop seasons.

Reconditioned 0-1 weeks at room temperature

	VISUAL SCORES			
	(2 YEARS, 1 LOCATION)			
	DEC	JAN	FEB	AVG
Snowden	4.5	4.0	4.0	4.2
Waneta	4.0	3.0	4.0	3.7
Lamoka	3.0	3.0	3.5	3.2
NY140	2.0	3.0	3.0	2.7
NY148	4.0	6.0	4.5	4.8
NY152	3.5	3.0	3.0	3.2
NY153	3.0	3.0	3.0	3.0
NY154	3.5	3.0	2.5	3.0

VISUAL CHIP SCALE: 1 - 10

1 = best

4 = marginal

5 and over = not acceptable



## Tuber Dormancy Relative to Atlantic

Replicate 10 tuber samples from each clone were stored in the dark at room temperature.  
The number of weeks that each clone sprouted earlier (-) or later (+) than Atlantic is shown.  
Atlantic typically breaks dormancy in late October to mid November

Dormancy is considered broken when half or more of the sample has 1/4" long sprouts.

	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003
<b>Round whites:</b>											
Andover		3	3	3	3		4	4	3		1
Atlantic	0	0		0	0	0	0	0	0	0	0
Eva		7	8								9
Katahdin						1					
King Harry							0	0		-1	-2
Lamoka		3	0	1	1	1	2	3	-1	1	
Lehigh						3	3	3	3	1	2
Marcy			4				4	4	3	2	2
Pike						4	5			2	4
Reba		4		5	5	4	6	7	5	3	4
Snowden		2	2	2	2	1	4	2	0	0	0
Superior						2					-1
Waneta		10	7	8	8	6	8	7	5	6	
Yukon Gold			0	1							
NY140	5	7	6	6	7	5	6	6	5	5	
NY141	4	3	2	2	2	2	3	3	1	2	
NY148	0	0	1	0	0	0					
NY149			0	2	1						
NY150	3	2	2	2	2						
NY151	0	1	1	0							
NY152	4	3	5								
NY153	6	5	6								
NY154 (H15-17)	0	-1	3								
NY156 (J104-3)	1	2									
NY157 (J105-10)	0	2									
J17-1	0	3									
J112-2	0	0									
<b>Reds and purples:</b>											
Chieftain	0	2	1	2	1	1	0	2	2	1	1
Norland DR		-1				-3	-3		-2	-2	-2
Nordonna	0	2	0	1	2	0	0	1	1	0	
Red Maria	3	3	4	5	3	3	4	4	1	4	3
NY136		5	4	5			4	4	5	4	3
NY155 (H122-4)	2	3	2								
K100-3	2										
Ad. Blue	0	-2					2	2	1	-1	
Ad. Red							2	1	5		

**Data from Freeville and Upstate County Farm Trials  
Don Halseth**

**Upstate New York Table 2. Total yield, marketable yield, percentage of yield by grade size distribution, mean tuber number per foot and weight, and specific gravity for the early maturity trial grown at Freeville, New York - 2014.**

Genotype Variety or Clone	Total Yield Cwt/A	Mkt. Yield		Size Distribution <sup>1</sup> (% of total yield)					Size Distrib. (%)		Mean Tuber		Spec. Grav.
		Cwt/A	% of Std.	1	2	3	4	5	1-7/8" to 4"	2-1/2" to 4"	#/ft.	wt.(oz.)	
ANDOVER	466	431	80	1	28	53	15	3	96	69	7.7	6.4	81
ATLANTIC	503	464	87	5	41	52	2	1	94	54	11.0	4.7	96
AF4138-8	477	435	81	8	46	39	7	0	92	46	12.1	4.1	69
AF4157-6	392	350	65	8	55	37	0	0	92	37	10.2	4.0	90
CO0499-3W/Y	440	342	64	18	68	15	0	0	82	15	15.2	3.0	93
K28-18	523	446	83	10	66	23	1	0	90	23	15.3	3.6	105
MSQ086-3	523	465	87	9	49	39	3	0	91	42	13.1	4.1	82
MSS576-5SPL	424	369	69	7	42	48	3	0	93	51	10.2	4.3	76
NY141	524	443	83	4	22	53	16	4	91	69	9.2	6.0	83
NY150	422	276	52	27	57	15	0	0	73	15	16.3	2.7	79
NY155	519	479	90	6	58	35	1	0	94	36	12.4	4.4	64
SUPERIOR	593	535	100	2	20	62	14	2	96	76	9.0	6.8	81
Average:	484	420	78	9	46	39	5	1	90	44	11.8	4.5	83
Maximum:	593	535	100	27	68	62	16	4	96	76	16.3	6.8	105
Minimum:	392	276	52	1	20	15	0	0	73	15	7.7	2.7	64
Waller-Duncan LSD (k=100)	xx	xx									xx	xx	xx
C.V. (%)	(xx)	(xx)									(xx)	(xx)	(xx)

<sup>1</sup>Tuber size classes: 1 = 1" to 1-7/8", 2 = 1-7/8" to 2-1/2", 3 = 2-1/2" to 3-1/4", 4 = 3-1/4" to 4", and 5 = over 4" dia.

Plant Date: May 6

Maturity Ratings: Aug 18

Vinekill Date (MOWED): Aug 18

Harvest Date: Aug 19



**Upstate New York Table 3. Plant maturity, tuber shape and appearance, percentage of external and internal tuber defects, and scab rating for the early maturity trial grown at Freeville, New York - 2014.**

Genotype Variety or Clone	Plant <sup>1</sup> Mat. At Vinekill	Tuber Attributes <sup>1</sup>			External Tuber Defects (%)					Int. Tuber Defects (%) <sup>2</sup>				Scab Rating
		Tuber Shape	Skin Text.	Tuber Appear.	Total Defects	Sun- Green	Mis- shapen	Growth Cracks	Rot	Holl. Heart	Brn. Center	Vasc. Disc.	Int. Nec.	
ANDOVER	4.3	3	6	6.8	3.9	1.1	0.0	1.7	1.0	6.7	0.0	0.0	0.0	1.0
ATLANTIC	5.3	1	6	5.0	1.9	1.3	0.2	0.4	0.0	3.3	0.0	0.0	0.0	1.7
AF4138-8	5.0	3	8	5.7	0.6	0.3	0.2	0.1	0.1	3.3	0.0	0.0	0.0	2.0
AF4157-6	4.0	3	8	6.8	2.7	0.4	0.3	1.4	0.6	0.0	0.0	6.7	0.0	2.3
CO0499-3W/Y	6.0	2	8	5.7	4.6	1.0	2.8	0.7	0.1	10.0	3.3	0.0	0.0	1.7
K28-18	6.0	3	6	5.0	4.5	0.7	2.1	1.7	0.0	0.0	0.0	0.0	0.0	1.8
MSQ086-3	7.3	1	7	5.0	2.1	1.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	2.8
MSS576-5SPL	4.7	1	8	4.8	6.1	1.8	0.4	1.4	2.5	0.0	0.0	0.0	3.3	3.2
NY141	4.0	3	8	7.0	7.1	1.6	2.6	0.7	2.2	0.0	0.0	0.0	0.0	1.3
NY150	4.7	1	8	7.0	7.7	3.0	4.3	0.1	0.4	0.0	0.0	0.0	0.0	1.0
NY155	4.7	3	8	6.3	1.9	0.1	1.3	0.1	0.4	0.0	0.0	3.3	0.0	0.8
SUPERIOR	4.7	3	5	5.0	6.1	2.0	4.0	0.2	0.0	0.0	0.0	3.3	0.0	0.3
Average:	5.1	2	7	5.8	4.1	1.2	1.6	0.7	0.6	1.9	0.3	1.1	0.3	1.7
Maximum:	7.3	3	8	7.0	7.7	3.0	4.3	1.7	2.5	10.0	3.3	6.7	3.3	3.2
Minimum:	4.0	1	5	4.8	0.6	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.3

<sup>1</sup>See the standard NE1031 rating system for a key to these rating scales in the appendix in the rear of this report.

<sup>2</sup>Based on a 10-tuber sample from each replication. The tubers were taken from the size 3 and 4 categories.

**Upstate New York Table 8. Total yield, marketable yield, percentage of yield by grade size distribution, mean tuber number per foot and weight, and specific gravity for the late maturity trial grown at Freeville, New York - 2014.**

Genotype Variety or Clone	Total Yield Cwt/A	Mkt. Yield		Size Distribution <sup>1</sup> (% of total yield)					Size Distrib. (%)		Mean Tuber		Spec. Grav.
		Cwt/A	% of Std.	1	2	3	4	5	1-7/8" to 4"	2-1/2" to 4"	#/ft.	wt.(oz.)	
ATLANTIC	492	420	100	3	37	50	6	4	93	56	9.2	5.8	97
JACQUELINE LEE	507	399	95	17	70	13	0	0	83	13	15.4	3.4	86
KATAHDIN	403	346	82	3	48	42	6	1	97	48	8.2	5.2	78
LAMOKA	497	433	103	2	42	50	4	2	96	54	9.3	5.6	96
MARCY	551	473	113	2	21	53	17	7	91	70	8.4	7.0	87
NY140	580	510	122	2	27	56	11	4	94	67	9.6	6.5	85
NY148	572	525	125	5	50	42	3	0	95	44	12.5	4.8	100
NY151	597	516	123	4	35	49	11	1	95	60	11.3	5.5	70
NY152	581	500	119	6	41	43	9	2	92	51	12.4	5.0	86
NY154	633	583	139	3	46	46	4	0	97	50	12.9	5.1	94
SNOWDEN	586	540	128	4	48	45	4	0	96	48	13.0	4.7	96
WANETA	498	456	109	4	37	53	5	1	95	58	9.8	5.3	83
Average:	542	475	113	5	42	45	7	2	94	52	11.0	5.3	88
Maximum:	633	583	139	17	70	56	17	7	97	70	15.4	7.0	100
Minimum:	403	346	82	2	21	13	0	0	83	13	8.2	3.4	70
Waller-Duncan LSD (k=100)	xx	xx									xx	xx	xx
C.V. (%)	(xx)	(xx)									(xx)	(xx)	(xx)

<sup>1</sup>Tuber size classes: 1 = 1" to 1-7/8", 2 = 1-7/8" to 2-1/2", 3 = 2-1/2" to 3-1/4", 4 = 3-1/4" to 4", and 5 = over 4" dia.

Plant Date: May 8

Maturity Ratings: Aug 27

Vinekill Date: Aug 27

Harvest Date: Sep 10

**Upstate New York Table 9. Plant maturity, tuber shape and appearance, percentage of external and internal tuber defects, and scab rating for the late maturity trial grown at Freeville, New York - 2014.**

Genotype Variety or Clone	Plant <sup>1</sup> Mat. At Vinekill	Tuber Attributes <sup>1</sup>			External Tuber Defects (%)					Int. Tuber Defects (%) <sup>2</sup>				Scab Rating
		Tuber Shape	Skin Text.	Tuber Appear.	Total Defects	Sun- Green	Mis- shapen	Growth Cracks	Rot	Holl. Heart	Brn. Center	Vasc. Disc.	Int. Nec.	
ATLANTIC	4.7	2	5	5.3	8.1	4.6	1.0	2.1	0.4	3.3	0.0	0.0	0.0	1.7
JACQUELINE LEE	3.7	5	6	6.2	4.3	2.4	1.6	0.0	0.3	0.0	0.0	3.3	0.0	2.3
KATAHDIN	4.0	3	8	5.0	10.9	9.3	0.3	0.4	0.8	10.0	0.0	6.7	0.0	2.7
LAMOKA	5.0	3	7	4.7	8.3	7.7	0.3	0.1	0.2	0.0	0.0	30.0	0.0	3.3
MARCY	5.7	3	5	5.0	4.6	3.4	0.3	0.3	0.6	26.7	0.0	3.3	0.0	2.3
NY140	6.0	3	7	5.3	6.4	5.9	0.0	0.3	0.2	23.3	0.0	0.0	0.0	2.0
NY148	7.0	2	6	6.3	3.0	2.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	1.3
NY151	5.7	2	8	6.7	8.7	7.4	1.3	0.0	0.1	0.0	13.3	0.0	6.7	3.7
NY152	6.3	3	5	6.0	5.9	5.2	0.0	0.2	0.5	33.3	0.0	3.3	0.0	1.7
NY154	6.0	3	5	5.3	4.6	4.3	0.1	0.1	0.1	10.0	0.0	16.7	0.0	1.0
SNOWDEN	5.0	3	5	5.3	4.4	3.4	0.2	0.0	0.8	0.0	0.0	23.3	0.0	1.0
WANETA	5.7	3	7	6.2	3.3	2.6	0.0	0.4	0.3	3.3	0.0	0.0	0.0	1.0
Average:	5.4	3	6	5.6	6.0	4.9	0.4	0.3	0.4	9.2	1.1	7.2	0.6	2.0
Maximum:	7.0	5	8	6.7	10.9	9.3	1.6	2.1	0.8	33.3	13.3	30.0	6.7	3.7
Minimum:	3.7	2	5	4.7	3.0	2.4	0.0	0.0	0.1	0.0	0.0	0.0	0.0	1.0

<sup>1</sup>See the standard NE1031 rating system for a key to these rating scales in the appendix in the rear of this report.

<sup>2</sup>Based on a 10-tuber sample from each replication. The tubers were taken from the size 3 and 4 categories.

**Upstate New York Table 10. Total yield, marketable yield, percentage of yield by grade size distribution, mean tuber number per foot and weight, and specific gravity for the red/purple skinned trial grown at Freeville, New York - 2014.**

Genotype Variety or Clone	Total Yield Cwt/A	Mkt. Yield		Size Distribution <sup>1</sup> (% of total yield)					Size Distrib. (%)		Mean Tuber		Spec. Grav.	
		Cwt/A	% of Std.	1	2	3	4	5	1-7/8" to 4"	2-1/2" to 4"	#/ft.	wt.(oz.)		
A05180-3PY	529	433	91	9	53	36	3	0	91	38	13.5	4.1	76	
A05182-7RY	430	363	76	13	77	10	0	0	87	10	14.8	3.0	81	
AF4565-1	358	258	54	12	66	20	1	0	88	21	12.5	2.9	75	
AF4815-1	480	430	90	4	36	50	10	0	96	60	8.8	5.7	67	
AF4831-2	469	376	79	15	68	18	0	0	85	18	13.4	3.6	74	
AF4831-3	487	431	90	2	40	47	9	2	96	56	9.4	5.4	71	
AF4845-3	426	267	56	2	25	42	23	8	90	65	6.8	6.5	68	
AF4985-1	411	263	55	6	39	41	11	3	91	52	8.2	5.2	74	
B2152-17	427	342	72	15	66	18	1	0	85	19	13.5	3.4	77	
BNC315-5	438	412	86	4	45	44	7	0	96	51	8.8	5.2	84	
BNC316-1	562	528	110	3	48	49	0	0	97	49	11.8	5.0	85	
BNC322-1	550	479	100	4	34	56	6	0	96	61	10.6	5.4	75	
CHIEFTAIN	518	478	100	2	42	52	3	1	97	55	10.6	5.0	80	
CO04067-8R/Y	388	271	57	24	73	3	0	0	76	3	14.9	2.7	84	
CO05228-4R	387	314	66	18	70	11	1	0	82	11	13.6	3.0	78	
CO098012-5R	404	333	70	10	65	23	1	0	90	25	11.2	3.7	82	
DARK RED NORLAND	517	465	97	3	34	58	6	0	97	64	8.9	6.1	74	
K100-3	507	404	84	4	40	40	9	8	88	48	10.2	5.2	68	
L26-4	371	134	28	21	73	6	0	0	79	6	12.9	3.0	78	
L26-6	480	444	93	5	41	51	3	0	95	55	10.6	4.7	75	
L26-7	465	410	86	6	61	33	0	0	94	33	11.4	4.3	68	
L27-2	649	564	118	10	51	35	3	1	90	39	15.6	4.4	83	
L31-1	528	339	71	27	43	27	3	0	73	30	10.8	5.1	85	
L31-2	402	197	41	46	42	12	0	0	54	12	12.0	3.5	93	
MAGIC MOLLY	265	140	29	47	50	3	0	0	53	3	8.9	3.1	82	
NORDONNA	540	506	106	4	45	48	3	0	96	51	12.1	4.6	78	
PURPLE HAZE	477	408	85	2	35	57	6	0	98	63	8.5	5.8	93	
RED MARIA	529	498	104	4	33	59	4	0	96	63	10.6	5.2	77	
STRAWBERRY PAW (N)	507	430	90	2	30	47	14	7	91	61	8.3	6.4	77	
W6002-1R	523	448	94	10	58	31	0	0	90	31	14.1	3.9	74	
Average:	468	379	79	11	49	34	4	1	88	38	11.2	4.5	78	
Maximum:	649	564	118	47	77	59	23	8	98	65	15.6	6.5	93	
Minimum:	265	134	28	2	25	3	0	0	53	3	6.8	2.7	67	
Waller-Duncan														
LSD (k=100)	xx	xx									xx	xx		xx
C.V. (%)	(xx)	(xx)									(xx)	(xx)		(xx)

<sup>1</sup>Tuber size classes: 1 = 1" to 1-7/8", 2 = 1-7/8" to 2-1/2", 3 = 2-1/2" to 3-1/4", 4 = 3-1/4" to 4", and 5 = over 4" dia.

Plant Date: May 8

Maturity Ratings: Aug 18

Vinekill Date: Aug 18

Harvest Date: Sep 8

**Upstate New York Table 11. Plant maturity, tuber shape and appearance, percentage of external and internal tuber defects, and scab rating for the red/purple skinned trial grown at Freeville, New York - 2014.**

Genotype Variety or Clone	Plant <sup>1</sup> Mat. At Vinekill	Tuber Attributes <sup>1</sup>			External Tuber Defects (%)					Int. Tuber Defects (%) <sup>2</sup>				Scab Rating
		Tuber Shape	Skin Text.	Tuber Appear.	Total Defects	Sun- Green	Mis- shapen	Growth Cracks	Rot	Holl. Heart	Brn. Center	Vasc. Disc.	Int. Nec.	
A05180-3PY	6.0	2	8	6.3	9.0	0.3	3.0	4.8	0.9	5.0	0.0	5.0	0.0	1.8
A05182-7RY	7.0	2	8	6.5	2.5	1.5	0.6	0.0	0.5	0.0	0.0	0.0	0.0	1.0
AF4565-1	4.5	3	8	6.0	22.6	1.5	0.9	6.1	14.2	10.0	0.0	0.0	0.0	4.0
AF4815-1	4.5	5	8	5.5	6.4	0.0	0.7	5.2	0.5	0.0	0.0	0.0	0.0	3.5
AF4831-2	5.0	3	8	6.8	5.2	1.2	0.7	1.3	2.1	0.0	0.0	0.0	0.0	1.3
AF4831-3	5.0	3	8	6.8	7.5	0.6	0.0	2.0	4.9	10.0	5.0	0.0	0.0	2.5
AF4845-3	6.5	3	8	6.5	27.1	0.7	0.0	19.7	6.7	0.0	0.0	0.0	0.0	2.3
AF4985-1	4.5	3	8	6.0	27.7	7.9	6.4	9.6	3.8	15.0	0.0	0.0	0.0	2.0
B2152-17	3.5	3	8	6.5	5.2	0.7	0.2	0.0	4.2	0.0	0.0	0.0	0.0	3.0
BNC315-5	5.0	3	8	5.0	1.8	0.2	0.6	0.6	0.3	15.0	0.0	0.0	0.0	3.5
BNC316-1	6.5	2	8	6.5	3.2	0.0	0.5	0.1	2.6	0.0	0.0	0.0	0.0	3.5
BNC322-1	7.0	2	8	5.5	8.5	2.1	0.4	4.4	1.6	0.0	0.0	0.0	0.0	3.8
CHIEFTAIN	6.0	3	8	5.0	4.8	0.7	0.0	1.4	2.6	5.0	0.0	0.0	5.0	3.3
CO04067-8R/Y	4.5	2	8	5.3	5.7	0.1	0.0	4.0	1.6	0.0	0.0	0.0	0.0	3.8
CO05228-4R	5.0	2	8	7.0	1.3	0.0	0.2	0.1	1.0	0.0	0.0	0.0	0.0	1.5
CO098012-5R	5.0	2	8	6.0	7.8	1.3	1.3	3.8	1.4	15.0	0.0	0.0	5.0	3.0
DARK RED NORLAND	4.0	4	8	4.0	7.6	2.9	1.2	2.7	0.7	5.0	0.0	0.0	0.0	2.8
K100-3	7.0	3	8	6.5	8.1	0.4	1.1	4.2	2.4	0.0	0.0	0.0	0.0	3.5
L26-4	3.5	3	6	7.0	45.9	0.0	45.9	0.0	0.0	0.0	0.0	0.0	0.0	1.0
L26-6	5.5	2	8	5.8	2.6	0.5	0.6	0.2	1.4	0.0	0.0	0.0	0.0	4.3
L26-7	4.5	3	8	5.0	5.9	0.3	1.3	0.9	3.4	0.0	0.0	0.0	0.0	2.0
L27-2	5.5	1	8	7.0	2.8	0.7	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
L31-1	6.0	8	8	5.0	8.7	1.1	5.6	1.7	0.1	0.0	5.0	0.0	0.0	3.5
L31-2	6.0	8	8	4.0	4.9	0.8	3.7	0.0	0.3	0.0	5.0	0.0	0.0	3.0
MAGIC MOLLY	4.5	8	8	6.0	0.6	0.0	0.4	0.0	0.2	0.0	0.0	0.0	0.0	2.5
NORDONNA	5.0	2	8	6.5	2.3	0.9	0.0	0.9	0.5	0.0	0.0	0.0	0.0	2.5
PURPLE HAZE	7.0	2	8	5.0	12.7	0.2	2.0	4.8	5.7	0.0	0.0	0.0	0.0	2.3
RED MARIA	7.0	1	6	5.5	2.2	0.1	0.4	0.9	0.9	0.0	0.0	0.0	0.0	3.8
STRAWBERRY PAW (NY)	7.0	3	8	5.5	6.5	0.7	0.8	1.9	3.1	5.0	0.0	0.0	0.0	3.0
W6002-1R	4.0	2	8	6.0	4.2	0.7	0.8	1.3	1.4	0.0	0.0	0.0	0.0	3.0
Average:	5.4	3	8	5.9	8.7	0.9	2.6	2.7	2.4	2.8	0.5	0.2	0.3	2.7
Maximum:	7.0	8	8	7.0	45.9	7.9	45.9	19.7	14.2	15.0	5.0	5.0	5.0	4.3
Minimum:	3.5	1	6	4.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

<sup>1</sup>See the standard NE1031 rating system for a key to these rating scales in the appendix in the rear of this report.

<sup>2</sup>Based on a 10-tuber sample from each replication. The tubers were taken from the size 3 and 4 categories.

**Upstate New York Table 16. Total yield, marketable yield, percentage of yield by grade size distribution, mean tuber number per foot and weight, and specific gravity for the Cornell J & K clone trial grown at Freeville, New York - 2014.**

Genotype Variety or Clone	Total Yield Cwt/A	Mkt. Yield		Size Distribution <sup>1</sup> (% of total yield)					Size Distrib. (%)		Mean Tuber		Spec. Grav.
		Cwt/A	% of Std.	1	2	3	4	5	1-7/8" to 4"	2-1/2" to 4"	#/ft.	wt.(oz.)	
ATLANTIC	513	433	100	3	55	33	7	2	94	40	11.1	4.9	98
EVA	411	353	82	3	46	47	4	0	97	51	7.9	5.4	81
J15-7	503	457	106	3	44	43	8	2	95	51	9.8	5.4	88
J17-1	431	382	88	3	55	40	1	0	97	41	9.6	4.7	94
J21-5	529	436	101	3	44	49	3	0	97	53	10.4	5.3	84
J105-10	471	407	94	6	63	28	2	1	93	30	11.7	4.2	86
J112-2	356	302	70	8	78	14	0	0	92	14	9.8	3.8	96
K11-2	409	356	82	6	58	34	1	1	93	35	10.4	4.1	75
K27-1	495	431	100	6	61	32	1	0	94	33	12.5	4.1	89
K27-3	494	423	98	6	64	30	0	0	94	30	12.2	4.2	96
K28-7	423	361	83	6	64	30	0	0	94	31	10.5	4.2	98
K28-18	550	477	110	3	65	30	2	0	97	32	12.6	4.5	108
K31-4	438	373	86	4	48	44	3	1	95	47	9.7	4.7	93
SNOWDEN	590	529	122	5	67	27	1	0	95	28	14.8	4.1	97
SUPERIOR	437	385	89	2	52	43	3	0	98	46	9.0	5.0	84
Average:	470	407	94	4	58	35	2	0	95	38	10.8	4.6	91
Maximum:	590	529	122	8	78	49	8	2	98	53	14.8	5.4	108
Minimum:	356	302	70	2	44	14	0	0	92	14	7.9	3.8	75
Waller-Duncan													
LSD (k=100)	xx	xx									xx	xx	xx
C.V. (%)	(xx)	(xx)									(xx)	(xx)	(xx)

<sup>1</sup>Tuber size classes: 1 = 1" to 1-7/8", 2 = 1-7/8" to 2-1/2", 3 = 2-1/2" to 3-1/4", 4 = 3-1/4" to 4", and 5 = over 4" dia.

Plant Date: May 12

Maturity Ratings: Sep 9

Vinekill Date: Sep10

Harvest Date: Sep 26

**Upstate New York Table 17. Plant maturity, tuber shape and appearance, percentage of external and internal tuber defects, and scab rating for the Cornell J & K clone trial grown at Freeville, New York - 2014.**

Genotype Variety or Clone	Plant <sup>1</sup> Mat. At Vinekill	Tuber Attributes <sup>1</sup>			External Tuber Defects (%)					Int. Tuber Defects (%) <sup>2</sup>				Scab Rating
		Tuber Shape	Skin Text.	Tuber Appear.	Total Defects	Sun- Green	Mis- shapen	Growth Cracks	Rot	Holl. Heart	Brn. Center	Vasc. Disc.	Int. Nec.	
ATLANTIC	4.7	2	6	4.7	9.9	5.1	0.2	0.8	3.7	3.3	0.0	0.0	0.0	2.0
EVA	3.3	2	8	6.0	11.0	8.4	2.0	0.6	0.0	0.0	0.0	0.0	0.0	3.3
J15-7	4.3	2	6	6.8	4.6	3.6	0.4	0.3	0.3	26.7	0.0	0.0	0.0	1.0
J17-1	3.0	3	6	7.0	7.9	6.8	0.1	0.4	0.5	6.7	0.0	0.0	0.0	2.2
J21-5	3.3	5	8	6.5	14.6	5.1	2.1	4.3	3.2	0.0	0.0	0.0	0.0	2.5
J105-10	3.3	3	6	5.2	6.3	2.3	0.3	0.5	3.2	0.0	0.0	0.0	0.0	1.7
J112-2	3.0	3	8	6.3	6.7	2.9	1.0	1.4	1.4	10.0	0.0	0.0	0.0	2.0
K11-2	4.3	3	8	6.8	6.4	2.2	0.6	2.9	0.8	0.0	0.0	0.0	0.0	1.8
K27-1	3.7	2	8	7.0	7.1	5.0	0.0	0.9	1.2	0.0	13.3	0.0	0.0	1.0
K27-3	5.0	3	6	5.8	8.4	6.5	0.9	0.5	0.4	3.3	0.0	0.0	0.0	2.0
K28-7	4.3	2	6	5.2	8.9	6.7	0.3	1.3	0.5	3.3	0.0	0.0	0.0	1.7
K28-18	3.3	3	6	5.0	10.5	4.9	2.2	3.2	0.1	0.0	0.0	0.0	0.0	1.8
K31-4	4.0	1	7	6.0	9.8	2.8	2.5	1.1	3.4	3.3	0.0	0.0	0.0	2.2
SNOWDEN	5.3	2	6	4.8	6.0	4.1	0.4	0.5	1.0	0.0	0.0	0.0	0.0	1.2
SUPERIOR	1.7	3	6	4.7	9.6	3.0	4.0	0.6	2.0	3.3	0.0	0.0	0.0	0.5
Average:	3.8	3	7	5.9	8.5	4.6	1.1	1.3	1.4	4.0	0.9	0.0	0.0	1.8
Maximum:	5.3	5	8	7.0	14.6	8.4	4.0	4.3	3.7	26.7	13.3	0.0	0.0	3.3
Minimum:	1.7	1	6	4.7	4.6	2.2	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.5

<sup>1</sup>See the standard NE1031 rating system for a key to these rating scales in the appendix in the rear of this report.

<sup>2</sup>Based on a 10-tuber sample from each replication. The tubers were taken from the size 3 and 4 categories.

**Upstate New York Table 18. Total yield, marketable yield, percentage of yield by grade size distribution, mean tuber number per foot and weight, and specific gravity for the Cornell L clone trial grown at Freeville, New York - 2014.**

Genotype Variety or Clone	Total Yield Cwt/A	Mkt. Yield		Size Distribution <sup>1</sup> ( % of total yield )					Size Distrib. (%)		Mean Tuber		Spec. Grav.	
		Cwt/A	% of Std.	1	2	3	4	5	1-7/8" to 4"	2-1/2" to 4 "	#/ft.	wt.(oz.)		
ATLANTIC	529	481	100	3	56	38	2	0	97	40	12.1	4.6	98	
L1-7	426	399	83	1	51	46	1	0	99	47	9.4	4.8	89	
L1-8	418	368	77	7	78	14	0	0	93	14	12.4	3.5	93	
L2-3	458	385	80	5	64	28	1	1	94	30	11.9	4.0	92	
L2-12	468	416	87	6	67	26	0	0	94	27	12.6	3.9	94	
L2-16	561	499	104	4	57	38	1	0	96	39	13.6	4.3	91	
L4-23	397	315	65	6	66	27	1	0	94	28	10.4	4.0	84	
L6-4	474	386	80	5	66	27	1	0	95	28	11.7	4.2	100	
L7-2	383	331	69	8	76	15	2	0	92	16	11.2	3.5	91	
L7-3	414	362	75	7	71	21	0	0	93	22	11.6	3.7	96	
L7-5	446	393	82	5	70	24	1	0	95	25	12.2	3.9	97	
L7-10	457	397	82	5	72	23	0	0	95	23	11.7	4.1	98	
L7-13	440	368	76	2	37	46	10	5	93	56	7.9	6.0	91	
L8-12	389	338	70	2	36	54	6	2	95	59	7.4	5.4	90	
L8-14	585	495	103	9	67	21	3	0	91	24	17.5	3.5	99	
L8-24	418	387	80	2	50	46	2	0	98	48	8.3	5.2	96	
L9-6	436	371	77	4	57	36	4	0	96	40	10.4	4.4	92	
L9-10	426	376	78	6	71	22	2	0	94	23	11.3	3.9	100	
L10-2	464	401	83	3	45	45	6	1	96	51	9.4	5.1	88	
L12-1	430	380	79	1	32	55	11	1	98	66	7.1	6.3	82	
L12-2	366	337	70	3	66	30	1	0	97	31	8.8	4.3	87	
L14-1	427	386	80	3	40	51	6	0	97	57	8.7	5.1	75	
L14-4	272	230	48	3	57	36	1	2	94	38	6.4	4.5	83	
L15-7	446	332	69	5	44	43	9	1	95	51	9.6	4.9	94	
L17-1	503	446	93	2	33	55	9	2	97	64	9.4	5.6	100	
L17-3	561	478	99	4	58	34	4	0	96	38	13.1	4.5	101	
L18-1	422	364	76	2	33	44	14	7	91	58	7.2	6.2	78	
L29-1	484	360	75	21	70	8	1	0	79	9	18.9	2.7	95	
L29-3	591	531	110	5	63	32	1	0	95	33	14.8	4.2	82	
L30-5	280	223	46	14	77	9	0	0	86	9	9.4	3.1	86	
L33-1 *	386	92	19	52	46	2	0	0	48	2	15.5	2.6	82	
SNOWDEN	438	391	81	3	68	28	1	0	97	29	10.8	4.2	98	
SUPERIOR	399	332	69	2	56	41	1	0	98	42	8.4	5.0	84	
Average:	442	374	78	6	58	32	3	1	93	35	10.9	4.4	91	
Maximum:	591	531	110	52	78	55	14	7	99	66	18.9	6.3	101	
Minimum:	272	92	19	1	32	2	0	0	48	2	6.4	2.6	75	
Waller-Duncan														
LSD (k=100)	xx	xx									xx	xx		xx
C.V. (%)	(xx)	(xx)									(xx)	(xx)		(xx)

<sup>1</sup>Tuber size classes: 1 = 1" to 1-7/8", 2 = 1-7/8" to 2-1/2", 3 = 2-1/2" to 3-1/4", 4 = 3-1/4" to 4", and 5 = over 4" dia.

Plant Date: May 12

Maturity Ratings: Sep 9

Vinekill Date: Sep10

Harvest Date: Sep 26

\* Note: L33-1 was graded by weight rather than dimensions (five weight categories of 0-4, 4-8, 8-12, 12-16 and over 16 ounces).



**Upstate New York Table 19. Plant maturity, tuber shape and appearance, percentage of external and internal tuber defects, and scab rating for the Cornell L clone trial grown at Freeville, New York - 2014.**

Genotype Variety or Clone	Plant <sup>1</sup> Mat. At Vinekill	Tuber Attributes <sup>1</sup>			External Tuber Defects (%)					Int. Tuber Defects (%) <sup>2</sup>				Scab Rating
		Tuber Shape	Skin Text.	Tuber Appear.	Total Defects	Sun- Green	Mis- shapen	Growth Cracks	Rot	Holl. Heart	Brn. Center	Vasc. Disc.	Int. Nec.	
ATLANTIC	3.7	2	6	6.0	5.6	3.2	0.1	0.3	2.0	10.0	0.0	3.3	0.0	1.8
L1-7	4.7	2	6	5.0	5.3	1.4	0.4	3.2	0.3	0.0	0.0	0.0	0.0	2.3
L1-8	4.0	1	8	7.2	4.5	2.2	0.0	0.7	1.6	0.0	0.0	0.0	0.0	1.7
L2-3	3.0	3	8	5.8	9.9	6.0	0.3	1.3	2.3	33.3	0.0	0.0	0.0	2.0
L2-12	3.3	2	7	5.2	4.8	2.2	0.6	1.1	0.9	3.3	0.0	0.0	0.0	2.5
L2-16	5.0	2	6	4.0	7.3	3.3	0.5	2.3	1.2	3.3	0.0	3.3	0.0	3.3
L4-23	3.0	2	7	5.3	14.8	8.1	3.7	2.2	0.8	0.0	0.0	0.0	0.0	3.5
L6-4	5.0	3	6	4.7	13.5	8.3	0.4	3.8	1.0	3.3	0.0	0.0	0.0	2.2
L7-2	4.0	2	8	6.5	6.5	4.4	0.9	1.1	0.0	0.0	0.0	0.0	0.0	0.7
L7-3	3.7	2	7	4.3	5.6	1.3	0.8	2.4	1.0	0.0	0.0	0.0	0.0	1.7
L7-5	3.7	3	8	3.7	6.8	2.0	1.1	2.6	1.2	0.0	3.3	0.0	0.0	1.2
L7-10	4.0	2	6	4.3	8.4	5.1	0.6	1.5	1.3	0.0	0.0	0.0	0.0	0.5
L7-13	5.0	3	7	5.7	9.7	5.8	1.0	1.5	1.4	0.0	0.0	3.3	0.0	2.0
L8-12	5.7	1	6	6.0	7.7	2.2	0.1	1.0	4.4	3.3	0.0	0.0	0.0	1.0
L8-14	3.3	1	6	6.7	6.0	2.8	0.4	0.9	1.9	0.0	0.0	0.0	0.0	1.5
L8-24	4.0	3	7	4.0	5.7	1.7	0.5	1.7	1.7	10.0	0.0	0.0	0.0	2.5
L9-6	5.7	3	6	5.5	11.3	3.3	1.2	2.3	4.5	0.0	0.0	0.0	0.0	2.0
L9-10	6.7	2	6	4.5	5.5	1.8	0.1	2.0	1.5	3.3	0.0	0.0	6.7	2.0
L10-2	4.3	3	6	5.3	10.0	5.8	0.8	1.2	2.3	10.0	0.0	0.0	0.0	2.0
L12-1	4.5	2	6	5.5	9.3	2.5	2.6	2.2	2.1	30.0	0.0	0.0	0.0	2.5
L12-2	2.7	2	6	5.3	5.2	2.9	0.0	0.7	1.6	40.0	0.0	0.0	0.0	3.0
L14-1	4.0	3	6	6.3	6.6	2.3	0.4	1.2	2.7	0.0	0.0	0.0	0.0	2.0
L14-4	2.0	2	6	5.7	10.4	4.0	0.4	2.4	3.6	0.0	0.0	0.0	0.0	2.3
L15-7	5.7	3	6	5.0	20.2	10.3	0.6	2.9	6.5	0.0	0.0	0.0	0.0	1.5
L17-1	7.0	1	6	5.3	8.1	4.6	0.0	2.1	1.4	10.0	0.0	0.0	0.0	1.3
L17-3	3.0	3	6	6.0	10.1	2.6	1.6	1.6	4.3	0.0	0.0	0.0	0.0	2.0
L18-1	2.7	2	8	5.7	5.0	2.0	0.6	0.9	1.5	53.3	0.0	0.0	0.0	2.5
L29-1	3.3	1	8	6.0	4.6	1.5	2.4	0.8	0.0	13.3	0.0	0.0	0.0	1.5
L29-3	3.0	3	8	6.3	5.6	1.5	1.0	2.7	0.5	6.7	0.0	0.0	0.0	1.2
L30-5	1.7	3	8	7.0	5.6	0.3	1.8	1.4	2.1	0.0	0.0	0.0	0.0	3.0
L33-1 *	4.7	8	8	6.0	24.5	15.4	7.3	0.5	1.3	0.0	3.3	6.7	0.0	1.5
SNOWDEN	4.7	1	6	5.0	7.8	5.7	0.9	1.2	0.0	3.3	0.0	3.3	0.0	1.3
SUPERIOR	2.3	3	6	4.0	14.2	2.6	6.3	2.0	3.3	3.3	0.0	0.0	0.0	0.5
Average:	4.0	2	7	5.4	8.7	3.9	1.2	1.7	1.9	7.3	0.2	0.6	0.2	1.9
Maximum:	7.0	8	8	7.2	24.5	15.4	7.3	3.8	6.5	53.3	3.3	6.7	6.7	3.5
Minimum:	1.7	1	6	3.7	4.5	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.5

<sup>1</sup>See the standard NE1031 rating system for a key to these rating scales in the appendix in the rear of this report.

<sup>2</sup>Based on a 10-tuber sample from each replication. The tubers were taken from the size 3 and 4 categories.

**Upstate New York Table 26. Yield, marketable yield, percentage of yield by grade size distribution, mean tuber number per foot and weight, percentage of defects, and specific gravity for Wayne County muck soil red and purple-skinned variety trial grown near Marion, New York - 2014.**

Variety or Clone	Total Yield	Mkt. Yield		Size Distribution <sup>1</sup> (% of total yield)				Mean Tuber		Percent External Tuber Defects				Percent Internal Tuber Defects				Spec. Grav.
	Cwt/A	Cwt/A	% of Std.	1	2	3	4	#/ft	wt(oz)	SUN	KNB	GC	ROT	HH	BC	VD	NEC	
A05180-3PY *	391	275	102	19	58	24	0	11.0	3.7	0	1	9	0	20	0	0	0	71
AF4565-1 *	282	173	64	24	76	0	0	9.2	3.2	3	1	11	0	0	0	0	0	67
AF4815-1 *	309	219	81	16	71	13	0	8.5	3.8	2	5	6	0	0	0	0	0	63
AF4831-2 *	339	175	65	35	61	3	0	13.8	2.6	7	2	3	1	0	0	0	0	72
AF4831-3 *	330	259	96	19	78	3	0	10.8	3.2	1	0	0	0	0	0	0	0	64
AF4845-3 *	341	223	83	15	53	33	0	8.2	4.3	3	1	16	0	0	0	0	0	64
AF4985-1 *	304	185	68	9	73	19	0	7.7	4.1	4	4	23	0	10	0	0	0	62
BNC315-5 *	283	204	76	26	71	3	0	10.3	2.9	1	0	2	0	0	0	0	0	67
BNC316-1 *	484	415	154	8	72	19	2	10.9	4.6	1	2	0	2	0	0	0	0	80
CHIEFTAIN	404	270	100	12	56	25	8	8.8	4.8	8	1	5	0	0	0	0	0	71
DARK RED NORLAND	364	282	104	12	65	23	0	13.4	3.2	5	0	6	0	0	0	0	0	69
K100-3	385	303	112	11	63	24	2	9.2	4.4	1	5	2	0	0	0	0	0	65
L26-4	242	89	33	59	41	0	0	11.1	2.3	1	1	2	2	5	0	0	0	65
L26-6	243	185	68	21	63	17	0	7.0	3.5	4	1	0	0	0	0	0	0	67
L26-7	290	217	81	17	79	4	0	8.6	3.5	3	3	0	1	0	0	0	0	64
L27-2	349	227	84	32	66	2	0	14.7	2.5	2	1	1	0	0	0	0	0	74
MAGIC MOLLY **	254	110	41	51	44	3	2	6.6	4.0	1	3	0	0	0	0	0	0	76
RED MARIA	389	328	122	9	71	18	2	9.6	4.3	2	0	1	2	0	0	0	0	72
STRAWBERRY PAW	370	288	107	14	69	16	0	9.7	4.0	4	0	1	2	0	0	0	0	70
W6002-1R *	356	277	102	16	70	11	2	10.0	3.7	2	1	1	0	0	0	0	0	64
Average:	335	235	87	21	65	13	1	10.0	3.6	3	2	4	1	2	0	0	0	68
Maximum:	484	415	154	59	79	33	8	14.7	4.8	8	5	23	2	20	0	0	0	80
Minimum:	242	89	33	8	41	0	0	6.6	2.3	0	0	0	0	0	0	0	0	62

<sup>1</sup>Tuber size classes: 1 = under 2" dia., 2 = 2" to 3" dia., 3 = 3" to 4" dia., and 4 = over 4" dia.

Plant Date: June 16

Vinekill Date: September ???

Harvest Date: October 6

Fertilizer: 87 N-70 P-230 K lbs. per acre

Vinekill: 1 pt./a Reglone

Irrigation: none

Other: 1 qt./a Vydate CLV, 12.8 oz./a Quadris, 6 oz./a Ranman, and 12.8 oz./a Advise

\* Note: This trial had two replications, except there was only one plot each for ten entries denoted by "\*\*".

\*\* Note: Due to long tuber shape of Magic Molly, it was sized by weight (0-4, 4-8, 8-12 and over 12 oz.).

**Upstate New York Table 27. Yield, marketable yield, percentage of yield by grade size distribution, mean tuber number per foot and weight, percentage of defects, and specific gravity for Wayne County muck soil white-skinned variety trial grown near Marion, New York - 2014.**

Variety or Clone	Total Yield	Mkt. Yield		Size Distribution <sup>1</sup>				Mean Tuber		Percent External Tuber Defects				Percent Internal Tuber Defects				Spec. Grav.
	Cwt/A	Cwt/A	% of Std.	(% of total yield)				#/ft	wt(oz)	SUN	KNB	GC	ROT	HH	BC	VD	NEC	
				1	2	3	4											
ATLANTIC	436	261	100	8	39	48	6	8.1	5.6	15	8	3	1	20	0	0	0	89
AF4640-1 *	454	341	131	12	67	19	2	10.9	4.3	9	2	0	0	0	0	0	0	82
EVA *	417	282	108	6	43	43	8	7.4	5.9	17	0	1	1	0	0	0	0	77
JACQUELINE LEE	429	275	105	12	59	27	3	9.3	4.8	16	4	1	0	0	0	0	0	81
J21-5	163	102	39	7	35	58	0	2.8	6.0	13	1	16	0	0	0	0	0	72
K11-2	355	260	100	14	72	13	1	9.5	3.9	9	3	0	0	0	0	0	0	70
L18-1	327	193	74	4	35	39	22	5.4	6.4	11	1	1	2	85	0	0	0	72
L29-1	402	255	98	25	70	6	0	14.8	2.8	6	3	1	1	20	0	0	0	83
L29-3	535	402	154	7	64	29	1	11.7	4.7	6	1	9	1	5	0	0	0	73
L30-5	439	333	128	17	72	10	1	12.5	3.7	2	3	1	0	0	0	0	0	78
NY150	329	137	52	39	55	6	0	15.3	2.3	15	3	0	1	0	0	0	0	80
NY151	420	293	112	6	45	46	4	9.0	4.9	17	2	2	0	0	0	0	0	64
NY155	349	255	98	9	50	35	6	6.5	5.5	4	5	2	1	0	0	0	0	61
REBA	454	305	117	3	42	48	7	7.1	6.7	24	0	0	0	0	0	0	0	75
SPARTAN SPLASH	407	305	117	22	70	7	0	12.8	3.3	2	1	1	0	5	0	0	0	79
WANETA	404	263	101	6	42	42	11	7.3	5.9	17	0	0	0	0	0	0	0	78
Average:	395	266	102	12	54	30	4	9.4	4.8	12	2	2	1	8	0	0	0	76
Maximum:	535	402	154	39	72	58	22	15.3	6.7	24	8	16	2	85	0	0	0	89
Minimum:	163	102	39	3	35	6	0	2.8	2.3	2	0	0	0	0	0	0	0	61

<sup>1</sup>Tuber size classes: 1 = under 2" dia., 2 = 2" to 3" dia., 3 = 3" to 4" dia., and 4 = over 4" dia.

Plant Date: June 16

Vinekill Date: September????

Harvest Date: October 6

Fertilizer: 87 N-70 P-230 K lbs. per acre

Vinekill: 1 pt./a Reglone

Irrigation: none

Other: 1 qt./a Vydate CLV, 12.8 oz./a Quadris, 6 oz./a Ranman, and 12.8 oz./a Advise

\* Note: This trial had two replications, except there was only one plot each for the two entries denoted by "\*\*".

**Upstate New York Table 28. Yield, marketable yield, percentage of yield by grade size distribution, mean tuber number per foot and weight, percentage of defects, and specific gravity for Steuben County chipping variety trial grown near Arkport, New York - 2014.**

Variety or Clone	Total Yield	Mkt. Yield		Size Distribution <sup>1</sup>				Mean Tuber		Percent External Tuber Defects				Percent Internal Tuber Defects				Spec. Grav.
	Cwt/A	Cwt/A	% of Std.	(% of total yield)				#/ft	wt(oz)	SUN	KNB	GC	ROT	HH	BC	VD	NEC	
				1	2	3	4											
ATLANTIC	343	257	100	6	64	24	6	7.3	5.2	2	8	4	0	5	0	0	5	104
J15-7	464	376	146	6	56	34	3	10.5	4.9	8	1	0	0	30	0	0	0	93
J105-10	329	264	103	12	71	17	1	8.4	4.3	4	3	1	0	0	0	0	0	101
J112-2	350	284	111	8	66	25	1	8.2	4.7	7	1	2	0	70	0	0	0	100
K27-1 *	241	183	71	14	68	17	0	6.9	3.9	6	1	3	0	10	0	0	0	93
K27-3 *	340	272	106	10	82	7	1	9.7	3.9	6	0	1	1	0	0	0	0	99
K28-7	340	274	106	15	81	4	0	10.7	3.5	4	1	0	0	5	0	0	5	101
K28-18 *	359	275	107	10	81	9	0	10.0	4.0	7	5	1	0	10	0	0	0	104
K31-4 *	372	301	117	5	52	40	3	7.1	5.7	8	2	1	0	10	0	0	0	91
LAMOKA (NY139)	374	318	124	3	50	45	2	6.6	6.3	7	3	0	0	20	0	0	0	102
NY152 (H15-5)	442	370	144	9	75	15	0	11.7	4.2	6	1	1	0	10	0	0	0	99
NY154 (H15-17)	473	376	146	6	75	19	0	10.2	5.1	13	0	0	0	30	0	0	0	100
SNOWDEN	397	337	131	10	74	16	0	11.0	4.0	4	0	1	0	20	5	0	0	105
WANETA (NY138)	399	309	120	3	42	49	6	6.3	6.9	14	1	0	0	5	0	0	0	93
Average:	373	300	117	8	67	23	2	8.9	4.8	7	2	1	0	16	0	0	1	99
Maximum:	473	376	146	15	82	49	6	11.7	6.9	14	8	4	1	70	5	0	5	105
Minimum:	241	183	71	3	42	4	0	6.3	3.5	2	0	0	0	0	0	0	0	91

<sup>1</sup>Tuber size classes: 1 = under 2" dia., 2 = 2" to 3" dia., 3 = 3" to 4" dia., and 4 = over 4" dia.

GET NEW CULTURAL PRACTICE INFO - INFO BELOW WAS FROM LAST YEAR:

PLANTING AND HARVEST DATES ARE FOR 2014

Plant Date: June 6

Fertilizer: 128N - 256P- 128K - 4S - 4Zn - 0.24B lbs. per acre

Other: 7 oz /a Quadris, 2.67 oz /a Platinum.

\* Note: This trial had two replications, except there was only one plot each for the four "K" clones as denoted by "\*".

Vinekill Dates: September X & Y

Vinekill: 1 pt./a Reglone + crop oil

Harvest Date: October 8

Irrigation: none

36" bed width by 8 inch within row spacing

**Upstate New York Table 29. Yield, marketable yield, percentage of yield by grade size distribution, mean tuber number per foot and weight, percentage of defects, and specific gravity for Wyoming County chipping variety trial grown near Bliss, New York - 2014.**

Variety or Clone	Total Yield Cwt/A	Mkt. Yield		Size Distribution <sup>1</sup> ( % of total yield )				Mean Tuber		Percent External Tuber Defects				Percent Internal Tuber Defects				Spec. Grav.
		Cwt/A	% of Std.	1	2	3	4	#/ft	wt(oz)	SUN	KNB	GC	ROT	HH	BC	VD	NEC	
ATLANTIC	343	293	100	8	50	42	1	6.7	5.2	3	1	2	0	10	0	0	0	96
J15-7	563	463	158	3	32	52	12	8.4	7.0	2	0	0	0	5	0	0	0	83
J105-10	325	283	97	11	69	20	0	8.4	4.0	1	0	1	0	0	0	0	0	84
J112-2	250	217	74	10	61	29	1	5.8	4.5	1	1	1	0	40	0	0	0	87
K27-1 *	343	287	98	12	67	20	1	8.0	4.5	1	1	1	0	0	0	0	0	86
K27-3 *	471	405	138	9	63	29	0	9.7	5.1	2	1	2	0	0	0	0	0	89
K28-7	404	355	121	8	63	28	2	9.2	4.6	2	1	1	0	5	0	0	0	93
K28-18 *	421	343	117	9	63	28	0	9.4	4.6	2	3	4	0	0	0	0	0	96
K31-4 *	403	348	119	6	49	44	2	8.1	5.2	2	4	0	0	0	0	0	0	82
LAMOKA (NY139)	290	255	87	7	58	32	3	6.4	4.7	3	0	0	0	0	0	0	0	87
NY152 (H15-5)	397	346	118	9	67	23	1	9.7	4.4	1	1	0	0	0	0	0	0	87
NY154 (H15-17)	445	413	141	5	61	33	0	8.9	5.2	2	0	0	0	0	0	0	0	84
SNOWDEN	316	274	94	8	64	26	1	7.2	4.6	2	1	0	0	10	0	0	0	96
WANETA (NY138)	417	378	129	4	37	55	4	7.5	5.8	0	0	0	0	5	0	0	0	80
Average:	385	333	114	8	57	33	2	8.1	4.9	2	1	1	0	5	0	0	0	88
Maximum:	563	463	158	12	69	55	12	9.7	7.0	3	4	4	0	40	0	0	0	96
Minimum:	250	217	74	3	32	20	0	5.8	4.0	0	0	0	0	0	0	0	0	80

<sup>1</sup>Tuber size classes: 1 = under 2" dia., 2 = 2" to 3" dia., 3 = 3" to 4" dia., and 4 = over 4" dia.

GET NEW CULTURAL PRACTICE INFO FOR BELOW!!!

Plant Date: May 30

Fertilizer: 128N - 256P- 128K - 4S - 4Zn - 0.24B lbs. per acre

Other: 7 oz /a Quadris, 2.67 oz /a Platinum.

Vinekill Dates: September ??? & ???

Vinekill: 1 pt./a Reglone + crop oil

Harvest Date: October 17

Irrigation: none

34" bed width by 8 inch within row spacing

\* Note: This trial had two replications, except there was only one plot each for the four "K" clones as denoted by "\*".

**Data from Riverhead, Long Island Trials**  
**Sandra Menasha**

Long Island Table 2. Yield, marketable yield, percentage of yield by grade, size distribution and specific gravity of Cornell advanced white-skinned clones grown at Riverhead, N.Y. - 2014.

Clone	Total Yield cwt/A	Marketable Yield		Size Distribution (%)					Size Distribution		Specific Gravity <sup>1</sup>	
		cwt/A	percentage of standard	< 2"	2 to 2.5"	2.5 to 3.25"	3.25 to 4"	> 4"	2 to 4 in.	2.5 to 4 in.		
<b>Season-134 days</b>												
Reba	351	315	100	2	17	57	20	4	94	77	70	
Andover	490	471	150	1	19	75	5	0	99	80	83	
Envol	430	398	126	1	16	74	9	0	99	82	72	
Marcy	542	501	159	1	12	59	27	0	98	86	81	
Norwis	312	282	89	1	17	60	18	3	96	79	65	
Superior	457	421	134	2	19	71	8	0	98	79	72	
NY140	548	483	153	1	14	59	22	4	95	80	79	
NY141	495	451	143	2	23	66	9	0	97	75	75	
NY148	486	464	147	3	25	64	8	0	97	72	87	
NY150	352	282	90	18	76	6	0	0	82	6	78	
NY151	503	445	142	2	17	54	23	4	95	77	65	
NY152	545	518	165	3	29	65	3	0	97	68	85	
NY155	555	475	151	2	24	62	9	2	96	72	65	
<i>Fisher's Protected</i>												
<i>LSD (0.05)</i>		(83)	(64)									(3)

Planted on 4/14/14, fertilizer rate was 160-176-192/A, vine killed on 8/26/14 and harvested on 9/30/14.

<sup>1</sup> -1.0 is excluded from specific gravity readings.

Long Island Table 3. Maturity, tuber shape, and internal and external defects of Cornell advanced white-skinned clones grown at Riverhead, N.Y. - 2014.

Clone	Maturity <sup>1</sup> on 8/19/2014	Tuber Data <sup>1</sup>		Tuber Defects (%)					Percentage				
		Shape	Appearance	Sun- Total burn	Mis- shapen	Growth cracks	Other <sup>2</sup>	Hollow heart	Brown center	Internal Necrosis			
											Sl.	Mod.	Sev.
<b>Season-134 days</b>													
Reba	3	R-O	7	4	2	1	0	2	8	0	0	0	0
Andover	2	R-O	8	3	0	2	1	0	3	0	0	0	0
Envol	1	R-O	8	6	1	1	0	5	0	0	0	0	0
Marcy	6	R-O	6	6	4	1	0	1	20	0	0	0	0
Norwis	2	R-O	7	6	1	2	0	3	10	3	0	3	3
Superior	1	O-R	7	6	0	3	1	1	0	0	0	0	0
NY140	5	R-O	7	7	3	0	1	2	8	0	0	0	0
NY141	3	R-O	8	7	1	3	0	2	0	0	0	0	0
NY148	3	R	7	2	1	0	0	1	0	0	10	3	5
NY150	1	R	8	2	0	1	0	1	0	0	0	0	0
NY151	3	R	8	6	4	1	0	1	0	8	3	10	3
NY152	5	R-O	8	2	1	1	0	0	0	0	0	0	0
NY155	4	O-R	7	11	4	6	0	1	0	5	13	0	0

<sup>1</sup> -See rating system outlined in the text.

<sup>2</sup> -Other includes defects such as rhizoctonia, prominent lenticels, pink eye, decay and other defects scorable against a U.S. No. 1 grade. Mechanical defects, however, were not scored.

Long Island Table 4. Yield, marketable yield, percentage of yield by grade, size distribution and specific gravity of Cornell, Maine, and USDA Intermediate white-skinned clones grown at Riverhead, N.Y. - 2014.

Clone	Total Yield cwt/A	Marketable Yield		Size Distribution (%)					Size Distribution		Specific Gravity <sup>1</sup>
		cwt/A	percentage of standard	2 to < 2"	2.5 to 2.5"	3.25 to 3.25"	4 to 4"	> 4"	2 to 4 in.	2.5 to 4 in.	
<b>Season-134 days</b>											
Reba	398	370	100	2	18	54	25	1	97	79	76
Marcy	523	493	133	1	8	59	32	0	99	91	85
Salem	525	474	128	2	13	60	23	2	96	83	67
AF4386-16	429	392	106	6	44	47	3	0	94	50	87
AF5039-17	434	394	106	4	15	62	19	0	96	81	82
AF5345-1	463	419	113	6	47	45	2	0	94	47	73
B2869-28	464	439	118	1	14	63	22	0	99	85	78
B2869-29	541	501	135	5	39	52	5	0	95	56	93
B2954-20	504	467	126	3	25	64	8	0	97	72	75
J15-7	479	453	122	2	17	56	25	0	98	81	79
J21-5	510	433	117	3	27	62	8	0	97	70	72
J105-10	465	423	114	6	33	56	5	0	94	61	81
K11-2	422	396	107	4	31	62	3	0	96	65	67
<i>Fisher's Protected</i>											
LSD (0.05)	(61)	(64)									(3)

Planted on 4/14/14, fertilizer rate was 160-176-192/A, vine killed on 8/26/14, harvested on 10/7/14.

<sup>1</sup> -1.0 is excluded from specific gravity readings.

Long Island Table 5. Maturity, tuber shape, and internal and external defects of Cornell, Maine and USDA white-skinned clones grown at Riverhead, N.Y. - 2014.

Clone	Maturity <sup>1</sup> on 8/19/2014	Tuber Data <sup>1</sup>		Tuber Defects (%)					Percentage				
		Shape	Appearance	Total	burn	Mis-shapen	Growth cracks	Other <sup>2</sup>	Hollow heart	Brown center	Internal Necrosis		
											Sl.	Mod.	Sev.
<b>Season-134 days</b>													
Reba	3	R-O	8	5	2	1	0	1	3	0	0	0	0
Marcy	6	R-O	7	5	2	0	1	2	3	0	3	3	0
Salem	3	R-O	8	6	1	2	0	3	0	0	3	0	0
AF4386-16	3	R	8	3	0	2	0	1	0	0	8	3	0
AF5039-17	3	R-O	7	5	0	2	1	2	0	0	3	0	0
AF5345-1	2	R	7	4	0	3	0	0	0	0	3	0	0
B2869-28	3	R-O	8	4	0	1	2	1	3	3	3	0	0
B2869-29	3	R-O	7	3	1	1	0	1	10	0	0	0	0
B2954-20	2	R-O	8	5	1	3	1	1	0	0	3	0	0
J15-7	3	R-O	8	3	0	0	0	2	5	0	0	0	0
J21-5	4	O-R	8	12	2	7	4	0	0	0	0	0	0
J105-10	2	R-O	7	3	1	2	0	0	0	0	0	0	0
K11-2	3	R-O	8	2	0	1	0	0	0	0	0	0	0

<sup>1</sup> -See rating system outlined in the text.

<sup>2</sup> -Other includes defects such as rhizoctonia, prominent lenticels, pink eye, decay and other defects scorable against a U.S. No. 1 grade. Mechanical defects, however, were not scored.



Long Island Table 6. Yield, marketable yield, percentage of yield by grade, size distribution and specific gravity of NE1231 white-skinned clones grown at Riverhead, N.Y. - 2014.

Clone	Total Yield cwt/A	Marketable Yield		Size Distribution (%)					Size Distribution		Specific Gravity <sup>1</sup>
		cwt/A	percentage of standard	< 2"	2 to 2.5"	2.5 to 3.25"	3.25 to 4"	> 4"	2 to 4 in.	2.5 to 4 in.	
<b>Season-126 days</b>											
Atlantic	471	440	100	2	16	66	15	1	97	81	87
Katahdin	365	338	77	5	37	58	1	0	95	59	67
Kennebec	407	337	76	5	31	57	7	0	95	64	72
Superior	321	308	70	2	29	68	2	0	98	69	71
Yukon Gold	391	331	75	2	17	66	15	0	98	81	75
AF4013-3	379	353	80	5	45	50	1	0	95	50	78
AF4138-8	435	410	93	5	41	53	1	0	95	55	65
AF4640-1	477	446	101	4	29	60	7	0	96	66	75
BNC182-5	466	449	102	2	23	60	16	0	98	75	83
MSQ086-3	508	468	106	5	41	52	3	0	95	55	70
NY148	442	416	95	4	30	63	3	0	96	66	89
NY154	587	551	125	2	18	66	14	0	97	80	80
<i>Fisher's Protected</i>											
LSD (0.05)	(87)	(86)									(5)

Planted on 4/22/14, fertilizer rate was 160-176-192/A, vine killed on 8/26/14, harvested on 9/16/14.

<sup>1</sup> -1.0 is excluded from specific gravity readings.

Long Island Table 7. Maturity, tuber shape, and internal and external defects of NE1231 white-skinned clones grown at Riverhead, N.Y. - 2014.

Clone	Maturity <sup>1</sup> on 8/19/2014	Tuber Data <sup>1</sup>		Tuber Defects (%)					Percentage			
		Shape	Appearance	Sun- Total	Mis- burn	Growth shapen	Cracks	Other <sup>2</sup>	Hollow heart	Brown center	Internal Sl.	External Mod.
<b>Season-126 days</b>												
Atlantic	3	R-O	6	4	1	1	1	1	45	15	15	25
Katahdin	2	O-R	6	3	3	0	0	0	3	5	0	0
Kennebec	2	O-R	5	13	6	1	5	1	10	3	3	0
Superior	1	O-R	7	2	0	1	0	0	0	0	5	0
Yukon Gold	1	R-O	7	14	2	1	0	11	25	0	10	0
AF4013-3	2	O-R	7	2	0	0	0	1	0	0	3	0
AF4138-8	2	R	6	1	1	0	0	0	0	0	5	0
AF4640-1	2	R-O	7	2	0	1	0	1	3	0	3	0
BNC182-5	5	R-O	6	2	0	1	0	1	20	0	3	0
MSQ086-3	6	R	7	3	1	1	1	1	0	0	3	0
NY148	5	R	6	2	1	0	0	1	0	0	30	5
NY154	4	R-O	7	3	2	0	0	0	20	0	0	0

<sup>1</sup> -See rating system outlined in the text.

<sup>2</sup> -Other includes defects such as rhizoctonia, prominent lenticels, pink eye, decay and other defects scorable against a U.S.

No. 1 grade. Mechanical defects, however, were not scored.



Loading potatoes harvested from four-hill plots onto 'Old Yeller', a truck purchased with a gift from Bob Plaisted

