

Horticulture Report

Number 85

January 2015

2014

**UPSTATE NEW YORK
POTATO VARIETY TRIALS
AND
CULTURAL PRACTICE EXPERIMENTS**

**D.E. Halseth, E.R. Sandsted,
J.M.Kelly**

**School of Integrative Plant Science, Horticulture Section
N.Y. State College of Agriculture and Life Sciences
Cornell University
Ithaca, New York 14853-5908**

TABLE OF CONTENTS

Table 1: Table Index, GN Resistance, and Tuber Characteristics

FREEVILLE VARIETY TRIALS

Tables 2-3: Early Maturity
Tables 4-5: Medium Maturity
Tables 6-7: Medium-Late Maturity
Tables 8-9: Late Maturity
Tables 10-11: Red/Blue/Purple-skinned
Tables 12-13: Red Observational
Tables 14-15: Russet
Tables 16-17: Cornell Advanced Lines (J&K-Clones)
Tables 18-19: Cornell Advanced Lines (L-Clones)
Tables 20-21: University of Maine Lines
Tables 22-23: USDA Advanced Lines
Tables 24-25: USDA Observational Lines

COUNTY VARIETY TRIALS

Table 26: Wayne County – Red/Purple-skinned
Table 27: Wayne County – White-skinned
Table 28: Steuben County – Chipping
Table 29: Wyoming County – Chipping

PROCESSING DATA – 2013 TRIALS

Tables 30: Chip Color Agtron Readings
Tables 31: After-Cooking Darkening and Sloughing Readings

ACKNOWLEDGMENTS:

Cooperative Extension agents Carol MacNeil and Stephanie Mehlenbacher coordinated grower trial work in their counties. Special thanks is given to grower-cooperators: Murray Mahany and family of Mahany Farms, Arkport; Jim McCormick of McCormick Farms, Bliss; and John Williams of Williams Farm, Marion. Seed of new clones was provided by: Drs. Walter De Jong, Robert Plaisted and Keith Perry, Cornell University; Dr. Kathleen Haynes, USDA-Beltsville; Dr. Greg Porter, University of Maine; Dr. Rich Novy, USDA-Aberdeen; Dr. Felix Navarro, University of Wisconsin; Dr. David Holm, Colorado State University; and Dr. David Douches, Michigan State University. Certified seed provided by Bruce Pryputniewicz is greatly appreciated. The Freeville crew is acknowledged for their excellent cooperation in maintaining the research plots and assisting with harvests.

Summary of Potato Variety Trials in Upstate New York

Potato variety yield trials were conducted in four counties in upstate New York in 2014 in which a total of 30 named varieties and 206 numbered clones were evaluated. Ten replicated variety yield trials and two observational trials were conducted at the Thompson Vegetable Research Farm near Freeville in Tompkins County on a Howard gravelly loam soil. Grower chip processing trials were conducted on mineral soils near Arkport (Steuben County) and Bliss (Wyoming County). Grower red and white tablestock trials were planted on muck soil near Marion (Wayne County). All trials at Freeville and on grower cooperator farms were grown using standard commercial cultural practices. Freeville trials were irrigated but the grower trials were not. As evaluation of potato lines with golden nematode (GN) resistance is of high priority, 12 named and 18 numbered entries in these trials are known to have GN resistance (see Table 1 for attributes). Marketable yield, tuber quality and appearance, maturity, storage life and processing potential are among the important characteristics which are evaluated.

Freeville Trial Results:

The **early replicated yield trial** (Tables 2 and 3) had 12 entries, including the early maturity standard Superior. No entries had marketable yield above Superior, the Cornell line NY155 had the next highest marketable yield (479 cwt/acre) at 90% that of Superior. Only Andover, AF4157-6 and NY141 had maturity as early as Superior. NY150 is unique in that it has very high tuber set, at 16.3 tubers per foot of row compared to 9.0 for Superior, thus resulting in the smallest average tuber size. NY141 and NY150 had the best tuber appearance. There was little to modest levels of scab in the trial this year. K28-18 had the highest specific gravity (1.105) while NY155 had the lowest (1.064).

The **medium maturity yield trial** (Tables 4 and 5) had 12 entries with a trial average marketable yield of 395 cwt/acre. Salem had the highest total yield (557 cwt/acre) and marketable yield (479 cwt/acre). AF0338-17 and MSQ086-3 also had good marketable yield above Atlantic. The novelty multi-colored entries Masquerade and Spartan Splash had the most attractive tubers, while Snowden was the worst in appearance and had the most common scab. AF4386-16 had the highest specific gravity (1.100) while Salem was the lowest (1.069). There was significant hollow heart in Yukon Gold.

The average marketable yield of the 16 entries in the **medium-late maturity yield trial** (Tables 6 and 7) was 352 cwt/acre, with only Keuka Gold and Reba having marketable yield above the standard, Atlantic. Keuka Gold had the highest yield while MSS176-1 had the lowest. Atlantic had the best tuber appearance while Snowden and W5015-12 were very poor. Lehigh had the least scab (0.0) while Snowden had the most (a very bad 4.0). Atlantic, B2833-16 and W5015-12 had the highest specific gravity (1.093), while Kennebec was the lowest (1.075).

In the **late maturity trial** (Tables 8 and 9) with 12 entries there were 9 entries with marketable yield above Atlantic, with NY154 having the highest at 583 cwt/acre. NY148 had very late maturity. In general tuber appearance was only average, but NY151 was quite attractive with a bright white skin. There was a range of common scab ratings, with NY151 having the highest score at 3.7. NY148 again had the highest specific gravity (1.100), Atlantic was at 1.097, and NY151 was the lowest (1.070).

There are few GN resistant red- and purple-skinned clones currently available. In the **red/blue/purple-skinned replicated trial** (Tables 10 and 11) with 30 entries, there were only two varieties, Red Maria and Strawberry Paw, which have been screened for GN resistant in tests by the USDA-ARS GN lab. The Cornell line L27-2 had the highest total yield (649 cwt/acre) and marketable yield (564 cwt/acre). BNC316-1, Nordonna and Red Maria had yield above the high yielding standard Chieftain. L31-2 and Purple Haze had the highest specific gravity (1.093) while AF4815-1 had the lowest (1.067). CO05228-4R, L26-4, and L27-2 had the best appearance, while L26-6 had the most scab. AF4985-1, BNC315-5 and CO098012-5R had modest hollow heart (15%).

The **red and purple skinned observational trial** (Tables 12 and 13) compared 20 early generation lines from the University of Maine and USDA-ARS-MD to Chieftain and Dark Red Norland. Yields were lower in this trial, with marketable yield averaging at 65% of Chieftain. Specific gravity ranged from 1.066 to 1.089, almost no internal defects, generally low scab scores, and significant soft rot in two lines.

The **russet-skinned and long tuber trial** (Tables 14 and 15) had 17 replicated and 9 observational clones. As with the case of the red-skinned lines, GN resistance is not widely available in russet-skinned lines and in 2014 we had no golden nematode resistant russet entry. Russet Burbank typically has a low percentage (40% to 50%) of marketable yield when grown under NYS conditions due to defects and undersize tubers, but in the 2014 russet trial had 67% marketable yield, representing a less stressful growing season. While 8 breeding lines had marketable yield above Russet Burbank, AF4347-1 and AF5464-4 had marketable yield above RB by 128% and 137%, respectively. There was significant hollow heart for many entries in this trial, with A08014-11TE at 73% and AF4532-8 at 80%. AF5406-10 (1.095) had the highest specific gravity while AAF08065-2 (1.066) was the lowest.

Cornell University advanced J and K-clone replicated yield trial (Tables 16 and 17) compared five “J” and six “K” clones to three white-skinned varieties. Four clones had marketable yield above or equal to Atlantic, which was 433 cwt/acre. However, no clone surpassed Snowden’s marketable yield (529 cwt/acre). K28-18 again had the highest (1.108) specific gravity while K11-2 the lowest (1.075). J17-1 and K27-1 had the best tuber appearance, J15-7 the lowest percentage of external defects, J15-7 the most hollow heart (27%) and Eva the most scab (3.3).

Cornell University advanced L-clone replicated yield trial (Tables 18 and 19) compared 30 “L” clones to three white-skinned standard varieties. L2-16 (104%), L8-14 (103%), L29-3 (110%) had marketable yield above that of Atlantic, which was 481 cwt/acre. L6-4 (1.100), L9-10 (1.100), L17-1 (1.100) and L17-3 (1.101) had the highest specific gravity, Atlantic was 1.098 and L14-1 (1.075) had the lowest. L18-1 had the most hollow heart (53%) while L30-5 had the most scab (3.0).

University of Maine observational trial (Tables 20 and 21) had 28 entries compared to Atlantic, Snowden, and Superior. AF5435-7 had the highest total yield (661 cwt/acre) and marketable yield (606 cwt/acre). AF5040-8 had the highest specific gravity (1.100), Atlantic was at 1.086 and AF5280-5 was the lowest (1.066). AAF07307-3 had the best tuber appearance, AF5280-1 the most hollow heart (60%), and AF5428-7 the most scab.

USDA-ARS-MD advanced clone trial (Tables 22 and 23) had 14 entries compared to Atlantic, Snowden and Superior. Three entries had marketable yield above Atlantic, with B2832-12 having the highest total yield (467 cwt/acre) and marketable yield (416 cwt/acre). Snowden had the highest specific gravity (1.096), followed by B2951-7 (1.095), while B2738-3 and B2890-11 had the lowest (1.074). Scab scores were generally low and few internal defects except for hollow heart in B2832-12 (23%) and BNC318-6 (10%).

USDA-ARS-MD observational B clone (one replication) trial (Tables 24 and 25) compared 24 “B” clones to Atlantic. Note that the standard Atlantic’s marketable yield (465 cwt/acre) was very good, so only one entry, B2981-5 had higher marketable yield (484 cwt/acre). B3093-11 had the lowest specific gravity (1.076) while B3005-7 and Atlantic the highest (1.097). There was significant hollow heart in many clones, with 100% of the tubers cut for B2993-6 having internal cavities. Scab scores generally good except for the 3.5 for B2996-1.

County Trial Results:

The **Wayne County grower tablestock trial** (Tables 26 and 27) had 20 red-skinned and 16 white entries. Chieftain was used as the red-skinned yield standard, obtaining 270 cwt/acre marketable yield, and there were 7 red entries with higher marketable yield. BNC316-1 had the highest yield at 415 cwt/acre, equal to 154% of Chieftain, while Red Maria was second highest at 328 cwt/acre. Atlantic was used as the white yield standard, reaching 261 cwt/acre marketable yield (somewhat lower yield than in past seasons). Nine entries had higher yield than Atlantic, with L29-3 having the highest yield at 402 cwt/acre (154% of Atlantic).

Steuben (Table 28) and **Wyoming** (Table 29) **County chip processing trials** had the same entries: the two standards Atlantic and Snowden for yield, specific gravity and chip color comparisons; two recently released Cornell varieties Lamoka and Waneta; and 10 Cornell breeding lines. While J15-7 was the highest yielder in both county trials, it has shown a high risk for hollow heart, plus lower specific gravity, and hence has been dropped from the CU breeding program. NY154 was tied for highest yield in Steuben County and second highest in Wyoming County, representing 146% and 141% of Atlantic’s marketable yield, respectively. K28-18 had very high specific gravity in both counties, equal to Atlantic and Snowden. J112-2 had 70% hollow heart in Steuben and 40% in Wyoming trials. Samples were placed in grower farm storage and in Cornell facilities for chipping from long-term storage.

Agtron Chip Color Readings on 2013 Trials:

Chip data (Table 30) are presented for the 2013 season for eight replicated yield trials grown at Freeville and two grower yield trials in Steuben and Wyoming Counties which have been stored at 40F and 45F. Compare the Agtron readings to Snowden, which is the long-term storage chipper – the higher the number above 60.0 the better. In general, Lamoka, Waneta, NY140 and NY148 have been as good or better (lighter chip color) than Snowden.

After-Cooking Darkening and Sloughing Ratings for 2013 Trials:

Cooking data are presented (Table 31) for ten replicated yield trials grown at Freeville and grower yield trials in Steuben, and Wyoming Counties during the 2013 season. Thirteen entries had near perfect scores for both after-cooking darkening and sloughing, while the Cornell University clone K45-2 perfect 5.0 scores for both attributes.

MATERIALS AND METHODS – 2014 FREEVILLE TRIALS

TABLES 2-25

Location: Homer C. Thompson Vegetable Research Farm, Freeville, New York

Trial Design: All replicated trials and experiments were in a randomized complete block design.
All trials were planted with 3 replications with the exception of the following:

Red-skinned Trial (10-11) – 2 reps
Red-skinned Observational Trial (12-13) – 1 rep
Russet Trial (14-15) – 1 and 3 reps
University of Maine Observational Trial (20-21) – 1 rep
USDA White Observational Trial (24-25) – 1 rep

Plot Size: Twin beds with 14 hills each, planted with 34” row width, and 9” spacing between plants.

Weed Control: 2.0 LB/A Lorox 50 DF and 1.5 PT/A Dual II Magnum were applied pre-emergence to all trials.

Fertilizer: All conventional plots were banded with 1150 LB/A 13-13-13 at planting.
(No broadcast fertilizer was applied pre-plant.)

Insect Control: All trials were sprayed with Leverage 2.7 for Potato Leaf Hopper.

Disease Control: Variety trials were sprayed 12 times between June 12 and October 28. Applications were rotated among the following fungicides: Bravo Weather Stick, Ridomil Gold/Bravo SC, Revus Top, Dithane F-45, Previcur Flex, Curzate 60DF and Dupont Tanos.

Irrigation: About one inch of water was applied 4 times between July 15 and August 11.

Vinekill: A single application of Reglone 1.5 pt/A + COC 1 pt/A. was used on all trials, except the Early trial which was mowed.

Weather: Comparisons between 2014 data and the 39 year average weather data for the period 1975-2013.

	May		June		July		Aug		Sept		Oct	
	'14	39_yr	'14	39_yr	'14	39_yr	'14	39_yr	'14	39_yr	'14	39_yr
Min Temp (°F)	31	--	42	--	45	--	43	--	33	--	26	--
Max Temp (°F)	84	--	85	--	87	--	82	--	84	--	75	--
Avg Min Temp (°F)	44	43	55	52	56	56	53	56	48	47	41	37
Avg Max Temp (°F)	66	67	75	76	77	80	74	78	70	71	60	59
Mean Temp (°F)	52	54	62	63	65	67	59	65	52	57	46	46
Rainfall (in)	3.06	3.37	6.44	4.18	3.86	3.82	5.02	3.99	2.73	4.35	2.60	3.63

Upstate New York Table 1. Table Index, Golden Nematode Resistance, Tuber Characteristics of Varieties and Clones in the 2014 Potato Trials Summarized in this Report.

Variety/Clone	Table No.	GN ²	COLOR	TEX.	SHAPE	X-SECT.	Variety/Clone	Table No.	GN ²	COLOR	TEX.	SHAPE	X-SECT.
ACCUMULATOR	6-7, 30-31	?	7	5	2	6	A01010-1	14-15, 31	S	4	2	7	5
ANDOVER	2-3, 6-7, 30-31	R	7	6	3	7	A03158-2TE	14-15, 31	?	5	3	8	4
ATLANTIC	2-9, 16-25, 27-31	R	7	6	2	6	A05180-3PY YF2	10-11, 26, 31	?	1	8	2	7
CHIEFTAIN	10-13, 26, 31	S	3	8	3	5	A05182-7RY YF2	10-11, 31	?	9	8	2	5
DARK RED NORLAND	10-13, 26, 31	S	2	8	4	4	A06014-14TE	14-15	?	4	2	8	5
EVA	16-17, 27	R	8	8	2	5	A06408-99LB	14-15	?	7	6	7	4
JACQUELINE LEE	8-9, 27, 30-31	?	9	6	5	6	A08014-11TE	14-15	?	5	2	6	5
KATAHDIN	8-9, 31	S	8	8	3	6	AAF07307-3	20-21	?	9	8	2	5
KENNEBEC	6-7, 31	S	8	7	7	6	AAF07769-3	14-15	?	8	6	8	5
KEUKA GOLD	6-7, 31	R	7	5	3	5	AAF08065-2	14-15	?	8	7	8	3
LAMOKA	8-9, 28-31	R	8	7	3	6	AF0338-17	4-5, 31	R	8	6	3	5
LEHIGH	6-7, 31	R	9	5	3	6	AF3362-1	14-15	?	5	3	8	4
MAGIC MOLLY	10-11, 26	?	1	8	8	5	AF4013-3	4-5, 30-31	?	9	8	4	5
MARCY	8-9, 30-31	R	7	5	3	6	AF4113-2	6-7, 31	?	7	6	7	6
MASQUERADE YF3	4-5, 31	?	9	8	2	5	AF4124-7	14-15	?	7	6	8	4
NORDONNA	10-11, 31	S	2	8	2	5	AF4138-8	2-3, 30-31	?	8	8	3	7
PALISADE RUSSET	14-15	?	8	7	8	4	AF4157-6	2-3, 30-31	?	8	8	3	5
PURPLE HAZE	10-11	?	1	8	2	7	AF4172-2	14-15	?	7	6	6	4
REBA	6-7, 27, 30-31	R	8	7	3	6	AF4296-3	14-15, 31	?	7	6	8	5
RED MARIA - NY129	10-11, 26, 31	R	2	6	1	7	AF4320-17	14-15	?	7	6	6	4
RUSSET BURBANK	14-15, 31	S	5	3	5	5	AF4320-7	14-15, 31	?	7	6	7	4
RUSSET NORKOTAH	14-15	S	5	3	8	5	AF4347-1	14-15	?	5	3	8	3
SALEM	4-5	R	8	6	3	6	AF4386-16	4-5	?	7	6	2	5
SHEPODY	6-7, 31	S	8	7	6	7	AF4532-8	14-15, 31	?	4	2	8	5
SNOWDEN	4-9, 16-25, 28-31	S	7	6	2	5	AF4532-9	14-15	?	5	3	8	5
SPARTAN SPLASH	4-5, 27, 31	?	9	6	2	5	AF4565-1	10-11, 26, 31	?	2	8	3	4
STRAWBERRY PAW (NY136)	10-11, 26	R	2	8	3	5	AF4593-1	12-13	?	2	8	2	5
SUPERIOR	2-3, 16-25, 30-31	S	8	6	3	5	AF4614-2	20-21, 30-31	?	8	8	3	6
WANETA	8-9, 27-31	R	8	7	3	6	AF4640-1	4-5, 27, 30-31	?	8	6	2	4
YUKON GOLD	4-5, 31	S	9	8	3	5	AF4730-2	6-7	?	8	7	3	6

(continued)

Upstate New York Table 1. -(cont'd)- Table Index, Golden Nematode Resistance, Tuber Characteristics of Varieties and Clones in the 2014 Potato Trials Summarized in this Report.

Variety/Clone	Table No.	GN ²	COLOR	TEX.	SHAPE	X-SECT.	Variety/Clone	Table No.	GN ²	COLOR	TEX.	SHAPE	X-SECT.
AF4815-1	10-11, 26	?	2	8	5	4	AF5446-11	20-21	?	8	8	1	7
AF4831-2	10-11, 26	?	2	8	3	5	AF5447-4	20-21	?	9	8	1	5
AF4831-3	10-11, 26	?	2	8	3	4	AF5448-4	20-21	?	8	8	1	7
AF4845-3	10-11, 26	?	2	8	3	5	AF5464-4	14-15	?	8	6	8	5
AF4885-1	6-7	?	8	7	2	7	AF5466-1	14-15	?	6	6	8	4
AF4985-1	10-11, 26	?	2	8	3	5	AF5467-10	20-21	?	8	8	3	3
AF5040-8	20-21	?	8	8	3	4	AF5467-13	20-21	?	8	6	3	5
AF5140-1	20-21	?	8	8	1	8	AF5467-4	20-21	?	8	6	3	5
AF5245-1	12-13, 31	?	1	8	1	3	AF5473-6	20-21	?	8	6	8	3
AF5274-6	12-13, 31	?	2	6	1	7	AF5477-6	20-21	?	7	6	8	4
AF5278-3	12-13	?	2	6	3	4	B2152-17	10-11	?	2	8	3	4
AF5280-1	20-21	?	8	8	3	4	B2738-3	22-23, 30-31	?	7	6	1	4
AF5280-5	20-21	?	8	8	3	4	B2832-12	22-23, 30-31	?	7	6	1	8
AF5292-4	20-21	?	8	8	1	7	B2833-16	6-7	?	7	6	2	7
AF5382-1	20-21	?	9	9	3	5	B2834-8	22-23, 30-31	?	8	8	1	7
AF5392-8	20-21	?	8	6	3	4	B2869-28	22-23, 30-31	?	8	6	1	6
AF5393-1	20-21	?	7	6	2	5	B2890-11 YF1	22-23, 30-31	?	9	6	3	6
AF5395-10	20-21	?	8	8	2	3	B2930-5	22-23	?	9	8	3	5
AF5400-2	20-21	?	9	8	3	7	B2950-2	22-23, 30-31	?	8	6	1	7
AF5406-10	14-15	?	7	6	8	4	B2950-3	22-23, 30-31	?	7	6	1	6
AF5406-7	14-15	?	6	5	8	4	B2951-7	22-23	?	7	6	1	7
AF5407-5	14-15	?	6	5	6	4	B2952-6	22-23	?	9	8	1	4
AF5412-3	12-13	?	1	9	4	4	B2954-11	24-25	?	8	6	1	5
AF5415-1	20-21	?	8	8	4	5	B2954-20	22-23	?	8	6	1	7
AF5426-1	20-21	?	8	6	3	3	B2981-5	24-25	?	8	6	1	5
AF5428-7	20-21	?	8	8	1	7	B2981-7	24-25	?	8	6	1	7
AF5433-10	20-21	?	7	6	2	7	B2993-6	24-25	?	8	6	3	5
AF5435-7	20-21	?	8	7	2	4	B2996-1	24-25	?	8	7	8	4
AF5444-1	20-21	?	8	9	2	6	B2998-1	24-25	?	1	6	1	5

(continued)

Upstate New York Table 1. -(cont'd)- Table Index, Golden Nematode Resistance, Tuber Characteristics of Varieties and Clones in the 2014 Potato Trials Summarized in this Report.

Variety/Clone	Table No.	GN ²	COLOR	TEX.	SHAPE	X-SECT.	Variety/Clone	Table No.	GN ²	COLOR	TEX.	SHAPE	X-SECT.
B2999-6	24-25	?	7	6	1	4	BNC182-5	6-7, 30-31	R	8	7	2	7
B3002-1	24-25	?	7	6	3	5	BNC315-5	10-11, 26, 31	?	2	8	3	6
B3002-3	24-25	?	8	6	3	5	BNC316-1 YF1	10-11, 26, 31	?	1	8	2	5
B3005-6	24-25	?	7	6	3	4	BNC318-6	22-23	?	7	6	1	7
B3005-7	24-25	?	8	6	1	4	BNC318-7	22-23	?	7	6	2	5
B3012-3	24-25	?	8	6	1	5	BNC318-9	22-23	?	7	6	2	5
B3019-2	24-25	?	8	6	1	7	BNC322-1	10-11	?	2	8	2	7
B3021-1	24-25	?	9	6	3	4	BNC364-1	24-25	?	8	6	5	3
B3082-12	24-25	?	7	6	3	4	BNC366-1	24-25	?	8	6	1	8
B3082-13	24-25	?	7	5	1	7	BNC369-4	24-25	?	8	6	1	5
B3082-16	24-25	?	8	6	3	4	BNC372-3	24-25	?	8	6	1	7
B3082-18	24-25	?	8	6	1	4	BTD0265-5	24-25	?	8	7	3	4
B3083-8	24-25	?	8	6	1	5	CO04067-8R/Y	10-11	?	2	8	2	5
B3093-11	24-25	?	7	6	2	5	CO0499-3W/Y	2-3	?	9	8	2	7
B3095-13	24-25	?	8	8	2	7	CO05228-4R	10-11	?	2	8	2	7
B3095-5	24-25	?	8	6	1	6	CO098012-5R	10-11	?	2	8	2	4
B3100-1	24-25	?	8	7	1	7	J15-7	16-17, 28-31	?	7	6	2	7
B3101-1	24-25	?	8	8	3	7	J17-1	16-17, 30-31	?	7	6	3	5
B3106-10	24-25	?	9	8	1	7	J21-5	16-17, 27, 30-31	?	8	8	5	4
B3106-9	24-25	?	9	6	4	4	J112-2	16-17, 28-29	R	8	8	3	5
B3124-4	12-13	?	1	8	2	4	K11-2	16-17, 27, 31	R	8	8	3	7
B3126-3	12-13	?	3	7	3	5	K27-1	16-17, 28-31	R	8	8	2	4
B3126-4	12-13	?	3	7	1	7	K27-3	16-17, 28-31	?	8	6	3	4
B3127-5	12-13	?	2	7	1	7	K28-18	2-3, 16-17, 28-31	R	8	6	3	3
B3128-5	12-13	?	2	7	3	5	K28-7	16-17, 28-31	R	8	6	2	4
B3131-3	12-13	?	2	7	2	5	K31-4	16-17, 28-31	R	8	7	1	7
B3134-12	12-13	?	2	6	4	3	K100-3	10-11, 26, 31	S	2	8	3	4
B3137-3	12-13	?	2	7	5	5	L1-7	18-19	R	7	6	2	3
B3138-5	12-13	?	2	7	1	7	L1-8	18-19	?	8	8	1	7

(continued)

Upstate New York Table 1. -(cont'd)- Table Index, Golden Nematode Resistance, Tuber Characteristics of Varieties and Clones in the 2014 Potato Trials Summarized in this Report.

Variety/Clone	Table No.	GN ²	COLOR	TEX.	SHAPE	X-SECT.	Variety/Clone	Table No.	GN ²	COLOR	TEX.	SHAPE	X-SECT.
L2-3	18-19	?	8	8	3	3	L30-5	18-19, 27	R	9	8	3	4
L2-12	18-19	R	8	7	2	4	L31-1	10-11	R	2	8	8	5
L2-16	18-19	?	7	6	2	2	L31-2	10-11	R	2	8	8	7
L4-23	18-19	?	8	7	2	3	L33-1	18-19	R	9	8	8	5
L6-4	18-19	?	7	6	3	5	MSQ086-3	2-5	?	8	7	1	5
L7-2	18-19	R	8	8	2	5	MSQ131-A	4-5	?	8	8	1	7
L7-3	18-19	?	8	7	2	5	MSS176-1	6-7, 30-31	?	8	7	5	6
L7-5	18-19	?	8	8	3	2	MSS576-5SPL	2-3, 31	?	8	8	1	6
L7-10	18-19	?	8	6	2	4	NC421-4	12-13	?	2	7	2	7
L7-13	18-19	?	8	7	3	4	NDAF092231C-1	12-13	?	1	8	1	7
L8-12	18-19	R	7	6	1	7	NDAF092274b-2	12-13	?	2	8	1	7
L8-14	18-19	?	7	6	1	5	NDAF102571B-5	12-13	?	2	8	3	4
L8-24	18-19	?	9	7	3	5	NDAF102573-2	12-13	?	2	7	1	4
L9-6	18-19	R	7	6	3	5	NDAF102576B-1	12-13	?	2	8	1	7
L9-10	18-19	?	8	6	2	5	NY140	8-9, 30-31	R ²	8	7	3	6
L10-2	18-19	?	8	6	3	4	NY141	2-3, 30-31	R	8	8	3	4
L12-1	18-19	?	7	6	2	5	NY148 (NYE106-4) BC	8-9, 30-31	R	7	6	2	6
L12-2	18-19	?	7	6	2	5	NY150 (NYF52-1) BC	2-3, 27, 30-31	R	8	8	1	8
L14-1	18-19	?	7	6	3	6	NY151	8-9, 27	R	8	8	2	5
L14-4	18-19	?	7	6	2	5	NY152 (H15-5)	8-9, 28-29, 31	S	7	5	3	6
L15-7	18-19	?	7	6	3	5	NY154	8-9, 28-29	S	7	5	3	6
L17-1	18-19	?	9	6	1	4	NY155 (H122-4)	2-3, 27, 31	?	3	8	3	4
L17-3	18-19	R	7	6	3	4	NY157 (J105-10)	16-17, 28-29	R	7	6	3	5
L18-1	18-19, 27	?	8	8	2	2	W5015-12	6-7, 30-31	?	6	5	2	3
L26-4	10-11, 26	?	2	6	3	5	W6002-1R	10-11, 26, 31	?	2	8	2	5
L26-6	10-11, 26	?	2	8	2	5	WAF10051-1RUS	14-15	?	5	4	6	4
L26-7	10-11, 26	S	2	8	3	5	WAF10078-3RUS	14-15	?	6	4	8	4
L27-2	10-11, 26	S	3	8	1	7	WAF10131-2	20-21	?	8	6	3	4
L29-1	18-19, 27	?	9	8	1	7	WAF10131-8	20-21	?	8	8	1	7
L29-3	18-19, 27	R	9	8	3	5							

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 ¹					Size Distrib. (%)		Mean Tuber		Spec. Grav.
		Cwt/A	% of Std.	(% of total yield)					1-7/8"	2-1/2"	#/ft.	wt.(oz.)	
				1	2	3	4	5	to 4"	to 4 "			
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)	56	59									2	1	4
C.V. (%)	(7)	(9)									(9)	(10)	(3)

¹Tuber 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 13

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 ¹ Mat. At Vinekill	Tuber Attributes ¹			External Tuber Defects (%)					Int. Tuber Defects (%) ²				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

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

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

Upstate New York Table 4. Total yield, marketable yield, percentage of yield by grade size distribution, mean tuber number per foot and weight, and specific gravity for the medium maturity trial grown at Freeville, New York - 2014.

Genotype Variety or Clone	Total Yield Cwt/A	Mkt. Yield		Size Distribution ¹ (% of total yield)					Size Distrib. (%)		Mean Tuber		Spec. Grav.
		Cwt/A	% of Std.	1	2	3	4	5	1-7/8"	2-1/2"	#/ft.	wt.(oz.)	
									to 4"	to 4 "			
ATLANTIC	500	451	100	3	36	52	7	2	95	59	9.3	5.6	96
AF0338-17	511	466	103	2	22	62	14	1	97	76	8.2	6.5	85
AF4013-3	443	406	90	5	55	39	1	0	95	40	10.4	4.4	93
AF4386-16	323	261	58	14	53	33	0	0	86	33	9.0	3.8	100
AF4640-1	471	419	93	6	56	37	1	0	94	37	12.0	4.1	82
MASQUERADE	485	392	87	14	60	25	1	0	86	25	15.8	3.2	85
MSQ086-3	514	456	101	8	52	38	1	0	92	40	13.1	4.1	81
MSQ131-A	398	322	71	1	11	52	21	14	85	74	5.1	8.2	72
SALEM	557	479	106	2	29	53	11	5	93	64	9.8	5.9	69
SNOWDEN	440	385	85	4	45	47	3	0	96	50	9.6	4.8	91
SPARTAN SPLASH	398	328	73	17	76	8	0	0	83	8	14.1	2.9	81
YUKON GOLD	463	374	83	2	24	54	13	7	91	66	7.6	6.4	91
Average:	459	395	88	7	43	42	6	2	91	48	10.3	5.0	86
Maximum:	557	479	106	17	76	62	21	14	97	76	15.8	8.2	100
Minimum:	323	261	58	1	11	8	0	0	83	8	5.1	2.9	69
Waller-Duncan													
LSD (k=100)	82	78									2.0	0.5	3
C.V. (%)	(10)	(12)									(12)	(6)	(3)

¹Tuber 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 13

Vinekill Date: Aug 13 & Aug 18

Harvest Date: Aug 25

Upstate New York Table 5. Plant maturity, tuber shape and appearance, percentage of external and internal tuber defects, and scab rating for the medium maturity trial grown at Freeville, New York - 2014.

Genotype Variety or Clone	Plant ¹ Mat. At Vinekill	Tuber Attributes ¹			External Tuber Defects (%)					Int. Tuber Defects (%) ²				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	6.7	2	6	5.0	4.8	3.0	1.6	0.3	0.0	3.3	0.0	6.7	0.0	1.2
AF0338-17	6.0	3	6	5.3	6.4	4.6	1.1	0.3	0.3	10.0	0.0	0.0	3.3	1.0
AF4013-3	6.3	4	8	6.0	3.2	1.5	1.4	0.2	0.0	0.0	0.0	0.0	0.0	3.3
AF4386-16	5.7	2	6	3.3	5.4	2.0	1.6	0.4	1.4	3.3	0.0	0.0	0.0	3.0
AF4640-1	5.3	2	6	5.7	4.6	1.9	2.4	0.0	0.3	0.0	0.0	0.0	3.3	1.5
MASQUERADE	7.0	2	8	7.3	4.7	3.6	0.9	0.1	0.1	0.0	3.3	3.3	0.0	0.2
MSQ086-3	7.7	1	8	6.7	3.4	2.7	0.7	0.0	0.0	0.0	0.0	3.3	0.0	1.3
MSQ131-A	6.7	1	8	3.7	4.1	2.8	0.0	0.8	0.5	0.0	0.0	0.0	0.0	4.5
SALEM	7.3	3	6	5.0	6.9	3.1	1.9	0.3	1.7	0.0	0.0	0.0	0.0	2.7
SNOWDEN	6.7	2	6	3.2	8.2	5.3	2.2	0.7	0.0	0.0	0.0	0.0	0.0	4.3
SPARTAN SPLASH	6.7	2	6	7.2	1.2	0.4	0.7	0.0	0.2	0.0	0.0	3.3	0.0	0.2
YUKON GOLD	4.7	3	8	6.5	9.8	2.4	3.9	2.9	0.7	33.3	0.0	0.0	0.0	0.5
Average:	6.4	2	7	5.4	5.2	2.8	1.5	0.5	0.4	4.2	0.3	1.4	0.6	2.0
Maximum:	7.7	4	8	7.3	9.8	5.3	3.9	2.9	1.7	33.3	3.3	6.7	3.3	4.5
Minimum:	4.7	1	6	3.2	1.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2

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

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

Upstate New York Table 6. Total yield, marketable yield, percentage of yield by grade size distribution, mean tuber number per foot and weight, and specific gravity for the medium-late maturity trial grown at Freeville, New York - 2014.

Genotype Variety or Clone	Total Yield Cwt/A	Mkt. Yield		Size Distribution ¹					Size Distrib. (%)		Mean Tuber		Spec. Grav.
		Cwt/A	% of Std.	(% of total yield)					1-7/8"	2-1/2"	#/ft.	wt.(oz.)	
				1	2	3	4	5	to 4"	to 4 "			
ACCUMULATOR	267	238	58	8	47	43	1	0	92	44	6.1	4.6	91
ANDOVER	429	385	93	1	27	52	15	5	94	67	6.4	7.0	81
ATLANTIC	463	412	100	2	36	51	8	3	95	59	8.4	5.8	93
AF4113-2	449	373	91	9	49	33	8	1	89	41	8.1	5.8	79
AF4730-2	367	301	73	8	45	44	2	1	91	46	8.3	4.6	80
AF4885-1	375	321	78	7	45	45	2	1	92	47	8.2	4.8	90
B2833-16	461	411	100	3	29	57	10	1	96	67	7.8	6.1	93
BNC182-5	396	346	84	7	45	46	2	0	93	48	9.2	4.5	84
KENNEBEC	490	277	67	3	24	47	15	11	86	61	6.7	7.6	75
KEUKA GOLD	576	520	126	4	35	53	7	1	95	60	11.1	5.4	79
LEHIGH	431	371	90	1	23	57	14	4	95	72	6.2	7.1	84
MSS176-1	296	194	47	13	37	39	10	1	86	49	5.8	5.3	80
REBA	480	422	102	2	34	46	12	5	93	58	8.2	6.2	80
SHEPODY	501	388	94	8	36	41	11	4	88	52	7.8	6.7	81
SNOWDEN	358	302	73	6	46	44	4	0	94	48	7.9	4.7	91
W5015-12	457	372	90	10	58	29	1	1	88	30	12.5	3.8	93
Average:	425	352	85	6	39	45	8	2	92	53	8.0	5.6	85
Maximum:	576	520	126	13	58	57	15	11	96	72	12.5	7.6	93
Minimum:	267	194	47	1	23	29	1	0	86	30	5.8	3.8	75
Waller-Duncan LSD (k=100)	105	113									2.0	0.7	5
C.V. (%)	(15)	(19)									(15)	(8)	(4)

¹Tuber 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: Aug 18

Harvest Date: Sep 3

Upstate New York Table 7. Plant maturity, tuber shape and appearance, percentage of external and internal tuber defects, and scab rating for the medium-late maturity trial grown at Freeville, New York - 2014.

Genotype Variety or Clone	Plant ¹ Mat. At Vinekill	Tuber Attributes ¹			External Tuber Defects (%)					Int. Tuber Defects (%) ²				Scab Rating
		Tuber Shape	Skin Text.	Tuber Appear.	Total Defects	Sun- Green	Mis- shapen	Growth Cracks	Rot	Holl. Heart	Bn. Center	Vasc. Disc.	Int. Nec.	
ACCUMULATOR	5.3	2	5	5.0	2.9	0.2	1.2	1.0	0.5	6.7	0.0	0.0	0.0	2.0
ANDOVER	4.3	3	5	5.7	4.4	1.7	0.6	1.8	0.4	16.7	0.0	0.0	0.0	1.5
ATLANTIC	6.7	3	5	6.7	6.7	4.2	0.7	1.2	0.5	6.7	0.0	3.3	3.3	1.3
AF4113-2	6.0	7	6	5.3	6.1	1.9	1.4	2.0	0.8	3.3	0.0	6.7	0.0	1.7
AF4730-2	5.3	3	7	3.7	8.7	3.3	0.9	2.9	1.6	10.0	0.0	0.0	0.0	2.0
AF4885-1	4.3	2	7	3.3	6.9	4.5	1.9	0.1	0.4	0.0	0.0	33.3	0.0	2.7
B2833-16	4.0	2	6	6.0	7.0	1.7	2.8	2.2	0.4	3.3	0.0	6.7	3.3	1.0
BNC182-5	7.0	2	7	4.0	5.6	2.7	1.2	0.5	1.2	6.7	0.0	3.3	0.0	2.3
KENNEBEC	6.3	7	7	3.0	29.3	12.3	5.0	10.1	2.0	20.0	0.0	6.7	0.0	1.3
KEUKA GOLD	7.3	3	5	6.3	4.9	3.1	1.0	0.0	0.8	0.0	0.0	0.0	6.7	1.3
LEHIGH	7.3	3	5	6.0	10.0	6.5	0.2	2.2	1.2	3.3	0.0	0.0	0.0	0.0
MSS176-1	6.7	5	7	2.7	25.6	9.3	1.2	14.8	0.4	43.3	0.0	3.3	0.0	2.7
REBA	6.0	3	7	5.3	4.9	2.3	0.5	0.8	1.4	16.7	0.0	10.0	0.0	1.0
SHEPODY	6.3	6	7	3.7	10.7	5.5	2.6	1.4	1.3	26.7	0.0	6.7	0.0	2.7
SNOWDEN	5.3	2	5	2.0	9.6	4.8	0.4	4.2	0.2	0.0	0.0	33.3	0.0	4.0
W5015-12	7.0	2	5	2.3	6.7	3.4	1.5	1.8	0.0	16.7	0.0	6.7	0.0	2.7
Average:	6.0	3	6	4.4	9.4	4.2	1.4	2.9	0.8	11.3	0.0	7.5	0.8	1.9
Maximum:	7.3	7	7	6.7	29.3	12.3	5.0	14.8	2.0	43.3	0.0	33.3	6.7	4.0
Minimum:	4.0	2	5	2.0	2.9	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

²Based 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 ¹ (% of total yield)					Size Distrib. (%)		Mean Tuber		Spec. Grav.
		Cwt/A	% of Std.	1	2	3	4	5	1-7/8"	2-1/2"	#/ft.	wt.(oz.)	
									to 4"	to 4 "			
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)	98	87									1.6	0.7	4
C.V. (%)	(10)	(11)									(9)	(8)	(3)

¹Tuber 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 ¹ Mat. At Vinekill	Tuber Attributes ¹			External Tuber Defects (%)					Int. Tuber Defects (%) ²				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

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

²Based 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 ¹ (% 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

(continued)

Upstate New York Table 10. -(cont'd)- 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 ¹ (% 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.)	
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 (NY136)	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	48	33	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	1	2	3	0	0	53	3	6.8	2.7	67

¹Tuber 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 ¹ Mat. At Vinekill	Tuber Attributes ¹			External Tuber Defects (%)					Int. Tuber Defects (%) ²				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

(continued)

Upstate New York Table 11. -(cont'd)- 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 ¹ Mat. At Vinekill	Tuber Attributes ¹			External Tuber Defects (%)					Int. Tuber Defects (%) ²				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.	
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 (NY136)	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

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

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

Upstate New York Table 12. 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 observational trial (single rep) grown at Freeville, New York - 2014.

Genotype Variety or Clone	Total Yield Cwt/A	Mkt. Yield		Size Distribution ¹ (% 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.)	
AF4593-1	479	409	74	4	31	61	4	0	96	65	9.5	5.2	67
AF5245-1	439	386	70	8	57	35	0	0	92	35	12.4	3.7	88
AF5274-6	398	301	54	22	73	5	0	0	78	5	14.9	2.8	75
AF5278-3	327	288	52	8	70	20	1	0	92	22	9.4	3.6	80
AF5412-3	317	265	48	8	60	32	0	0	92	32	8.2	4.0	66
B3124-4	389	310	56	20	61	18	1	0	80	19	13.4	3.0	75
B3126-3	460	376	68	17	74	9	0	0	83	9	15.9	3.0	85
B3126-4	486	386	70	19	79	2	0	0	81	2	18.0	2.8	89
B3127-5	481	373	67	11	61	28	0	0	89	28	12.9	3.9	86
B3128-5	395	299	54	21	69	11	0	0	79	11	12.9	3.2	85
B3131-3	420	349	63	16	59	26	0	0	84	26	12.4	3.5	73
B3134-12	534	452	82	5	41	39	13	3	93	52	10.2	5.5	73
B3137-3	482	422	76	4	46	43	2	5	91	45	9.6	5.2	78
B3138-5	495	432	78	7	41	49	3	0	93	52	11.6	4.5	77
CHIEFTAIN **	599	554	100	2	34	51	12	0	98	63	12.8	4.9	73
DARK RED NORLAND **	515	485	87	2	44	52	2	0	98	54	9.7	5.5	69
NC421-4	495	440	79	9	52	39	0	0	91	39	12.9	4.0	81
NDAF092231C-1	330	227	41	29	71	1	0	0	71	1	13.4	2.6	75
NDAF092274b-2	318	273	49	3	42	50	5	0	97	55	7.2	4.6	66
NDAF102571B-5	341	263	48	21	73	5	2	0	79	6	12.8	2.8	81
NDAF102573-2	407	329	59	10	61	27	3	0	90	29	11.4	3.7	81
NDAF102576B-1	421	359	65	5	46	39	11	0	95	50	8.8	5.0	66
Average:	433	363	65	11	57	29	3	0	88	32	11.8	3.9	77
Maximum:	599	554	100	29	79	61	13	5	98	65	18.0	5.5	89
Minimum:	317	227	41	2	31	1	0	0	71	1	7.2	2.6	66

¹Tuber 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 13

Vinekill Date: Aug 13 & Aug 18

Harvest Date: Sep 9

Note: entries are in a single replication except when denoted by ** they are in 2 replications.

Upstate New York Table 13. Plant maturity, tuber shape and appearance, percentage of external and internal tuber defects, and scab rating for the red/purple skinned observational (single rep) trial grown at Freeville, New York - 2014.

Genotype Variety or Clone	Plant ¹ Mat. At Vinekill	Tuber Attributes ¹			External Tuber Defects (%)					Int. Tuber Defects (%) ²				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.	
AF4593-1	5.0	2	8	7.0	11.0	0.0	4.4	0.8	5.8	0.0	0.0	0.0	0.0	0.5
AF5245-1	7.0	1	8	6.5	4.4	1.3	0.0	1.4	1.7	10.0	0.0	10.0	0.0	1.0
AF5274-6	6.0	1	6	5.5	2.5	0.4	0.4	0.7	0.9	0.0	0.0	0.0	0.0	1.5
AF5278-3	4.0	3	6	6.5	3.9	0.4	0.3	2.4	0.8	0.0	0.0	0.0	0.0	0.5
AF5412-3	3.0	4	9	7.0	8.0	0.0	2.6	1.9	3.6	0.0	0.0	0.0	0.0	0.0
B3124-4	3.0	2	8	5.5	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B3126-3	7.0	3	7	5.5	1.6	1.1	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B3126-4	7.0	1	7	4.0	2.0	0.8	0.3	0.7	0.2	0.0	0.0	0.0	0.0	3.0
B3127-5	4.0	1	7	5.0	11.5	0.3	0.2	0.4	10.6	10.0	0.0	0.0	0.0	1.0
B3128-5	4.0	3	7	5.0	3.9	2.5	1.1	0.4	0.0	0.0	0.0	0.0	0.0	1.5
B3131-3	5.0	2	7	5.5	1.3	0.0	0.7	0.3	0.3	0.0	0.0	20.0	0.0	1.5
B3134-12	5.0	4	6	6.0	7.9	2.2	0.0	3.2	2.5	10.0	0.0	0.0	0.0	0.5
B3137-3	6.0	5	7	4.0	3.1	2.6	0.0	0.5	0.0	10.0	0.0	0.0	10.0	0.0
B3138-5	5.0	1	7	5.5	6.2	0.9	0.8	3.9	0.6	0.0	0.0	0.0	0.0	3.0
CHIEFTAIN **	5.5	3	8	5.5	5.4	0.1	0.0	1.5	3.8	0.0	5.0	0.0	0.0	2.3
DARK RED NORLAND **	4.5	3	8	6.0	3.6	0.5	0.2	1.3	1.7	0.0	0.0	0.0	0.0	1.0
NC421-4	5.0	2	7	6.0	1.6	0.4	0.0	0.0	1.3	0.0	0.0	0.0	10.0	1.5
NDAF092231C-1	5.0	1	8	4.0	2.6	0.0	1.1	0.0	1.5	0.0	0.0	0.0	0.0	0.5
NDAF092274b-2	7.0	1	8	6.5	10.9	1.4	0.0	5.7	3.8	0.0	0.0	0.0	0.0	1.0
NDAF102571B-5	5.0	3	8	6.5	2.2	0.1	0.5	0.0	1.6	0.0	0.0	0.0	0.0	0.0
NDAF102573-2	5.0	1	7	6.0	9.4	0.3	2.0	6.5	0.5	0.0	0.0	0.0	0.0	1.0
NDAF102576B-1	4.0	1	8	5.0	10.2	2.5	0.0	4.6	3.0	0.0	10.0	0.0	0.0	3.0
Average:	5.1	2	7	5.6	5.2	0.8	0.7	1.6	2.0	1.8	0.7	1.4	0.9	1.1
Maximum:	7.0	5	9	7.0	11.5	2.6	4.4	6.5	10.6	10.0	10.0	20.0	10.0	3.0
Minimum:	3.0	1	6	4.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

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

Upstate New York Table 14. Total yield, marketable yield, percentage of yield by grade size distribution, mean tuber number per foot and weight, and specific gravity for the russet and long-white trial grown at Freeville, New York - 2014.

Genotype Variety or Clone	Total Yield Cwt/A	Mkt. Yield		Size Distribution ¹ (% 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.)	
A01010-1	527	378	108	19	45	32	4	1	80	36	9.5	5.8	88
A03158-2TE	494	360	103	14	35	32	11	7	78	43	7.9	6.5	88
A06014-14TE	449	292	84	16	30	30	16	9	76	46	6.6	7.1	79
A06408-99LB	502	358	103	21	41	28	7	3	76	35	9.2	5.7	94
A08014-11TE	393	283	81	16	35	30	11	7	76	42	6.5	6.4	83
AAF07769-3 *	433	333	95	15	40	35	9	2	84	44	7.6	6.0	86
AAF08065-2 *	527	300	86	31	44	14	6	6	63	19	11.3	4.8	66
AF3362-1	557	362	104	7	22	32	23	17	76	54	6.6	8.7	87
AF4124-7	480	324	93	6	20	33	21	20	74	54	5.5	9.2	89
AF4172-2	553	432	124	16	47	29	8	0	83	37	9.4	6.1	85
AF4296-3	490	385	110	13	40	34	10	3	84	44	7.9	6.4	85
AF4320-7	393	287	82	14	30	39	9	8	77	47	5.7	7.1	80
AF4320-17	382	277	79	22	52	20	3	3	75	23	7.4	5.3	88
AF4347-1	544	445	128	5	32	37	22	5	90	58	7.2	7.9	83

(continued)

Upstate New York Table 14. -(cont'd)- Total yield, marketable yield, percentage of yield by grade size distribution, mean tuber number per foot and weight, and specific gravity for the russet and long-white trial grown at Freeville, New York - 2014.

Genotype Variety or Clone	Total Yield Cwt/A	Mkt. Yield		Size Distribution ¹ (% 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.)	
AF4532-8	359	154	44	11	20	26	16	26	63	42	4.5	8.5	71
AF4532-9	368	231	66	28	45	20	2	5	67	22	7.5	5.2	88
AF5406-7 *	468	299	86	15	18	39	23	5	80	62	6.0	8.1	92
AF5406-10 *	493	342	98	15	50	23	6	6	79	29	9.0	5.7	95
AF5407-5 *	461	252	72	21	39	27	11	2	77	39	8.1	5.9	77
AF5464-4 *	667	477	137	7	27	39	26	2	91	65	8.6	8.1	76
AF5466-1 *	538	251	72	11	23	37	12	17	72	49	7.1	7.9	75
PALISADE RUSSET	428	207	59	11	33	32	15	9	80	47	6.6	6.8	94
RUSSET BURBANK	520	349	100	29	55	13	2	1	70	15	12.1	4.4	90
RUSSET NORKOTAH	554	420	120	15	31	33	13	6	78	47	8.7	6.6	84
WAF10051-1RUS *	289	203	58	26	38	25	10	0	74	35	5.3	5.7	69
WAF10078-3RUS *	349	214	61	10	33	33	11	13	76	44	5.3	6.9	79
Average:	470	316	91	15	34	29	12	7	77	41	7.6	6.7	84
Maximum:	667	477	137	31	55	39	26	26	91	65	12.1	9.2	95
Minimum:	289	154	44	1	2	3	2	0	63	15	4.5	4.4	66
Waller-Duncan													
LSD (k=100)	64	78									0.95	0.95	5
C.V. (%)	(9)	(15)									(8)	(9)	(4)

¹Tuber size classes: 1 = under 4 oz., 2 = 4 to 8 oz., 3 = 8 to 12 oz., 4 = 12 to 16 oz., 5 = over 16 oz. ²Mkt. Yield = 4 to 16 oz. less defects.

Plant Date: May 9

Maturity Ratings: Sep 1

Vinekill Date: Sep 3

Harvest Date: Sep 24

* Note: entries are in three replications except when denoted by * they are in a single replication.

Upstate New York Table 15. Plant maturity, tuber shape and appearance, percentage of external and internal tuber defects, and scab rating for the russet and long-white trial grown at Freeville, New York - 2014.

Genotype Variety or Clone	Plant ¹ Mat. At Vinekill	Tuber Attributes ¹			External Tuber Defects (%)					Int. Tuber Defects (%) ²				Scab Rating
		Tuber Shape	Skin Text.	Tuber Appear.	Total Defects	Sun- Green	Mis- shapen	Growth Cracks	Rot	Holl. Heart	Bn. Center	Vasc. Disc.	Int. Nec.	
A01010-1	5.3	7	2	6.0	8.6	0.7	2.1	5.8	0.0	0.0	0.0	0.0	0.0	1.8
A03158-2TE	5.0	8	3	5.0	5.2	1.2	0.0	4.1	0.0	6.7	0.0	0.0	0.0	3.3
A06014-14TE	3.0	8	2	5.7	10.8	1.8	3.9	4.5	0.6	6.7	0.0	0.0	0.0	2.8
A06408-99LB	4.7	7	6	6.0	5.0	3.1	0.7	0.3	0.9	0.0	0.0	0.0	0.0	3.0
A08014-11TE	3.0	6	2	5.3	4.5	0.9	1.0	0.9	1.6	73.3	0.0	0.0	0.0	3.0
AAF07769-3 *	2.0	8	6	5.5	6.6	6.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0
AAF08065-2 *	2.0	8	7	5.0	6.4	0.9	2.0	3.6	0.0	0.0	0.0	0.0	0.0	4.0
AF3362-1	4.0	8	3	5.7	11.3	6.1	2.1	2.2	1.0	0.0	0.0	0.0	0.0	3.3
AF4124-7	3.7	8	6	5.0	6.6	3.6	1.0	0.9	1.2	3.3	0.0	0.0	0.0	2.5
AF4172-2	4.3	6	6	4.0	5.5	4.3	0.9	0.0	0.3	13.3	0.0	0.0	0.0	3.0
AF4296-3	4.3	8	6	3.3	5.5	3.1	2.3	0.2	0.0	0.0	0.0	0.0	0.0	3.7
AF4320-7	4.0	7	6	5.0	4.6	2.1	1.7	0.0	0.8	10.0	0.0	0.0	0.0	3.2
AF4320-17	3.0	6	6	6.2	2.4	1.8	0.4	0.0	0.2	3.3	0.0	0.0	0.0	3.0
AF4347-1	5.0	8	3	4.0	7.9	1.0	3.0	3.7	0.3	26.7	0.0	0.0	0.0	3.3

(continued)

Upstate New York Table 15. -(cont'd)- Plant maturity, tuber shape and appearance, percentage of external and internal tuber defects, and scab rating for the russet and long-white trial grown at Freeville, New York - 2014.

Genotype Variety or Clone	Plant ¹ Mat. At Vinekill	Tuber Attributes ¹			External Tuber Defects (%)					Int. Tuber Defects (%) ²				Scab Rating
		Tuber Shape	Skin Text.	Tuber Appear.	Total Defects	Sun- Green	Mis- shapen	Growth Cracks	Rot	Holl. Heart	Bm. Center	Vasc. Disc.	Int. Nec.	
AF4532-8	4.7	8	2	4.0	19.6	6.9	2.0	4.5	6.2	80.0	0.0	0.0	0.0	2.3
AF4532-9	3.3	8	3	5.7	4.0	1.0	1.1	1.4	0.4	6.7	0.0	0.0	0.0	1.5
AF5406-7 *	7.0	8	5	4.0	16.0	4.7	6.6	4.8	0.0	20.0	0.0	0.0	0.0	3.5
AF5406-10 *	3.0	8	6	4.5	9.3	4.8	2.9	0.0	1.5	10.0	0.0	0.0	0.0	3.0
AF5407-5 *	2.0	6	5	4.0	22.6	1.1	0.0	11.7	9.8	20.0	0.0	0.0	0.0	3.5
AF5464-4 *	6.0	8	6	5.0	19.8	15.8	3.5	0.4	0.0	0.0	0.0	0.0	0.0	3.0
AF5466-1 *	3.0	8	6	4.0	25.4	13.6	3.8	8.0	0.0	10.0	0.0	0.0	0.0	3.5
PALISADE RUSSET	5.7	8	7	4.2	31.5	24.1	4.5	2.9	0.0	10.0	0.0	0.0	0.0	3.5
RUSSET BURBANK	4.0	5	3	5.5	3.5	0.4	1.5	1.5	0.1	40.0	0.0	0.0	0.0	3.0
RUSSET NORKOTAH	3.3	8	3	7.0	2.5	1.0	0.8	0.2	0.6	23.3	0.0	3.3	0.0	2.2
WAF10051-1RUS *	3.0	6	4	6.0	3.6	0.0	1.8	1.7	0.0	0.0	0.0	20.0	0.0	2.5
WAF10078-3RUS *	6.0	8	4	5.0	15.1	7.9	3.8	1.4	2.0	50.0	0.0	0.0	0.0	4.0
Average:	4.0	7	5	5.0	10.1	4.6	2.1	2.5	1.1	15.9	0.0	0.9	0.0	3.1
Maximum:	7.0	8	7	7.0	31.5	24.1	6.6	11.7	9.8	80.0	0.0	20.0	0.0	4.0
Minimum:	2.0	5	2	3.3	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5

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

²Based 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 ¹ (% of total yield)					Size Distrib. (%)		Mean Tuber		Spec. Grav.
		Cwt/A	% of Std.	1	2	3	4	5	1-7/8"	2-1/2"	#/ft.	wt.(oz.)	
									to 4"	to 4 "			
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)	127	128									2.4	0.5	5
C.V. (%)	(14)	(15)									(13)	(6)	(3)

¹Tuber 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: Sep 10

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 ¹ Mat. At Vinekill	Tuber Attributes ¹			External Tuber Defects (%)					Int. Tuber Defects (%) ²				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

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

²Based 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 ¹ (% of total yield)					Size Distrib. (%)		Mean Tuber		Spec. Grav.
		Cwt/A	% of Std.	1	2	3	4	5	1-7/8"	2-1/2"	#/ft.	wt.(oz.)	
									to 4"	to 4"			
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

(continued)

Upstate New York Table 18. -(cont'd)- 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 ¹ (% of total yield)					Size Distrib. (%)		Mean Tuber		Spec. Grav.
		Cwt/A	% of Std.	1	2	3	4	5	1-7/8"	2-1/2"	#/ft.	wt.(oz.)	
									to 4"	to 4"			
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	56	31	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	2	2	0	0	48	2	6.4	2.6	75
Waller-Duncan													
LSD (k=100)	92	82									2.3	0.5	5
C.V. (%)	(13)	(14)									(14)	(9)	(4)

¹Tuber 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 ¹ Mat. At Vinekill	Tuber Attributes ¹			External Tuber Defects (%)					Int. Tuber Defects (%) ²				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

(continued)

Upstate New York Table 19. -(cont'd)- 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 ¹ Mat. At Vinekill	Tuber Attributes ¹			External Tuber Defects (%)					Int. Tuber Defects (%) ²				Scab Rating
		Tuber Shape	Skin Text.	Tuber Appear.	Total Defects	Sun- Green	Mis- shapen	Growth Cracks	Rot	Holl. Heart	Bm. Center	Vasc. Disc.	Int. Nec.	
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

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

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

Upstate New York Table 20. Total yield, marketable yield, percentage of yield by grade size distribution, mean tuber number per foot and weight, and specific gravity for the University of Maine observational trial (single rep) grown at Freeville, New York - 2014.

Genotype Variety or Clone	Total Yield Cwt/A	Mkt. Yield		Size Distribution ¹					Size Distrib. (%)		Mean Tuber		Spec. Grav.
		Cwt/A	% of Std.	(% of total yield)					1-7/8"	2-1/2"	#/ft.	wt.(oz.)	
				1	2	3	4	5	to 4"	to 4 "			
ATLANTIC	569	498	100	3	32	45	20	0	97	65	9.9	6.0	86
AAF07307-3	389	355	71	2	42	53	3	0	98	56	7.0	5.8	85
AF4614-2	525	355	71	1	2	53	19	25	74	72	7.4	7.4	87
AF5040-8	573	506	102	2	29	64	2	3	95	66	9.5	6.3	100
AF5140-1	510	389	78	3	11	53	19	14	83	72	7.1	7.5	78
AF5280-1	406	303	61	7	41	43	5	4	89	48	9.1	4.6	75
AF5280-5	433	386	78	4	31	55	10	0	96	65	7.8	5.8	66
AF5292-4	499	456	92	4	40	55	1	0	96	56	10.1	5.1	81
AF5382-1	487	456	92	3	39	58	0	0	97	58	9.7	5.2	82
AF5392-8	486	439	88	2	23	55	16	4	93	71	7.3	6.9	95
AF5393-1	479	433	87	4	49	43	5	0	96	47	10.7	4.6	97
AF5395-10	380	292	59	1	32	45	18	4	95	63	6.1	6.5	88
AF5400-2	510	355	71	1	10	45	36	8	91	81	6.3	8.4	83
AF5415-1	473	385	77	0	27	56	15	2	98	71	7.0	7.0	82
AF5426-1	597	519	104	1	26	56	13	4	95	69	9.6	6.5	79
AF5428-7	501	363	73	3	21	57	16	3	94	73	7.8	6.7	80

(continued)

Upstate New York Table 20. -(cont'd)- Total yield, marketable yield, percentage of yield by grade size distribution, mean tuber number per foot and weight and specific gravity for the University of Maine observational trial grown at Freeville, New York - 2014.

Genotype Variety or Clone	Total Yield Cwt/A	Mkt. Yield		Size Distribution ¹ (% of total yield)					Size Distrib. (%)		Mean Tuber		Spec. Grav.
		Cwt/A	% of Std.	1	2	3	4	5	1-7/8"	2-1/2"	#/ft.	wt.(oz.)	
									to 4"	to 4"			
AF5433-10	447	422	85	4	50	44	2	0	96	46	10.2	4.5	81
AF5435-7	661	606	122	4	38	50	7	2	94	56	13.3	5.2	86
AF5444-1	593	548	110	4	36	50	10	0	96	60	11.7	5.3	84
AF5446-11	438	362	73	2	14	61	18	6	93	79	6.2	7.3	86
AF5447-4	407	380	76	2	28	52	18	0	98	70	6.6	6.4	85
AF5448-4	384	365	73	2	33	47	18	0	98	65	6.7	6.0	67
AF5467-4	429	398	80	1	33	54	11	2	97	64	7.0	6.4	79
AF5467-10	500	439	88	2	42	45	10	1	97	55	9.5	5.5	77
AF5467-13	527	454	91	3	43	42	12	0	97	54	10.4	5.3	86
AF5473-6	296	214	43	3	40	41	11	5	92	52	5.0	6.2	81
AF5477-6	464	333	67	2	30	31	22	16	82	52	6.3	7.7	81
SNOWDEN	660	592	119	4	42	49	4	0	96	53	14.1	4.9	99
SUPERIOR	449	415	83	2	42	53	4	0	98	56	8.5	5.5	78
WAF10131-2	595	506	102	1	18	59	15	7	92	74	8.7	7.2	84
WAF10131-8	449	360	72	1	11	47	30	12	87	76	5.4	8.7	75
Average:	488	416	83	2	30	49	12	4	94	63	8.5	6.2	83
Maximum:	661	606	122	7	50	64	36	25	98	81	14.1	8.7	100
Minimum:	296	214	43	0	2	3	0	0	74	46	5.0	4.5	66

¹Tuber 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 26

Vinekill Date: Aug 27

Harvest Date: Sep 15

Upstate New York Table 21. Plant maturity, tuber shape and appearance, percentage of external and internal tuber defects, and scab rating for the University of Maine observational trial (single rep) grown at Freeville, New York - 2014.

Genotype Variety or Clone	Plant ¹ Mat. At Vinekill	Tuber Attributes ¹			External Tuber Defects (%)					Int. Tuber Defects (%) ²				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	5.0	1	6	5.0	10.0	4.5	2.0	1.8	1.6	10.0	0.0	0.0	0.0	2.5
AAF07307-3	4.0	2	8	7.5	7.0	1.0	5.4	0.6	0.0	30.0	30.0	0.0	0.0	1.0
AF4614-2	6.0	3	8	3.0	6.2	5.7	0.5	0.0	0.0	0.0	0.0	0.0	0.0	2.0
AF5040-8	6.0	3	8	5.0	7.0	5.4	1.6	0.0	0.0	0.0	0.0	0.0	0.0	2.0
AF5140-1	4.0	1	8	4.0	6.8	4.6	2.2	0.0	0.0	0.0	0.0	0.0	0.0	1.5
AF5280-1	3.0	3	8	6.5	14.5	2.7	1.0	8.5	2.3	60.0	0.0	0.0	10.0	1.5
AF5280-5	2.0	3	8	5.0	6.8	4.3	1.2	0.0	1.3	0.0	0.0	10.0	0.0	1.5
AF5292-4	5.0	1	8	7.0	4.3	2.8	0.0	0.0	1.6	20.0	80.0	0.0	0.0	1.0
AF5382-1	5.0	3	9	6.5	3.3	0.7	0.4	1.4	0.9	0.0	0.0	0.0	0.0	2.5
AF5392-8	5.0	3	6	6.0	3.0	1.8	0.0	0.8	0.4	0.0	0.0	0.0	10.0	3.0
AF5393-1	5.0	2	6	6.5	5.5	3.0	0.8	1.7	0.0	0.0	0.0	0.0	0.0	1.0
AF5395-10	4.0	2	8	6.0	17.9	5.0	0.0	10.1	2.8	0.0	0.0	0.0	20.0	3.0
AF5400-2	6.0	3	8	4.0	21.6	0.3	2.0	19.2	0.0	10.0	0.0	0.0	0.0	3.0
AF5415-1	5.0	4	8	5.0	16.2	2.8	0.6	11.2	1.5	10.0	0.0	0.0	0.0	2.0
AF5426-1	5.0	3	6	5.0	8.2	3.9	1.4	0.0	3.0	0.0	0.0	0.0	0.0	0.0
AF5428-7	3.0	1	8	6.0	21.2	11.5	0.4	5.2	4.2	20.0	0.0	0.0	0.0	4.5

(continued)

Upstate New York Table 21. -(cont'd)- Plant maturity, tuber shape and appearance, percentage of external and internal tuber defects, and scab rating for the University of Maine observational trial grown at Freeville, New York - 2014.

Genotype Variety or Clone	Plant ¹ Mat. At Vinekill	Tuber Attributes ¹			External Tuber Defects (%)					Int. Tuber Defects (%) ²				Scab Rating
		Tuber Shape	Skin Text.	Tuber Appear.	Total Defects	Sun- Green	Mis- shapen	Growth Cracks	Rot	Holl. Heart	Bn. Center	Vasc. Disc.	Int. Nec.	
AF5433-10	3.0	2	6	6.0	1.3	1.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	3.0
AF5435-7	6.0	2	7	6.0	2.7	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
AF5444-1	6.0	2	9	6.0	3.6	1.3	1.3	0.4	0.6	10.0	10.0	0.0	0.0	3.0
AF5446-11	3.0	1	8	5.0	10.0	0.0	2.5	2.9	4.6	0.0	0.0	0.0	0.0	2.0
AF5447-4	2.0	1	8	7.0	4.9	0.0	0.0	3.0	1.8	0.0	0.0	0.0	0.0	0.5
AF5448-4	2.0	1	8	7.0	3.0	2.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	3.0
AF5467-4	4.0	3	6	5.5	4.3	1.4	2.2	0.7	0.0	10.0	0.0	0.0	0.0	3.5
AF5467-10	4.0	3	8	4.0	9.3	4.8	0.3	3.5	0.6	0.0	0.0	0.0	0.0	3.0
AF5467-13	5.0	3	6	5.0	11.3	6.3	2.8	2.2	0.0	0.0	0.0	0.0	0.0	3.0
AF5473-6	6.0	8	6	5.0	19.6	8.5	2.0	9.1	0.0	0.0	0.0	10.0	0.0	1.0
AF5477-6	6.0	8	6	5.0	10.2	7.6	2.7	0.0	0.0	10.0	0.0	0.0	0.0	1.0
SNOWDEN	0.0	2	5	4.0	5.9	5.2	0.0	0.0	0.7	0.0	0.0	10.0	0.0	3.0
SUPERIOR	5.0	3	6	5.5	5.9	3.7	1.7	0.0	0.5	0.0	0.0	0.0	0.0	0.0
WAF10131-2	5.0	3	6	5.5	7.1	3.3	3.8	0.0	0.0	0.0	0.0	10.0	0.0	3.0
WAF10131-8	3.0	1	8	6.0	7.3	4.7	0.0	2.5	0.0	0.0	0.0	10.0	0.0	3.0
Average:	4.3	3	7	5.5	8.6	3.7	1.3	2.7	0.9	6.1	3.9	1.6	1.3	2.1
Maximum:	6.0	8	9	7.5	21.6	11.5	5.4	19.2	4.6	60.0	80.0	10.0	20.0	4.5
Minimum:	0.0	1	5	3.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

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

Upstate New York Table 22. Total yield, marketable yield, percentage of yield by grade size distribution, mean tuber number per foot and weight, and specific gravity for the USDA advanced clone trial grown at Freeville, New York - 2014.

Genotype Variety or Clone	Total Yield Cwt/A	Mkt. Yield		Size Distribution ¹					Size Distrib. (%)		Mean Tuber		Spec. Grav.
		Cwt/A	% of Std.	(% of total yield)					1-7/8"	2-1/2"	#/ft.	wt.(oz.)	
				1	2	3	4	5	to 4"	to 4 "			
ATLANTIC	415	367	100	5	42	48	3	2	93	51	8.7	5.0	94
B2738-3	391	378	103	3	39	55	2	0	97	58	8.2	5.0	74
B2832-12	467	416	113	5	46	44	6	0	95	50	10.4	4.7	92
B2834-8	426	384	105	6	55	38	1	0	94	39	10.4	4.2	82
B2869-28	378	350	95	6	61	32	0	0	94	32	9.9	4.0	84
B2890-11	321	273	74	6	57	36	0	0	94	36	8.2	4.1	74
B2930-5	363	299	81	15	67	18	0	0	85	18	11.7	3.2	80
B2950-2	296	250	68	13	63	24	0	0	87	24	8.9	3.5	88
B2950-3	410	345	94	14	75	11	0	0	86	11	13.0	3.3	86
B2951-7	358	302	82	11	72	17	0	0	89	17	11.1	3.4	95
B2952-6	403	312	85	21	70	9	0	0	79	9	15.1	2.8	76
B2954-20 *	368	268	73	13	60	27	0	0	87	27	10.5	3.6	78
BNC318-6 *	403	334	91	8	54	39	0	0	92	39	10.6	3.9	80
BNC318-7	372	321	88	8	55	34	3	0	92	37	9.5	4.1	80
BNC318-9	331	285	78	7	60	33	0	0	93	33	8.6	4.0	81
SNOWDEN	400	338	92	12	70	18	0	0	88	18	12.9	3.2	96
SUPERIOR *	447	381	104	4	62	34	0	1	95	34	10.5	4.4	86
Average:	385	330	90	9	59	30	1	0	91	31	10.5	3.9	84
Maximum:	467	416	113	21	75	55	6	2	97	58	15.1	5.0	96
Minimum:	296	250	68	3	39	9	0	0	79	9	8.2	2.8	74
Waller-Duncan													
LSD (k=100)	91	71									2.5	0.4	3
C.V. (%)	(12)	(12)									(14)	(6)	(3)

¹Tuber 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 14

Maturity Ratings: Aug 13

Vinekill Date: Aug 13 & Aug 18

Harvest Date: Aug 26

* Note: entries in trial had three replications, except BNC318-6, B2954-20 and Superior had two replications.

Upstate New York Table 23. Plant maturity, tuber shape and appearance, percentage of external and internal tuber defects, and scab rating for the USDA advanced clone trial grown at Freeville, New York - 2014.

Genotype Variety or Clone	Plant ¹ Mat. At Vinekill	Tuber Attributes ¹			External Tuber Defects (%)					Int. Tuber Defects (%) ²				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	7.3	2	6	4.2	4.7	3.4	0.5	0.8	0.0	3.3	0.0	0.0	0.0	2.2
B2738-3	7.3	1	6	6.5	0.1	0.1	0.0	0.0	0.0	3.3	0.0	0.0	0.0	1.3
B2832-12	7.0	1	6	6.8	6.3	6.1	0.0	0.1	0.0	23.3	0.0	0.0	0.0	1.2
B2834-8	5.7	1	8	6.3	3.9	1.6	0.7	1.4	0.2	0.0	0.0	0.0	0.0	0.5
B2869-28	6.7	1	6	5.7	1.5	0.4	0.2	0.6	0.2	0.0	0.0	0.0	0.0	2.0
B2890-11	4.7	3	6	6.3	8.6	4.5	1.3	2.3	0.5	0.0	0.0	0.0	0.0	2.2
B2930-5	6.7	3	8	6.3	3.0	2.8	0.1	0.0	0.0	3.3	0.0	0.0	0.0	1.0
B2950-2	7.3	1	6	5.7	2.4	0.5	0.3	0.6	1.0	0.0	0.0	0.0	0.0	2.7
B2950-3	5.7	1	6	6.0	2.0	0.4	0.8	0.1	0.7	0.0	0.0	0.0	0.0	2.0
B2951-7	7.0	1	6	5.3	4.3	1.2	0.8	0.3	1.9	0.0	0.0	0.0	0.0	2.0
B2952-6	6.3	1	8	7.0	1.4	1.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	1.0
B2954-20 *	7.0	1	6	5.0	14.6	9.2	1.0	2.7	1.6	5.0	0.0	0.0	0.0	2.0
BNC318-6 *	7.0	1	6	5.0	9.2	7.5	0.4	0.0	1.3	10.0	0.0	5.0	0.0	2.5
BNC318-7	7.7	2	6	5.7	6.3	5.0	0.2	1.1	0.0	6.7	0.0	0.0	0.0	1.5
BNC318-9	6.7	2	6	6.0	6.6	6.6	0.0	0.0	0.0	6.7	0.0	0.0	0.0	1.7
SNOWDEN	7.0	1	6	5.2	3.0	2.8	0.0	0.1	0.1	0.0	0.0	0.0	0.0	1.2
SUPERIOR *	6.0	5	6	4.5	10.1	2.6	5.2	0.9	1.4	0.0	5.0	0.0	0.0	0.0
Average:	6.6	2	6	5.7	5.2	3.3	0.7	0.7	0.5	3.6	0.3	0.3	0.0	1.6
Maximum:	7.7	5	8	7.0	14.6	9.2	5.2	2.7	1.9	23.3	5.0	5.0	0.0	2.7
Minimum:	4.7	1	6	4.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

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

Upstate New York Table 24. Total yield, marketable yield, percentage of yield by grade size distribution, mean tuber number per foot and weight, and specific gravity for the USDA observational trial (single rep) grown at Freeville, New York - 2014.

Genotype Variety or Clone	Total Yield Cwt/A	Mkt. Yield		Size Distribution ¹					Size Distrib. (%)		Mean Tuber		Spec. Grav.
		Cwt/A	% of Std.	(% of total yield)					1-7/8"	2-1/2"	#/ft.	wt.(oz.)	
				1	2	3	4	5	to 4"	to 4 "			
ATLANTIC	497	465	100	4	52	43	2	0	96	44	11.0	4.7	97
B2954-11	444	378	81	11	47	42	0	0	89	42	11.8	3.9	82
B2981-5	549	484	104	7	69	24	1	0	93	25	12.4	4.6	92
B2981-7	327	266	57	17	81	2	0	0	83	2	10.9	3.1	86
B2993-6	403	350	75	9	67	25	0	0	91	25	10.7	3.9	89
B2996-1	422	329	71	10	67	18	5	0	90	23	11.4	3.8	88
B2998-1	345	269	58	17	77	6	0	0	83	6	12.2	2.9	95
B2999-6	409	351	76	13	71	17	0	0	87	17	12.3	3.5	86
B3002-1	395	320	69	6	47	41	5	0	94	47	8.2	5.0	88
B3002-3	406	304	65	22	71	7	0	0	78	7	15.2	2.8	84
B3005-6	457	395	85	4	35	57	4	0	96	61	9.0	5.3	86
B3005-7	369	314	67	11	83	6	0	0	89	6	11.8	3.3	97
B3012-3	347	289	62	14	62	23	1	0	86	25	10.3	3.5	90
B3019-2	424	330	71	21	78	1	0	0	79	1	15.2	2.9	92
B3021-1	447	393	85	10	83	7	0	0	90	7	13.5	3.5	86
B3082-12	423	366	79	11	75	13	0	0	89	13	12.6	3.5	90
B3082-13	357	285	61	16	78	5	0	0	84	5	12.0	3.1	94
B3082-16	335	288	62	10	67	23	0	0	90	23	9.3	3.8	96
B3082-18	508	450	97	6	66	28	0	0	94	28	12.4	4.3	84
B3083-8	362	317	68	10	57	34	0	0	90	34	9.3	4.0	79
B3093-11	400	355	76	4	46	49	1	0	96	50	8.8	4.7	76
B3095-5	406	323	70	16	75	9	0	0	84	9	13.1	3.2	96
B3095-13	373	342	74	5	60	33	1	0	95	34	8.8	4.4	87
B3100-1	448	383	82	8	67	25	0	0	92	25	11.5	4.1	92
B3101-1	450	350	75	7	49	42	2	0	93	44	10.5	4.5	94
Average:	412	348	75	11	65	23	1	0	89	24	11.4	3.8	89
Maximum:	549	484	104	22	83	57	5	0	96	61	15.2	5.3	97
Minimum:	327	266	57	4	35	1	0	0	78	1	8.2	2.8	76

¹Tuber 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 14

Maturity Ratings: Aug 13

Vinekill Date: Aug 13 & Aug 18

Harvest Date: Aug 27

Upstate New York Table 25. Plant maturity, tuber shape and appearance, percentage of external and internal tuber defects, and scab rating for the USDA observational trial (single rep) grown at Freeville, New York - 2014.

Genotype Variety or Clone	Plant ¹ Mat. At Vinekill	Tuber Attributes ¹			External Tuber Defects (%)					Int. Tuber Defects (%) ²				Scab Rating
		Tuber Shape	Skin Text.	Tuber Appear.	Total Defects	Sun- Green	Mis- shapen	Growth Cracks	Rot	Holl. Heart	Bn. Center	Vasc. Disc.	Int. Nec.	
ATLANTIC	6.5	1	6	5.8	2.5	1.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
B2954-11	5.0	1	6	6.0	3.6	0.8	0.0	0.4	2.4	0.0	0.0	0.0	0.0	1.0
B2981-5	6.0	1	6	6.5	5.2	2.0	0.0	2.4	0.8	30.0	0.0	0.0	0.0	1.0
B2981-7	8.0	1	6	5.5	1.7	0.5	1.2	0.0	0.0	0.0	10.0	0.0	0.0	1.0
B2993-6	6.0	3	6	5.0	4.7	4.7	0.0	0.0	0.0	100.0	0.0	0.0	0.0	2.0
B2996-1	4.0	8	7	3.0	11.8	9.2	2.5	0.0	0.0	90.0	0.0	0.0	0.0	3.5
B2998-1	8.0	1	6	5.5	4.9	3.4	1.3	0.2	0.0	50.0	0.0	0.0	0.0	1.0
B2999-6	6.0	1	6	6.0	1.5	1.5	0.0	0.0	0.0	20.0	0.0	0.0	0.0	0.5
B3002-1	7.0	3	6	5.5	12.7	8.9	0.0	3.9	0.0	60.0	0.0	0.0	0.0	2.5
B3002-3	8.0	3	6	6.5	3.6	3.6	0.0	0.0	0.0	10.0	0.0	0.0	0.0	1.5
B3005-6	7.0	3	6	4.0	8.9	4.0	0.0	3.3	1.7	20.0	0.0	0.0	0.0	2.5
B3005-7	7.0	1	6	5.5	3.8	2.7	0.6	0.6	0.0	40.0	0.0	0.0	0.0	2.0
B3012-3	5.0	1	6	5.0	3.2	3.2	0.0	0.0	0.0	30.0	0.0	0.0	0.0	1.0
B3019-2	6.0	1	6	5.5	1.4	0.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	1.0
B3021-1	5.0	3	6	5.0	2.2	1.7	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5
B3082-12	8.0	3	6	5.0	2.5	2.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	1.0
B3082-13	7.0	1	5	6.0	3.7	3.3	0.0	0.0	0.4	0.0	0.0	0.0	0.0	1.0
B3082-16	5.0	3	6	5.0	4.0	1.3	1.9	0.5	0.3	20.0	0.0	0.0	0.0	0.0
B3082-18	6.0	1	6	6.0	5.6	3.3	2.1	0.0	0.3	0.0	0.0	0.0	0.0	1.5
B3083-8	8.0	1	6	6.5	2.8	1.6	0.8	0.5	0.0	0.0	0.0	0.0	0.0	1.5
B3093-11	5.0	2	6	3.0	6.8	4.0	1.8	1.1	0.0	0.0	0.0	0.0	0.0	2.5
B3095-5	7.0	1	6	6.0	4.6	3.4	0.4	0.3	0.5	10.0	0.0	10.0	0.0	1.0
B3095-13	7.0	2	8	6.5	2.9	0.3	0.9	1.7	0.0	0.0	0.0	0.0	0.0	1.0
B3100-1	5.0	1	7	6.0	6.1	5.0	0.0	0.2	0.9	50.0	0.0	0.0	0.0	0.5
B3101-1	6.0	3	8	5.5	15.5	9.6	1.4	0.9	3.5	0.0	0.0	0.0	70.0	1.0
Average:	6.3	2	6	5.4	5.1	3.3	0.7	0.6	0.4	21.2	0.4	0.4	2.8	1.3
Maximum:	8.0	8	8	6.5	15.5	9.6	2.5	3.9	3.5	100.0	10.0	10.0	70.0	3.5
Minimum:	4.0	1	5	3.0	1.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

²Based 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		Mkt. Yield		Size Distribution ¹				Mean Tuber		Percent External				Percent Internal				Spec. Grav.
	Yield		% of		(% of total yield)				#/ft wt(oz)		Tuber Defects				Tuber Defects				
	Cwt/A	Cwt/A	Cwt/A	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

¹Tuber 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 10

Harvest Date: October 6

Fertilizer: 87 N-90 P-240 K lbs. per acre

Vinekill: 1 pt./a Reglone + 16 oz crop oil

Irrigation: none

Other: in furrow 16 oz. Advise, 12 oz. Quadris, and 1 quart Vydate clv

* 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 ¹				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	
	ATLANTIC	436	261	100	8	39	48	6	8.1	5.6	15	8	3	1	20	0	0	
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

¹Tuber 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 10

Harvest Date: October 6

Fertilizer: 87 N-90 P-240 K lbs. per acre

Vinekill: 1 pt./a Reglone + 16 oz crop oil

Irrigation: none

Other: in furrow 16 oz. Advise, 12 oz. Quadris, and 1 quart Vydate clv

* 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	Mkt. Yield		Size Distribution ¹				Mean Tuber		Percent External				Percent Internal				Spec. Grav.
	Yield	Cwt/A	% of Std.	(% of total yield)				#/ft	wt(oz)	Tuber Defects				Tuber Defects				
	Cwt/A			1	2	3	4			SUN	KNB	GC	ROT	HH	BC	VD	NEC	
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

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

Plant Date: June 6

Vinekill Dates: September 19 & 23

Harvest Date: October 8

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

Vinekill: 1 pt./a Reglone + crop oil

Irrigation: none

Top Dress on July 2 with 160 lbs Calcium Amonium Nitrate per acre

36" 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 "*".

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	Mkt. Yield		Size Distribution ¹				Mean Tuber		Percent External				Percent Internal				Spec. Grav.
	Yield	Cwt/A	% of Std.	(% of total yield)				#/ft	wt(oz)	Tuber Defects				Tuber Defects				
	Cwt/A			1	2	3	4			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

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

Plant Date: May 30

Vinekill Dates: September 24 & October 1

Harvest Date: October 17

Fertilizer: 180N - 149P - 240K - 15S

Vinekill: 2 pt./a Reglone + crop oil

Irrigation: none

Other: 3 pt./a Vydate in furrow

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 "*".

Upstate New York Table 30. 2013 Potato Variety Trials - Chip Color Agtron Readings¹

Variety/Clone	Freeville ²												Upstate Counties ²								
	CU								Univ. of				Steuben		Wyoming		Steuben		Wyoming		
	Early		Medium		Med-Late		Late		Clones		Multistate		Maine		USDA		Cornell Storage		Grower Storage		
	Field	45	40	45	40	45	40	45	40	45	40	45	40	45	40	45	40	45	40	50	50
ACCUMULATOR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	53.8	47.5	NA	53.8	51.5	54.0
ANDOVER	55.9	49.9	52.2	-	-	-	-	55.0	45.6	-	-	-	-	-	-	-	-	-	-	-	-
ATLANTIC	56.9	48.6	56.4	43.0	49.2	52.7	47.5	52.0	45.1	56.0	55.9	50.8	54.0	48.9	46.7	58.0	50.1	NA	46.0	58.1	55.1
JACQUELINE LEE	-	-	-	-	-	29.9	15.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LAMOKA - NY139	-	-	-	-	-	56.1	57.7	-	-	-	-	-	-	-	-	61.4	62.3	NA	60.3	58.9	56.4
MARCY	-	-	-	-	-	59.5	60.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MISSAUKEE	-	-	-	-	-	55.1	45.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NICOLET	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	59.4	53.5	NA	55.1	56.7	53.3
REBA	-	53.7	52.9	-	-	54.6	50.0	53.8	40.6	-	-	-	-	-	-	-	-	-	-	-	-
ROCHDALE GOLD-DOREE	48.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SNOWDEN	-	54.2	62.7	51.6	60.0	57.2	60.9	60.2	59.5	59.3	64.4	56.8	58.3	56.0	61.3	61.4	59.5	NA	59.8	59.4	55.3
SUPERIOR	51.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WANETA - NY138	-	-	-	-	-	59.9	60.9	-	-	-	-	-	-	-	-	60.3	58.9	NA	62.0	62.7	61.2
A00286-3Y	-	41.9	35.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AF4013-3	-	50.5	47.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AF4138-8	50.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AF4157-6	58.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AF4227-2	-	-	-	-	-	-	-	-	-	-	-	48.3	48.2	-	-	-	-	-	-	-	-
AF4421-4*	-	-	-	-	-	-	-	-	-	-	-	35.6	27.0	-	-	-	-	-	-	-	-
AF4463-8	-	-	-	-	-	-	-	-	-	-	-	49.2	50.5	-	-	-	-	-	-	-	-
AF4552-5	-	-	-	-	-	-	-	-	-	-	-	48.1	36.1	-	-	-	-	-	-	-	-
AF4573-2	-	-	-	-	-	-	-	-	-	-	-	50.7	58.0	-	-	-	-	-	-	-	-
AF4614-2	-	-	-	-	-	-	-	-	-	-	-	38.6	28.7	-	-	-	-	-	-	-	-
AF4640-1	-	-	-	-	-	-	-	-	-	-	-	49.1	44.2	-	-	-	-	-	-	-	-
B2738-3	-	-	-	-	-	-	-	-	-	-	-	-	-	44.1	41.3	-	-	-	-	-	-
B2827-12	-	-	-	-	-	-	-	-	-	-	-	-	-	54.0	D	-	-	-	-	-	-
B2827-13	-	-	-	-	-	-	-	-	-	-	-	-	-	43.8	D	-	-	-	-	-	-
B2832-12	-	-	-	-	-	-	-	-	-	-	-	-	-	43.3	35.2	-	-	-	-	-	-

(continued)

Upstate New York Table 30. -(cont'd)- 2013 Potato Variety Trials - Chip Color Agtron Readings¹

Variety/Clone	Freeville ²														Upstate Counties ²							
	CU								Univ. of						Steuben		Wyoming		Steuben		Wyoming	
	Early	Medium		Med-Late		Late		Clones		Multit-state		Maine		USDA		Cornell Storage		Grower Storage				
	Field	45	40	45	40	45	40	45	40	45	40	45	40	45	40	45	40	45	40	50	50	
B2834-8	-	-	-	-	-	-	-	-	-	-	-	-	-	49.0	39.2	-	-	-	-	-	-	
B2869-17	-	-	-	-	-	-	-	-	-	-	-	-	-	35.8	D	-	-	-	-	-	-	
B2869-28	-	-	-	-	-	-	-	-	-	-	-	-	-	49.8	36.9	-	-	-	-	-	-	
B2876-7	-	-	-	-	-	-	-	-	-	-	-	-	-	39.8	28.1	-	-	-	-	-	-	
B2882-4	-	-	-	-	-	-	-	-	-	-	-	-	-	42.7	D	-	-	-	-	-	-	
B2883-11	-	-	-	-	-	-	-	-	-	-	-	-	-	51.0	D	-	-	-	-	-	-	
B2883-12	-	-	-	-	-	-	-	-	-	-	-	-	-	46.5	D	-	-	-	-	-	-	
B2890-11	-	-	-	-	-	-	-	-	-	-	-	-	-	23.4	12.1	-	-	-	-	-	-	
B2893-2	-	-	-	-	-	-	-	-	-	-	-	-	-	37.4	36.6	-	-	-	-	-	-	
B2908-3	-	-	-	-	-	-	-	-	-	-	-	-	-	45.9	D	-	-	-	-	-	-	
B2947-5	-	-	-	-	-	-	-	-	-	-	-	-	-	46.0	39.9	-	-	-	-	-	-	
B2947-7	-	-	-	-	-	-	-	-	-	-	-	-	-	52.0	57.2	-	-	-	-	-	-	
B2947-8	-	-	-	-	-	-	-	-	-	-	-	-	-	53.1	D	-	-	-	-	-	-	
B2948-1	-	-	-	-	-	-	-	-	-	-	-	-	-	34.7	D	-	-	-	-	-	-	
B2950-2	-	-	-	-	-	-	-	-	-	-	-	-	-	50.7	42.8	-	-	-	-	-	-	
B2950-3	-	-	-	-	-	-	-	-	-	-	-	-	-	41.5	38.0	-	-	-	-	-	-	
BNC182-5	-	-	-	46.6	45.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
BNC233-3	-	-	-	-	-	-	-	-	-	-	-	-	-	44.8	33.1	-	-	-	-	-	-	
BNC266-6	-	-	-	-	-	-	-	-	-	-	-	-	-	52.4	55.8	-	-	-	-	-	-	
J15-7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	58.3	52.4	NA	63.2	57.7	52.6	
J17-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	58.5	55.9	NA	62.4	59.1	56.6	
J21-5	-	-	-	-	-	-	-	53.7	38.3	-	-	-	-	-	-	-	-	-	-	-	-	
K23-13	-	-	-	-	-	-	-	60.2	61.8	-	-	-	-	-	-	-	-	-	-	-	-	
K27-1	-	-	-	-	-	-	-	59.1	55.0	-	-	-	-	-	-	-	-	-	-	-	-	
K27-3	-	-	-	-	-	-	-	60.3	57.7	-	-	-	-	-	-	-	-	-	-	-	-	
K28-7	-	-	-	-	-	-	-	56.2	60.5	-	-	-	-	-	-	-	-	-	-	-	-	
K28-14	-	-	-	-	-	-	-	58.1	55.6	-	-	-	-	-	-	-	-	-	-	-	-	
K28-18	-	-	-	-	-	-	-	62.1	62.1	-	-	-	-	-	-	-	-	-	-	-	-	
K30-9	-	-	-	-	-	-	-	56.8	59.2	-	-	-	-	-	-	-	-	-	-	-	-	
K31-4	-	-	-	-	-	-	-	57.4	52.0	-	-	-	-	-	-	-	-	-	-	-	-	

(continued)

Upstate New York Table 30. -(cont'd)- 2013 Potato Variety Trials - Chip Color Agtron Readings¹

Variety/Clone	Freeville ²												Upstate Counties ²									
	CU								Univ. of				Steuben				Wyoming					
	Early		Medium		Med-Late		Late		Clones		Multit-state		Maine		USDA		Cornell Storage		Steuben		Wyoming	
	Field	45	40	45	40	45	40	45	40	45	40	45	40	45	40	45	40	45	40	50	50	
MSL211-3	-	-	-	-	-	-	-	-	-	30.1	17.6	-	-	-	-	-	-	-	-	-	-	
MSM182-1	-	-	-	-	-	-	-	-	-	42.8	36.3	-	-	-	-	-	-	-	-	-	-	
MSR061-1	-	-	-	-	-	-	-	-	-	59.9	56.7	-	-	-	-	58.9	50.4	NA	53.9	53.7	53.1	
MSS176-1	-	-	-	-	-	-	-	-	-	51.2	26.4	-	-	-	-	-	-	-	-	-	-	
MSS206-2	-	-	-	-	-	-	-	-	-	43.6	39.5	-	-	-	-	-	-	-	-	-	-	
NY115	-	-	-	-	-	-	-	57.4	57.4	-	-	-	-	-	-	-	-	-	-	-	-	
NY140	-	-	-	-	-	61.3	60.9	-	-	-	-	-	-	-	-	62.7	55.4	NA	57.4	59.8	53.0	
NY141	54.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
NY143	-	-	-	49.4	47.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
NY148 (NYE106-4) BC	-	-	-	-	-	56.7	61.0	-	-	-	-	-	-	-	-	61.0	61.1	NA	59.5	58.4	55.9	
NY150 (NYF52-1) BC	61.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
NY152 (H15-5)	-	-	-	-	-	58.9	64.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
W5015-12	-	-	-	56.1	60.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
W5955-1	-	-	-	51.9	55.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
W6483-5	-	-	-	-	-	-	-	-	-	55.9	62.2	-	-	-	-	-	-	-	-	-	-	

¹Agtron M600 Colorimeter readings. Standards for whole chips were disks 00 and 90. 200g samples of slices were taken from 15 tubers and fried in vegetable oil at 375°F. A minimum acceptable Agtron would be 50.

²The Early trial at Freeville was chipped out of the field, 2 days after harvest. The other Freeville trials and the county trials (designated "Cornell") were stored in Cornell facilities at 45°F and 40°F. The "Grower" samples from the counties were stored in the growers' facilities at the temperatures specified. After warm-up, at 65°F for two weeks, the 45°F Freeville samples were chipped between January 22 to February 5. The Steuben county 45°F samples stored at Cornell were also warmed-up for two weeks at 65°F and were chipped on January 31. (No samples were taken from the Wyoming trial for 45F storage.) After warm-up for three weeks at 65°F, the 40°F Freeville samples were chipped between March 3 and March 26. The county 40°F samples stored at Cornell were also warmed-up for three weeks at 65°F. The Steuben county samples were chipped on March 17 and the Wyoming samples were chipped on March 18. The Steuben samples from the growers' storage were chipped without warm-up on March 7. The Wyoming samples from the growers' storage were chipped without warmup on April 15. *Based on 2 replications that were chipped.

Upstate New York Table 31. 2013 Freeville Trials - After-cooking darkening and sloughing ratings¹

Variety/Clone ²	Early		Medium		M-Late		Late		Red/Purp		Russet		Cornell H, J & K Lines		Univ of Maine Clones		USDA Clones		Multi-State Clones		Steuben		Wyoming	
	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG
ACCUMULATOR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.5	2.4	2.0	2.7
ADIRONDACK BLUE BF	-	-	-	-	-	-	-	-	4.4	3.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADIRONDACK RED RF	-	-	-	-	-	-	-	-	4.7	3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANDOVER	4.2	3.9	4.3	3.4	-	-	-	-	-	-	-	-	4.5	2.9	-	-	-	-	-	-	-	-	-	-
ATLANTIC	3.5	2.4	3.5	2.9	4.0	3.1	3.8	3.2	-	-	-	-	3.7	2.1	3.4	2.5	3.5	3.1	3.7	1.6	3.1	1.5	2.9	2.5
CHIEFTAIN	-	-	-	-	-	-	-	-	3.7	3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DARK RED NORLAND	-	-	-	-	-	-	-	-	3.9	4.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GENESEE	-	-	-	-	-	-	4.6	4.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
JACQUELINE LEE	-	-	-	-	-	-	4.7	4.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
KATAHDIN	-	-	-	-	-	-	4.3	3.9	-	-	-	-	4.7	3.9	-	-	-	-	4.3	3.7	-	-	-	-
KENNEBEC	-	-	-	-	4.5	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
KEUKA GOLD	-	-	-	-	3.9	3.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LAMOKA-NY139	-	-	-	-	-	-	2.9	3.0	-	-	-	-	-	-	-	-	-	-	-	-	2.7	2.4	2.3	2.5
LEHIGH - NY126	-	-	4.0	3.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MARCY	-	-	-	-	-	-	3.2	2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MASQUERADE YF3	-	-	-	-	-	-	-	-	4.7	3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MISSAUKEE	-	-	-	-	-	-	3.7	4.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NICOLET	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.5	1.8	1.7	1.7
NORDONNA	-	-	-	-	-	-	-	-	3.5	3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
REBA	-	-	4.1	4.8	-	-	4.2	3.8	-	-	-	-	4.6	4.1	-	-	-	-	-	-	-	-	-	-
RED MARIA - NY129	-	-	-	-	-	-	-	-	4.0	4.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ROCHDALE GOLD-DOREE	4.8	4.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RUSSET BURBANK	-	-	-	-	-	-	-	-	-	-	3.3	2.4	-	-	-	-	-	-	-	-	-	-	-	-
SHEPODY	-	-	-	-	-	-	-	-	-	-	3.6	3.2	-	-	-	-	-	-	-	-	-	-	-	-
SNOWDEN	-	-	2.6	1.5	3.4	2.4	3.2	1.9	-	-	-	-	3.0	1.7	3.5	2.5	2.7	2.1	3.6	2.1	2.5	1.3	2.2	2.2
SPARTAN SPLASH	-	-	-	-	-	-	4.2	3.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUPERIOR	4.1	3.7	-	-	-	-	-	-	-	-	-	-	2.8	3.0	3.7	2.7	2.9	2.8	3.8	3.0	-	-	-	-
TETON RUSSET	-	-	-	-	-	-	-	-	-	-	4.2	3.7	-	-	-	-	-	-	-	-	-	-	-	-
WANETA - NY138	-	-	-	-	-	-	3.5	3.9	-	-	-	-	-	-	-	-	-	-	-	-	2.5	4.0	2.3	3.8
YUKON GOLD	-	-	3.8	2.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
#1RMPR	-	-	-	-	-	-	-	-	3.1	2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A00286-3Y	-	-	4.4	3.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A010101-1	-	-	-	-	-	-	-	-	-	-	3.8	3.7	-	-	-	-	-	-	-	-	-	-	-	-
A01025-4	-	-	-	-	-	-	-	-	-	-	3.6	4.3	-	-	-	-	-	-	-	-	-	-	-	-
A03141-6	-	-	-	-	-	-	-	-	-	-	3.5	1.9	-	-	-	-	-	-	-	-	-	-	-	-
A03158-2TE	-	-	-	-	-	-	-	-	-	-	3.5	3.4	-	-	-	-	-	-	-	-	-	-	-	-
A03873-3NV	-	-	-	-	-	-	-	-	-	-	3.6	3.6	-	-	-	-	-	-	-	-	-	-	-	-

(continued)

Upstate New York Table 31. -(cont'd)- 2013 Freeville Trials - After-cooking darkening and sloughing ratings¹

Variety/Clone ²	<u>Early</u>		<u>Medium</u>		<u>M-Late</u>		<u>Late</u>		<u>Red/Purp</u>		<u>Russet</u>		<u>Cornell</u>		<u>Univ of Maine</u>		<u>USDA</u>		<u>Multi-State</u>		<u>Steuben</u>		<u>Wyoming</u>	
	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG
A05180-3PY YF2	-	-	-	-	-	-	-	-	5.0	3.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A05182-7RY YF2	-	-	-	-	-	-	-	-	4.5	3.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A06020-8	-	-	-	-	-	-	-	-	-	-	4.0	3.3	-	-	-	-	-	-	-	-	-	-	-	-
A06914-3CR	-	-	-	-	-	-	-	-	-	-	4.4	4.1	-	-	-	-	-	-	-	-	-	-	-	-
A07008-43	-	-	-	-	-	-	-	-	-	-	4.3	3.6	-	-	-	-	-	-	-	-	-	-	-	-
A07103-1T	-	-	-	-	-	-	-	-	-	-	4.3	3.7	-	-	-	-	-	-	-	-	-	-	-	-
A08014-9TE	-	-	-	-	-	-	-	-	-	-	3.9	2.9	-	-	-	-	-	-	-	-	-	-	-	-
A08422-2VR	-	-	-	-	-	-	-	-	-	-	3.0	3.8	-	-	-	-	-	-	-	-	-	-	-	-
A08422-5VR	-	-	-	-	-	-	-	-	-	-	3.6	4.5	-	-	-	-	-	-	-	-	-	-	-	-
AC00395-2RU	-	-	-	-	-	-	-	-	-	-	4.0	2.4	-	-	-	-	-	-	-	-	-	-	-	-
AF0338-17	-	-	3.0	3.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AF4013-3	-	-	3.8	2.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AF4113-2	-	-	-	-	-	-	-	-	-	-	4.5	4.4	-	-	-	-	-	-	-	-	-	-	-	-
AF4138-8	3.9	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AF4157-6	2.4	2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AF4227-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.4	2.6	-	-	-	-	-	-	-	-
AF4296-3	-	-	-	-	-	-	-	-	-	-	3.7	3.7	-	-	-	-	-	-	-	-	-	-	-	-
AF4320-7	-	-	-	-	-	-	-	-	-	-	3.8	2.5	-	-	-	-	-	-	-	-	-	-	-	-
AF4342-3	-	-	-	-	-	-	-	-	-	-	3.1	3.1	-	-	-	-	-	-	-	-	-	-	-	-
AF4421-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.0	3.6	-	-	-	-	-	-	-	-
AF4445-3	-	-	-	-	-	-	-	-	-	-	4.1	3.9	-	-	-	-	-	-	-	-	-	-	-	-
AF4453-7	-	-	-	-	-	-	-	-	-	-	4.0	3.5	-	-	-	-	-	-	-	-	-	-	-	-
AF4463-8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.7	3.6	-	-	-	-	-	-	-	-
AF4532-8	-	-	-	-	-	-	-	-	-	-	2.5	1.7	-	-	-	-	-	-	-	-	-	-	-	-
AF4552-5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.8	2.7	-	-	-	-	-	-	-	-
AF4565-1	-	-	-	-	-	-	-	-	2.5	3.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AF4573-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.1	3.5	-	-	-	-	-	-	-	-
AF4614-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.3	3.1	-	-	-	-	-	-	-	-
AF4615-5	-	-	-	-	-	-	-	-	-	-	3.8	3.3	-	-	-	-	-	-	-	-	-	-	-	-
AF4640-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.2	3.3	-	-	-	-	-	-	-	-
AF4692-1	-	-	-	-	-	-	-	-	-	-	4.0	4.2	-	-	-	-	-	-	-	-	-	-	-	-
AF4950-1	-	-	-	-	-	-	-	-	-	-	2.8	2.6	-	-	-	-	-	-	-	-	-	-	-	-
AF4950-2	-	-	-	-	-	-	-	-	-	-	4.0	3.8	-	-	-	-	-	-	-	-	-	-	-	-
AF4953-2	-	-	-	-	-	-	-	-	-	-	4.4	3.4	-	-	-	-	-	-	-	-	-	-	-	-

(continued)

Upstate New York Table 31. -(cont'd)- 2013 Freeville Trials - After-cooking darkening and sloughing ratings¹

Variety/Clone ²	<u>Early</u>		<u>Medium</u>		<u>M-Late</u>		<u>Late</u>		<u>Red/Purp</u>		<u>Russet</u>		<u>Cornell H, J & K Lines</u>		<u>Univ of Maine Clones</u>		<u>USDA Clones</u>		<u>Multi-State Clones</u>		<u>Steuben</u>		<u>Wyoming</u>	
	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG
AF4953-6	-	-	-	-	-	-	-	-	-	-	4.0	3.4	-	-	-	-	-	-	-	-	-	-	-	-
AF4957-5	-	-	-	-	-	-	-	-	-	-	4.0	4.6	-	-	-	-	-	-	-	-	-	-	-	-
AF4989-1	-	-	-	-	-	-	-	-	-	-	3.4	2.6	-	-	-	-	-	-	-	-	-	-	-	-
AF5041-1	-	-	-	-	-	-	-	-	-	4.8	5.0	-	-	-	-	-	-	-	-	-	-	-	-	-
AF5131-2	-	-	-	-	-	-	-	-	-	3.0	4.8	-	-	-	-	-	-	-	-	-	-	-	-	-
AF5154-2	-	-	-	-	-	-	-	-	-	3.4	3.6	-	-	-	-	-	-	-	-	-	-	-	-	-
AF5160-7	-	-	-	-	-	-	-	-	-	4.0	3.8	-	-	-	-	-	-	-	-	-	-	-	-	-
AF5188-1	-	-	-	-	-	-	-	-	-	-	4.0	4.6	-	-	-	-	-	-	-	-	-	-	-	-
AF5235-2	-	-	-	-	-	-	-	-	-	-	2.4	2.8	-	-	-	-	-	-	-	-	-	-	-	-
AF5245-1	-	-	-	-	-	-	-	-	-	3.8	3.4	-	-	-	-	-	-	-	-	-	-	-	-	-
AF5274-6	-	-	-	-	-	-	-	-	-	2.6	3.8	-	-	-	-	-	-	-	-	-	-	-	-	-
AF5305-3	-	-	-	-	-	-	-	-	-	-	1.2	3.4	-	-	-	-	-	-	-	-	-	-	-	-
AF5356-3 YF2	-	-	-	-	-	-	-	-	-	4.0	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-
AOTX91861-41	-	-	-	-	-	-	-	-	-	3.7	3.9	-	-	-	-	-	-	-	-	-	-	-	-	-
ATTX01178-1R	-	-	-	-	-	-	-	-	-	4.4	4.2	-	-	-	-	-	-	-	-	-	-	-	-	-
B1816-5 YF2	-	-	-	-	-	-	-	-	-	3.5	3.5	-	-	-	-	-	-	-	-	-	-	-	-	-
B2676-2	-	-	-	-	-	-	-	-	-	3.8	3.9	-	-	-	-	-	-	-	-	-	-	-	-	-
B2738-3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.9	4.2	-	-	-	-	-	-
B2827-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.1	3.5	-	-	-	-	-	-
B2827-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.5	4.4	-	-	-	-	-	-
B2832-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.5	1.7	-	-	-	-	-	-
B2834-8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.1	2.9	-	-	-	-	-	-
B2869-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.9	4.3	-	-	-	-	-	-
B2869-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.8	3.5	-	-	-	-	-	-
B2876-7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.4	3.6	-	-	-	-	-	-
B2882-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.5	4.3	-	-	-	-	-	-
B2883-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.7	4.7	-	-	-	-	-	-
B2883-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.8	4.7	-	-	-	-	-	-
B2890-11 YF1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.4	4.1	-	-	-	-	-	-
B2893-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.6	4.9	-	-	-	-	-	-
B2908-3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.4	4.5	-	-	-	-	-	-
B2942-6	-	-	-	-	-	-	-	-	-	3.4	3.2	-	-	-	-	-	-	-	-	-	-	-	-	-
B2947-5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.0	2.6	-	-	-	-	-	-
B2947-7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.2	4.4	-	-	-	-	-	-
B2947-8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.5	4.1	-	-	-	-	-	-

(continued)

Upstate New York Table 31. -(cont'd)- 2013 Freeville Trials - After-cooking darkening and sloughing ratings¹

Variety/Clone ²	<u>Early</u>		<u>Medium</u>		<u>M-Late</u>		<u>Late</u>		<u>Red/Purp</u>		<u>Russet</u>		<u>Cornell H, J & K Lines</u>		<u>Univ of Maine Clones</u>		<u>USDA Clones</u>		<u>Multi-State Clones</u>		<u>Steuben</u>		<u>Wyoming</u>	
	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG
B2948-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.6	1.2	-	-	-	-	-	-
B2950-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.8	3.8	-	-	-	-	-	-
B2950-3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.7	3.8	-	-	-	-	-	-
B3034-7	-	-	-	-	-	-	-	-	-	4.2	3.8	-	-	-	-	-	-	-	-	-	-	-	-	-
B3034-9	-	-	-	-	-	-	-	-	-	4.6	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-
BNC182-5	-	-	-	-	3.3	3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BNC201-1 YF1	-	-	-	-	-	-	-	-	-	3.7	4.5	-	-	-	-	-	-	-	-	-	-	-	-	-
BNC233-3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.5	4.5	-	-	-	-	-	-
BNC266-6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.7	2.5	-	-	-	-	-	-
BNC304-1	-	-	-	-	-	-	-	-	-	4.4	4.2	-	-	-	-	-	-	-	-	-	-	-	-	-
BNC306-2	-	-	-	-	-	-	-	-	-	4.2	3.4	-	-	-	-	-	-	-	-	-	-	-	-	-
BNC306-3	-	-	-	-	-	-	-	-	-	2.6	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-
BNC313-3 YF2	-	-	-	-	-	-	-	-	-	4.6	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-
BNC314-8	-	-	-	-	-	-	-	-	-	3.4	2.4	-	-	-	-	-	-	-	-	-	-	-	-	-
BNC315-5	-	-	-	-	-	-	-	-	-	3.8	3.2	-	-	-	-	-	-	-	-	-	-	-	-	-
BNC316-1 YF1	-	-	-	-	-	-	-	-	-	3.6	2.8	-	-	-	-	-	-	-	-	-	-	-	-	-
BNC320-2	-	-	-	-	-	-	-	-	-	4.0	3.4	-	-	-	-	-	-	-	-	-	-	-	-	-
BNC322-2	-	-	-	-	-	-	-	-	-	4.6	4.8	-	-	-	-	-	-	-	-	-	-	-	-	-
CO03276-5RU	-	-	-	-	-	-	-	-	-	-	-	4.7	3.9	-	-	-	-	-	-	-	-	-	-	-
CO04159-1R	-	-	-	-	-	-	-	-	-	3.7	4.2	-	-	-	-	-	-	-	-	-	-	-	-	-
H122-4	-	-	-	-	-	-	-	-	-	-	-	-	-	3.7	3.3	-	-	-	-	-	-	-	-	-
J15-7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.4	2.4	2.0	2.0
J17-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.8	1.6	3.0	2.0
J21-5	-	-	-	-	-	-	-	-	-	-	-	-	-	2.7	2.7	-	-	-	-	-	-	-	-	-
K11-2	-	-	-	-	-	-	-	-	-	-	-	-	-	3.6	3.5	-	-	-	-	-	-	-	-	-
K23-13	-	-	-	-	-	-	-	-	-	-	-	-	-	3.2	2.1	-	-	-	-	-	-	-	-	-
K27-1	-	-	-	-	-	-	-	-	-	-	-	-	-	2.3	1.8	-	-	-	-	-	-	-	-	-
K27-3	-	-	-	-	-	-	-	-	-	-	-	-	-	2.9	1.9	-	-	-	-	-	-	-	-	-
K28-7	-	-	-	-	-	-	-	-	-	-	-	-	-	2.7	1.8	-	-	-	-	-	-	-	-	-
K28-14	-	-	-	-	-	-	-	-	-	-	-	-	-	2.9	3.2	-	-	-	-	-	-	-	-	-
K28-18	-	-	-	-	-	-	-	-	-	-	-	-	-	2.7	1.7	-	-	-	-	-	-	-	-	-
K30-9YF1	-	-	-	-	-	-	-	-	-	-	-	-	-	2.7	2.7	-	-	-	-	-	-	-	-	-
K31-4	-	-	-	-	-	-	-	-	-	-	-	-	-	3.1	3.4	-	-	-	-	-	-	-	-	-
K45-2	-	-	-	-	-	-	-	-	-	5.0	5.0	-	-	-	-	-	-	-	-	-	-	-	-	-
K100-3	-	-	-	-	-	-	-	-	-	3.2	3.4	-	-	-	-	-	-	-	-	-	-	-	-	-

(continued)

Upstate New York Table 31. -(cont'd)- 2013 Freeville Trials - After-cooking darkening and sloughing ratings¹

Variety/Clone ²	Early		Medium		M-Late		Late		Red/Purp		Russet		Cornell H, J & K Lines		Univ of Maine Clones		USDA Clones		Multi-State Clones		Steuben		Wyoming	
	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG	ACD	SLG
	MSL211-3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.9	4.8	-	-	-
MSM182-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.1	4.5	-	-	-	-
MSR061-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.3	3.4	2.3	1.5	2.4	2.6
MSS176-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.8	4.5	-	-	-	-
MSS206-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.8	4.6	-	-	-	-
MSS576-5SPL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.0	3.1	-	-	-	-
MSS582-1SPL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.8	4.5	-	-	-	-
NDTX5438-11R	-	-	-	-	-	-	-	-	4.7	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NY115	-	-	-	-	-	-	-	-	-	-	-	-	4.9	4.8	-	-	-	-	-	-	-	-	-	-
NY140	-	-	-	-	-	-	3.5	3.4	-	-	-	-	-	-	-	-	-	-	-	-	3.3	2.0	2.9	3.0
NY141	3.7	4.1	3.9	4.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NY143	-	-	-	-	3.5	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NY148	-	-	-	-	-	-	3.6	2.0	-	-	-	-	-	-	-	-	-	-	-	-	2.7	1.0	2.8	1.0
NY150	5.0	3.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NY152	-	-	-	-	-	-	2.8	3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W5015-12	-	-	-	-	4.3	3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W5955-1	-	-	-	-	3.9	3.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W6002-1R	-	-	-	-	-	-	-	-	4.2	3.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W6483-5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.0	4.8	-	-	-	-
W8370-2R	-	-	-	-	-	-	-	-	4.0	3.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W8405-1R	-	-	-	-	-	-	-	-	3.6	2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W8893-1R	-	-	-	-	-	-	-	-	4.1	4.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W9426-3R/Y YF1	-	-	-	-	-	-	-	-	3.8	3.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W9746-4R	-	-	-	-	-	-	-	-	4.0	4.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W9765-3R	-	-	-	-	-	-	-	-	4.5	4.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-

¹Five tubers from each replicaton were peeled, dipped in a 0.5% sodium meta-bisulfite solution and cooked in an autoclave for 8-1/2 minutes at 350°F, followed by a 15 minute slow exhaust. After removal from the autoclave and cooling for 10 minutes at room temperature, the tubers were rated on a scale of 1 to 5, with 5 = no after-cooking darkening or sloughing, and 1 = severe after-cooking darkening or sloughing.

A minimum score of 3 would normally be acceptable. These trials were stored at 50° F until the time of cooking, which was carried out between January 6 and January 10, 2014.

²BF = Blue Flesh; RF = Red Flesh; YF = Yellow Flesh (1-5 with 5 = darkest yellow color)

APPENDIX

STANDARD NE1031 RATING CODES FOR PLANT AND TUBER CHARACTERISTICS

(formerly Regional Projects NE184 and NE1014)

Tuber Skin Color

1. Purple
2. Red
3. Pink
4. Dark Brown
5. Brown
6. Tan/Light Brown
7. Buff
8. White
9. Cream

Tuber Skin Texture

1. Partial Russet
2. Heavy Russet
3. Moderate Russet
4. Light Russet
5. Netted
6. Slight Net
7. Moderately Smooth
8. Smooth
9. Very Smooth

Tuber Shape

1. Round
2. Mostly Round
3. Round to Oblong
4. Mostly Oblong
5. Oblong
6. Oblong to Long
7. Mostly Long
8. Long
9. Cylindrical

Tuber Cross-section

1. Very Flat
2. --
3. Flat
4. --
5. Intermediate/Oval
6. --
7. Mostly Round
8. --
9. Very Round

Tuber Appearance

1. Very Poor
2. --
3. Poor
4. --
5. Fair
6. --
7. Good
8. --
9. Excellent

Maturity at Vinekill

1. Completely Dead
2. --
3. Yellow and Dying
4. --
5. Moderately Mature
6. --
7. Starting to Mature
8. --
9. Green and Vigorous

Scab Type

P = Pitted
S = Surface
S/P = Mostly Surface
P/S = Mostly Pitted

Scab Rating

0 = None
1 = Trace, slight lesions or #
2 = Visible, up to 20% of tubers
3 = Moderate, 20 to 50% of tubers
4 = Bad, over 50% of tubers
5 = Very bad, on all tubers