



MICHIGAN SUGARBEET
REACH
Research & Education Advisory Council

2020 VARIETY TRIAL RESULTS

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	Amanda Goffnett		
	Corey Guza		
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Company	Name
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CEO of Michigan Sugar Company	Mark Flegenheimer

MISSION STATEMENT:

The mission of the *Michigan Sugarbeet Research Education Advisory Council* is to be the central trusted source of agronomic information for the sugarbeet industry.

The council will provide direction for the Michigan-Ontario sugarbeet researchers and assemble and distribute research/agronomy information.

Cooperative educational efforts will be conducted with the goal of improving productivity and profitability for all stakeholders.



RESEARCH SPECIALISTS:

MICHIGAN SUGAR COMPANY Corey Guza

PhD, Director of Agronomy and Research
989.415.3419
corey.guza@michigansugar.com

Amanda Goffnett

Research Scientist
989.400.3793
amanda.goffnett@michigansugar.com

Dennis Bischer

Director of Agronomy
989.551.4416
dennis.bischer@michigansugar.com

Brian Groulx

Research Manager
989.225.6709
brian.groulx@michigansugar.com

MICHIGAN STATE UNIVERSITY

Daniel Bublitz

SBA Director
989.392.7805
bublitzd@msu.edu

Tom Wenzel

Research Technician
989.737.9447
wenzelth@msu.edu

2020 Variety Trial Results

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Approval of Seed Varieties for the 2021 Crop

Fully Approved Varieties		
Unlimited Quantities		
BTS-1399	HIL-9865	MA-814
BTS-1703	HIL-9879NT	SX-RR1243
BTS-188N	HIL-9908	SX-RR1245N
C-RR059	HIL-2238NT	SX-RR1264
C-G675	HIL-2240	SX-RR1275N
C-G752NT	MA-709	SX-RR1278N
C-G855	MA-813NT	SX-2283

Limited Approved Varieties		
Quantities limited to 5% of acres		
BTS-197N	HIL-2332NT	SX-2296N
C-G932NT	SX-2294	SX-2297
C-G919	SX-2295	

Specialty Approved Varieties		
Variety	Specialty	Quantity
BTS-1606N**	Nematode/Alt.	Unlimited units
BTS-1941*	CR+	5%
C-G943*	CR+	5%
BTS-1065*	CR+	500 units
C-G021*	CR+	1000 units

* Approved to plant through 2021

** Approved to plant through 2022

Corporate Agricultural Office
122 Uptown Dr. Suite 300
Bay City, Michigan 48708
Telephone (989) 686-0161 - Fax (989) 671-3714



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MICHIGAN SUGAR

Approved Varieties for 2021

2019 & 2020 Data

Variety	Approval Status	\$/A	All Values are % of Check									
			RWSA	RWST	T/A	Emergence	Cercospora	Rhizoctonia	Root Aphid	Aphanomyces	Fusarium	Rhizomania
C-G675	Fully Approved	\$2,146	106.0	101.1	104.9	107 G+	99 G	99 G	71 G	113 F-	113 F-	92 G
SX-2296N	Limited Approval	\$2,103	104.2	103.6	100.6	85 F	117 P	103 F	107 G	92 F+	123 P	99 G
HIL-9865	Fully Approved	\$2,087	103.2	103.1	100.0	93 F+	105 F	108 F-	65 G	94 F+	140 P	90 G
C-G932NT	Limited Approval	\$2,084	103.8	100.8	102.7	103 G	113 P	95 G	88 G	74 G+	68 G+	94 G
C-G752NT	Fully Approved	\$2,084	104.4	99.5	104.7	97 F+	108 F	97 G	82 G	78 G+	71 G+	93 G
BTS-197N	Limited Approval	\$2,078	103.8	100.4	103.2	104 G	114 P	104 F	85 G	77 G+	76 G	95 G
BTS-188N	Fully Approved	\$2,070	102.8	101.3	101.6	96 F+	117 P	99 G	114 G	73 G+	75 G+	103 F+
SX-2294	Limited Approval	\$2,062	102.3	102.1	100.3	97 F+	100 G	106 F	191 F+	84 G+	97 F+	103 F+
BTS-1606N	Special Approval	\$2,060	103.3	98.2	104.8	98 F+	108 F	103 F	82 G	91 G	67 G+	85 G+
**C-G021	Special Approval	N/A	102.0	100.9	101.3	103 G	49 E	97 G	392 F-	85 G+	66 G+	83 G+
SX-2295	Limited Approval	\$2,059	101.8	102.6	99.4	100 G	99 G	98 G	103 G	92 G	102 F	114 F-
BTS-1703	Fully Approved	\$2,058	102.2	100.3	102.0	112 G+	87 G+	101 F	31 G+	104 F	120 P	94 G
SX-RR1264	Fully Approved	\$2,045	101.0	102.7	98.5	93 F+	101 G	101 F	77 G	88 G	98 F+	111 F-
HIL-2332NT	Limited Approval	\$2,035	101.4	104.6	96.6	89 F	111 F-	97 G	72 G	96 F+	140 P	103 F+
**BTS-1065	Special Approval	N/A	101.1	97.3	103.7	103 G	53 E	104 F	211 F+	90 G	52 G+	85 G+
BTS-1941	Special Approval	\$2,030	101.0	96.6	104.3	106 G+	44 E	101 F	107 G	90 G	75 G	81 G+
SX-2283	Fully Approved	\$2,026	100.4	101.5	98.9	101 G	104 F	110 P	123 G	84 G+	97 F+	105 F
C-G943	Special Approval	\$2,022	100.2	96.3	104.1	105 G+	51 E	100 F	35 G+	109 F-	71 G+	81 G+
SX-RR1278N	Fully Approved	\$2,011	99.8	98.7	101.2	99 G	119 P	108 F-	362 F-	90 G	118 P	88 G
BTS-1399	Fully Approved	\$2,004	99.1	96.0	103.2	106 G+	85 G+	96 G	87 G	94 F+	66 G+	90 G
C-G919	Limited Approval	\$2,003	99.5	99.2	100.3	106 G+	78 G+	90 G+	67 G	93 F+	87 G	91 G
SX-2297	Limited Approval	\$1,981	98.2	103.3	95.2	94 F+	99 G	91 G+	194 F+	95 F+	104 F	113 F-
MA-814	Fully Approved	\$1,974	97.5	98.6	98.9	109 G+	97 G	103 F	63 G	119 P	106 F	114 F-
SX-RR1275N	Fully Approved	\$1,973	98.0	98.3	99.4	100 G	110 F-	109 F-	406 P	89 G	109 F-	92 G
HIL-2238NT	Fully Approved	\$1,963	96.6	97.7	98.8	108 G+	97 G	106 F	202 F+	116 P	135 P	83 G+
C-G855	Fully Approved	\$1,948	96.8	97.9	98.9	99 G	87 G+	92 G	58 G	108 F-	86 G	103 F+
MA-709	Fully Approved	\$1,939	96.1	99.9	96.1	96 F+	95 G	105 F	305 F-	114 F-	128 P	101 F+
HIL-2240	Fully Approved	\$1,922	95.2	99.0	96.2	97 F+	92 G+	107 F-	124 G	106 F	122 P	101 F+
HIL-9908	Fully Approved	\$1,852	91.2	100.3	91.2	87 F	79 G+	97 G	81 G	113 F-	126 P	111 F-
HIL-9879NT	Fully Approved	\$1,847	91.0	100.1	91.1	93 F+	94 G	104 F	63 G	121 P	126 P	117 F-
MA-813NT	Fully Approved	\$1,804	89.0	98.9	90.4	102 G	93 G	108 F-	78 G	117 P	125 P	111 F-

A lower value is better for Cercospora, Rhizoctonia, Root Aphid, Aphanomyces, Fusarium and Rhizomania, **Data from 2020 only
\$/A: Gross dollars per acre calculated using early delivery adjustment where necessary, and a per pound payment of \$.165.



Rhizoctonia

Varieties for 2021 - Average of 2019 & 2020

Variety	% of Check				Comments
	Rhizoc	RWSA	RWST	Cerc	
C-G919	89.8	99.5	99.2	78.2	New well rounded disease tolerant variety with slightly below average yield and sugar. Very good Rhizoctonia and Cercospora tolerance.
SX-2297	90.6	98.2	103.3	99.5	New very high sugar yielding variety with good root rot traits. Also better than average Cercospora tolerance. Below average on RWSA.
C-G932NT	94.7	103.8	100.8	113.4	New high RWSA and average RWST variety with good Rhizoctonia tolerance. Poor tolerance to Cercospora will require high management.
BTS-1399	96.2	99.1	96.0	85.0	Fully approved variety with strong disease package with below average RWSA and low RWST. Very good Cercospora tolerance.
HIL-2332NT	97.3	101.4	104.6	110.9	New good yielding and above average RWST variety with good Rhizoctonia tolerance. Weakness to Cercospora.
** C-G021	97.3	102.0	100.9	48.6	New variety with one year of data. Excellent Cercospora tolerance from CR+ trait. Good RWSA, average RWST and good Rhizoc tolerance. Slight weakness to Root Aphids.
HIL-9908	97.4	91.2	100.3	79.1	Fully approved variety with good RWST but below average RWSA. Good tolerance to Rhizoctonia and very good Cercospora tolerance. Slight weakness to Fusarium.

Note: Lower values are better for Rhizoctonia and Cercospora. Rhizoctonia ratings are from Rhizoctonia Nurseries.

**C-G021 is a first year variety. Data for this variety is from 2020 only.

Cercospora

Varieties for 2021 - Average of 2019 & 2020**

Variety	% of Check				Comments
	Cerc	RWSA	RWST	Rhizoc	
BTS-1941	44.2	101.0	96.6	100.9	New limited approval variety with CR+ trait for excellent Cercospora tolerance. Good overall disease package but low on RWST.
** C-G021	48.6	102.0	100.9	97.3	New first year variety with CR+ trait for excellent Cercospora tolerance. Good disease package but slight weakness to Root Aphids. Better RWST than other CR+ varieties available.
C-G943	50.8	100.2	96.3	100.4	New limited approval variety with CR+ trait for excellent Cercospora tolerance. Good overall disease package but low on RWST.
** BTS-G1065	53.0	101.1	97.3	104.1	New first year variety with CR+ trait for excellent Cercospora tolerance. Good disease package but slight weakness to Root Aphids. Low on RWST.
C-G919	78.2	99.5	99.2	89.8	New limited approval variety with very good Cercospora tolerance. Very well rounded disease package with average RWST and RWSA.
HIL-9908	79.1	91.2	100.3	97.4	Fully approved variety with very good Cercospora tolerance. Good RWST but below average RWSA. Slight weakness to Fusarium.
BTS-1399	85.0	99.1	96.0	96.2	Fully approved variety with very good Cercospora tolerance. Average RWSA but below average RWST. Well rounded disease package.
C-G855	86.8	96.8	97.9	91.9	New fully approved variety with very good Cercospora tolerance. Below average RWSA and RWST. Slight weakness to Aphanomyces.
HIL-2240	91.9	95.2	99.0	107.0	New fully approved variety with very good Cercospora tolerance. Below average RWSA and RWST. Slight weakness to Rhizoctonia and Fusarium.
MA-813NT	93.5	89.0	98.9	107.9	New fully approved nematode tolerant variety with good Cercospora tolerance. Below average RWSA and RWST. Slight weakness to all root rots tested.
HIL-9879NT	94.2	91.0	100.1	103.9	Fully approved nematode tolerant variety with good Cercospora tolerance. Below average RWSA and average RWST. Slight weakness to Aphanomyces and Fusarium.
MA-709	94.6	96.1	99.9	105.3	Fully approved variety with good Cercospora tolerance. Below average RWSA and Average RWST. Weak on diseases other than Cercospora.
MA-814	96.6	97.5	98.6	103.5	New fully approved variety with good Cercospora tolerance. Below average RWSA and RWST. Weak on Aphanomyces.
HIL-2238NT	97.2	96.6	97.7	106.1	New fully approved nematode tolerant variety with good Cercospora tolerance. Below average RWSA and RWST. Weak on Root Aphid, Aphanomyces, and Fusarium.
BTS-1703	97.3	102.2	100.3	100.6	Fully approved variety with good Cercospora tolerance. Above average RWSA and average RWST. Slight weakness to Fusarium.

Note: Lower values are better for Cercospora and Rhizoctonia.

Higher is better for RWSA and RWST.

**BTS-1065 and C-G021 are first year varieties. Data for these varieties is from 2020 only.



High Quality

Varieties for 2021 - Average of 2019 & 2020

Variety	% of Check				Comments
	RWST	RWSA	Rhizoc	Cerc	
HIL-2332NT	104.6	101.4	97.3	110.9	New limited approval variety with very good RWST and above average RWSA. Slight weakness to Cercospora and Fusarium. Good tolerance to Rhizoctonia.
SX-2296N	103.6	104.2	103.5	116.9	New limited approval nematode tolerant variety with very good RWST and above average RWSA. Weak on Cercospora and Fusarium.
SX-2297	103.3	98.2	90.6	99.5	New limited approval variety with very good RWST and below average RWSA. Good Cercospora tolerance. Slight weakness to Root Aphids.
HIL-9865	103.1	103.2	108.0	105.1	Fully approved variety with very good RWST and above average RWSA. Slightly weak on Rhizoctonia and Fusarium.
SX-RR1264	102.7	101.0	101.0	100.7	Fully approved variety with very good RWST and above average RWSA. Good tolerance to Cercospora and well rounded disease package.
SX-2295	102.6	101.8	97.6	99.2	New limited approval variety with very good RWST and above average RWSA. Well rounded disease package.
SX-2294	102.1	102.3	105.5	99.6	New limited approval variety with very good RWST and above average RWSA. Slight weakness to Root Aphid.

Note: Lower values are better for Cercospora and Rhizoctonia.
Higher is better for RWSA and RWST



Sugarbeet Cyst Nematode

Varieties for 2021 - Average of 2019 & 2020

Variety	All Values are % of Check				Comments
	RWSA	RWST	Rhizoc	Cerc	
SX-2296N	104.2	103.6	103.5	116.9	New limited approval variety with very good RWST and above average RWSA. Weak on Cercospora and Fusarium.
C-G932NT	103.8	100.8	94.7	113.4	New limited approval variety with average RWST and above average RWSA. Good root rot tolerance package but slightly weak on Cercospora.
C-G752NT	104.4	99.5	97.5	107.7	Fully approved variety with average RWST and above average RWSA. Well rounded disease package, slightly weak on Cercospora.
BTS-197N	103.8	100.4	103.8	114.4	New limited approval variety with average RWST and above average RWSA. Good root rot tolerance package but slightly weak on Cercospora.
BTS-188N	102.8	101.3	99.4	116.8	Fully approved variety with above average RWST and RWSA. Good root rot tolerance package but weak on Cercospora.
BTS-1606N	103.3	98.2	103.1	108.2	Special approval variety with below average RWST and above average RWSA. Well rounded disease package, slight weakness to Cercospora.
HIL-2332NT	101.4	104.6	97.3	110.9	New limited approval variety with very good RWST and above average RWSA. Slight weakness to Cercospora and Fusarium. Good tolerance to Rhizoctonia.
SX-RR1278N	99.8	98.7	108.5	119.3	Fully approved variety with below average RWST and average RWSA. Weak on Cercospora, Root Aphid, and Fusarium.
SX-RR1275N	98.0	98.3	108.6	110.5	Fully approved variety with below average RWST and average RWSA. Weak on Cercospora, Root Aphid, and Fusarium.
HIL-2238NT	96.6	97.7	106.1	97.2	New fully approved variety with good Cercospora tolerance. Below average RWSA and RWST. Weak on Root Aphid, Aphanomyces, and Fusarium.
HIL-9879NT	91.0	100.1	103.9	94.2	Fully approved variety with good Cercospora tolerance. Below average RWSA and average RWST. Slight weakness to Aphanomyces and Fusarium.
MA-813NT	89.0	98.9	107.9	93.5	New fully approved variety with good Cercospora Tolerance. Below Average RWSA and RWST. Slight weakness to all root rots tested.

Note: Higher is better for RWSA and RWST. Lower is better for Cercospora and Rhizoctonia



Official Variety Trial

Average of 5 Locations - 2020

Trial Quality: see trial pages
Plant/Harv: see trial pages
Plots: 2 rows x 38 ft.
Row Spacing: 22 inches
Seeding Rate: 3.75 inches

Locations: Grekowicz
 Maurer
 Mininger
 Sylvester
 Trost

Cerc Control:
 see trial pages
Rhizoc Control:
 see trial pages

Variety	\$/A	RWSA	RWST		Yield		Sugar		CJP		Emerge	
			Lb/T	Rank	T/A	Rank	%	Rank	%	Rank	%	Rank
C-G675	\$2,532	14147	317	10	44.7	1	20.2	10	97.2	17	61.8	1
SX-2296N	\$2,448	13619	328	1	41.9	17	20.8	1	97.4	6	51.5	28
HIL-9865	\$2,439	13576	322	5	42.4	9	20.4	5	97.5	4	52.9	23
SX-2295	\$2,414	13443	324	3	41.7	19	20.6	2	97.5	5	52.6	25
C-G021	\$2,408	13411	318	9	42.5	8	20.3	8	97.1	21	61.2	5
SX-RR1264	\$2,397	13360	319	7	42.0	16	20.3	9	97.4	7	61.3	3
C-G932NT	\$2,388	13339	315	13	42.5	7	20.1	14	97.3	14	60.0	9
BTS-1065	\$2,380	13302	307	27	43.5	3	19.8	24	96.6	28	61.3	2
BTS-1703	\$2,372	13240	314	15	42.3	11	20.1	15	97.2	16	60.4	8
SX-2294	\$2,374	13236	319	8	41.8	18	20.4	6	97.2	19	49.6	30
BTS-1399	\$2,364	13221	304	29	43.6	2	19.4	31	97.2	18	61.2	4
HIL-2238NT	\$2,368	13183	310	23	42.8	6	19.8	23	97.1	20	56.6	15
BTS-188N	\$2,362	13154	313	17	42.3	12	20.0	17	97.1	22	53.2	21
BTS-197N	\$2,343	13069	315	14	41.6	20	20.2	13	97.0	23	58.1	12
SX-2283	\$2,343	13062	320	6	41.1	23	20.3	7	97.3	9	54.2	19
HIL-2332NT	\$2,332	13003	325	2	40.1	27	20.6	3	97.6	2	52.8	24
MA-814	\$2,334	12997	311	20	42.0	15	19.8	21	97.4	8	58.9	10
BTS-1606N	\$2,313	12956	307	26	42.3	10	19.8	25	96.8	27	54.2	20
C-G943	\$2,325	12940	302	30	43.0	4	19.6	30	96.4	30	60.6	7
BTS-1941	\$2,318	12917	301	31	43.0	5	19.7	27	96.0	31	57.7	13
C-G752NT	\$2,315	12901	307	25	42.3	13	19.8	22	96.6	29	56.7	14
SX-RR1278N	\$2,317	12898	308	24	42.1	14	19.7	28	97.3	11	56.0	17
SX-RR1275N	\$2,303	12827	314	16	41.1	24	20.0	18	97.3	15	55.4	18
C-G919	\$2,302	12824	310	21	41.6	21	19.7	26	97.5	3	61.1	6
SX-2297	\$2,290	12763	323	4	39.8	28	20.5	4	97.6	1	51.8	26
MA-709	\$2,257	12595	313	19	40.5	25	20.0	16	97.0	24	51.2	29
C-G855	\$2,245	12504	306	28	41.1	22	19.6	29	97.0	26	56.1	16
HIL-2240	\$2,238	12455	310	22	40.4	26	19.9	20	97.0	25	51.7	27
HIL-9879NT	\$2,191	12206	317	11	38.8	29	20.2	11	97.3	10	58.4	11
HIL-9908	\$2,178	12106	317	12	38.6	30	20.2	12	97.3	12	49.1	31
MA-813NT	\$2,107	11733	313	18	37.8	31	19.9	19	97.3	13	53.1	22
Average	\$2,332.2	12999.5	313.7		41.64		20.06		97.14		56.15	
LSD 5%	125.5	699.4	6.5		2.1		0.3		0.4		5.0	
CV %	4.3	4.3	1.7		4.1		1.3		0.3		7.1	

\$/A: Payment calculated using early delivery adjustment where necessary, and a per pound payment of \$.165.

Bold: Results are not statistically different from top-ranking variety in each column.

Comments: For 2020, 5 of 8 OVT's planted were used for variety approval. This is the average of those 5 trials. The trials were planted to stand in 2020 due to labor concerns. Overall, trials had very good root and sugar yields when compared to recent years. Sugar and root yield of variety trials harvested during permanent pile averaged 335 lbs. RWST and 39 tons/acre, respectively. Disease control was very good in all 5 trials.



Plant To Stand

Average of 5 Locations - 2020

Trial Quality: see trial pages

Plant/Harv: Apr 17/Oct 15

Plots: 6 Rows X 38 ft.

Row Spacing: 22 inches

Seeding Rate: 4.1 inches

Locations: Gerstenberger

Grekowicz

Lynch

Mininger

Trost

Cerc Control:

see trial pages

Rhizoc Control:

see trial pages

Variety	\$/A	RWSA	RWST		Yield		Sugar		CJP		Beets/100 ft	
			Lb/T	Rank	T/A	Rank	%	Rank	%	Rank	Act.	Rank
C-G675	\$2,274	11148	275	7	40.6	1	18.1	7	96.5	9	154	1
BTS-1606N	\$2,167	10616	265	16	40.1	2	17.7	14	95.8	19	131	13
HIL-9865	\$2,150	10580	278	2	38.0	8	18.2	2	96.6	6	136	10
SX-RR1264	\$2,149	10554	276	4	38.4	5	18.1	6	96.7	3	149	5
BTS-188N	\$2,132	10459	270	13	38.7	3	17.8	11	96.3	12	127	17
SX-2283	\$2,097	10291	275	6	37.4	9	18.1	4	96.3	11	131	14
BTS-1703	\$2,082	10238	265	17	38.6	4	17.5	18	96.2	14	153	2
C-G855	\$2,061	10143	273	9	37.0	13	18.0	8	96.3	13	127	16
MA-709	\$2,060	10095	264	18	38.2	7	17.6	16	96.0	18	136	11
HIL-2238NT	\$2,055	10086	273	10	37.0	12	18.0	9	96.2	15	141	7
MA-814	\$2,046	10083	274	8	36.7	15	17.9	10	96.8	1	151	3
BTS-1399	\$2,040	10054	262	19	38.3	6	17.2	19	96.8	2	150	4
SX-RR1275N	\$2,037	10031	271	11	36.8	14	17.8	12	96.6	7	130	15
SX-RR1278N	\$2,036	10006	271	12	37.0	11	17.7	13	96.6	5	132	12
C-G752NT	\$2,011	9889	265	15	37.3	10	17.5	17	96.2	17	143	6
HIL-9908	\$2,006	9823	280	1	35.2	17	18.4	1	96.4	10	126	18
HIL-2240	\$1,985	9779	267	14	36.5	16	17.7	15	96.2	16	117	19
HIL-9879NT	\$1,921	9435	276	5	34.3	18	18.1	5	96.5	8	140	8
MA-813NT	\$1,917	9385	277	3	33.9	19	18.2	3	96.6	4	139	9
Average	\$2,064.5	10141.8	271.5		37.38		17.87		96.40		137.5	
LSD 5%	127.4	607.2	9.1		2.1		0.5		0.5		13.5	
CV%	4.9	4.8	2.7		4.4		2.3		0.4		7.8	

\$/A: Payment calculated using early delivery adjustment where necessary, and a per pound payment of \$.165.

Bold: Results are not statistically different from top ranking variety in each column.

Comments: Most trials in 2020 were impacted by a rainfall event shortly after planting in May. Some locations developed crusting which reduced final stands below 150 beets/100' of row. Heavy rain events in May caused some variability in root health and development. Overall, yields were good for trials with harvest dates distributed through the months of September and October. Sugar content and yield are also representative of the 2020 growing season with September trials averaging around 250 lbs RWST, while the October trials averaging 287 lbs RWST. The latest harvested PTS (10/15) trial saw average RWST values in excess of 310 lbs, with root yields over 36 tons/acre. Disease control in all trials remained very good throughout the growing season.

2020 Variety Trial Averages

Average of Six Trials

Farms: Chaffin Farms (Ithaca)
Stephen Kearns (Ontario)
Schuette Farms (Elkton)

Shaffner Brothers (Freeland)
Sylvester Farms (Quanicassee)
DVL Farms (Ruth)

Variety	\$/A	RWSA	RWST	T/A	% Sugar	% CJP
SX-2283	\$1,858	10199	297	34.4	19.6	95.8
HIL-9865	\$1,855	10193	295	34.6	19.4	95.8
SX-1278N	\$1,841	10107	301	33.6	19.8	95.9
C-G675	\$1,836	10085	288	35.1	19.0	95.8
B-1703	\$1,829	10043	286	35.1	18.9	95.8
B-1606N	\$1,827	10034	281	35.8	18.6	95.7
B-188N	\$1,827	10030	285	35.2	18.9	95.8
C-G752NT	\$1,814	9967	285	35.0	18.9	95.8
C-G855	\$1,812	9944	284	35.0	18.8	95.8
SX-1264	\$1,796	9862	295	33.5	19.4	95.9
HIL-2238NT	\$1,775	9748	286	34.2	18.9	95.7
MA-709	\$1,741	9564	290	33.1	19.2	95.8
Average	\$1,818	9981	289	34.6	19.1	95.8
LSD 5%	46.6	258.7	4.1	0.8	0.2	0.1
CV %	3.9	3.9	2.2	3.6	1.9	0.2

Comments: These results are the average of six 2020 Sugarbeet Advancement trials. This year, the spring weather had an impact on the trials. Freezing conditions along with crusting issues necessitated the replanting of three trials, including the Sylvester, DVL, and Wadsworth trials. Shortly after planting, the Chaffin and Shaffner trials experienced a major rain event (5+ inches). This did not have a long lasting impact on the Shaffner trial, as the quality of this trial was excellent, but it did have more of an impact on the Chaffin trial. Throughout the summer, the trials experienced similar weather conditions; generally good, but with periods of dry weather. The DVL trial was more impacted by the dry weather than the others, especially since this field has sandy soil. Generally, the 2020 Sugarbeet Advancement Variety Trials had higher levels of root rot disease than last year. The primary disease was Rhizoctonia root rot, but Aphanomyces and Fusarium root rots were also observed. All Sugarbeet Advancement trials in 2020 had very low leafspot pressure. Sugarbeet cyst nematode was present at four of the trials, with low levels at the Schuette trial, moderate levels at the Sylvester trial, and high levels at both Wadsworth trials. Due to the high level of nematodes present, the Wadsworth trials are not included in this average, and should only be used to compare nematode varieties. Soil types vary for these six trials. The Chaffin and Shaffner trials were on clay loam fields, the DVL trial was on a sandy field, and the remaining trials were on loam fields. The soil types influenced the results. Use this data in conjunction with Michigan Sugar variety/nursery data and seed company information.

\$/A: Gross dollars per acre calculated using \$0.165 per pound of RWSA and the early delivery adjustments.

Bold: Results are not statistically different from top ranking variety in each column.

N.S. – not significant



OVT Emergence

Average of 2 Years, 2019 & 2020

Trial Quality: Good
Locations: 2019 - Deshano, Gerstenberger, Grekowicz, Maurer, Trost, Mininger
 2020 - Grekowicz, Maurer, Mininger, Sylvester, Trost
Plot Size: 2 Rows X 38 ft., 8 reps
Seeding Rate: 2019 - 1.9" seed spacing. 2020 - 3.75" seed spacing

Variety	% Emerge
BTS-1703	64.7
MA-814	63.2
HIL-2238NT	62.3
C-G675	62.0
BTS-1399	61.4
C-G919	61.3
**BTS-1065	61.3
BTS-1941	61.3
C-G943	61.2
**C-G021	61.2
BTS-197N	60.5
C-G932NT	59.8
MA-813NT	59.1
SX-2283	58.6
SX-2295	58.0
SX-RR1275N	57.9
C-G855	57.5
SX-RR1278N	57.5
BTS-1606N	56.7
HIL-2240	56.3
SX-2294	56.3
C-G752NT	56.3
MA-709	55.5
BTS-188N	55.5
SX-2297	54.5
SX-RR1264	54.1
HIL-9879NT	54.1
HIL-9865	53.8
HIL-2332NT	51.5
HIL-9908	50.6
SX-2296N	49.4
Average	57.86
LSD 5%	9.0
CV%	7.6

****C-G021 and BTS-1065** - First year varieties only used 2020 data

Comments: Emergence counts were taken from OVT locations after full emergence to determine % emergence. Conditions for emergence were better in 2019 than in 2020.

2020 Variety Trials Emergence Summary

Early Counts

<i>Trial</i>	Chaffin	Kearns	Schuette	Shaffner	Sylvester	Wadsworth Early	Wadsworth Late	Average
	Gratiot	Ontario	Huron	Midland	Tuscola	Sanilac	Sanilac	
<i>Plant Date</i>	April 20	April 27	April 18	April 20	April 19	April 6	May 7	
<i>Count Days</i>	16	16	15	16	15	25	14	
C-G675	70	135	128	46	55	82	257	111
B-1703	53	85	170	49	35	108	243	110
B-1606N	31	155	149	40	64	65	252	107
C-G855	38	114	158	48	50	59	237	106
B-188N	51	121	111	42	76	62	226	101
C-G752NT	50	123	129	26	31	75	266	100
MA-709	20	116	118	28	53	60	228	89
SX-1278N	11	85	92	32	36	86	250	84
SX-2283	21	75	89	27	33	98	251	84
HIL-9865	24	145	108	38	36	98	182	78
SX-1264	32	122	57	15	23	78	243	74
HIL-2238NT	13	41	73	19	27	103	226	72
Average	35	110	115	34	43	81	238	93
LSD 5%	33.4	42.7	42.7	N.S.	N.S.	N.S.	31.5	16.2
CV %	56.9	23.0	21.9	45.8	68.3	29.2	7.8	24.0

Late Counts

<i>Trial</i>	Chaffin	Kearns	Schuette	Shaffner	Sylvester	Wadsworth Early	Wadsworth Late	Average
<i>Count Days</i>	42	35	45	42	46	63	32	
SX-2283	188	212	241	177	249	174	272	225
C-G752NT	188	232	249	166	239	118	276	224
SX-1278N	186	215	238	176	245	149	269	223
HIL-2238NT	177	237	245	182	235	175	270	222
SX-1264	181	211	233	176	234	161	271	219
B-1703	191	241	246	169	208	155	260	215
C-G675	178	221	223	162	231	123	276	214
HIL-9865	171	215	236	178	217	158	237	208
C-G855	174	190	238	168	195	83	259	207
B-1606N	159	193	239	152	211	97	266	206
B-188N	166	200	226	149	224	91	249	203
MA-709	157	185	231	144	218	108	263	203
Average	176	213	237	167	226	133	264	214
LSD 5%	21.6	21.0	N.S.	N.S.	30.2	32.6	17.5	10.2
CV %	7.2	5.8	4.4	9.8	8.2	14.5	3.9	6.6

Comments: Averages are of 5 trials, and do not include Kearns (different seed treatments were used), DVL Farms (see trial page for explanation), or Wadsworth Early (freezing temperatures impacted stand).

Numbers in bold are not significantly less than the highest emerging variety.

N.S. – not significant

All varieties had the standard seed treatment plus Tachigaren 20. The varieties also contained these additional seed treatments by these companies: Seedex - Tri-Pak; Hilleshog - Vibrance (HIL-2238NT), CruiserMaxx & Vibrance (HIL-9865); Maribo - Vibrance; Crystal - Kabina; Betaseed - Kabina. Kabina is not approved for use in Canada (Kearns).

Root Rot Summary

Fall Count of Dead Beets in 1200 Foot of Row

<i>Trial Location</i>	Chaffin	DVL	Schuette	Shaffner	Sylvester	Average
C-G855	2	22	8	6	11	10
B-1703	18	4	5	14	29	14
B-188N	17	10	13	19	13	14
B-1606N	25	3	15	4	38	17
C-G675	4	32	7	5	50	20
C-G752NT	26	19	41	40	62	38
SX-2283	35	18	84	34	58	46
MA-709	51	4	61	50	91	51
HIL-9865	66	5	102	71	62	61
SX-1264	51	30	86	53	106	65
HIL-2238NT	38	46	111	91	85	74
SX-1278N	78	52	128	69	181	102
AVERAGE	34	20	55	38	65	43
LSD (5%)	20.5	31.1	65.4	38.3	37.7	17.7
CV (%)	35.4	91.1	70.3	59.7	34.0	57.4

Comments: This root rot summary provides the results of the dead beet counts taken from the Sugarbeet Advancement variety trials this fall. During these counts, the number of dead/dying beets in 1200 feet of row is recorded from each plot. The dead beets were likely injured by one of the root diseases which can be found in the growing area, including Rhizoctonia, Aphanomyces, and Fusarium. This year the overall level of disease was higher in the trials than it has been in recent years. Based on our field observations, we believe that Rhizoctonia was the primary disease in most of these trials. While still not as prevalent as other root diseases, we observed Fusarium in a greater number of locations this year than last year. No dead beet count was taken at Kearns. Research has suggested there may be a link between Rhizoctonia root rot and sugarbeet cyst nematodes. For this reason, the Wadsworth trials which had a high level of nematode pressure were not included in this average. See the individual trials for Quadris treatments.

Bold: Results are not statistically different from top ranking variety in each column.

N.S. – not significant

East District Trials





Official Variety Trial

Maurer, Forestville - 2020

Trial Quality: Good

Plant/Harv: Apr 16/Oct 19

Plots: 2 rows X 38 ft., 8 reps

Row Spacing: 22 inches

Seeding Rate: 3.75 inches

Soil Type: Clay Loam

% OM: 3.3 **pH:** 7.1 **CEC:** 16.6

Nutrients: P: Abv Opt K: Abv Opt

Mn: High **B:** Very Low

Added N: 35 lbs. 2x2,
120 lbs. Side-dress

Prev Crop: Wheat

****Cerc Control:** Very Good
8 applications**

Rhizoc Control: Very Good
Quadris IF, 6-8 If

Rainfall: 19.06 inches

Variety	\$/A	RWSA	RWST		Yield		Sugar		CJP		Emerge	
			Lb/T	Rank	T/A	Rank	%	Rank	%	Rank	%	Rank
C-G675	\$2,297	13922	338	10	41.2	1	21.7	10	97.0	9	60.3	3
BTS-1399	\$2,175	13184	327	23	40.3	2	21.1	25	97.0	12	59.6	5
BTS-1703	\$2,158	13077	332	15	39.4	3	21.5	13	96.6	18	62.6	1
BTS-188N	\$2,137	12951	329	19	39.3	4	21.5	14	96.3	26	52.1	22
HIL-2332NT	\$2,130	12906	345	2	37.4	11	21.9	7	97.5	1	55.3	15
SX-2296N	\$2,129	12905	347	1	37.2	14	22.2	1	97.0	6	51.3	24
HIL-9865	\$2,124	12874	337	12	38.2	9	21.5	12	97.3	2	53.2	19
BTS-1606N	\$2,119	12842	328	22	39.1	6	21.4	18	96.3	27	56.7	12
C-G932NT	\$2,115	12819	334	13	38.4	8	21.4	19	97.2	4	58.8	7
BTS-197N	\$2,090	12669	340	6	37.2	13	22.0	6	96.7	17	54.6	17
SX-RR1264	\$2,087	12651	340	7	37.2	12	21.8	9	97.2	5	61.4	2
SX-2283	\$2,086	12645	344	3	36.7	19	22.1	3	97.0	8	46.5	30
BTS-1065	\$2,076	12583	320	28	39.3	5	21.0	27	95.9	29	57.3	10
C-G752NT	\$2,057	12469	325	25	38.4	7	21.2	22	96.2	28	56.0	13
SX-2295	\$2,029	12295	342	5	36.0	24	22.1	2	96.6	19	50.3	25
SX-RR1275N	\$2,013	12202	329	21	37.1	15	21.4	15	96.3	24	55.1	16
MA-709	\$2,013	12199	330	18	37.0	16	21.4	17	96.5	20	51.6	23
SX-RR1278N	\$1,997	12103	329	20	36.7	18	21.2	23	97.0	10	55.8	14
SX-2297	\$1,995	12092	340	8	35.6	26	21.9	8	96.8	16	48.2	27
MA-814	\$1,990	12062	332	16	36.3	22	21.4	16	96.8	15	53.5	18
C-G919	\$1,989	12054	332	14	36.2	23	21.3	21	97.3	3	58.4	8
C-G855	\$1,975	11971	325	24	36.8	17	21.0	28	96.9	13	60.1	4
SX-2294	\$1,972	11951	340	9	35.3	27	22.1	4	96.3	25	36.8	31
C-G021	\$1,928	11685	343	4	34.1	29	22.1	5	96.9	14	58.9	6
C-G943	\$1,917	11620	310	31	37.5	10	20.7	31	95.2	30	57.0	11
HIL-2240	\$1,917	11618	324	26	35.8	25	21.1	24	96.4	23	53.0	20
HIL-2238NT	\$1,915	11609	320	29	36.4	21	20.8	30	96.4	22	52.6	21
HIL-9908	\$1,909	11571	331	17	35.0	28	21.3	20	97.0	7	49.4	26
BTS-1941	\$1,896	11492	315	30	36.5	20	21.1	26	95.1	31	47.4	29
HIL-9879NT	\$1,864	11296	338	11	33.5	30	21.7	11	97.0	11	57.7	9
MA-813NT	\$1,736	10521	322	27	32.8	31	20.9	29	96.5	21	47.5	28
Average	\$2,027.0	12285.1	331.9		37.03		21.46		96.66		54.16	
LSD 5%	142.8	865.2	9.8		2.6		0.5		0.6		8.3	
CV%	7.2	7.2	3.0		7.0		2.4		0.6		15.6	

**** See Cercospora Fungicide Application Page**

\$/A: Payment calculated using early delivery adjustment where necessary, and a per pound payment of \$.165.

Bold: Results are not statistically different from top-ranking variety in each column.

Comments: Trial emerged well and was progressing until a late June/early July dry period. Ample rainfall in August boosted yields. Favorable September/October weather increased sugar yields to very good levels. Disease control in this trial was very good.



Official Variety Trial

Grekowicz, Port Hope - 2020

Trial Quality: Good
Plant/Harv: Apr 20/Oct 8
Plots: 2 rows X 38 ft., 8 reps
Row Spacing: 22 inches
Seeding Rate: 3.75 inches

Soil Type: Sandy Clay Loam
% OM: 3.9 **pH:** 7.7 **CEC:** 14.2
Nutrients: P: Abv Opt K: Abv Opt
Mn: High **B:** Med
Added N: 35 lbs. 2x2, Manure
Prev Crop: Corn

****Cerc Control:** Very Good
 8 applications**
Rhizoc Control: Very Good
 Quadris IF, 6-8 If
Rainfall: 18.44 inches

Variety	\$/A	RWSA	RWST		Yield		Sugar		CJP		Emerge	
			Lb/T	Rank	T/A	Rank	%	Rank	%	Rank	%	Rank
SX-2295	\$2,647	13813	298	1	46.3	2	19.2	1	97.4	10	51.8	24
C-G021	\$2,532	13212	285	10	46.4	1	18.6	8	96.7	27	54.5	16
SX-2297	\$2,514	13117	293	5	44.7	7	18.7	7	97.8	1	50.3	28
HIL-9908	\$2,470	12888	286	8	45.1	3	18.4	10	97.5	6	50.5	27
BTS-188N	\$2,423	12642	282	17	44.9	4	18.2	18	97.4	11	52.3	22
SX-2296N	\$2,419	12622	296	3	42.7	17	19.1	2	97.1	21	51.0	25
C-G932NT	\$2,419	12621	283	13	44.6	8	18.3	15	97.3	13	54.0	18
HIL-2238NT	\$2,416	12609	282	16	44.7	6	18.1	21	97.5	8	53.5	20
SX-RR1278N	\$2,409	12570	281	18	44.8	5	18.1	23	97.5	5	55.4	12
HIL-2332NT	\$2,377	12402	296	4	42.0	22	19.0	4	97.4	9	50.7	26
HIL-9879NT	\$2,367	12350	284	12	43.5	13	18.4	14	97.2	20	55.4	13
SX-2283	\$2,359	12309	286	9	43.0	14	18.4	9	97.3	12	60.1	3
C-G675	\$2,351	12267	279	22	43.9	10	18.0	24	97.2	19	62.1	1
HIL-9865	\$2,349	12260	293	6	41.9	24	18.8	5	97.3	15	56.6	9
SX-2294	\$2,341	12219	291	7	41.9	23	18.8	6	97.3	17	55.5	11
SX-RR1264	\$2,336	12191	296	2	41.2	28	19.0	3	97.5	4	61.5	2
MA-814	\$2,333	12172	277	25	43.9	9	17.8	28	97.5	3	55.2	14
BTS-1399	\$2,311	12057	276	26	43.7	11	17.8	29	97.3	16	59.6	4
SX-RR1275N	\$2,302	12013	284	11	42.3	20	18.3	16	97.5	7	53.5	19
HIL-2240	\$2,297	11988	275	27	43.6	12	18.2	19	96.2	30	49.9	30
C-G919	\$2,278	11890	280	21	42.5	18	18.1	22	97.3	14	54.4	17
C-G855	\$2,278	11889	277	24	42.9	15	17.9	26	97.3	18	59.5	5
MA-709	\$2,253	11755	283	14	41.5	26	18.4	11	96.9	24	49.3	31
MA-813NT	\$2,246	11720	274	29	42.8	16	17.6	31	97.7	2	49.9	29
C-G943	\$2,231	11640	283	15	41.1	29	18.4	12	96.9	23	57.0	7
BTS-1606N	\$2,226	11615	275	28	42.3	21	17.9	25	96.9	25	57.8	6
BTS-1703	\$2,225	11613	281	19	41.4	27	18.2	17	97.0	22	56.0	10
C-G752NT	\$2,220	11587	278	23	41.6	25	18.2	20	96.8	26	55.0	15
BTS-1065	\$2,183	11392	268	31	42.4	19	17.8	30	96.0	31	56.9	8
BTS-197N	\$2,179	11373	280	20	40.5	31	18.4	13	96.5	28	52.3	23
BTS-1941	\$2,123	11078	272	30	40.7	30	17.9	27	96.4	29	53.3	21
Average	\$2,335.9	12189.5	283.0		43.05		18.32		97.15		54.66	
LSD 5%	232.1	1211.4	10.7		3.7		0.6		0.8		6.8	
CV%	10.1	10.1	3.8		8.8		3.3		0.8		12.6	

**** See Cercospora Fungicide Application Page**

\$/A: Payment calculated using early delivery adjustment where necessary, and a per pound payment of \$.165.

Bold: Results are not statistically different from top-ranking variety in each column.

Comments: Trial experienced favorable growing conditions for most of the year. It was slightly dry in July. Good stands and favorable weather produced very good root and sugar yields. Disease control was very good.



Official Variety Trial

Gerstenberger, Sandusky - 2020

Trial Quality: Fair

Plant/Harv: Apr 17/Sep 16

Plots: 2 rows X 38 ft., 8 reps

Row Spacing: 22 inches

Seeding Rate: 3.75 inches

Soil Type: Clay Loam

% OM: 3.3 **pH:** 5.8 **CEC:** 14.3

Nutrients: P: Abv Opt K: Abv Opt

Mn: High **B:** Low

Added N: 35 lbs. 2x2, 120 lbs. PPI

Prev Crop: Alfalfa

****Cerc Control:** Very Good

7 applications**

Rhizoc Control: Very Good

Quadris IF, 6-8 If

Rainfall: 21.16 inches

Variety	\$/A	RWSA	RWST		Yield		Sugar		CJP		Emerge	
			Lb/T	Rank	T/A	Rank	%	Rank	%	Rank	%	Rank
SX-RR1264	\$2,412	9511	227	16	41.9	1	15.1	23	96.3	2	56.5	1
C-G021	\$2,261	8914	237	4	37.5	9	16.0	3	95.6	11	55.5	2
SX-RR1275N	\$2,204	8688	224	18	38.6	4	15.2	21	95.6	10	51.8	8
SX-2296N	\$2,202	8681	227	12	38.1	5	15.4	15	95.6	12	53.3	6
BTS-1399	\$2,187	8622	217	26	39.8	2	14.7	31	95.7	8	49.5	16
BTS-1941	\$2,174	8572	219	25	39.2	3	15.3	18	94.1	30	53.6	5
BTS-188N	\$2,168	8548	224	21	38.1	7	15.4	14	94.8	23	44.1	28
MA-814	\$2,148	8468	231	8	36.7	14	15.7	7	95.4	14	51.1	11
MA-709	\$2,138	8428	232	6	36.3	18	15.9	5	95.0	19	44.6	26
HIL-9908	\$2,134	8412	232	7	36.2	19	15.6	8	95.8	6	48.7	19
C-G932NT	\$2,126	8382	227	10	36.8	12	15.6	9	94.8	22	46.4	24
C-G675	\$2,116	8344	220	24	37.9	8	15.2	22	94.7	25	49.9	14
HIL-9865	\$2,112	8327	224	22	37.2	10	15.1	25	95.7	9	55.2	3
HIL-2238NT	\$2,102	8288	227	11	36.4	15	15.5	11	95.1	18	51.5	9
BTS-197N	\$2,100	8278	224	20	37.0	11	15.4	13	94.7	26	49.5	17
HIL-2240	\$2,098	8270	237	5	34.9	23	16.3	1	94.5	28	43.1	29
SX-2283	\$2,087	8227	228	9	36.1	21	15.4	17	95.8	5	46.9	23
SX-RR1278N	\$2,073	8172	224	19	36.3	17	15.3	19	95.3	15	51.0	12
BTS-1065	\$2,061	8124	213	31	38.1	6	15.0	26	93.9	31	54.7	4
C-G943	\$2,050	8082	227	15	35.6	22	15.6	10	94.7	24	48.1	20
SX-2297	\$2,022	7972	245	1	32.5	29	16.2	2	96.3	1	50.4	13
C-G752NT	\$2,018	7955	220	23	36.2	20	15.1	24	94.8	20	49.7	15
BTS-1606N	\$1,994	7863	214	30	36.7	13	14.9	27	94.2	29	47.5	22
SX-2295	\$1,980	7805	237	3	32.8	28	15.9	6	96.1	4	42.0	30
C-G855	\$1,978	7797	214	29	36.4	16	14.8	29	94.8	21	49.2	18
HIL-2332NT	\$1,973	7778	239	2	32.5	30	15.9	4	96.2	3	47.7	21
SX-2294	\$1,971	7771	227	14	34.2	24	15.4	16	95.5	13	40.6	31
C-G919	\$1,904	7507	226	17	33.1	26	15.3	20	95.7	7	51.3	10
HIL-9879NT	\$1,887	7440	227	13	32.8	27	15.5	12	95.2	17	51.9	7
BTS-1703	\$1,866	7356	215	28	34.2	25	14.9	28	94.6	27	46.2	25
MA-813NT	\$1,762	6949	216	27	32.3	31	14.7	30	95.3	16	44.3	27
Average	\$2,074.4	8178.3	225.8		36.21		15.40		95.20		49.22	
LSD 5%	189.3	746.1	9.6		2.9		0.6		0.7		7.2	
CV%	9.3	9.3	4.3		8.0		3.6		0.8		14.8	

**** See Cercospora Fungicide Application Page**

\$/A: Payment calculated using early delivery adjustment where necessary, and a per pound payment of \$.165.

Bold: Results are not statistically different from top-ranking variety in each column.

Comments: Trial emerged slowly and had crusting issues. Crust-busting was performed with mixed results. Final stands ranged from 130-180 beets/100' of row. High levels of fertility promoted season long growth but appeared to reduce sugar content and quality. Due to inconsistent stand issues, this trial was not used for variety approval.



Plant To Stand

Grekowicz, Port Hope - 2020

Trial Quality: Good

Plant/Harv: Apr 20/Oct 9

Plots: 6 rows X 38 ft., 4 reps

Row Spacing: 22 inches

Seeding Rate: 4.5 inches

Soil Type: Sandy Clay Loam

% OM: 4.0 **pH:** 7.6 **CEC:** 14.2

Nutrients: **P:** Abv Opt **K:** Abv Opt

Mn: High **B:** Low

Added N: 35 lbs. 2x2, Manure

Prev Crop: Corn

****Cerc Control:** Very Good

8 applications**

Rhizoc Control: Very Good

Quadris IF, 6-8 If

Rainfall: 18.44 inches

Variety	\$/A	RWSA	RWST		Yield		Sugar		CJP		Beets/100 ft	
			Lb/T	Rank	T/A	Rank	%	Rank	%	Rank	Act.	Rank
BTS-1606N	\$2,353	12418	261	16	47.7	1	17.6	15	95.2	19	165	3
C-G675	\$2,348	12391	261	15	47.5	2	17.6	16	95.3	18	146	10
BTS-188N	\$2,327	12280	262	14	47.0	3	17.6	14	95.4	13	134	17
HIL-9908	\$2,318	12231	284	1	43.1	13	18.9	1	95.6	6	136	16
SX-RR1264	\$2,287	12068	276	5	43.7	9	18.4	7	95.7	2	164	4
SX-2283	\$2,279	12026	279	3	43.2	12	18.6	2	95.6	3	143	13
C-G855	\$2,275	12006	264	13	45.5	5	17.8	13	95.3	14	156	5
HIL-9865	\$2,263	11941	276	6	43.2	11	18.4	6	95.6	4	151	6
HIL-2238NT	\$2,262	11935	265	12	45.1	7	17.8	12	95.3	15	148	8
MA-814	\$2,221	11722	271	9	43.3	10	18.1	9	95.5	10	170	1
HIL-2240	\$2,207	11649	266	11	43.9	8	17.9	11	95.3	17	124	19
MA-709	\$2,207	11646	272	8	42.9	14	18.2	8	95.5	9	139	15
BTS-1703	\$2,182	11517	253	17	45.5	4	17.0	17	95.6	5	168	2
SX-RR1278N	\$2,134	11259	267	10	42.1	16	17.9	10	95.5	8	128	18
BTS-1399	\$2,129	11234	249	19	45.2	6	16.8	19	95.3	16	146	11
SX-RR1275N	\$2,095	11057	275	7	40.3	17	18.4	5	95.4	12	143	12
HIL-9879NT	\$2,069	10918	279	2	39.1	18	18.5	3	95.8	1	147	9
MA-813NT	\$2,046	10794	277	4	38.9	19	18.5	4	95.6	7	150	7
C-G752NT	\$2,031	10718	251	18	42.7	15	16.9	18	95.4	11	139	14
Average	\$2,212.3	11674.3	267.7		43.68		17.94		95.46		147.2	
LSD 5%	147.2	776.6	11.7		2.0		0.7		0.3		27.9	
CV %	5.8	5.8	3.8		4.1		3.4		0.3		16.5	

**** See Cercospora Fungicide Application Page**

\$/A: Payment calculated using early delivery adjustment where necessary, and a per pound payment of \$.165.

Bold: Results are not statistically different from top-ranking variety in each column.

Comments: This trial was planted into good soil conditions, although emergence was slightly less than desired.

A heavy rainfall event occurred on May 18th, but it did not appear to negatively affect this trial. Very dry conditions followed during the months of June and July, with rainfall totals around one inch for each of those months. During the month of August, rainfall returned with an accumulation of more than 6 inches. Favorable growing conditions followed until harvest on October 9. Disease control in this trial was very good. Very good root yields and respectable sugar content were observed during harvest. High fertility and dry summer conditions likely led to slightly below average RWST.



Plant To Stand

Gerstenberger, Sandusky - 2020

Trial Quality: Fair

Plant/Harv: Apr 17/Sep 16

Plots: 6 rows X 38 ft., 4 reps

Row Spacing: 22 inches

Seeding Rate: 4.5 inches

Soil Type: Clay Loam

% OM: 3.3 **pH:** 5.8 **CEC:** 14.3

Nutrients: P: Abv Opt K: Abv Opt

Mn: High **B:** Low

Added N: 35 lbs. 2x2, 120 lbs. PPI

Prev Crop: Alfalfa

****Cerc Control:** Very Good

7 applications**

Rhizoc Control: Very Good

Quadris IF, 6-8 lf

Rainfall: 21.16 inches

Variety	\$/A	RWSA	RWST		Yield		Sugar		CJP		Beets/100 ft	
			Lb/T	Rank	T/A	Rank	%	Rank	%	Rank	Act.	Rank
C-G675	\$2,238	8822	236	2	37.3	2	15.5	4	97.1	2	124	1
BTS-1606N	\$2,182	8601	229	6	37.5	1	15.3	5	96.1	12	115	4
MA-709	\$2,103	8290	235	3	35.3	5	15.8	1	95.9	14	89	18
C-G752NT	\$2,043	8057	222	14	36.4	4	14.9	15	95.9	13	107	12
SX-2283	\$2,013	7938	225	13	35.2	6	15.5	3	94.7	19	88	19
SX-RR1264	\$2,012	7932	215	17	36.9	3	14.3	17	96.7	5	116	3
BTS-188N	\$1,964	7743	229	5	33.6	9	15.2	11	96.6	6	95	17
HIL-9865	\$1,946	7674	230	4	33.4	11	15.3	6	96.4	8	102	14
SX-RR1275N	\$1,943	7659	226	11	33.8	7	15.1	13	96.2	11	105	13
MA-813NT	\$1,930	7608	238	1	32.0	15	15.5	2	97.4	1	110	8
HIL-2238NT	\$1,926	7593	226	10	33.5	10	15.3	7	95.7	17	97	16
BTS-1703	\$1,863	7346	225	12	32.5	14	15.0	14	96.3	9	107	11
C-G855	\$1,856	7318	222	15	33.1	12	15.1	12	95.2	18	109	9
HIL-2240	\$1,830	7217	228	7	31.7	16	15.3	10	96.2	10	99	15
MA-814	\$1,805	7117	219	16	32.5	13	14.5	16	96.9	3	119	2
BTS-1399	\$1,805	7116	210	18	33.7	8	14.0	19	96.8	4	107	10
HIL-9879NT	\$1,785	7039	227	8	31.1	18	15.3	8	95.9	15	114	5
HIL-9908	\$1,767	6965	226	9	30.8	19	15.3	9	95.8	16	110	7
SX-RR1278N	\$1,688	6656	210	19	31.6	17	14.1	18	96.5	7	113	6
Average	\$1,931.5	7615.2	225.2		33.78		15.07		96.23		106.6	
LSD 5%	257.7	1016.1	14.9		3.8		0.9		1.7		23.3	
CV %	9.4	9.4	4.7		7.9		4.2		1.2		15.5	

**** See Cercospora Fungicide Application Page**

\$/A: Payment calculated using early delivery adjustment where necessary, and a per pound payment of \$.165.

Bold: Results are not statistically different from top-ranking variety in each column.

Comments: This trial had less than desirable stands due to crusting issues at emergence. Crust-busting was performed with varying results. Favorable in season growing conditions, combined with very good disease control, allowed for respectable yields when harvested during mid-September. The thinner stands, earlier harvest, and high fertility levels contributed to a lower RWST.

Variety Trial

Stephen Kearns, Ontario - 2020

Trial Quality: Excellent
Planted: April 27
Harv/Samp: Oct 14 / Oct 14
Plot Size: 3 reps
Row Spacing: 30 inch
Seeding Rate: 54,000

Soil Type: Loam
Fertilizer: Fall: MAP + Potash;
PPI: 36 gal of 28%
and 6 gal of ATS
Prev Crop: Wheat w/ clover
Weather: Very Good weather

Cerc Control: Very Good control: See below for materials
Rhiz Control: Very Good control: Quadris I.F. (7 oz)
Other Pests: None

Variety	\$/A	RWSA	RWST	T/A	% Sugar	% CJP	Populations 100 Ft. of Row	
							16 Day	35 Day
SX-2283	\$2,276	12661	297	42.7	19.6	96.1	75	212
C-G855	\$2,255	12544	290	43.3	19.1	96.0	114	190
HIL-9865	\$2,242	12470	295	42.3	19.4	96.0	145	215
SX-1278N	\$2,232	12417	302	41.1	19.9	96.1	85	215
C-G675	\$2,207	12275	287	42.7	19.0	95.9	135	221
B-1703	\$2,189	12177	293	41.5	19.3	96.1	85	241
C-G752NT	\$2,188	12172	283	42.9	18.8	96.1	123	232
SX-1264	\$2,175	12100	292	41.5	19.3	95.9	122	211
HIL-2238NT	\$2,150	11957	279	42.9	18.5	96.0	41	237
MA-709	\$2,128	11838	285	41.6	18.8	96.0	116	185
B-188N	\$2,124	11816	283	41.8	18.7	95.9	121	200
B-1606N	\$2,120	11792	279	42.3	18.5	96.0	155	193
Average	\$2,191	12185	289	42.2	19.1	96.0	110	213
LSD 5%	N.S.	N.S.	9.5	N.S.	0.6	N.S.	42.7	21.0
CV %	3.8	3.8	1.9	3.2	1.8	0.1	23.0	5.8

Comments: Due to travel restrictions implemented in response to COVID-19, the Sugarbeet Advancement team was unable to travel to the Kearns Variety Trial in 2020. The trial was able to continue because Wayne Martin, from Michigan Sugar Company, volunteered to manage it this year. This was an excellent quality trial, with no major issues or diseases. The leaf spot program was as follows: 6/28 Kocide, 7/10 Manzate, 7/21 Proline, 8/5 Manzate, 8/18 Cevya + Manzate, 9/4 Proline, 9/20 Manzate + Kocide.

\$/A: Gross dollars per acre calculated using \$0.165 per pound of RWSA and the early delivery adjustments.

Bold: Results are not statistically different from top ranking variety in each column.

N.S. – not significant

Variety Trial

DVL Farms, Ruth - 2020

Trial Quality: Fair **Soil Type:** Loamy sand **Cerc Control:** Very Good control: See below for materials
Planted: April 4 and May 3 **Fertilizer:** 2x2: dry blend of N,P, K, S, Mn & B; Streamer: 45 gal of 28% **Rhizoc Control:** I.F.: 5 oz w/ Mustang on 1st planting, none on 2nd. 8-10 leaf: 10 oz
Harv/Samp: Oct 30 / Oct 19
Plot Size: 3 reps
Row Spacing: 28 inch **Prev Crop:** Dry beans / wheat cover crop
Seeding Rate: See comments **Weather:** Very dry weather during the end of June and late July / early August **Other Pests:** None

Variety	\$/A	RWSA	RWST	T/A	% Sugar	% CJP	Populations 100 Ft. of Row		Dead Beets / 1200 Ft
							—	29 Day	
HIL-9865	\$1,438	8718	303	28.8	19.8	96.2	—	258	5
B-1703	\$1,424	8629	294	29.4	19.3	96.2	—	292	4
C-G675	\$1,410	8543	302	28.3	19.7	96.2	—	328	32
B-1606N	\$1,406	8519	289	29.5	19.0	96.2	—	289	3
C-G752NT	\$1,392	8435	294	28.7	19.3	96.2	—	305	19
SX-2283	\$1,388	8410	303	27.8	19.9	96.3	—	336	18
B-188N	\$1,376	8337	297	28.1	19.5	96.3	—	264	10
SX-1264	\$1,372	8316	298	27.9	19.6	96.4	—	310	30
SX-1278N	\$1,344	8146	304	26.8	19.9	96.3	—	347	52
MA-709	\$1,339	8118	303	26.8	19.9	96.3	—	311	4
HIL-2238NT	\$1,299	7875	298	26.4	19.6	96.2	—	313	46
C-G855	\$1,281	7762	288	27.0	19.0	96.2	—	288	22
Average	\$1,372	8317	298	28.0	19.5	96.3	—	303	20
LSD 5%	N.S.	N.S.	6.7	1.8	0.4	N.S.	—	—	31.1
CV %	4.3	4.3	1.3	3.9	1.1	0.1	—	—	91.1

Comments: The DVL Variety Trail was in a field with sandy soil that had dry beans the year before, with a wheat cover crop planted that fall to manage the sand. The cover crop was killed with roundup a few weeks after planting. The trial was planted into a stale seed bed on April 4th, with a seeding rate of 52,000. It experienced several nights of freezing temperatures the weeks after planting. These cold temperatures reduced emergence to the point where the grower decided to replant the trial, which we did on May 3rd. The seeding rate during the second planting was 48,000. In order to preserve the cover crop and reduce wind erosion, the field was not worked before replanting. Several beets from the first planting survived the replanting, so there were beets from both planting times present in the trial. This dramatically increased the population of this trial, to an average of 303 beets in 100 feet of row as opposed to an average of 214 in the other trials. Consequently, statistics were not done on the emergence data from this trial, nor was this trial included in the emergence averages.

This field was dry throughout the summer, particularly during the end of June, and again during the end of July and beginning of August. Due to the sandy nature of the soil here, this trial was impacted to a greater extent by the dry weather than the other trials. In spite of the dry weather, the beets remained fairly healthy. Disease levels in this trial were very low for root and foliar diseases. The leaf spot program was as follows: 1. Proline, 2. Flint Extra + boron, 3. Inspire XT, 4. Penncozeb + boron, 5. Eminent. All applications included Penncozeb.

\$/A: Gross dollars per acre calculated using \$0.165 per pound of RWSA.

Bold: Results are not statistically different from top ranking variety in each column.

N.S. – not significant

Variety Trial - Early Planting

Wadsworth Farms Inc., Sandusky - 2020

Trial Quality: Good	Soil Type: Loam	Cerc Control: Excellent control: See below for materials
Planted: April 6	Fertilizer: Fall: 474# V.R. potash; 2x2: 30-#-46#-9#-31#S- 4#Mn-1#B-1Zn; PPI: 135# N by urea/ESN	Rhizoc Control: Fair control: Quadris I.F: 6 oz; Foliar: 14 oz
Harv/Samp: Nov 3 / Oct 13	Prev Crop: Dry beans	Other Pests: Sugarbeet cyst nematode, Alternaria leaf spot
Plot Size: 3 reps	Weather: Generally good, periods of dry weather in summer	
Row Spacing: 27.56 inches		
Seeding Rate: 57,000		

Variety	\$/A	RWSA	RWST	T/A	% Sugar	% CJP	Populations 100 Ft. of Row		Dead Beets / 1200 Ft
							25 Day	63 Day	
SX-1278N	\$1,511	9161	289	31.7	19.0	96.2	86	149	138
HIL-2238NT	\$1,435	8699	281	31.0	18.4	96.0	103	175	120
B-1606N	\$1,396	8462	271	31.2	18.0	96.3	65	97	9
C-G752NT	\$1,370	8304	256	32.3	17.1	95.9	75	118	42
B-188N	\$1,327	8045	267	30.1	17.7	96.1	62	91	18
C-G675	\$1,159	7025	278	25.3	18.2	96.0	82	123	25
B-1703	\$1,100	6665	271	24.6	17.9	96.3	108	155	51
SX-2283	\$1,077	6529	284	22.9	18.7	96.4	98	174	262
SX-1264	\$1,053	6384	275	23.2	18.0	96.1	78	161	242
C-G855	\$1,051	6371	262	24.3	17.4	95.9	59	83	6
HIL-9865	\$950	5757	276	20.9	18.2	96.5	98	158	101
MA-709	\$911	5521	286	19.4	18.8	96.0	60	108	76
Average	\$1,195	7243	275	26.4	18.1	96.1	81	133	91
LSD 5%	197.9	1199.5	10.2	4.1	0.6	N.S.	N.S.	32.6	101.9
CV %	9.8	9.8	2.3	9.1	1.9	0.3	29.2	14.5	66.7

Comments: This year, the Wadsworth location had 2 variety trials next to each other. Wadsworth Early Planting was planted on April 6th and is the original trial at this location. During the second week after planting, this location experienced several nights of freezing temperatures. The field also had crusting issues at the time when beets were emerging. The combination of these factors led to lower than ideal emergence. The grower decided to replant the field on May 7th, but instead of working up the old trial (Wadsworth Early Planting), he left it intact and planted a new trial (Wadsworth Late Planting) adjacent to it. Aside from the planting date and emergence, both Wadsworth trials experienced very similar agronomic pressures. The most influential of these was a high population of sugarbeet cyst nematode, which influenced this trial to such a degree that a visible difference was observed between the nematode tolerant and susceptible varieties. This trial is not included in the yield averages page, and should only be used to evaluate the nematode varieties. A high level of root disease was present at this trial. The primary root disease was Rhizoctonia root rot. Alternaria leaf spot was present throughout the field, but did not reach the economic threshold. The level of Cercospora leaf spot was very low. The leaf spot program was as follows: 6/25 EBDC only, 7/8 Delaro + Proline, 7/24 Tin + Topsin, 8/6 Proline, 8/23 Tin, 9/11 Provysol + Badge. All applications included an EBDC (except the final) and Masterlock.

\$/A: Gross dollars per acre calculated using \$0.165 per pound of RWSA.

Bold: Results are not statistically different from top ranking variety in each column.

N.S. – not significant

Variety Trial - Late Planting

Wadsworth Farms Inc., Sandusky - 2020

Trial Quality: Very Good	Soil Type: Loam	Cerc Control: Excellent control: See below for materials
Planted: May 7	Fertilizer: Fall: 474# V.R. potash; 2x2: 1st plus 20#-16#-0-21#S-.4#Zn; PPI: 135# N by urea/ESN	
Harv/Samp: Nov 3 / Oct 13		Rhizoc Control: Fair/Poor control: Quadris I.F: 6 oz; Foliar: 14 oz
Plot Size: 3 reps	Prev Crop: Dry beans	
Row Spacing: 27.56 inch	Weather: Generally good, periods of dry weather in summer	Other Pests: Sugarbeet cyst nematode, Alternaria leaf spot
Seeding Rate: 57,000		

Variety	\$/A	RWSA	RWST	T/A	% Sugar	% CJP	Populations 100 Ft. of Row		Dead Beets / 1200 Ft
							21 Day	32 Day	
B-188N	\$1,615	9789	284	34.5	18.7	96.4	226	249	27
C-G752NT	\$1,557	9435	278	33.9	18.4	96.4	266	276	102
SX-1278N	\$1,451	8791	290	30.3	19.0	96.4	250	269	236
B-1606N	\$1,444	8749	272	32.2	18.0	96.4	252	266	21
HIL-2238NT	\$1,355	8211	276	29.8	18.2	96.3	226	270	167
B-1703	\$1,082	6555	270	24.3	17.8	96.3	243	260	41
C-G675	\$1,051	6372	267	23.9	17.7	96.0	257	276	52
C-G855	\$1,034	6267	268	23.3	17.7	96.4	237	259	4
MA-709	\$999	6055	281	21.5	18.5	96.4	228	263	116
SX-1264	\$909	5508	265	20.7	17.5	96.4	243	271	277
HIL-9865	\$829	5027	263	19.1	17.5	96.6	182	237	182
SX-2283	\$811	4917	264	18.7	17.5	96.5	251	272	628
Average	\$1,178	7140	273	26.0	18.0	96.4	238	264	154
LSD 5%	116.6	706.7	7.1	2.4	0.4	N.S.	31.5	17.5	221.9
CV %	5.8	5.8	1.5	5.5	1.2	0.2	7.8	3.9	84.9

Comments: In contrast to Wadsworth Early Planting, conditions were nearly perfect for emergence the two weeks after planting of Wadsworth Late Planting. Consequently, this trial had the best emergence of all our trials this year, with an average early stand count of 238 beets in 100 feet, and an average final stand count of 264 beets in 100 feet. Aside from the planting date and emergence, both Wadsworth trials experienced very similar agronomic pressures. The most influential of these was a high population of sugarbeet cyst nematode, which influenced this trial to such a degree that a visible difference was observed between the nematode tolerant and susceptible varieties. This trial is not included in the yield averages page, and should only be used to evaluate the nematode varieties. A high level of root disease was present at this trial. The primary root disease is Rhizoctonia root rot. Alternaria leaf spot was present throughout the field, but did not reach the economic threshold. The level of Cercospora leaf spot was very low. The leaf spot program was as follows: 6/25 EBDC only, 7/8 Delaro + Proline, 7/24 Tin + Topsin, 8/6 Proline, 8/23 Tin, 9/11 Provysol + Badge. All applications included an EBDC (except the final) and Masterlock.

\$/A: Gross dollars per acre calculated using \$0.165 per pound of RWSA.

Bold: Results are not statistically different from top ranking variety in each column.

N.S. – not significant

Central District Trials





Official Variety Trial

Trost, Pigeon - 2020

Trial Quality: Good

Plant/Harv: Apr 28/Oct 29

Plots: 2 rows X 38 ft., 8 reps

Row Spacing: 22 inches

Seeding Rate: 3.75 inches

Soil Type: Clay Loam

% OM: 2.6 **pH:** 6.7 **CEC:** 16.1

Nutrients: **P:** Abv Opt **K:** Abv Opt

Mn: High **B:** Med

Added N: 35 lbs. 2x2, Manure,
80 lbs. Side-dress

Prev Crop: Corn

****Cerc Control:** Very Good
8 applications**

Rhizoc Control: Very Good
Quadris IF, 6-8 If

Rainfall: 19.42 inches

Variety	\$/A	RWSA	RWST		Yield		Sugar		CJP		Emerge	
			Lb/T	Rank	T/A	Rank	%	Rank	%	Rank	%	Rank
C-G675	\$2,572	15590	336	11	46.4	1	20.7	11	97.6	7	51.8	4
C-G021	\$2,454	14870	334	12	44.5	5	20.8	10	97.3	18	48.5	10
SX-2296N	\$2,427	14712	353	1	41.7	21	21.6	1	98.0	1	40.9	28
BTS-1399	\$2,419	14661	325	25	45.2	2	20.2	25	97.2	21	49.2	8
SX-RR1264	\$2,406	14581	336	8	43.3	10	20.7	12	97.7	5	50.6	6
BTS-1065	\$2,385	14457	331	19	43.7	7	20.7	14	97.0	26	50.7	5
MA-814	\$2,377	14408	333	14	43.3	12	20.6	18	97.6	8	49.5	7
HIL-2238NT	\$2,368	14354	333	15	43.2	14	20.6	16	97.5	11	44.2	20
SX-2294	\$2,356	14277	330	20	43.3	13	20.5	20	97.3	17	37.0	31
SX-RR1275N	\$2,353	14259	338	5	42.3	19	20.9	5	97.6	6	45.8	17
C-G752NT	\$2,345	14213	318	28	44.7	4	20.1	28	96.5	28	47.8	11
SX-RR1278N	\$2,344	14208	328	21	43.3	11	20.5	21	97.2	20	42.8	26
BTS-1606N	\$2,338	14168	317	29	44.7	3	20.0	29	96.6	27	46.3	16
HIL-2332NT	\$2,332	14136	346	4	40.9	23	21.4	2	97.5	12	44.0	21
C-G932NT	\$2,328	14112	326	23	43.3	9	20.4	23	97.0	25	48.6	9
HIL-9865	\$2,319	14054	334	13	42.2	20	20.7	15	97.5	14	45.3	18
BTS-1703	\$2,314	14023	332	16	42.3	18	20.6	17	97.4	15	43.8	22
C-G919	\$2,295	13906	326	22	42.6	16	20.2	26	97.5	10	51.9	3
BTS-188N	\$2,288	13869	324	26	42.9	15	20.4	22	96.5	29	40.3	29
BTS-197N	\$2,271	13764	325	24	42.3	17	20.3	24	97.1	23	52.3	2
SX-2295	\$2,270	13757	347	2	39.6	26	21.3	3	98.0	2	42.8	25
SX-2283	\$2,264	13723	336	9	40.8	24	20.8	6	97.4	16	44.8	19
C-G943	\$2,264	13721	310	31	44.2	6	19.9	31	95.8	31	53.9	1
BTS-1941	\$2,233	13531	311	30	43.6	8	19.9	30	95.9	30	47.6	13
C-G855	\$2,215	13423	323	27	41.5	22	20.2	27	97.2	22	47.8	12
SX-2297	\$2,212	13408	346	3	38.8	28	21.3	4	97.7	4	43.7	23
MA-709	\$2,194	13296	331	18	40.3	25	20.6	19	97.3	19	43.7	24
HIL-2240	\$2,153	13047	332	17	39.4	27	20.7	13	97.1	24	41.6	27
HIL-9879NT	\$2,102	12742	336	7	37.9	29	20.8	7	97.5	13	46.5	15
MA-813NT	\$2,064	12511	337	6	37.1	30	20.8	8	97.7	3	47.4	14
HIL-9908	\$2,016	12220	336	10	36.4	31	20.8	9	97.5	9	39.2	30
Average	\$2,299.4	13935.5	331		42.1		20.61		97.24		46.14	
LSD 5%	178.7	1083.0	11.8		3.2		0.6		0.7		8.7	
CV%	7.9	7.9	3.6		7.8		2.9		0.7		19.0	

**** See Cercospora Fungicide Application Page**

\$/A: Payment calculated using early delivery adjustment where necessary, and a per pound payment of \$.165.

Bold: Results are not statistically different from top-ranking variety in each column.

Comments: This was the final OVT planted in 2020 on April 28. Stands ranged from 120-170 beets/100' of row. Several rainfalls after planting contributed to crusting conditions that slightly reduced stands in this trial. A small amount of hail damage was observed from a June 10 storm, but it did not have a lasting effect. Root and sugar yield in this trial were very good and indicative of the full season growth. Disease control in this trial was very good.



Official Variety Trial

SVREC, Richville - 2020

Trial Quality: Fair/Poor
Plant/Harv: Apr 24/Sep 22
Plots: 2 rows X 38 ft., 8 reps
Row Spacing: 22 inches
Seeding Rate: 3.75 inches

Soil Type: Clay Loam
% OM: 2.8 **pH:** 7.4 **CEC:** 17.5
Nutrients: P: Opt K: Opt
Mn: High **B:** Low
Added N: 35 lbs. 2x2, 120 lbs. PPI
Prev Crop: Corn

****Cerc Control:** Very Good
 7 applications**
Rhizoc Control: Fair
 Quadris IF, 6-8 lf
Rainfall: 18.74 inches

Variety	\$/A	RWSA	RWST		Yield		Sugar		CJP		Emerge	
			Lb/T	Rank	T/A	Rank	%	Rank	%	Rank	%	Rank
BTS-1065	\$1,949	8332	266	12	31.3	2	18.0	12	95.0	10	50.1	11
C-G675	\$1,902	8131	255	26	31.8	1	17.4	26	94.8	24	51.6	7
SX-2294	\$1,881	8038	274	4	29.3	8	18.5	4	95.0	9	49.0	14
C-G943	\$1,853	7922	257	24	30.8	3	17.5	23	94.9	20	52.5	5
BTS-1703	\$1,839	7863	258	22	30.4	5	17.6	21	94.7	29	58.3	2
HIL-2238NT	\$1,838	7857	257	23	30.5	4	17.5	24	94.9	15	50.9	8
C-G932NT	\$1,835	7842	261	17	30.1	6	17.7	18	94.9	18	52.4	6
SX-2295	\$1,830	7824	273	6	28.6	10	18.4	6	95.1	2	44.1	24
BTS-1941	\$1,797	7682	255	25	30.0	7	17.4	25	94.8	25	49.1	13
HIL-2332NT	\$1,774	7583	271	8	28.0	12	18.3	9	95.1	3	36.0	31
SX-RR1264	\$1,761	7528	271	9	27.8	13	18.3	8	95.0	11	46.1	20
C-G021	\$1,752	7491	265	13	28.3	11	17.9	13	95.1	5	56.4	3
HIL-9865	\$1,683	7192	274	3	26.2	17	18.6	3	94.9	17	47.0	16
MA-709	\$1,676	7165	264	14	27.2	14	17.8	16	95.1	4	41.9	27
SX-2296N	\$1,676	7163	279	1	25.7	23	18.8	1	94.9	13	46.2	19
BTS-1399	\$1,666	7122	248	29	28.7	9	17.0	29	94.8	27	50.8	10
C-G752NT	\$1,598	6832	260	19	26.3	15	17.6	20	95.0	8	50.9	9
SX-2297	\$1,594	6813	277	2	24.6	25	18.6	2	95.1	6	44.9	22
SX-RR1275N	\$1,579	6750	259	20	26.0	18	17.6	19	94.9	16	47.1	15
C-G919	\$1,568	6702	260	18	25.7	22	17.7	17	94.8	26	60.9	1
BTS-188N	\$1,544	6600	255	27	25.9	21	17.3	27	94.8	23	40.8	29
HIL-9879NT	\$1,541	6588	268	11	24.6	26	18.1	10	94.9	19	53.9	4
SX-RR1278N	\$1,536	6566	253	28	25.9	20	17.3	28	94.7	30	46.4	18
C-G855	\$1,527	6526	248	30	26.3	16	16.9	30	94.9	21	43.2	25
BTS-197N	\$1,521	6503	259	21	25.2	24	17.5	22	95.0	12	46.8	17
MA-814	\$1,509	6449	263	15	24.6	27	17.8	15	94.9	22	49.9	12
SX-2283	\$1,499	6408	273	5	23.4	29	18.4	7	95.2	1	44.6	23
HIL-2240	\$1,492	6378	263	16	24.3	28	17.9	14	94.8	28	45.3	21
BTS-1606N	\$1,481	6331	245	31	26.0	19	16.8	31	94.6	31	40.3	30
MA-813NT	\$1,413	6039	268	10	22.5	30	18.1	11	95.0	7	42.2	26
HIL-9908	\$1,367	5845	272	7	21.5	31	18.4	5	94.9	14	40.8	28
Average	\$1,660.8	7098.9	262.9		27.02		17.83		94.92		47.76	
LSD 5%	203.1	868.0	6.8		3.2		0.4		0.2		11.7	
CV%	12.4	12.4	2.6		12.2		2.3		0.2		24.8	

** See Cercospora Fungicide Application Page

\$/A: Payment calculated using early delivery adjustment where necessary, and a per pound payment of \$.165.

Bold: Results are not statistically different from top-ranking variety in each column.

Comments: Trial experienced some variability in emergence. Stands ranged from 115-195 beets/100' of row. Dry weather in June slowed growth. Pockets of Rhizoctonia and Fusarium impacted root quality and stands. This trial was not used for variety approval due to stand and root disease issues that impacted trial quality.



Plant To Stand

Trost, Pigeon - 2020

Trial Quality: Good

Plant/Harv: Apr 28/Oct 15

Plots: 6 rows X 38 ft., 4 reps

Row Spacing: 22 inches

Seeding Rate: 4.5 inches

Soil Type: Sandy Clay Loam

% OM: 2.2 **pH:** 7.4 **CEC:** 13.1

Nutrients: **P:** Abv Opt **K:** Abv Opt

Mn: High **B:** Med

Added N: 35 lbs. 2x2, Manure,
80 lbs. Side-dress

Prev Crop: Corn

****Cerc Control:** Very Good

8 applications**

Rhizoc Control: Very Good

Quadris IF, 6-8 lf

Rainfall: 19.42 inches

Variety	\$/A	RWSA	RWST		Yield		Sugar		CJP		Beets/100 ft	
			Lb/T	Rank	T/A	Rank	%	Rank	%	Rank	Act.	Rank
C-G675	\$2,302	12932	318	4	40.8	1	20.8	3	96.2	11	148	2
HIL-9865	\$2,180	12243	309	13	39.8	3	20.2	15	96.3	8	127	8
BTS-1399	\$2,133	11981	319	2	37.5	8	20.7	5	96.7	1	144	3
BTS-1606N	\$2,131	11972	304	15	39.4	4	20.2	16	95.6	15	115	16
SX-RR1275N	\$2,091	11744	313	10	37.6	7	20.3	13	96.7	2	114	17
SX-RR1264	\$2,087	11723	325	1	36.2	12	21.1	1	96.4	5	149	1
C-G855	\$2,087	11722	293	19	40.0	2	19.5	19	95.6	16	120	12
BTS-1703	\$2,085	11712	305	14	38.4	6	20.3	12	95.4	17	143	4
MA-814	\$2,074	11651	317	5	36.9	10	20.7	4	96.4	7	130	7
SX-2283	\$2,045	11489	315	8	36.5	11	20.6	6	96.2	10	118	14
HIL-2240	\$2,036	11437	294	18	38.9	5	19.6	18	95.3	18	96	19
SX-RR1278N	\$2,009	11285	319	3	35.4	15	20.8	2	96.2	9	121	10
BTS-188N	\$1,998	11222	301	17	37.3	9	20.2	14	94.9	19	137	5
HIL-9908	\$1,996	11213	316	6	35.5	14	20.6	8	96.5	4	100	18
HIL-2238NT	\$1,991	11187	312	12	35.9	13	20.6	7	95.7	14	122	9
MA-709	\$1,903	10692	303	16	35.4	16	19.9	17	96.0	13	118	13
HIL-9879NT	\$1,843	10351	316	7	32.8	18	20.6	9	96.4	6	116	15
C-G752NT	\$1,841	10344	313	11	33.1	17	20.5	10	96.0	12	136	6
MA-813NT	\$1,832	10290	314	9	32.8	19	20.4	11	96.5	3	121	11
Average	\$2,034.9	11431.0	310.9		36.85		20.41		96.05		125.0	
LSD 5%	215.9	1212.6	18.0		3.8		0.9		1.1		36.2	
CV %	7.5	7.5	4.1		7.2		3.3		0.8		20.4	

**** See Cercospora Fungicide Application Page**

\$/A: Payment calculated using early delivery adjustment where necessary, and a per pound payment of \$.165.

Bold: Results are not statistically different from top-ranking variety in each column.

Comments: This was the last PTS trial planted in 2020 on April 28. During the month of May, several rainfalls contributed to crusting conditions that reduced the stands in this trial. On June 10, a severe thunderstorm was experienced with strong winds and a small amount of hail that slightly damaged the canopy. This damage did not have any obvious lasting effect on the growth of this trial. Harvest of this trial was just before the beginning of permanent pile, and the root and sugar yields were indicative of a full season crop. Disease control in this trial was very good.



****Cerc Control:** Very Good

7 applications**

Rhizoc Control: Good

Quadris IF, 6-8 If

Rainfall: 19.82 inches

Prev Crop: Wheat/Clover

Variety	\$/A	RWSA	RWST		Yield		Sugar		CJP	
			Lb/T	Rank	T/A	Rank	%	Rank	%	Rank
BTS-197N	\$2,227	11488	277	12	41.6	2	18.3	12	96.1	14
C-G855	\$2,182	11257	278	10	40.5	4	18.3	8	96.3	6
C-G752NT	\$2,170	11195	275	14	40.7	3	18.2	14	96.1	15
BTS-188N	\$2,154	11114	264	22	42.1	1	17.4	22	96.3	2
SX-2296N	\$2,064	10650	279	5	38.2	7	18.4	6	96.2	9
HIL-2332NT	\$2,032	10486	279	6	37.5	8	18.4	5	96.1	11
BTS-1606N	\$2,008	10358	272	18	38.2	6	18.0	17	96.0	20
SX-RR1278N	\$1,998	10308	278	9	37.0	10	18.3	13	96.4	1
C-G932NT	\$1,987	10252	265	21	38.6	5	17.6	21	96.1	16
HIL-2238NT	\$1,987	10251	274	15	37.4	9	18.2	15	96.0	17
SX-RR1275N	\$1,979	10209	277	11	36.8	11	18.3	10	96.2	10
HIL-9865	\$1,839	9490	278	8	34.0	12	18.3	9	96.3	3
HIL-9879NT	\$1,763	9094	274	16	33.2	13	18.2	16	96.0	18
MA-813NT	\$1,762	9090	282	1	32.3	15	18.6	1	96.1	13
BTS-1703	\$1,665	8589	266	20	32.3	14	17.7	20	96.0	21
C-G675	\$1,641	8467	271	19	31.3	16	18.0	19	95.9	22
HIL-9908	\$1,541	7949	281	3	28.4	17	18.5	2	96.1	12
SX-RR1264	\$1,484	7658	280	4	27.4	19	18.4	4	96.3	5
MA-709	\$1,480	7635	276	13	27.5	18	18.3	11	96.0	19
HIL-2240	\$1,458	7523	281	2	26.8	20	18.5	3	96.2	8
MA-814	\$1,439	7425	279	7	26.7	21	18.4	7	96.3	7
SX-2283	\$1,397	7210	273	17	26.4	22	18.0	18	96.3	4
Average	\$1,829.8	9440.7	275.5		34.31		18.19		96.15	
LSD 5%	250.75	1293.7	13.6		4.3		0.8		N.S.	
CV%	10.90	10.9	3.9		10.0		3.7		0.6	

**** See Cercospora Fungicide Application Page**

\$/A: Payment calculated using early delivery adjustment where necessary, and a per pound payment of \$.165.

Bold: Results are not statistically different from top-ranking variety in each column.

Comments: Past history in this trial location indicated high level of nematode pressure. Generally, varieties sorted themselves out based on tolerance to nematodes. Favorable summer growing conditions did not create the worst case scenario for impact, as an adequate amount of rain kept crop relatively healthy throughout the whole growing season.

Variety Trial

Schuette Farms, Elkton - 2020

Trial Quality: Very Good	Soil Type: Loam	Cerc Control: Excellent control: See below for materials
Planted: April 18	Fertilizer: 2x2: 34#-47#-0-10# + B & Mn; 13,000 gal of dairy manure; S.D.: 81# N by 28%	Rhizoc Control: Good/Fair control: Quadris foliar only: 6/1 11 oz w/ Mustang & 20-20-20
Harv/Samp: Oct 14 / Oct 12	Prev Crop: Chopped corn	Other Pests: Low level of Sugarbeet cyst nematode
Plot Size: 3 reps	Weather: Generally good, periods of dry weather in the summer	
Row Spacing: 30 inches		
Seeding Rate: 49,000		

Variety	\$/A	RWSA	RWST	T/A	% Sugar	% CJP	Populations 100 Ft. of Row		Dead Beets / 1200 Ft
							15 Day	45 Day	
C-G675	\$1,868	10388	279	37.2	18.6	95.3	128	223	7
B-1606N	\$1,831	10182	268	38.0	18.0	95.3	149	239	15
SX-1278N	\$1,815	10097	295	34.3	19.5	95.4	92	238	128
HIL-2238NT	\$1,801	10015	278	36.1	18.5	95.3	73	245	111
C-G855	\$1,773	9860	270	36.5	18.1	95.3	158	238	8
B-1703	\$1,766	9823	271	36.3	18.2	95.3	170	246	5
B-188N	\$1,759	9783	273	35.8	18.3	95.5	111	226	13
SX-1264	\$1,734	9646	287	33.6	19.0	95.6	57	233	86
SX-2283	\$1,727	9605	281	34.2	18.7	95.4	89	241	84
C-G752NT	\$1,698	9443	271	34.9	18.1	95.3	129	249	41
HIL-9865	\$1,641	9129	276	33.1	18.4	95.5	108	236	102
MA-709	\$1,626	9041	277	32.7	18.5	95.2	118	231	61
Average	\$1,753	9751	277	35.2	18.5	95.4	115	237	55
LSD 5%	126.2	701.9	12.6	2.9	0.7	N.S.	42.7	N.S.	65.4
CV %	4.3	4.3	2.8	4.8	2.4	0.2	21.9	4.4	70.3

Comments: The Schuette Variety Trial was planted on April 18th. There was 13,000 gallons of dairy manure applied per acre the year before. The area where this field is located went through a few dry stretches this summer, particularly toward the end of June, and again during the end of July and the first two weeks of August. There was a fair amount of root disease at this location, primarily Rhizoctonia root and crown rot. No in-furrow Quadris was applied at this location, and while there was a foliar application of Quadris, there was a noticeable difference in the amount of disease between the varieties. Low levels of sugarbeet cyst nematode were found in this field. There was very little Alternaria or Cercospora leaf spot at this trial. The leaf spot program was as follows: 6/19 EBDC, 7/12 Proline + EBDC + NDemand + B, 7/27 Priaxor + EBDC, 8/11 Inspire + EBDC + NDemand + B, 8/26 Super Tin + Topsin, 9/14 Delaro + Proline + EBDC + B. All applications included a sticker.

\$/A: Gross dollars per acre calculated using \$0.165 per pound of RWSA and the early delivery adjustments.

Bold: Results are not statistically different from top ranking variety in each column.

N.S. – not significant

Variety Trial

Sylvester Farms, Quanicassee - 2020

Trial Quality: Very Good	Soil Type: Loam	Cerc Control: Very Good control: See below for materials
Planted: April 19	Fertilizer: 2x2: 7 gal 28%, 7 gal Thiosul, 5 gal 10-34-0 + micros; PPI: 40 gal of 28%	Rhizoc Control: Good/Fair control: Quadris I.F. (10 oz + Mustang), 8-10 leaf (10 oz)
Harv/Samp: Oct 12 / Oct 6		
Plot Size: 3 reps	Prev Crop: Wheat w/ clover	
Row Spacing: 24 inch	Weather: Moderate rain shortly after planting, periods of dry weather in the summer	Other Pests: Sugarbeet cyst nematode, Fusarium, Aphanomyces
Seeding Rate: 62,000		

Variety	\$/A	RWSA	RWST	T/A	% Sugar	% CJP	Populations 100 Ft. of Row		Dead Beets / 1200 Ft
							15 Day	46 Day	
B-188N	\$1,822	9932	293	33.9	19.4	95.3	76	224	13
C-G752NT	\$1,767	9632	297	32.4	19.6	95.4	31	239	62
B-1606N	\$1,756	9569	291	32.9	19.3	95.2	64	211	38
B-1703	\$1,751	9544	300	31.8	19.8	95.4	35	208	29
HIL-9865	\$1,749	9533	307	31.0	20.2	95.4	36	217	62
C-G855	\$1,733	9446	294	32.1	19.4	95.2	50	195	11
SX-1278N	\$1,732	9441	310	30.5	20.4	95.4	36	245	181
HIL-2238NT	\$1,732	9438	300	31.5	19.7	95.2	27	235	85
SX-2283	\$1,727	9414	308	30.6	20.2	95.5	33	249	58
MA-709	\$1,705	9292	300	30.9	19.9	95.5	53	218	91
C-G675	\$1,650	8992	297	30.2	19.6	95.5	55	231	50
SX-1264	\$1,606	8751	300	29.2	19.7	95.5	23	234	106
Average	\$1,728	9415	300	31.4	19.8	95.4	43	226	65
LSD 5%	103.3	562.9	N.S.	1.4	N.S.	N.S.	N.S.	30.2	37.7
CV %	3.5	3.5	2.5	2.6	2.3	0.2	68.3	8.2	34.0

Comments: The Sylvester Variety Trial was originally planted on March 27th, making it the first Sugarbeet Advancement variety trial planted this year. Shortly after planting, the trial experienced freezing conditions and crusting, both of which greatly reduced emergence. The trial was replanted on April 19th after working the field. A rain event occurred at this location shortly after planting, once again leading to crusting issues which impacted the early stand count. Fortunately, another rain came just in time to soften up the crust, so the final population was acceptable for the majority of the field.

This field has a moderate level of sugarbeet cyst nematode, which favors the nematode varieties. There was a moderate level of root disease present at this location. Throughout the season, three root diseases were observed here, including Rhizoctonia, Aphanomyces, and Fusarium root rots. For most of the season, very little Alternaria and Cercospora leaf spot was observed. The amount of Cercospora leaf spot present here did increase late in the season (mid-September), but it never reached the economic threshold. The leaf spot program was as follows: 6/18 EBDC only, 6/30 Propulse, 7/15 Tin, 7/30 Priaxor + Topsin, 8/7 Provysol, 8/24 Tin, 9/5 Delaro, 9/21 Tin. The 2nd and 6th apps had 2 gal/ac of calcium nitrate, 2 qt of Mg, & 1 qt of B. All applications included either EBDC or Badge and a spreader/sticker.

\$/A: Gross dollars per acre calculated using \$0.165 per pound of RWSA and the early delivery adjustments.

Bold: Results are not statistically different from top ranking variety in each column.

N.S. – not significant

West District Trials





Official Variety Trial

Sylvester, Reese - 2020

Trial Quality: Good

Plant/Harv: Apr 24/Nov 5

Plots: 2 rows X 38 ft., 8 reps

Row Spacing: 22 inches

Seeding Rate: 3.75 inches

Soil Type: Clay Loam

% OM: 2.8 **pH:** 7.9 **CEC:** 20.7

Nutrients: P: Abv Opt K: Abv Opt

Mn: High **B:** Med

Added N: 35 lbs. 2x2,
120 lbs. Side-dress

Prev Crop: Wheat and Clover

****Cerc Control:** Very Good
8 applications**

Rhizoc Control: Very Good
Quadris IF, 6-8 If

Rainfall: 18.67 inches

Variety	\$/A	RWSA	RWST		Yield		Sugar		CJP		Emerge	
			Lb/T	Rank	T/A	Rank	%	Rank	%	Rank	%	Rank
BTS-1941	\$2,533	15354	336	28	45.8	1	21.7	22	96.7	30	64.4	6
BTS-1065	\$2,520	15270	343	16	44.5	2	21.9	16	97.4	26	65.4	3
C-G675	\$2,518	15263	347	11	44.0	3	22.0	13	97.7	8	64.1	7
HIL-9865	\$2,465	14939	357	1	41.9	11	22.5	2	98.0	1	52.3	30
SX-2294	\$2,446	14825	357	2	41.6	13	22.6	1	97.6	18	53.5	28
C-G932NT	\$2,441	14791	351	6	42.1	10	22.1	9	97.9	2	64.5	5
SX-2295	\$2,429	14724	347	13	42.6	5	22.0	12	97.6	17	54.3	24
C-G943	\$2,405	14574	338	26	43.2	4	21.6	25	97.2	29	63.0	10
BTS-197N	\$2,403	14563	345	15	42.2	9	21.9	14	97.5	21	55.1	22
BTS-1703	\$2,402	14556	351	5	41.4	14	22.2	5	97.7	7	63.7	9
BTS-1606N	\$2,382	14434	342	18	42.2	8	21.8	18	97.5	22	59.1	15
HIL-2238NT	\$2,380	14424	340	22	42.4	7	21.6	24	97.5	23	57.8	19
C-G021	\$2,377	14404	350	8	41.2	15	22.1	10	97.8	5	69.6	1
SX-RR1264	\$2,341	14187	340	21	41.7	12	21.7	20	97.4	25	65.1	4
SX-2296N	\$2,321	14066	352	4	40.1	17	22.2	4	97.7	11	54.0	26
SX-2283	\$2,314	14027	350	10	40.1	18	22.1	8	97.7	10	54.0	25
BTS-1399	\$2,310	14002	329	30	42.5	6	21.0	31	97.6	14	68.1	2
MA-709	\$2,264	13722	341	20	40.2	16	21.8	17	97.3	27	52.8	29
C-G919	\$2,241	13579	339	24	40.0	19	21.5	28	97.8	4	64.0	8
BTS-188N	\$2,232	13530	346	14	39.1	24	21.9	15	97.7	12	58.6	17
MA-814	\$2,226	13490	342	19	39.4	23	21.7	19	97.6	15	61.5	12
SX-2297	\$2,221	13460	351	7	38.5	28	22.2	6	97.8	6	55.0	23
HIL-2240	\$2,211	13399	339	25	39.6	22	21.5	27	97.5	19	56.0	21
C-G752NT	\$2,206	13372	337	27	39.6	20	21.6	26	97.3	28	59.4	14
HIL-9879NT	\$2,176	13190	354	3	37.2	29	22.3	3	97.9	3	57.9	18
HIL-2332NT	\$2,174	13175	342	17	38.5	27	21.7	21	97.7	9	56.3	20
SX-RR1275N	\$2,156	13067	340	23	38.5	26	21.6	23	97.4	24	59.5	13
C-G855	\$2,149	13023	329	31	39.6	21	21.3	29	96.6	31	49.0	31
SX-RR1278N	\$2,145	13002	334	29	38.9	25	21.2	30	97.6	16	61.6	11
MA-813NT	\$2,100	12727	347	12	36.7	30	22.0	11	97.5	20	58.8	16
HIL-9908	\$2,031	12309	350	9	35.2	31	22.2	7	97.6	13	53.6	27
Average	\$2,307.1	13982.2	344.0		40.66		21.86		97.54		59.10	
LSD 5%	205.8	1247.2	11.9		3.5		0.6		0.6		7.8	
CV%	9.1	9.1	3.5		8.7		2.9		0.6		13.4	

**** See Cercospora Fungicide Application Page**

\$/A: Payment calculated using early delivery adjustment where necessary, and a per pound payment of \$.165.

Bold: Results are not statistically different from top-ranking variety in each column.

Comments: Trial was planted into favorable conditions and emerged well. Very dry weather followed in June. More favorable weather returned in July and frequent rainfall promoted continued growth. Disease control was very good. This was the final OVT harvested in 2020 on November 6. Both root and sugar yields were high.



Official Variety Trial

Lynch, Au Gres - 2020

Trial Quality: Fair

Plant/Harv: Apr 27/Oct 5

Plots: 2 rows X 38 ft., 8 reps

Row Spacing: 22 inches

Seeding Rate: 3.75 inches

Soil Type: Silty Clay

% OM: 3.3 **pH:** 7.5 **CEC:** 29

Nutrients: P: Abv Opt K: Abv Opt

Mn: High **B:** Med

Added N: 35 lbs. 2x2,
120 lbs. Side-dress

Prev Crop: Wheat/Clover

****Cerc Control:** Very Good
6 applications**

Rhizoc Control: Very Good
Quadris IF, 6-8 lf

Rainfall: 19.79 inches

Variety	\$/A	RWSA	RWST		Yield		Sugar		CJP		Emerge	
			Lb/T	Rank	T/A	Rank	%	Rank	%	Rank	%	Rank
BTS-1065	\$2,168	10930	299	12	36.6	1	19.0	13	98.0	10	50.8	2
BTS-1703	\$2,118	10679	295	18	36.2	2	18.9	19	97.8	15	46.1	12
BTS-1941	\$2,011	10136	287	28	35.4	3	18.4	30	97.6	18	48.9	5
SX-2296N	\$1,975	9958	309	4	32.3	11	19.7	1	97.6	17	42.5	20
C-G943	\$1,975	9957	281	30	35.4	4	18.5	28	96.4	31	48.2	8
C-G932NT	\$1,968	9921	291	24	34.1	5	18.7	23	97.3	24	49.1	4
BTS-1399	\$1,929	9723	289	26	33.6	6	18.4	29	98.1	8	47.1	9
C-G752NT	\$1,926	9707	290	25	33.5	7	18.8	20	96.9	29	45.3	14
C-G919	\$1,916	9661	294	21	32.8	9	18.7	25	98.0	12	49.9	3
C-G675	\$1,912	9641	295	19	32.8	8	18.9	16	97.5	20	46.3	11
SX-RR1275N	\$1,910	9628	306	6	31.4	15	19.3	8	98.3	3	39.9	23
C-G021	\$1,882	9487	303	9	31.3	16	19.5	5	97.2	26	51.2	1
SX-RR1264	\$1,873	9444	298	15	31.8	13	18.8	22	98.3	2	43.1	17
SX-2283	\$1,866	9406	302	10	31.0	17	19.4	7	97.6	19	42.7	19
HIL-9879NT	\$1,853	9343	310	3	30.2	21	19.6	4	98.2	5	46.5	10
BTS-188N	\$1,849	9321	296	17	31.5	14	19.0	12	97.3	23	40.7	21
SX-RR1278N	\$1,839	9273	288	27	32.2	12	18.5	27	97.4	21	42.9	18
MA-813NT	\$1,805	9102	297	16	30.6	20	19.2	11	97.1	28	45.4	13
HIL-2238NT	\$1,791	9032	292	23	31.0	18	18.8	21	97.2	25	44.0	15
SX-2294	\$1,790	9023	303	8	29.8	23	19.2	10	98.1	6	38.1	26
BTS-1606N	\$1,787	9009	278	31	32.5	10	18.2	31	96.7	30	39.7	25
MA-814	\$1,773	8940	304	7	29.4	25	19.4	6	97.8	14	48.2	7
HIL-9865	\$1,753	8838	298	14	29.6	24	19.0	15	97.8	16	43.4	16
BTS-197N	\$1,748	8812	286	29	30.8	19	18.5	26	97.1	27	48.5	6
HIL-2240	\$1,743	8787	294	20	29.8	22	18.9	18	97.4	22	37.2	27
MA-709	\$1,708	8613	298	13	29.0	26	18.9	17	98.0	11	34.1	29
HIL-2332NT	\$1,688	8509	310	2	27.4	28	19.6	2	98.1	9	34.6	28
SX-2295	\$1,666	8398	300	11	28.1	27	19.0	14	98.1	7	32.9	31
HIL-9908	\$1,641	8272	311	1	26.6	29	19.6	3	98.2	4	39.7	24
SX-2297	\$1,601	8071	306	5	26.3	30	19.3	9	98.4	1	33.6	30
C-G855	\$1,520	7665	294	22	26.1	31	18.7	24	97.9	13	40.4	22
Average	\$1,838.2	9267.3	296.9		31.26		18.99		97.66		43.27	
LSD 5%	203.0	1023.4	10.5		3.2		0.5		0.8		6.8	
CV%	11.2	11.2	3.6		10.4		2.7		0.9		16.0	

**** See Cercospora Fungicide Application Page**

\$/A: Payment calculated using early delivery adjustment where necessary, and a per pound payment of \$.165.

Bold: Results are not statistically different from top-ranking variety in each column.

Comments: This trial encountered some very adverse conditions prior to and during emergence. Two days after planting, a 3" pounding rain event occurred, creating a crust deeper than the seed depth. During the week of May 17th, this trial experienced rainfall in excess of 8" and spent a few days under water. Final stands ranged from 100-160 beets/100' of row. Dry conditions took over during the month of June and July to add to this trials challenges. Disease control was very good throughout the season and harvest results were favorable considering the difficult growing season this trial endured. Respectable root and sugar yields were achieved for a trial harvested in early October. Due to the numerous weather events and variable stands, this trial was not used for variety approval.



Official Variety Trial

Mininger, Middleton - 2020

Trial Quality: Good

Plant/Harv: Apr 8/Sep 29

Plots: 2 rows X 38 ft., 8 reps

Row Spacing: 22 inches

Seeding Rate: 3.75 inches

Soil Type: Sandy Clay Loam

% OM: 2.5 **pH:** 5.7 **CEC:** 10.1

Nutrients: P: Abv Opt K: Abv Opt

Mn: High **B:** Very Low

Added N: 35 lbs. 2x2, Manure

Prev Crop: Corn

****Cerc Control:** Very Good
7 applications**

Rhizoc Control: Very Good
Quadris IF, 6-8 lf

Rainfall: 14.27 inches

Variety	\$/A	RWSA	RWST		Yield		Sugar		CJP		Emerge	
			Lb/T	Rank	T/A	Rank	%	Rank	%	Rank	%	Rank
SX-2296N	\$2,944	13789	291	2	47.5	5	18.7	3	97.4	7	60.5	25
HIL-9865	\$2,937	13755	289	3	47.6	4	18.7	4	97.2	12	57.2	29
C-G675	\$2,924	13693	287	5	47.9	3	18.7	2	96.7	28	70.9	12
SX-RR1264	\$2,817	13192	284	7	46.4	15	18.4	7	97.2	15	67.7	14
C-G943	\$2,807	13147	269	30	49.0	1	17.6	29	96.7	27	72.2	11
BTS-1941	\$2,804	13131	271	26	48.4	2	17.9	19	96.1	31	75.7	5
BTS-197N	\$2,770	12975	283	9	45.9	17	18.3	8	97.2	18	76.0	4
BTS-1703	\$2,761	12929	276	19	46.9	10	17.8	24	97.5	6	76.0	3
HIL-2238NT	\$2,758	12918	274	22	47.2	7	17.9	20	96.7	26	75.0	6
SX-2294	\$2,756	12908	276	18	46.9	11	17.8	22	97.3	10	64.9	17
C-G021	\$2,751	12883	278	16	46.3	16	18.1	15	96.9	22	74.3	9
C-G752NT	\$2,747	12866	274	20	47.0	9	18.1	14	96.1	30	65.2	16
MA-814	\$2,745	12856	273	25	47.2	8	17.7	27	97.2	13	74.7	8
BTS-1065	\$2,735	12809	270	28	47.5	6	17.7	25	96.5	29	76.4	2
BTS-188N	\$2,728	12779	283	10	45.2	18	18.2	13	97.6	5	62.6	22
C-G919	\$2,709	12689	273	23	46.4	14	17.7	28	97.4	8	77.0	1
SX-2295	\$2,696	12626	288	4	43.9	23	18.4	5	97.8	1	64.0	19
SX-2283	\$2,692	12606	282	11	44.8	20	18.2	11	97.2	14	65.8	15
SX-RR1278N	\$2,691	12605	270	29	46.8	12	17.5	30	97.3	11	64.4	18
SX-RR1275N	\$2,689	12592	279	15	45.2	19	18.0	18	97.4	9	63.0	21
HIL-2332NT	\$2,647	12395	296	1	41.9	27	19.0	1	97.6	3	57.6	28
C-G932NT	\$2,637	12353	281	12	44.0	22	18.2	12	97.1	19	74.0	10
HIL-2240	\$2,610	12223	280	13	43.7	24	18.0	17	97.6	4	58.2	27
C-G855	\$2,607	12212	273	24	44.8	21	17.8	21	96.8	24	63.9	20
BTS-1399	\$2,605	12200	262	31	46.6	13	17.1	31	97.2	17	69.5	13
MA-709	\$2,563	12004	278	17	43.2	26	18.1	16	97.0	21	58.8	26
SX-2297	\$2,506	11737	285	6	41.3	29	18.3	9	97.7	2	61.8	24
BTS-1606N	\$2,502	11718	271	27	43.3	25	17.7	26	96.7	25	51.0	31
HIL-9908	\$2,465	11544	280	14	41.2	30	18.3	10	96.9	23	52.9	30
HIL-9879NT	\$2,445	11452	274	21	41.8	28	17.8	23	97.2	16	74.8	7
MA-813NT	\$2,388	11184	284	8	39.5	31	18.4	6	97.0	20	61.8	23
Average	\$2,691.5	12605.5	278.5		45.3		18.06		97.11		66.71	
LSD 5%	208.5	976.7	12.3		3.6		0.7		0.8		7.0	
CV%	7.9	7.9	4.5		8.0		3.9		0.9		10.6	

**** See Cercospora Fungicide Application Page**

\$/A: Payment calculated using early delivery adjustment where necessary, and a per pound payment of \$.165.

Bold: Results are not statistically different from top-ranking variety in each column.

Comments: This trial was the earliest OVT planted in 2020. It experienced some sub-freezing temperatures between planting and emergence. Those cold temperatures slowed emergence, but did not appear to reduce stand. Early planting along with favorable stand and weather produced very high root yields and respectable sugar yields for a late September harvested trial. Disease control was very good.



Plant To Stand

Lynch, Au Gres - 2020

Trial Quality: Fair

Plant/Harv: Apr 27/Oct 5

Plots: 6 rows X 38 ft., 4 reps

Row Spacing: 22 inches

Seeding Rate: 4.5 inches

Soil Type: Clay Loam

% OM: 2.5 **pH:** 6.8 **CEC:** 17.7

Nutrients: **P:** Abv Opt **K:** Abv Opt

Mn: High **B:** Low

Added N: 35 lbs. 2x2,
120 lbs. Side-dress

Prev Crop: Wheat and Clover

****Cerc Control:** Very Good

6 applications**

Rhizoc Control: Very Good

Quadris IF, 6-8 lf

Rainfall: 19.79 inches

Variety	\$/A	RWSA	RWST		Yield		Sugar		CJP		Beets/100 ft	
			Lb/T	Rank	T/A	Rank	%	Rank	%	Rank	Act.	Rank
MA-709	\$1,819	9172	291	5	31.5	1	18.8	4	97.2	11	127	9
SX-RR1264	\$1,794	9042	294	2	30.7	3	18.8	3	97.5	6	134	5
HIL-9865	\$1,745	8799	300	1	29.4	9	19.2	1	97.7	2	125	12
C-G752NT	\$1,693	8535	273	16	31.4	2	17.8	18	97.0	13	130	7
C-G675	\$1,683	8482	285	9	29.7	8	18.6	7	96.9	17	141	3
BTS-1399	\$1,654	8340	277	15	30.1	4	17.9	15	97.4	9	146	2
BTS-188N	\$1,642	8280	278	14	29.9	7	18.1	13	97.0	14	103	19
SX-RR1278N	\$1,626	8199	291	4	28.1	14	18.6	6	97.8	1	126	11
BTS-1703	\$1,624	8186	271	18	30.1	5	17.7	19	96.8	18	150	1
SX-2283	\$1,621	8170	285	10	28.5	12	18.3	12	97.7	3	121	13
MA-814	\$1,617	8151	287	8	28.4	13	18.4	10	97.7	4	133	6
HIL-2238NT	\$1,610	8115	283	12	28.8	11	18.4	9	96.9	15	120	14
SX-RR1275N	\$1,608	8109	279	13	29.2	10	17.9	14	97.7	5	127	8
BTS-1606N	\$1,595	8039	268	19	30.0	6	17.9	16	95.7	19	110	17
HIL-9879NT	\$1,570	7915	290	6	27.2	16	18.7	5	97.4	7	126	10
HIL-2240	\$1,539	7759	284	11	27.2	15	18.3	11	97.4	8	109	18
HIL-9908	\$1,481	7467	293	3	25.5	19	19.0	2	97.1	12	115	16
C-G855	\$1,477	7448	273	17	27.1	17	17.8	17	96.9	16	117	15
MA-813NT	\$1,473	7426	287	7	25.9	18	18.5	8	97.2	10	134	4
Average	\$1,624.8	8191.2	283.7		28.88		18.34		97.21		126.0	
LSD 5%	304.9	1537.0	15.4		5.2		0.9		0.6		25.1	
CV %	14.9	14.9	4.3		14.2		3.9		0.5		15.8	

**** See Cercospora Fungicide Application Page**

\$/A: Payment calculated using early delivery adjustment where necessary, and a per pound payment of \$.165.

Bold: Results are not statistically different from top-ranking variety in each column.

Comments: This trial encountered some very adverse conditions prior to and during emergence.

Two days after planting, a 3" pounding rain event occurred, creating a crust deeper than the seed depth.

During the week of May 17th, this trial experienced rainfall in excess of 8" and spent a few days under water.

Despite these rain events, a harvestable stand emerged. Dry conditions took over during the month of June and July to add to this trials challenges. Disease control was very good throughout the season and harvest results were favorable considering the difficult growing season this trial endured. Respectable root and sugar yields were achieved for a trial harvested in early October.



Plant To Stand

Mininger, Middleton - 2020

Trial Quality: Good

Plant/Harv: Apr 8/Sep 29

Plots: 6 rows X 38 ft., 4 reps

Row Spacing: 22 inches

Seeding Rate: 4.5 inches

Soil Type: Sandy Clay Loam

% OM: 2.5 **pH:** 6.6 **CEC:** 9.9

Nutrients: **P:** Abv Opt **K:** Abv Opt

Mn: High **B:** Very Low

Added N: 35 lbs. 2x2, Manure

Prev Crop: Corn

****Cerc Control:** Very Good

7 applications**

Rhizoc Control: Very Good

Quadris IF, 6-8 lf

Rainfall: 14.27 inches

Variety	\$/A	RWSA	RWST		Yield		Sugar		CJP		Beets/100 ft	
			Lb/T	Rank	T/A	Rank	%	Rank	%	Rank	Act.	Rank
C-G675	\$2,799	13111	274	6	47.8	2	17.8	6	97.1	6	209	2
BTS-188N	\$2,726	12769	279	3	45.7	5	17.9	3	97.6	2	166	15
SX-RR1278N	\$2,724	12758	266	15	47.9	1	17.3	16	97.1	7	170	13
BTS-1703	\$2,653	12427	268	11	46.5	3	17.4	13	97.1	9	195	7
HIL-9865	\$2,614	12242	275	5	44.5	8	17.9	5	97.1	10	176	11
C-G855	\$2,609	12220	270	10	45.2	6	17.6	9	96.8	15	175	12
BTS-1606N	\$2,573	12053	262	18	46.0	4	17.4	14	96.1	19	152	19
SX-RR1264	\$2,563	12004	271	7	44.3	9	17.6	8	97.1	12	184	8
SX-2283	\$2,526	11833	271	8	43.7	10	17.5	11	97.4	5	184	9
MA-814	\$2,514	11773	279	4	42.3	13	17.9	4	97.6	3	204	4
HIL-2238NT	\$2,486	11643	279	2	41.7	14	18.0	2	97.5	4	216	1
BTS-1399	\$2,477	11599	258	19	45.1	7	16.6	19	97.6	1	206	3
HIL-9908	\$2,471	11571	283	1	41.1	16	18.3	1	97.1	11	170	14
SX-RR1275N	\$2,447	11462	264	16	43.3	11	17.3	17	96.9	13	163	17
C-G752NT	\$2,447	11460	267	12	42.9	12	17.5	10	96.6	17	201	5
HIL-9879NT	\$2,339	10952	266	14	41.1	15	17.3	15	97.1	8	197	6
HIL-2240	\$2,313	10833	264	17	41.0	17	17.3	18	96.8	14	157	18
MA-813NT	\$2,307	10805	271	9	40.0	18	17.8	7	96.5	18	181	10
MA-709	\$2,270	10630	266	13	39.9	19	17.4	12	96.7	16	164	16
Average	\$2,518.9	11797.1	270.2		43.69		17.58		97.05		182.8	
LSD 5%	237.3	1111.3	13.0		3.4		0.7		N.S.		17.6	
CV %	7.5	7.5	3.8		6.2		3.1		1.1		7.6	

**** See Cercospora Fungicide Application Page**

\$/A: Payment calculated using early delivery adjustment where necessary, and a per pound payment of \$.165.

Bold: Results are not statistically different from top-ranking variety in each column.

Comments: This trial was the first PTS trial planted in 2020. Prior to emergence, this trial experienced some sub freezing temperatures. These temperatures appeared to slow but not reduce emergence. Final stands ranged from 150-200 beets/100 ft. of row which is fairly consistent with the growing season of 2020. Early planting of this trial, along with consistent growing conditions throughout the summer led to very favorable root and sugar yields, especially when considering the late September harvest. Disease control in this trial was very good.

Variety Trial

Shaffner Brothers, Freeland - 2020

Trial Quality: Excellent
Planted: April 20
Harv/Samp: Oct 3 / Oct 2
Plot Size: 3 reps
Row Spacing: 22 inch
Seeding Rate: 60,000

Soil Type: Clay loam
Fertilizer: 2x2: 16 gal of 16-16-2 + micros; PPI: 100# N by urea/AMS blend; Sidedress 15 gal of 28%
Prev Crop: Corn
Weather: Heavy rains in spring, periods of dry weather in the summer

Cerc Control: Very Good control: See below for materials
Rhizoc Control: Good control: In furrow Quadris only: (10 oz)
Other Pests: Alternaria leaf spot, Aphanomyces, Fusarium

Variety	\$/A	RWSA	RWST	T/A	% Sugar	% CJP	Populations 100 Ft. of Row		Dead Beets / 1200 Ft
							16 Day	42 Day	
SX-2283	\$2,219	10923	303	36.0	19.9	95.6	27	177	34
B-1703	\$2,171	10687	288	37.1	19.0	95.9	49	169	14
SX-1278N	\$2,163	10647	305	34.9	20.1	96.0	32	176	69
C-G675	\$2,162	10644	291	36.6	19.1	95.9	46	162	5
B-188N	\$2,162	10642	292	36.5	19.2	95.8	42	149	19
HIL-9865	\$2,154	10604	299	35.5	19.6	95.8	38	178	71
B-1606N	\$2,128	10472	285	36.8	18.8	95.7	40	152	4
SX-1264	\$2,118	10422	304	34.3	20.0	95.8	15	176	53
C-G752NT	\$2,101	10341	286	36.1	18.9	95.6	26	166	40
C-G855	\$2,097	10320	288	35.9	19.0	95.7	48	168	6
HIL-2238NT	\$2,032	10003	290	34.5	19.2	95.7	19	182	91
MA-709	\$2,011	9898	292	33.9	19.3	95.6	28	144	50
Average	\$2,127	10467	293	35.7	19.3	95.8	34	167	38
LSD 5%	99.7	490.8	5.8	1.6	0.3	N.S.	N.S.	N.S.	38.3
CV %	2.8	2.8	1.2	2.7	1.0	0.2	45.8	9.8	59.7

Comments: This was an excellent quality trial planted on April 20th into a field that has a higher clay component than many of the other trials. On May 18th the area received a major rain event (5+ inches), but this did not cause major long-term damage to the trial. The weather changed as the season went on, and the trial experienced abnormally dry conditions throughout August. There was a moderate level of root disease at this trial, with four different diseases being found here, including Rhizoctonia, Aphanomyces, and Fusarium root rots, as well as Bacterial Vascular Necrosis. This trial only received in-furrow Quadris, with no foliar application. Earlier in the season, a low amount of Alternaria leaf spot was observed in the trial, but this disease did not persist throughout the season. Cercospora leaf spot was first found in the trial on July 24, but never progressed to the level of causing economic damage. The leaf spot program was as follows: 6/25 EBDC only, 7/7 Enable, 7/21 Tin, 8/4 Provysol, 8/18 Tin, 9/1 Delaro + Proline. All applications included EBDC and Regard.

\$/A: Gross dollars per acre calculated using \$0.165 per pound of RWSA and the early delivery adjustments.

Bold: Results are not statistically different from top ranking variety in each column.

N.S. – not significant

Variety Trial

Chaffin Farms, Ithaca - 2020

Trial Quality: Good	Soil Type: Clay loam & loam	Cerc Control: Excellent control: See below for materials
Planted: April 20	Fertilizer: Fall: 12,000 gal dairy manure; PP: 80# N	
Harv/Samp: Oct 15 / Oct 15		
Plot Size: 3 reps	Prev Crop: Corn	Rhizoc Control: Good control: Quadris broadcast (16 oz) + EBDC
Row Spacing: 20 inch	Weather: Heavy rain in the spring, periods of dry weather in the summer	Other Pests: Water damage, Aphanomyces
Seeding Rate: 70,000		

Variety	\$/A	RWSA	RWST	T/A	% Sugar	% CJP	Populations 100 Ft. of Row		Dead Beets / 1200 Ft
							16 Day	42 Day	
HIL-9865	\$1,906	10704	288	37.1	19.0	96.0	24	171	66
SX-2283	\$1,812	10180	291	35.0	19.2	96.0	21	188	35
SX-1264	\$1,769	9938	288	34.5	19.1	96.2	32	181	51
SX-1278N	\$1,762	9895	288	34.4	19.1	96.0	11	186	78
C-G752NT	\$1,741	9778	278	35.2	18.4	96.0	50	188	26
C-G855	\$1,733	9732	276	35.3	18.3	96.0	38	174	2
B-1606N	\$1,722	9673	274	35.3	18.2	96.0	31	159	25
B-188N	\$1,721	9668	275	35.1	18.3	95.9	51	166	17
C-G675	\$1,721	9666	273	35.4	18.2	96.1	70	178	4
B-1703	\$1,673	9399	271	34.6	18.0	96.0	53	191	18
HIL-2238NT	\$1,638	9202	271	33.9	18.1	96.0	13	177	38
MA-709	\$1,638	9199	282	32.6	18.7	96.0	20	157	51
Average	\$1,736	9753	280	34.9	18.6	96.0	35	176	34
LSD 5%	140.5	789.4	12.8	N.S.	0.7	N.S.	33.4	21.6	20.5
CV %	4.8	4.8	2.7	3.9	2.4	0.1	56.9	7.2	35.4

Comments: The Chaffin Variety Trial was planted on April 20th. Shortly after planting, the field experienced a major rainfall event. The effects of this heavy rain could be seen in the trial through the early part of the growing season. A soil texture change that went across the whole trial caused the beets in the front half of the field to be smaller but even, while the beets in the back half were exceptional but somewhat uneven. In spite of this, we collected quality data from this trial. Disease levels at this location were low for both root and foliar diseases. The leaf spot program was as follows: 6/10 EBDC with Quadris, 6/25 Inspire XT + EBDC, 7/13 Super Tin + Topsin + EBDC, 7/28 Delaro + EBDC, 8/11 Super Tin + EBDC, 8/26 Topguard + EBDC, 9/10 Eminent + EBDC. All sprays included a spreader/sticker.

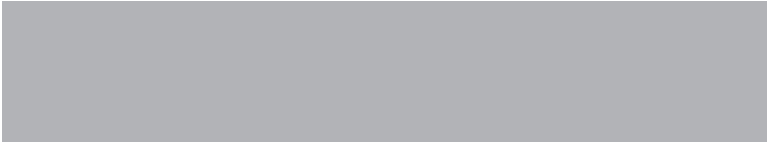
\$/A: Gross dollars per acre calculated using \$0.165 per pound of RWSA and the early delivery adjustments.

Bold: Results are not statistically different from top ranking variety in each column.

N.S. – not significant



Nursery Data





Rhizoctonia Nursery

Average of 2 years, 2019 & 2020

Trial Quality: Good
Location: 2019 - Blumfield East, SVREC, 2020 - SVREC
Plot Size: 2 rows X 25 ft., 6 reps
Inoculation: Inoculated with Rhizoctonia Solani AG 2-2 IIIB

Variety	Root Rating*	Estimated Root
	0-7	Rot %
C-G919	4.3	35.4
C-G855	4.3	33.8
SX-2297	4.3	37.6
C-G932NT	4.4	36.8
BTS-1399	4.5	38.2
C-G752NT	4.5	38.0
HIL-2332NT	4.5	39.5
HIL-9908	4.6	40.0
SX-2295	4.6	41.1
C-G675	4.6	41.8
SX-RR1264	4.6	41.1
BTS-188N	4.7	42.4
C-G943	4.7	42.3
BTS-1703	4.7	42.9
BTS-1941	4.7	43.3
BTS-1606N	4.7	42.9
MA-814	4.7	43.6
SX-2296N	4.8	45.0
Resistant Check	4.8	45.5
MA-709	4.8	45.9
HIL-9879NT	4.8	46.7
BTS-197N	4.8	46.8
HIL-2240	4.8	46.1
SX-2294	4.9	46.4
HIL-2238NT	4.9	47.3
MA-813NT	5.0	49.6
SX-RR1278N	5.0	50.0
SX-RR1275N	5.0	50.5
HIL-9865	5.0	50.7
Susceptible Check	5.1	51.5
SX-2283	5.1	51.8
**C-G021	5.4	60.0
**BTS-1065	5.8	69.5
Average	4.77	44.95
LSD 5%	0.7	14.5
CV %	6.9	16.2

Bold: Results are not significantly different from the top ranking variety in each column

****C-G021 and BTS-1065** - First year varieties only used 2020 data.

***Rating System:**

0 = No Infection 1 = less than 2% rotted roots 2 = less than 5% rotted roots
3 = 5 to 25% rotted roots 4 = 26 to 50% rotted roots 5 = 51 to 75% rotted roots
6 = 76 to 95% rotted roots 7 = 100% rotted roots

During evaluations, roots were dug and assigned values from 0 to 7. Each plot contained approximately 50 roots and each root was rated.



Cercospora Nursery

Average of 2 years, 2019 & 2020

Trial Quality: Good

Locations: 2019 - Blumfield East, SVREC
2020 - Gilford, SVREC

Plot Size: MSC - 2 Rows X 17.5 ft., 5 reps
SVREC - 2 Rows X 20 ft., 5 reps
Gilford - 2 rows X 17.5 ft., 5 reps

Inoculation: Trials were Inoculated

Variety	Avg of 2 Years CLS Rate 0-9	2019 CLS Rate 0-9	2020 CLS Rate 0-9
**C-G021	N.A	N.A	2.0
BTS-1941	2.2	2.5	1.8
**BTS-1065	N.A	N.A	2.2
C-G943	2.5	2.8	2.2
C-G919	3.8	4.4	3.3
HIL-9908	3.8	4.2	3.5
BTS-1399	4.1	4.7	3.6
C-G855	4.3	5.0	3.5
BTS-1703	4.3	5.1	3.5
HIL-2240	4.5	5.0	3.9
MA-709	4.6	5.2	4.0
MA-813NT	4.6	5.6	3.6
HIL-9879NT	4.6	5.4	3.8
MA-814	4.7	5.3	4.1
HIL-2238NT	4.7	5.4	4.1
C-G675	4.8	5.5	4.2
Resistant Check	4.8	5.5	4.1
SX-2295	4.9	5.8	4.0
SX-2294	4.9	5.7	4.0
SX-2297	4.9	5.9	3.9
SX-RR1264	4.9	5.8	4.1
SX-2283	5.1	6.0	4.2
HIL-9865	5.2	6.0	4.3
C-G752NT	5.2	5.8	4.6
BTS-1606N	5.3	6.2	4.4
SX-RR1275	5.4	6.1	4.6
HIL-2332NT	5.4	6.3	4.6
C-G932NT	5.5	6.3	4.8
BTS-197N	5.6	6.2	5.0
BTS-188N	5.7	6.2	5.1
SX-2296N	5.8	6.9	4.6
Susceptible Check	5.8	6.7	4.9
SX-RR1278N	5.8	6.7	4.9
Average	4.77	5.50	3.93

Cercospora Rating (0-9 Scale): 0 = no spots, 1 = very few spots, 2 = up to 10 spots/leaf,
2.5 = up to 50 spots/leaf, 3 = 100 to 200 spots/leaf (approx 3% leaf injury),
4 = up to 10 % injury, 5 = up to 25 % injury, 6 = up to 50% injury, 7 = up
to 75% injury, 8 = up to 90% injury, 9 = leaves completely dead.

****C-G021 and BTS-1065** - First year varieties only used 2020 data.

Comments: Disease pressure was late to develop and less severe in the 2020 Nursery trials. New varieties with the CR+ trait were able to stay below economic injury level during the rating period. Many more varieties are now available with Good to Excellent tolerance compared to past years.



Cyst Nematode Nursery

Average of 2 Years, 2019 & 2020

Trial Quality: Good

Cerc Control: Very Good

Locations: 2019 - Sylvester, 2020 - Maust

Rhizoc Control: Good

Plot Size: 2019 - 2 rows X 25 ft., X 6 reps

Plot Size: 2020 - 2 rows X 38 ft., X 6 reps

Variety	\$/A	RWSA	RWST		Yield		Sugar		CJP	
			Lb/T	Rank	T/A	Rank	%	Rank	%	Rank
BTS-197N	\$1,887	10475	285.6	4	36.6	1	18.4	4	97.5	12
C-G752NT	\$1,850	10302	280.9	10	36.6	2	18.1	10	97.5	11
BTS-188N	\$1,846	10238	283.4	6	36.0	3	18.2	6	97.5	10
C-G932NT	\$1,838	10225	287.9	3	35.5	4	18.4	3	97.7	5
BTS-1606N	\$1,766	9804	282.2	9	34.7	5	18.1	11	97.8	2
SX-RR1278N	\$1,719	9588	284.1	5	33.8	6	18.2	5	97.7	7
SX2296N	\$1,684	9340	290.0	2	32.2	9	18.5	2	97.8	1
SX-RR1275N	\$1,653	9219	277.6	12	33.3	7	17.8	12	97.7	6
HIL-2238NT	\$1,650	9130	280.8	11	32.3	8	18.1	8	97.3	13
HIL-2332NT	\$1,623	9080	291.2	1	31.2	10	18.6	1	97.8	3
C-G675	\$1,468	8306	282.4	8	29.5	11	18.1	7	97.6	9
MA-813NT	\$1,421	7936	283.0	7	28.1	12	18.1	9	97.8	4
HIL-9879NT	\$1,341	7484	275.4	13	27.2	13	17.7	13	97.6	8
Susceptible Check	\$1,306	7375	271.7	14	27.1	14	17.6	14	97.2	14
Average	\$1,646.6	9178.5	282.6		6.73		18.15		0.54	
LSD 5%	408.9	2087.6	13.7		6.7		0.8		0.5	
CV %	11.5	10.5	2.2		32.4		2.0		97.6	

\$/A: Payment calculated using early delivery adjustment where necessary, and a per pound payment of \$.165.

Bold: Results are not statistically different from top ranking variety in each column.



Root Aphid Nursery

Hilleshog

Average of 2019 & 2020

Variety	% Infected
BTS-1703	1.9
C-G943	2.8
C-G855	3.2
HIL-2332NT	3.7
HIL-9865	3.9
C-G919	4.0
MA-813NT	4.4
MA-814	4.4
BTS-1399	4.5
C-G675	4.6
BTS-1606N	5.1
HIL-9908	5.5
SX-RR1264	5.8
C-G752NT	5.9
SX-2295	6.3
C-G932NT	6.4
BTS-197N	6.5
BTS-188N	6.6
BTS-1941	6.7
SX-2283	7.2
HIL-2240	7.4
SX-2296N	7.6
HIL-9879NT	8.3
SX-2294	10.5
**BTS-1065	10.9
SX-2297	11.1
HIL-2238NT	11.4
MA-709	17.0
**C-G021	20.2
SX-RR1278N	23.2
SX-RR1275N	29.6
Average	8.3
LSD 5%	10.9
CV %	68.6

****C-G021 and BTS-1065** - First year varieties only used 2020 data.

Hilleshog conducts a replicated field trial (plots 4 rows X 30 ft).
Beets are rated for Root Aphids at harvest.



Aphanomyces Nursery

BETASEED, Shakopee, MN

Average of 2 years, 2019 & 2020

Variety	Root Rating 1 - 9 Scale	Canopy Rating 1 - 9 Scale	Stand Loss 1 - 5 Scale
**C-G021	3.2	2.0	1.0
BTS-188N	3.4	2.2	1.0
**BTS-1065	3.4	1.7	1.0
C-G932NT	3.5	2.2	1.0
BTS-197N	3.6	2.5	1.0
C-G752NT	3.7	2.2	1.0
SX-2283	3.9	1.9	1.0
SX-2294	4.0	2.0	1.0
SX-RR1275N	4.1	2.2	1.0
SX-RR1278N	4.2	2.4	1.0
SX-RR1264	4.2	2.3	1.0
BTS-1941	4.3	2.9	1.0
BTS-1606N	4.3	2.5	1.0
SX-2295	4.3	2.6	1.0
SX-2296N	4.4	2.6	1.0
C-G919	4.4	2.8	1.0
BTS-1399	4.4	2.3	1.0
HIL-9865	4.5	2.7	1.0
SX-2297	4.5	2.8	1.0
HIL-2332NT	4.5	2.8	1.0
BTS-1703	4.9	3.3	1.0
HIL-2240	5.0	3.2	1.0
C-G855	5.0	3.3	1.0
C-G943	5.1	3.5	1.0
C-G675	5.3	3.8	1.0
HIL-9908	5.3	3.7	1.0
MA-709	5.3	3.9	1.0
HIL-2238NT	5.4	4.0	1.0
MA-813NT	5.5	3.7	1.0
MA-814	5.5	3.8	1.0
HIL-9879NT	5.7	4.0	1.0
Average	4.56	2.90	1.00

Root and Canopy Ratings (1 - 9 scale): 1 = very little damage, 2 = up to 20% damage, 4 = up to 60% damage, 6 = up to 70% damage and 8 = up to 90% damage.

Stand Rating (1 - 5 scale): 1 = up to 20% loss, 2 = up to 40% loss, 3 = up to 60% loss, 4 = up to 80% loss, and 5 = up to 100% loss.

**** C-G021 and BTS-1065** - First year varieties only used 2020 data.



Rhizomania Nursery

USDA, Kimberly, Idaho

Average of 2 Years, 2019 & 2020

Trial Quality: Good

Location: Kimberly, Idaho

Plot Size: 2 rows X 24 ft., 6 reps

Variety	Root Rating 0-9	RWSA	% Sugar	T/A	Foliar Rating 0-100
**C-G021	2.2	13032	18.2	40.5	1.0
BTS-1941	2.2	12586	17.4	41.4	0.9
C-G943	2.2	12387	17.3	40.8	2.5
**BTS-1065	2.2	12733	18.1	40.4	0.5
HIL-2238NT	2.2	12235	17.6	39.7	1.2
BTS-1606N	2.3	12276	17.7	40.0	1.0
SX-RR1278N	2.4	11799	17.7	38.2	2.9
BTS-1399	2.4	11274	17.0	38.1	2.0
HIL-9865	2.4	11911	17.9	37.7	4.1
C-G919	2.5	11082	17.0	37.2	2.0
SX-RR1275N	2.5	11653	17.8	37.4	4.7
C-G675	2.5	11780	17.6	38.0	0.6
C-G752NT	2.5	11617	18.0	36.8	0.2
BTS-1703	2.5	11188	17.7	36.1	0.6
C-G932NT	2.5	11566	18.3	36.0	0.2
BTS-197N	2.6	11458	18.2	36.0	0.3
SX-2296N	2.7	11120	18.0	35.1	1.1
HIL-2240	2.7	10547	17.4	34.7	7.2
MA-709	2.7	10807	17.6	35.1	3.9
HIL-2332NT	2.8	11077	18.4	34.2	0.7
SX-2294	2.8	10262	17.3	33.6	8.5
C-G855	2.8	10730	17.7	34.8	0.6
BTS-188N	2.8	10925	18.1	34.2	0.0
SX-2283	2.8	10140	17.5	32.8	20.3
MA-813NT	3.0	9523	17.3	31.5	3.2
SX-RR1264	3.0	9817	17.4	31.9	3.4
HIL-9908	3.0	10200	17.9	32.3	0.4
SX-2297	3.0	9943	18.1	31.1	2.0
SX-2295	3.1	9737	17.8	31.1	7.6
MA-814	3.1	9481	17.6	30.8	4.0
HIL-9879NT	3.2	8944	16.9	30.3	4.8
Susceptible Check	4.4	5388	15.9	19.7	100.0
Average	2.7	10913.0	17.64	35.23	6.00
LSD 5%	0.5	1470.0	0.4	4.8	9.4
CV %	9.5	6.7	1.1	6.8	72.2

Root Rating (1-9 scale): 1 = very little damage, 2 = up to 20% damage, 4 = up to 60% damage, 6 = up to 75% damage and 8 = up to 90% damage.

Foliar Rating: 0 = best, 100 = worst.

****C-G021 and BTS-1065** - First year varieties only used 2020 data.



Fusarium Nursery

American Crystal Sugar Company

Average of 2 years, 2019 & 2020

Trial Quality: Good

Evaluated: 4 evaluation dates toward end of season

Plot Size: 2 rows X 17 ft., 4 reps

Variety	Avg of 2 Years Rating 1-9	2019 Rating 1-9	2020 Rating 1-9
**BTS-1065	N.A	N.A	1.6
**C-G021	N.A	N.A	2.0
BTS-1399	2.4	2.4	2.4
BTS-1606N	2.5	2.9	2.2
C-G932NT	2.7	3.4	1.9
C-G752NT	2.7	3.2	2.2
C-G943	2.8	3.4	2.1
BTS-1941	2.9	3.5	2.3
BTS-188N	2.9	3.5	2.3
BTS-197N	3.0	3.6	2.3
C-G855	3.3	3.7	2.9
C-G919	3.3	3.7	2.9
SX-2294	3.6	4.0	3.3
SX-2283	3.7	4.1	3.2
SX-RR1264	3.9	5.2	2.6
SX-2295	4.0	4.9	3.1
SX-2297	4.0	4.7	3.3
MA-814	4.0	4.4	3.6
SX-RR1275N	4.2	4.8	3.5
C-G675	4.3	5.0	3.6
SX-RR1278N	4.5	5.5	3.6
BTS-1703	4.6	5.2	3.9
HIL-2240	4.7	5.5	3.9
MA-813NT	4.8	5.6	4.0
SX-2296N	4.8	6.1	3.5
MA-709	4.9	5.5	4.2
HIL-9879NT	4.9	5.9	3.8
HIL-9908	4.9	6.1	3.7
HIL-2238NT	5.2	6.2	4.2
HIL-9865	5.3	6.0	4.7
HIL-2332NT	5.4	6.3	4.4
Susceptible Check	5.4	6.4	4.3
Average	3.97	4.69	3.17
LSD 5%	0.9		
CV %	10.8		

****C-G021 and BTS-1065** - First year varieties only used 2020 data.

Foliar Rating (1-9 scale): 1 = very little damage, 2 = up to 20% damage, 4 = up to 60% damage, 6 = up to 75% damage, and 8 = up to 90% damage. Values are an average of 4 ratings.



Official Variety and Plant to Stand Trials

Michigan Sugar Company

Location Information

Grower	Sandusky	Port Hope	Au Gres	Forestville	Middleton	Richville	Reese	Pigeon
Trial Quality	Gerstenberger OVT - Fair PTS - Fair	Grekowicz OVT - Good PTS - Good	Lynch OVT - Fair PTS - Fair	Maurer OVT - Good	Mininger OVT - Good PTS - Good	SVREC OVT - Fair/Poor	Sylvester OVT - Good	Trost OVT - Good PTS - Good
Planted	April 17	April 20	April 27	April 16	April 8	April 24	April 24	April 28
Harvested	October 16	October 8	October 5	October 19	September 29	September 22	November 5	October 29
Soil Type	Clay Loam	Sandy Clay Loam	Silty Clay	Clay Loam	Sandy Clay Loam	Clay Loam	Clay Loam	Clay Loam
Soil pH	5.8	7.7	7.5	7.1	5.7	7.4	7.9	6.7
Soil OM	3.3%	3.9%	3.3%	3.3%	2.5%	2.8%	2.8%	2.6%
Phosphorus	77	81	81	59	121	23	57	53
Potassium	142	175	230	285	161	115	295	184
Magnesium	212	245	564	260	193	367	454	238
Manganese	22.8	47	31.2	43.1	21.6	43.5	55.1	53.6
Boron	0.8	1.3	1.6	1.2	0.1	1	1.3	1.2
Zinc	5.3	9.7	21.1	8.3	5.8	3.4	4.3	7.4
Nitrogen Added	155 lbs.	35 lbs. + Manure	155 lbs.	155 lbs.	35 lbs. + Manure	155 lbs.	155 lbs.	115 lbs + Manure

Seasonal Rainfall								
April	1.09	1.21	2.7	1.39	2.16	1.39	1.01	1.09
May	3.51	5.16	8.04	3.09	4.79	4.72	4.05	2.3
June	2.85	1.02	1.15	2.85	1.98	2.09	1.05	1.75
July	3.65	1.21	1.62	2.16	3.61	3.68	4.27	2.69
August	6.84	6.64	3.63	5.75	1.30	4.74	3.48	7.03
September	3.22	1.72	2.26	2.47	0.43	2.12	2.15	2.4
October		1.48	0.39	1.35			2.51	2.16
November							0.15	
Total	21.16	18.44	19.79	19.06	14.27	18.74	18.67	19.42



Official Variety Trials

Cercospora Fungicides: Application Dates and Products

Location	Treatment 1**	Treatment 2**	Treatment 3**	Treatment 4**
Gerstenberger	6/22 - Dexter Max	7/1 - Propulse + EBDC + Boron 10%	7/15 - SuperTin + Topsin + EBDC	7/27 - Veltyma + EBDC
Grekowicz	6/22 - Dexter Max	7/1 - Propulse + EBDC + Boron 10%	7/15 - SuperTin + Topsin + EBDC	7/27 - Veltyma + EBDC
Lynch	6/24 - Dexter Max	7/7 - Propulse + EBDC + Boron 10%	7/21 - SuperTin + Topsin + EBDC	8/6 - Veltyma + EBDC
Maurer	6/22 - Dexter Max	7/1 - Propulse + EBDC + Boron 10%	7/15 - SuperTin + Topsin + EBDC	7/27 - Veltyma + EBDC
Maust	6/22 - Dexter Max	7/6 - Propulse + EBDC + Boron 10%	7/20 - SuperTin + Topsin + EBDC	7/31 - Veltyma + EBDC
Mininger	6/19 - Dexter Max	6/29 - Provysol + EBDC	7/13 - SuperTin + Topsin + EBDC	7/24 - Propulse + EBDC
SVREC	6/24 - Dexter Max	7/6 - Propulse + EBDC + Boron 10%	7/20 - SuperTin + Topsin + EBDC	7/31 - Veltyma + EBDC
Sylvester	6/22 - Dexter Max	7/6 - Propulse + EBDC + Boron 10%	7/20 - SuperTin + Topsin + EBDC	7/31 - Veltyma + EBDC
Trost	6/24 - Dexter Max	7/6 - Propulse + EBDC + Boron 10%	7/20 - SuperTin + Topsin + EBDC	7/31 - Veltyma + EBDC

Location	Treatment 5**	Treatment 6**	Treatment 7**	Treatment 8**
Gerstenberger	8/10 - SuperTin + EBDC	8/21 - Inspire XT + EBDC + Badge	9/3 - SuperTin	
Grekowicz	8/10 - SuperTin + EBDC	8/21 - Inspire XT + EBDC + Badge	9/3 - SuperTin + EBDC	9/17 - Badge
Lynch	8/19 - SuperTin + EBDC	9/1 - Inspire XT + EBDC + Badge		
Maurer	8/10 - SuperTin + EBDC	8/21 - Inspire XT + EBDC + Badge	9/3 - SuperTin + EBDC	9/17 - Delaro + Proline + Badge
Maust	8/13 - SuperTin + EBDC	8/24 - Inspire XT + EBDC + Badge	9/2 - SuperTin + EBDC	
Mininger	8/7 - SuperTin + EBDC	8/18 - Inspire XT + EBDC + Badge	8/31 - SuperTin + EBDC	
SVREC	8/14 - SuperTin + EBDC	8/24 - Inspire XT + EBDC + Badge	9/4 - SuperTin	
Sylvester	8/14 - SuperTin + EBDC	8/24 - Inspire XT + EBDC + Badge	9/4 - SuperTin + EBDC	9/18 - Delaro + Proline + Badge
Trost	8/13 - SuperTin + EBDC	8/24 - Inspire XT + EBDC + Badge	9/2 SuperTin + EBDC	9/18 - Delaro + Proline + Badge

EBDC* = Manzate Max

**Masterlock included in all Treatments.

Comments: Leafspot control was very good to excellent in all trials. Favorable weather allowed timely applications. Applications followed a 12-14 day reapplication interval based on environmental conditions. Fungicides were applied at 90 psi and 23 GPA water volume.

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Michigan Sugar Company
122 Uptown Drive, Suite 300
Bay City, MI 48708

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