

## 2019 Sweet Potato Trials

**Table 1: Variety information and overall yield per acre in Columbia County, NY (highest to lowest marketable yield)**

Variety	Source	Skin/Flesh Colors	# of Rows	Stand Count	Total Marketable Yield (lbs)	Total Yield (lbs)
B-14 (Beauregard)	Louisiana State University	Red/orange	2	48	41921	42625
NY Covington	Slips grown in NY	Red/orange	2	50	40401	41791
NY Covington	Slips grown in NY	Red/orange	1	25	39182	39790
B-14 (Beauregard)	Louisiana State University	Red/orange	1	24	35510	35569
Averre	Jones Family Farms	Red/orange	2	48	27332	29028
Bonita	Jones Family Farms	White/white	2	37	23370	24698
Covington	Jones Family Farms	Red/orange	1	24	19794	20523
Averre	Jones Family Farms	Red/orange	1	18	19526	20293
Covington	Jones Family Farms	Red/orange	2	45	19011	19966
445	Louisiana State University	Red/orange	2	24	17592	19028
Bellevue	Jones Family Farms	Orange/orange	2	39	15125	18517
Bonita	Jones Family Farms	White/white	1	22	14547	15000
14-31	Louisiana State University	Purple/purple	1	24	13735	16947
Orleans	Jones Family Farms	Red/light orange	2	44	11972	15138
Orleans	Jones Family Farms	Red/light orange	1	25	10988	15866
NC-531	Jones Family Farms	Red/orange	2	41	10523	12877
Burgundy	Jones Family Farms	Dark red/dark orange	2	46	9849	10749
Murasaki	Jones Family Farms	Purple/white	1	25	8723	9878
Bellevue	Jones Family Farms	Orange/orange	1	11	6323	6474
Murasaki	Jones Family Farms	Purple/white	2	45	5586	5724
Burgundy	Jones Family Farms	Dark red/dark orange	1	19	5511	8438
NC-531	Jones Family Farms	Red/orange	1	11	2726	2982

Planted on 6.5 foot raised black plastic mulch

Row Spacings: 1 row - centered on plastic, 12 inches apart in-row. 2 rows, approximately 18 inches apart, 12 inches apart in-row

Planting dates varied based on when we received the slips

Planted 6/7/19: Bonita, Covington, Orleans, Averre, Bellevue, NC-531, Burgandy

Planted 6/12/19: NY Covington

Planted 6/13/19: Murasaki, sized slip trial

Planted 6/19/19: 14-31, B-14, 445

Vines terminated and roots harvested 10/15/19

Stand Counts - 1 row was out of 25, 2 row was out of 50

**Table 2: Size distribution of root sizes in Columbia County, NY (highest to lowest marketable yield)**

Variety	# of Rows	Total Marketable Yield (lbs)	Total Jumbo (>32oz) Weight (lbs)	Total # Jumbo (>32 oz)	Total Large (14-32oz) Weight (lbs)	Total # Large (14-32 oz)	Total Small (4-14oz) Weight (lbs)	Total # Small (4-14 oz)	Total Fingerling (1-4oz) Weight (lbs)	Total # Fingerling (1-4 oz)
B-14	2	41921	1353	670	10372	10050	24254	46230	5942	39530
NY Covington	2	40401	1340	670	8367	7370	25246	48910	5448	38860
NY Covington	1	39182	0	0	16168	14740	20628	35510	2387	16080
B-14	1	35510	4351	2010	15511	12060	13748	29480	1901	12730
Averre	2	27332	0	0	6989	6700	17211	35510	3132	23450
Bonita	2	23370	0	0	4661	4690	12470	30820	6239	42880
Covington	1	19794	0	0	7956	6030	10130	20770	1709	10720
Averre	1	19526	3011	1340	7429	6030	7366	15410	1721	12060
Covington	2	19011	0	0	5251	4690	10444	19430	3317	24790
445	2	17592	6667	2680	8660	7370	2169	4020	96	670
Bellevue	2	15125	0	0	812	670	10381	22110	3932	27470
Bonita	1	14547	0	0	3601	3350	8409	20100	2538	20100
14-31	1	13735	0	0	599	670	11185	24120	1951	12730
Orleans	2	11972	0	0	6407	4690	4606	9380	959	8040
Orleans	1	10988	0	0	6997	6030	3513	6700	477	3350
NC-531	2	10523	0	0	691	670	7529	16080	2303	15410
Burgundy	2	9849	0	0	754	670	7383	18760	1713	10050
Murasaki	1	8723	0	0	0	0	6323	14740	2399	18090
Bellevue	1	6323	0	0	2291	2010	3283	8040	750	5360
Murasaki	2	5586	0	0	595	670	2513	7370	2479	18090
Burgundy	1	5511	0	0	2190	2010	2977	6700	343	2010
NC-531	1	2726	0	0	712	670	1457	3350	557	4690

Planted on 6.5 foot raised black plastic mulch

Row Spacings: 1 row - centered on plastic, 12 inches apart in-row. 2 rows, approximately 18 inches apart, 12 inches apart in-row

Planting dates varied based on when we received the slips

Planted 6/7/19: Bonita, Covington, Orleans, Averre, Bellevue, NC-531, Burgundy

Planted 6/12/19: NY Covington

Planted 6/13/19: Murasaki, sized slip trial

Planted 6/19/19: 14-31, B-14, 445

Vines terminated and roots harvested 10/15/19

**Table 3: Cull information and distribution per acre in Columbia County, NY (highest to lowest marketable yield)**

Variety	# of Rows	Total Marketable Yield (lbs)	Total Weight (lb) Unmarketable Roots	Total # Unmarketable Roots	Weight Rodent Damaged Roots (lbs)	# Rodent Damaged	Weight Misshaped Roots (lbs)	# Misshaped Roots	Weight Too Small Roots (lbs)	# Too Small Roots	Weight Roots With Mechanical Damage (lbs)	# Roots With Mechanical Damage
B-14	2	41921	704	8040	0	0	314	670	285	6700	105	670
NY Covington	2	40401	1390	8710	0	0	63	670	322	6700	1411	2680
NY Covington	1	39182	607	5360	0	0	444	670	163	4690	1076	2010
B-14	1	35510	59	1340	0	0	0	0	59	1340	6449	8040
Averre	2	27332	1696	7370	1558	2010	0	0	159	3350	2362	5360
Bonita	2	23370	1327	9380	0	0	779	1340	356	7370	2157	4020
Covington	1	19794	729	1340	0	0	729	1340	0	0	0	0
Averre	1	19526	766	3350	0	0	0	0	34	670	1466	4020
Covington	2	19011	955	4690	1235	1340	327	670	101	2680	168	670
445	2	17592	1436	670	0	0	1436	670	0	0	0	0
Bellevue	2	15125	3392	12730	0	0	3224	9380	168	3350	0	0
Bonita	1	14547	452	2680	0	0	381	1340	71	1340	1679	1340
14-31	1	13735	3212	10720	0	0	348	670	0	0	3781	12060
Orleans	2	11972	3166	6700	134	670	2843	4690	21	670	1432	1340
Orleans	1	10988	4878	6700	0	0	3940	5360	0	0	3869	4020
NC-531	2	10523	2353	8040	988	2680	209	670	34	670	1122	4020
Burgundy	2	9849	900	6030	0	0	193	670	34	670	674	4690
Murasaki	1	8723	1156	6700	0	0	1156	6700	0	0	0	0
Bellevue	1	6323	151	670	0	0	151	670	0	0	0	0
Murasaki	2	5586	138	2680	0	0	0	0	88	2010	50	670
Burgundy	1	5511	2927	7370	0	0	1302	3350	0	0	1625	4020
NC-531	1	2726	255	670	0	0	255	670	0	0	0	0

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Row Spacings: 1 row - centered on plastic, 12 inches apart in-row. 2 rows, approximately 18

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Planted 6/12/19: NY Covington

Planted 6/13/19: Murasaki, sized slip trial

Planted 6/19/19: 14-31, B-14, 445

Vines terminated and roots harvested 10/15/19

Too small roots were any roots under 1 oz

Mechanical damage was almost entirely slicing from bed lifter

**Table 4: Graded slip evaluation per acre in Columbia County, NY (highest to lowest marketable yield)**

Slip Types	# of Rows	Stand Counts at Harvest	Total Weight (lb)	Total # Root	Total Marketable Weight	Total # Marketable Roots	Jumbo Weight	Total # Jumbo (>32 oz)	Large Weight	Total # Large (14-32 oz)	Small Weight	Total # Small (4-14 oz)	Fingerling Weight	Total # Fingerling (1-4 oz)	Total # Unmarketable Roots
Large	1	25	6664	27693	6340	23450	0	0	667	670	3967	9380	1957	13623	4243
Medium	1	20	5939	29257	5825	26577	0	0	0	0	3349	8487	2476	18090	2680
Small	1	10	1690	8487	1647	7370	0	0	0	0	921	2233	726	5137	1117

Three reps were planted, harvested and averaged

Small slips had 2-3 nodes with small diameter and very short. Average length was 3.5 inches.

Medium slips have at least 3-4 nodes and had an average length of 6.7 inches.

Large slips had at least 7 nodes and were at least 11 inches with an average of 12 inches.

Slips were planted at 12 inch spacing, one row, in 25 foot sections but were not replanted. A 10 foot section was harvested

Murasaki was the variety left at the time of planting so it was used for all reps in this trial

Stand counts were out of 25

Planting date: 6/13/19

**Table 5: Size average and % as compared to total marketable yield in Columbia County, NY (highest to lowest marketable yield)**

Variety	# of Rows	Total Marketable Yield (lbs)	Jumbo Roots (>32oz)			Large Roots (14-32oz)			Small Roots (4-14oz)			Fingerling Roots (1-4oz)		
			Total Jumbo Weight (lbs)	Average Jumbo Root Size (oz)	Jumbo Root % of Total	Total Large Weight (lbs)	Average Large Root Size (oz)	Large Root % of Total	Total Small Weight (lbs)	Average Small Root Size (oz)	Small Root % of Total	Total Fingerling Weight (lbs)	Average Fingerling Root Size (oz)	Fingerling Root % of Total
B-14 (Beauregard)	2	41921	1353	32.3	3%	10372	16.5	25%	24254	8.4	58%	5942	2.4	14%
NY Covington	2	40401	1340	32.0	3%	8367	18.2	21%	25246	8.3	62%	5448	2.2	13%
NY Covington	1	39182	0	0	0%	16168	17.6	41%	20628	9.3	53%	2387	2.4	6%
B-14 (Beauregard)	1	35510	4351	34.6	12%	15511	20.6	44%	13748	7.5	39%	1901	2.4	5%
Averre	2	27332	0	0	0%	6989	16.7	26%	17211	7.8	63%	3132	2.1	11%
Bonita	2	23370	0	0	0%	4661	15.9	20%	12470	6.5	53%	6239	2.3	27%
Covington	1	19794	0	0	0%	7956	21.1	40%	10130	7.8	51%	1709	2.6	9%
Averre	1	19526	3011	36.0	15%	7429	19.7	38%	7366	7.6	38%	1721	2.3	9%
Covington	2	19011	0	0	0%	5251	17.9	28%	10444	8.6	55%	3317	2.1	17%
445	2	17592	6667	39.8	38%	8660	18.8	49%	2169	8.6	12%	96	2.3	1%
Bellevue	2	15125	0	0	0%	812	19.4	5%	10381	7.5	69%	3932	2.3	26%
Bonita	1	14547	0	0	0%	3601	17.2	25%	8409	6.7	58%	2538	2.0	17%
14-31	1	13735	0	0	0%	599	14.3	4%	11185	7.4	81%	1951	2.5	14%
Orleans	2	11972	0	0	0%	6407	21.9	54%	4606	7.9	38%	959	1.9	8%
Orleans	1	10988	0	0	0%	6997	18.6	64%	3513	8.4	32%	477	2.3	4%
NC-531	2	10523	0	0	0%	691	16.5	7%	7529	7.5	72%	2303	2.4	22%
Burgundy	2	9849	0	0	0%	754	18.0	8%	7383	6.3	75%	1713	2.7	17%
Murasaki	1	8723	0	0	0%	0	0	0%	6323	6.9	72%	2399	2.1	28%
Bellevue	1	6323	0	0	0%	2291	18.2	36%	3283	6.5	52%	750	2.2	12%
Murasaki	2	5586	0	0	0%	595	14.2	11%	2513	5.5	45%	2479	2.2	44%
Burgundy	1	5511	0	0	0%	2190	17.4	40%	2977	7.1	54%	343	2.7	6%
NC-531	1	2726	0	0	0%	712	17.0	26%	1457	7.0	53%	557	1.9	20%

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Row Spacings: 1 row - centered on plastic, 12 inches apart in-row. 2 rows, approximately 18 inches apart, 12 inches apart in-row

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