

A green tractor with yellow wheels is pulling a blue sugarbeet planter through a field of dark brown soil. A person is visible in the tractor's cab. In the background, there are trees and a wind turbine under a clear sky.

2022 Variety Trial Results

**REACH/SUGARBEET ADVANCEMENT COMMITTEE LIST
2022 VOTING MEMBERSHIP**

23 Voting Members

Company	Name	Terms Remaining	Expire
Michigan Sugar Company	Thomas Bignall (5th Member)	Permanent	
	Dennis Bischer		
	Amanda Harden		
	Corey Guza		
Michigan Sugar Agriculturists (4 years)	Kerrek Griffes	1	2023
	Kevin Messing	3	2025
	Adam Maurer	4	2026
Michigan Sugar Company District Board Members (1 year)	Mark Richards	1	2023
	Troy Schuette (Secretary)	1	2023
	Terry Schindler (Treasurer)	1	2023
Michigan Sugar Company At Large Growers (3 years)	Troy Gingrich	3	2025
	Dan Keenan	2	2024
	Eric Gentner	1	2023
	Andy Shaffner (Chairman)	3	2025
Michigan State University, University of Guelph, and USDA (3 years)	Linda Hanson	1	2023
	Cheryl Trueman	3	2025
	Jamie Willbur	3	2025
Sugar Beet Seed Company (2 years)	Doug Ruppall	1	2023
Agri-Business Retail (2 years)	Kyle Edler	1	2023
Agri-Business Manufacturing (2 years)	Brian Devine	2	2024
Michigan Sugar Company Board of Directors (1 year)	Ben Wilson	1	2023
	Mark Sylvester (Vice Chairman)	1	2023
SBA Director	Daniel Bublitz	Permanent	

Ex-Officio Members

Company	Name
Chairman of Board of Directors - MSC	James Roggenbuck
COO of Michigan Sugar Company	Jim Ruhlman

Presented In Partnership



Education

(Publications, meetings, seminars, web resources, clinics, reporting sessions.)



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

**Brought to you by
these partners:**



MICHIGAN STATE | **Extension**
UNIVERSITY



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 Harden

Research Scientist
989.415.2122
amanda.harden@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

2022 Variety Trial Results

Table of Contents

Table of Contents.....	1
Approved Varieties	2

Summary of Data

2 Year OVT Data with Traits	3
Rhizoctonia Choices.....	4
Cercospora Choices	5
High Quality Choices	6
Cyst Nematode Choices.....	7
MSC OVT – Avg. of 8 Locations.....	8
MSC Plant to Stand – Avg. of 4 Locations.....	9
SBA Variety Trial Averages.....	10
MSC Emergence – Avg. of 2 Years	11
SBA Emergence Summary.....	12
SBA Rhizoctonia Summary	13

EAST District Trials

MSC OVT – Maurer, Minden City	14
MSC OVT – Grekovicz, Harbor Beach	15
MSC OVT – Gerstenberger, Sandusky	16
MSC Plant to Stand – Maurer, Minden City.....	17
SBA Variety Trial – Kearns, Dover, Ontario	18
SBA Variety Trial – DVL Farms, Ruth	19
SBA Variety Trial – Wadsworth, Sandusky	20
SBA CR+ Trial – Guza, Minden City.....	21
SBA CR+ Trial – Guza, Minden City.....	22

CENTRAL District Trials.....

MSC OVT – Trost, Pigeon	23
MSC OVT – SVREC, Richville	24
MSC OVT – Sylvester, Fairgrove	25
MSC Plant to Stand – SVREC, Richville	26
MSC Plant to Stand – SVREC, Richville	27
SBA Variety Trial – Schuette, Elkton.....	28
SBA Variety Trial – Sylvester Farms, Fairgrove.....	29

WEST District Trials

MSC OVT – Schlicker, Bay City	30
MSC OVT – Mininger, Middleton	31
MSC Plant to Stand – Schlicker, Bay City	32
MSC Plant to Stand – Mininger, Middleton.....	33
SBA Variety Trial – Spartan Acres, Freeland	34
SBA Variety Trial – Chaffin Farms, St. Johns	35
SBA CR+ Trial – Reif Farms, Saginaw	36
SBA CR+ Trial – Crumbaugh Legacy, Breckenridge	37
SBA CR+ Trial – Crumbaugh Legacy, Breckenridge	38

Nursery Data

Rhizoctonia – Avg. of 2 Years.....	39
Cercospora – Avg. of 2 Years	40
Cyst Nematode – Avg. of 2 Years.....	41
Root Aphid – Avg. of 2 years	42
Aphanomyces – Avg. of 2 Years.....	43
Rhizomania – Avg. of 2 Years.....	44
Fusarium – Avg. of 2 Years.....	45
Fusarium – Avg. of 2 Years.....	46

OVT Location Information

OVT Cercospora Fungicide Application Information.....



Approval of Seed Varieties for the 2023 Crop

Fully Approved Varieties		
Unlimited Quantities		
BTS-1703	HIL-9865	SX-RR1278N*
BTS-197N	HIL-2238NT	SX-2283*
C-G675	HIL-2332NT	SX-2294
C-G752NT	HIL-2361	SX-2296N
C-G919*	MA-709	SX-2295
C-G932NT	MA-813NT	SX-2297
C-G021	MA-814*	SX-2201

Limited Approval Varieties		
Quantities limited to 5% of acres		
C-G139	BTS-1122	MA-933NT
C-G151	BTS-1183	
C-G174NT	HIL-2403	

Special Approval Varieties		
Variety	Specialty	Quantity
BTS-1606*	Nematode/Alternaria	Unlimited
BTS-1941*	CR+	5%
BTS-1065*	CR+	5%
C-G049*	CR+	5%
HIL-2401NT*	Cercospora/Nematode	5%

* Approved to plant through 2023

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



Approved Varieties for 2023

2021 & 2022 Data

Variety	Approval Status	\$/A	Values are % of Check										Fusarium	Rhizo mania
			RWSA	RWST	T/A	Emer gence	Cercos pora	Rhizoc tonia	Root Aphid	Aphan onmyces				
BTS-1122	Limited Approval	\$2,537	106.5	99.5	107.3	113.4 G+	50.7 E	107.4 F	184.2 F+	93.0 G	55.2 G+	91.8 G+		
C-G049	Special Approval	\$2,487	104.4	97.2	108.0	106.1 G+	47.1 E	95.5 G+	49.0 G	86.8 G	70.8 G	106.6 G		
C-G151	Limited Approval	\$2,465	103.6	99.4	104.2	103.7 G	50.3 E	99.6 G	93.4 F+	97.1 F+	59.2 G+	101.8 G+		
C-G139	Limited Approval	\$2,448	102.8	104.6	98.4	101.2 G	93.1 F+	107.1 F	97.3 F+	92.8 G	79.9 G	99.1 G+		
BTS-1183	Limited Approval	\$2,441	102.3	99.5	103.1	103.0 G	49.8 E	95.4 G+	42.5 G	91.2 G	76.3 G	93.3 G+		
C-G675*	Fully Approved	\$2,439	102.4	99.3	103.2	103.1 G	93.0 F+	100.1 G	101.8 F+	113.1 F	108.7 F	92.5 G+		
BTS-1941	Special Approval	\$2,416	101.2	95.9	106.1	106.0 G+	40.8 E	103.1 F+	135.9 F+	95.1 F+	79.2 G	94.0 G+		
BTS-1065	Special Approval	\$2,404	100.9	97.7	103.3	106.2 G+	46.5 E	111.4 F	102.4 F+	96.7 F+	54.9 G+	90.8 G+		
C-G174NT	Limited Approval	\$2,397	100.9	100.6	100.0	105.7 G	89.5 G	101.8 G	99.8 F+	109.5 F	92.6 G	108.7 G		
BTS-197N	Fully Approved	\$2,393	100.3	97.8	102.7	96.8 F+	107.6 F-	94.9 G+	105.0 F+	98.6 F+	83.1 G	98.0 G+		
C-G021	Fully Approved	\$2,392	100.3	98.6	101.8	100.8 G	41.7 E	98.9 G	237.7 F+	90.4 G	73.8 G	94.8 G+		
SX-2296N*	Fully Approved	\$2,389	100.5	102.7	97.9	97.7 F+	107.8 F-	99.2 G	123.7 F+	84.4 G	108.8 F	110.3 G		
C-G932NT	Fully Approved	\$2,386	100.3	99.3	101.3	105.1 G	103.9 F-	100.5 G	34.1 G+	71.2 G+	77.8 G	99.8 G+		
BTS-1606N	Special Approval	\$2,365	99.2	97.0	102.7	104.3 G	97.0 F	100.2 G	29.6 G+	103.6 F+	81.1 G	95.4 G+		
C-G752NT*	Fully Approved	\$2,362	99.3	97.5	101.9	103.1 G	101.1 F	103.6 F+	79.2 G	98.2 F+	70.7 G	94.3 G+		
BTS-1703	Fully Approved	\$2,359	99.1	99.4	99.8	102.0 G	78.4 G+	97.8 G	125.0 F+	113.0 F	104.9 F	103.0 G		
HIL-2332NT	Fully Approved	\$2,339	98.4	102.9	96.0	97.3 F+	106.5 F-	88.5 G+	46.4 G	97.3 F+	114.0 F-	105.2 G		
HIL-9865*	Fully Approved	\$2,331	97.8	100.6	97.0	96.1 F+	98.2 F	97.1 G	95.3 F+	104.3 F+	111.8 F	102.8 G		
SX-2294	Fully Approved	\$2,321	97.6	100.4	97.6	99.5 G	87.4 G	110.0 F	103.7 F+	107.8 F	96.9 F+	114.7 G		
SX-2295	Fully Approved	\$2,320	97.4	100.9	96.8	100.1 G	92.7 F+	93.2 G+	284.7 F+	97.3 F+	99.1 F	124.3 G		
SX-2201	Fully Approved	\$2,319	97.6	100.0	97.7	94.4 F+	86.7 G	103.1 F+	58.6 G	90.2 G	106.3 F	111.4 G		
HIL-2361	Fully Approved	\$2,310	97.1	102.5	94.9	99.2 G	91.8 G	87.2 G+	139.8 F+	102.2 F+	110.8 F	115.6 G		
SX-2297	Fully Approved	\$2,288	96.3	102.5	94.1	91.2 F	92.2 F+	82.9 G+	92.8 F+	111.5 F	109.1 F	123.8 G		
MA-933NT	Limited Approval	\$2,269	95.2	100.3	95.1	101.8 G	95.3 F	89.6 G+	191.9 F+	103.0 F+	100.0 F	139.1 F+		
MA-709	Fully Approved	\$2,254	94.7	98.1	96.8	96.1 F+	84.6 G+	99.8 G	143.0 F+	108.8 F	109.8 F	109.9 G		
HIL-2238NT	Fully Approved	\$2,238	93.4	95.4	97.7	103.4 G	93.0 F+	108.8 F	72.8 G	113.7 F	115.2 F-	93.8 G+		
HIL-2403	Limited Approval	\$2,214	93.1	101.2	92.4	101.3 G	92.6 F+	87.1 G+	85.7 F+	102.7 F+	101.7 F	126.3 G		
HIL-2401NT	Special Approval	\$2,165	90.9	98.7	92.4	105.3 G	77.1 G+	100.3 G	43.2 G	113.5 F	108.7 F	108.7 G		
MA-813NT	Fully Approved	\$2,018	85.0	97.6	87.6	100.4 G	81.5 G+	105.5 F	185.5 F+	135.2 F	110.5 F	138.9 G		

A lower value is better for Cercospora, Rhizoctonia, Root Aphid, Aphanomyces, Fusarium, and Rhizomania.

\$/A: Gross dollars per acre is calculated using early delivery adjustment where necessary and a per pound payment of \$0.1767 for 2021, and \$0.18 for 2022. Results are combined across 2 years which includes 8 locations in 2021 and 8 locations in 2022.

*Check Variety



Rhizoctonia

Varieties for 2023 - Average of 2021 & 2022

Variety	% of Check				Comments
	Rhizoc	RWSA	RWST	Cerc	
SX-2297	82.9	96.3	102.5	92.2	Fully Approved variety with very good Rhizoctonia tolerance. Slightly weak on Aphanomyces and Fusarium but otherwise good disease traits. Above average RWST but below average RWSA.
HIL-2403	87.1	93.1	101.2	92.6	Fully Approved variety with very good Rhizoctonia tolerance. Good overall disease package. Above average RWST but below average RWSA.
HIL-2361	87.2	97.1	102.5	91.8	Fully Approved variety with very good Rhizoctonia tolerance. Slightly weak on Fusarium but otherwise good disease traits. Above average RWST but below average RWSA.
HIL-2332NT	88.5	98.4	102.9	106.5	Fully Approved Nematode tolerant variety with very good Rhizoctonia tolerance. Weak on Cercospora and Fusarium. Above average RWST and average RWSA.
MA-933NT	89.6	95.2	100.3	95.3	New Limited Approval Nematode tolerant variety with very good Rhizoctonia tolerance. Fair overall disease traits. Above average RWST but below average RWSA.
SX-2295	93.2	97.4	100.9	92.7	Fully Approved variety with good Rhizoctonia tolerance. Fair overall disease traits. Above average RWST but below average RWSA.
BTS-197N	94.9	100.3	97.8	107.6	Fully Approved Nematode tolerant variety with good Rhizoctonia tolerance. Weak on Cercospora but otherwise good disease traits. Above average RWSA but below average RWST.
BTS-1183	95.4	102.3	99.5	49.8	New Limited Approval variety with good Rhizoctonia tolerance. CR+ trait for excellent Cercospora tolerance and good overall disease traits. Above average RWSA and average RWST.
C-G049	95.5	104.4	97.2	47.1	Specialty Approved variety with good Rhizoctonia tolerance. CR+ trait for excellent Cercospora tolerance and good overall disease package. Well above average RWSA but below average RWST.
HIL-9865	97.1	97.8	100.6	98.2	Fully Approved variety with good Rhizoctonia tolerance. Good overall disease traits. Above average RWST but below average RWSA.

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



Cercospora

Varieties for 2023 - Average of 2021 & 2022

Variety	% of Check				Comments
	Cerc	RWSA	RWST	Rhizoc	
BTS-1941	40.8	101.2	95.9	103.1	Specialty Approved variety with CR+ trait for excellent Cercospora tolerance. Good overall disease traits with above average RWSA but below average RWST.
C-G021	41.7	100.3	98.6	98.9	Fully Approved variety with CR+ trait for excellent Cercospora tolerance. Good overall disease traits. Above average RWSA but below average RWST.
BTS-1065	46.5	100.9	97.7	111.4	Specialty Approved variety with CR+ trait for excellent Cercospora tolerance. Good overall disease traits with slight weakness to Rhizoctonia. Above average RWSA and below average RWST.
C-G049	47.1	104.4	97.2	95.5	Specialty Approved variety with CR+ trait for excellent Cercospora tolerance. Good overall disease traits. Well above average RWSA but below average RWST.
BTS-1183	49.8	102.3	99.5	95.4	New Limited Approval variety with CR+ trait for excellent Cercospora tolerance. Good overall disease traits. Above average RWSA and average RWST.
C-G151	50.3	103.6	99.4	50.3	New Limited Approval variety with CR+ trait for excellent Cercospora tolerance. Good overall disease traits. Well above average RWSA and average RWST.
BTS-1122	50.7	106.5	99.5	107.4	New Limited Approval variety with CR+ trait for excellent Cercospora tolerance. Good overall disease traits, slightly weak on Rhizoctonia. Well above average RWSA and average RWST.
HIL-2401NT	77.1	90.9	98.7	100.3	New Specialty Approved Nematode tolerant variety with very good Cercospora tolerance. Good overall traits. Below average RWSA and RWST.
BTS-1703	78.4	99.1	99.4	97.8	Fully Approved variety with very good Cercospora tolerance. Good overall disease traits. Above average RWSA and average RWST.
MA-813NT	81.5	85.0	97.6	105.5	Fully Approved Nematode tolerant variety with very good Cercospora tolerance. Slight weakness to all root rot diseases. Below average RWSA and RWST.
MA-709	84.6	94.7	98.1	99.8	Fully Approved variety with very good Cercospora tolerance. Slight weakness to Aphanomyces. Below average RWSA and RWST.
SX-2201	86.7	97.6	100.0	86.7	Fully Approved variety with very good Cercospora tolerance. Good overall disease traits. Below average RWSA but above average RWST.
SX-2294	87.4	97.6	100.4	110.0	Fully Approved variety with very good Cercospora tolerance. Slight weakness to Rhizoctonia but otherwise good disease traits. Below average RWSA but above average RWST.
C-G174NT	89.5	100.9	100.6	101.8	New Limited Approval variety with very good Cercospora tolerance. Good overall disease traits with slight weakness to Aphanomyces. Above average RWSA and RWST.

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



High Quality

Varieties for 2023 - Average of 2021 & 2022

Variety	% of Check				Comments
	RWST	RWSA	Rhizoc	Cerc	
C-G139	104.6	102.8	107.1	93.1	New Limited Approval variety with very good RWST. Slightly weak for Rhizoctonia but otherwise good disease traits. Above average RWSA.
HIL-2332NT	102.9	98.4	88.5	106.5	Fully Approved Nematode tolerant variety with very good RWST. Weak on Cercospora and Fusarium, otherwise good disease traits. Average RWSA.
SX-2296N	102.7	100.5	99.2	107.8	Fully Approved Nematode tolerant variety with very good RWST. Weak on Cercospora but otherwise good disease traits. Above average RWSA.
SX-2297	102.5	96.3	82.9	92.2	Fully Approved variety with very good RWST. Slightly weak on Aphanomyces and Fusarium but otherwise good disease traits. Below average RWSA.
HIL-2361	102.5	97.1	87.2	91.8	Fully Approved variety with very good RWST. Slightly weak on Fusarium but otherwise good disease traits. Below average RWSA.

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



Sugarbeet Cyst Nematode

Varieties for 2023 - Average of 2021 & 2022

Variety	All Values are % of Check				Comments
	RWSA	RWST	Rhizoc	Cerc	
C-G174NT	100.9	100.6	101.8	89.5	New Limited Approval Nematode tolerant variety. Very good Cercospora tolerance and overall disease traits except slightly weak for Aphanomyces. Above average RWSA and RWST.
BTS-197N	100.3	97.8	94.9	107.6	Fully Approved Nematode tolerant variety. Good Rhizoctonia tolerance, weak on Cercospora, otherwise good disease traits. Above average RWSA but below average RWST.
SX-2296N	100.5	102.7	99.2	107.8	Fully Approved Nematode tolerant variety. Very good RWST and above average RWSA. Weak on Cercospora but otherwise good disease traits.
C-G932NT	100.3	99.3	100.5	103.9	Fully Approved Nematode tolerant variety. Weak on Cercospora but otherwise good disease traits. Above average RWSA and average RWST.
BTS-1606N	99.2	97.0	100.2	97.0	Specialty Approved Nematode tolerant variety. Good overall disease traits. Above average RWSA but below average RWST.
C-G752NT	99.3	97.5	103.6	101.1	Fully Approved Nematode tolerant variety. Slightly weak on Rhizoctonia and Cercospora but otherwise good disease traits. Above average RWSA but below average RWST.
HIL2332NT	98.4	102.9	88.5	106.5	Fully Approved Nematode tolerant variety. Very good RWST. Weak on Cercospora and Fusarium otherwise good disease traits. Average RWSA.
MA-933NT	95.2	100.3	89.6	95.3	New Limited Approval Nematode tolerant variety. Good overall disease traits. Above average RWST but below average RWSA.
HIL-2238NT	93.4	95.4	108.8	93.0	Fully Approved Nematode tolerant variety. Slightly weak on all root diseases but otherwise good disease traits. Below average RWSA and RWST.
HIL-2401NT	90.9	98.7	100.3	77.1	Specialty Approved Nematode tolerant variety. Very good Cercospora tolerance. Good overall disease traits. Below average RWSA and RWST.
MA-813NT	85.0	97.6	105.5	81.5	Fully Approved Nematode tolerant variety. Very good Cercospora tolerance. Slight weakness to all root rot diseases. Below average RWSA and RWST.

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



Official Variety Trial

Average of 8 Locations - 2022

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

Locations:
 Gerstenberger Schlicker
 Grekowicz SVREC
 Maurer Sylvester
 Mininger Trost

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

Variety	\$/A	RWSA	RWST		Yield		Sugar		CJP		Emergence	
			Ib/T	Rank	T/A	Rank	%	Rank	%	Rank	%	Rank
BTS-1122	\$2,586	12638	305	13	41.4	2	20.0	10	95.7	15	68.7	1
C-G151	\$2,512	12282	304	14	40.3	4	19.9	15	95.9	13	64.4	3
C-G049	\$2,514	12279	295	26	41.7	1	19.6	26	95.2	26	60.7	13
C-G675	\$2,477	12099	301	18	40.1	5	19.9	21	95.5	17	58.7	18
C-G139	\$2,475	12079	319	1	37.9	16	20.7	1	96.3	1	59.9	15
C-G174NT	\$2,451	11987	305	11	39.2	11	19.9	13	96.0	10	64.9	2
BTS-1065	\$2,449	11975	301	19	39.8	6	19.9	14	95.2	25	63.7	6
BTS-1183	\$2,443	11927	301	20	39.7	8	19.9	19	95.3	23	59.0	17
SX-2296N	\$2,440	11909	315	2	37.8	17	20.5	2	96.1	5	57.4	22
BTS-197N	\$2,436	11892	299	25	39.8	7	19.8	23	95.2	24	58.6	19
BTS-1941	\$2,428	11846	291	28	40.8	3	19.6	27	94.7	29	63.8	5
C-G752NT	\$2,411	11792	300	21	39.3	10	19.8	24	95.6	16	63.9	4
C-G021	\$2,415	11768	300	23	39.4	9	19.9	16	95.1	27	60.9	12
BTS-1703	\$2,403	11735	302	17	39.0	13	19.9	17	95.4	21	62.4	7
C-G932NT	\$2,395	11703	304	15	38.5	14	19.9	18	95.8	14	60.4	14
SX-2201	\$2,356	11514	306	10	37.6	19	20.0	11	95.9	11	47.0	29
BTS-1606N	\$2,357	11496	295	27	39.1	12	19.5	28	95.4	20	61.6	9
HIL-9865	\$2,355	11478	305	12	37.7	18	19.9	20	96.1	8	56.4	25
HIL-2332NT	\$2,339	11411	311	5	36.7	22	20.3	4	96.1	7	57.1	23
SX-2295	\$2,311	11267	307	8	36.8	21	20.0	9	96.1	6	57.4	21
SX-2297	\$2,294	11211	312	3	35.9	25	20.3	3	96.2	4	54.0	28
HIL-2361	\$2,288	11175	312	4	35.9	26	20.2	5	96.2	2	56.1	26
MA-933NT	\$2,285	11153	307	7	36.3	23	20.0	7	96.0	9	59.9	16
SX-2294	\$2,271	11091	306	9	36.2	24	20.0	8	95.9	12	54.7	27
MA-709	\$2,266	11078	300	22	36.9	20	19.8	22	95.4	22	58.2	20
HIL-2238NT	\$2,270	10971	288	29	38.0	15	19.2	29	95.1	28	61.5	10
HIL-2403	\$2,204	10768	309	6	34.9	28	20.1	6	96.2	3	61.8	8
HIL-2401NT	\$2,174	10614	303	16	35.1	27	20.0	12	95.5	19	61.4	11
MA-813NT	\$2,039	9998	299	24	33.4	29	19.7	25	95.5	18	56.7	24
Average	\$2,367.0	11556.4	303.6		38.11		19.94		95.68		59.70	
LSD 5%	82.2	399.6	5.4		1.2		0.3		0.3		3.5	
CV %	3.5	3.5	1.8		3.1		1.5		0.4		6.0	

\$/A: Payment calculated using early delivery adjustment where necessary, and a per pound payment of \$0.18.

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

Comments: For 2022, four trials were planted and thinned, while the remaining four trials were planted to stand. Drier than average conditions impacted both root and sugar yields. Four trials were harvested during early delivery and four trials were harvested during permanent pile. Overall, root yields were respectable and sugar was excellent.



Plant to Stand

Average of 4 Locations - 2022

Trial Quality: see trial pages

Plant/Harv: see trial pages

Plots: 6 Rows x 38 ft.

Row Spacing: 22 in.

Seeding Rate: 4.5 in.

Locations: Maurer

Mininger

Schlicker

SVREC

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-G049	\$2,377	10970	270	17	40.9	1	18.5	16	94.2	15	170.4	3
BTS-1065	\$2,305	10673	272	12	39.3	3	18.6	10	94.1	18	169.0	5
BTS-1941	\$2,294	10595	262	21	40.7	2	18.4	20	93.2	21	169.4	4
SX-2296N	\$2,274	10495	287	2	36.7	9	19.3	1	94.9	4	153.7	12
BTS-1606N	\$2,240	10342	269	19	38.7	4	18.4	19	94.2	14	168.1	6
C-G675	\$2,208	10199	275	7	37.4	6	18.7	8	94.4	10	160.9	10
SX-2295	\$2,200	10164	280	6	36.5	11	18.9	6	94.8	5	136.1	18
HIL-2332NT	\$2,186	10105	287	1	35.1	17	19.3	2	95.1	2	144.2	17
HIL-2361	\$2,192	10091	286	3	35.4	16	19.1	4	95.3	1	145.6	16
C-G021	\$2,189	10071	271	13	37.3	7	18.7	9	94.0	20	165.3	7
C-G932NT	\$2,175	10015	275	8	36.6	10	18.7	7	94.4	11	164.3	8
BTS-1703	\$2,164	9987	274	9	36.9	8	18.6	11	94.5	8	176.3	1
C-G752NT	\$2,174	9980	270	16	37.4	5	18.5	15	94.2	16	174.4	2
SX-2294	\$2,126	9858	281	5	35.1	18	19.0	5	94.8	6	128.5	20
MA-709	\$2,101	9759	270	14	36.1	13	18.6	12	94.1	17	150.2	13
HIL-9865	\$2,097	9699	273	10	35.5	15	18.5	13	94.6	7	149.4	14
BTS-197N	\$2,103	9680	269	18	36.3	12	18.5	17	94.0	19	157.1	11
SX-2297	\$2,084	9648	285	4	33.9	20	19.1	3	95.0	3	133.8	19
HIL-2238NT	\$2,071	9558	268	20	35.8	14	18.4	21	94.2	13	163.8	9
SX-2201	\$1,957	9178	270	15	33.9	19	18.5	18	94.3	12	100.6	21
MA-813NT	\$1,915	8903	272	11	32.6	21	18.5	14	94.5	9	147.4	15
Average	\$2,163.3	9998.5	275		36.6		18.71		94.42		153.7	
LSD 5%	170.8	750.7	7.5		2.5		0.4		0.6		22.1	
CV%	5.6	5.3	1.9		4.9		1.5		0.5		10.2	

\$/A: Payment calculated using early delivery adjustment where necessary, and a per pound payment of \$0.18.

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

Comments: For 2022, two Plant to Stand trials had weak emergence, and two trials had relatively good emergence. When the four trials were averaged together, the average stand was slightly lower than desired, but representative of the 2022 crop year. Two trials were harvested in September and two in October. Overall, root and sugar yield in these trials were very good. Disease control in all trials was very good.

2022 Variety Trial Averages

Average of Seven Trials

Farms: Chaffin Farms (St. Johns)
DVL Farms (Ruth)
Stephen Kearns (Ontario)

Schuetz Farms (Elkton)
Spartan Acres Farms (Freeland)
Sylvester Farms (Fairgrove)
Wadsworth Farms, Inc. (Sandusky)

Variety	\$/A	RWSA	RWST	T/A	% Sugar	% CJP
C-G049	\$2,139	9977	295	33.7	19.5	95.8
BTS-1065	\$2,121	9883	297	33.2	19.6	95.9
C-G021	\$2,073	9672	291	33.1	19.2	95.8
C-G932NT	\$2,058	9572	296	32.3	19.5	95.9
SX-2296N	\$2,013	9379	309	30.3	20.3	95.9
HIL-2332NT	\$1,989	9267	308	30.1	20.2	96.0
BTS-1606N	\$1,973	9194	286	32.1	19.0	95.8
BTS-1703	\$1,952	9083	289	31.3	19.1	95.8
C-G675	\$1,948	9085	291	31.2	19.2	95.8
HIL-2361	\$1,880	8771	307	28.5	20.1	96.0
HIL-9865	\$1,878	8753	294	29.8	19.4	96.0
SX-2295	\$1,812	8437	297	28.3	19.6	95.9
Average	\$1,986	9256	297	31.2	19.6	95.9
LSD 5%	57.1	252.1	4.8	0.8	0.3	0.1
CV %	4.9	4.6	2.7	4.1	2.4	0.2
p-value	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0004

Comments: These results are the average of seven 2022 Sugarbeet Advancement trials. As it does most years, the weather had a major impact on the SBA trials this year. The earliest planted trials, the Spartan Acres and Sylvester trials, had less than perfect emergence due to rain and crusting after planting. Most of the locations were drier than normal, with the Chaffin, Schuetz, DVL, and Kearns trials suffering the most from the drought. As far as root disease, this year levels were low or very low in most of the SBA trials, with the exception of the Schuetz trial which had a moderate level of disease. Leaf spot levels were also low or very low at each location. It is very likely the below average disease levels this year were due in part to the dry weather these locations experienced. Sugarbeet cyst nematode was present at two trials this year, with moderate levels at the Sylvester trial and low levels at the Schuetz trial. Root aphids were observed in the DVL and Schuetz trials, and may have had an impact on yield. To make the most informed sugarbeet variety selection possible, this data should be used in conjunction with Michigan Sugar variety/nursery data and seed company information.

\$/A: Gross dollars per acre calculated using \$0.18 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, 2021 & 2022

Locations: 2021 - Gerstenberger, Grekowicz, Maurer, Mininger, Shaffner, SVREC, Sylvester, Trost
 2022 - Gerstenberger, Grekowicz, Maurer, Mininger, Schlicker, SVREC, Sylvester, Trost

Plot Size: 2 Rows X 38 ft., 8 reps / 2 Rows X 38 ft., 10 reps / 2 Rows X 38 ft., 12 reps

Seeding Rate: 2021 - 1.9" and 3.75" seed spacing, 2022 - 1.9" & 4.5" seed spacing

Variety	% Emergence
BTS-1122	67.1
BTS-1065	63.3
C-G049	63.1
BTS-1941	63.0
HIL-2401NT	62.5
C-G932NT	62.4
C-G174NT	62.1
BTS-1606N	62.0
C-G151	61.7
HIL-2238NT	61.5
C-G752NT	61.4
C-G675	61.3
BTS-1183	61.1
BTS-1703	60.5
C-G021	59.9
MA-933NT	59.9
HIL-2403	59.9
MA-813NT	59.7
C-G139	59.6
SX-2295	59.4
SX-2294	59.1
HIL-2361	59.1
SX-2296N	58.2
HIL-2332NT	57.9
BTS-197N	57.8
MA-709	57.3
HIL-9865	57.3
SX-2201	55.9
SX-2297	54.3
Average	60.28
LSD 5%	6.9
CV %	5.6

Comments: Emergence data is from Official Variety Trials.

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

Early Counts

<i>Trial</i>	Chaffin	DVL	Kearns	Schuette	Spartan	Sylvester	Wadsworth	Average
	Clinton	Huron	Ontario	Huron	Bay	Tuscola	Sanilac	
<i>Plant Date</i>	May 9	May 7	May 10	May 10	April 30	April 30	May 8	
<i>Count Days</i>	8	9	10	8	12	11	8	
C-G021	144	108	169	199	80	85	139	126
BTS-1065	158	76	133	200	87	66	160	125
C-G675	129	103	120	201	111	60	131	122
BTS-1703	151	79	176	197	82	76	141	121
HIL-9865	141	107	193	192	68	52	149	118
C-G932NT	160	88	225	168	68	75	141	117
C-G049	131	71	123	192	90	79	118	113
SX-2296N	144	107	183	200	43	40	139	112
HIL-2361	125	102	201	186	63	40	131	108
BTS-1606	123	50	128	160	72	54	131	98
HIL-2332	109	80	150	191	47	44	114	98
SX-2295	125	70	187	188	31	24	145	97
Average	136	87	166	189	70	58	137	113
LSD 5%	28	N.S.	N.S.	N.S.	24	22	N.S.	13
CV %	14.5	27.8	25.1	10.9	23.4	23.0	22.1	18.6
p-value	0.0209	0.1052	0.0723	0.3566	<0.0001	0.0002	0.8598	<0.0001

Late Counts

<i>Trial</i>	Chaffin	DVL	Kearns	Schuette	Spartan	Sylvester	Wadsworth	Average
<i>Count Days</i>	31	33	30	29	41	31	29	
C-G021	195	266	281	256	130	158	214	203
BTS-1065	195	254	282	257	137	149	210	200
BTS-1703	191	252	272	257	119	156	205	197
C-G049	191	258	274	240	143	153	189	195
C-G675	178	258	254	250	159	128	192	194
C-G932NT	205	260	293	245	112	140	188	192
BTS-1606	192	254	289	236	124	141	196	190
SX-2296N	184	255	270	254	116	126	203	190
HIL-2332	187	252	270	247	122	132	184	187
SX-2295	186	243	267	246	117	130	202	187
HIL-9865	184	246	268	245	119	128	200	187
HIL-2361	166	242	252	241	119	101	197	178
Average	188	253	273	248	126	137	198	192
LSD 5%	N.S.	11	10	13	26	21	N.S.	9
CV %	10.2	2.6	2.3	3.2	14.3	9.4	6.6	7.6
p-value	0.4592	0.0050	<0.0001	0.0399	0.0357	0.0009	0.2193	<0.0001

Comments on root rot summary page

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

N.S. – not significant

Root Rot Summary

Fall Count of Dead Beets in 1200 Foot of Row

<i>Trial Location</i>	Chaffin	DVL	Kearns	Schuetz	Spartan	Sylvester	Wadsworth	Average
C-G049	0	15	0	3	0	0	1	3
HIL-2361	0	0	0	16	9	0	0	4
HIL-2332NT	2	5	2	43	12	5	1	10
BTS-1606N	0	46	3	60	10	7	1	18
C-G675	1	57	4	54	9	6	3	19
C-G021	2	27	1	90	7	7	2	19
BTS-1703	0	58	0	76	1	6	2	21
BTS-1065	4	30	2	79	12	15	4	21
SX-2295	0	53	4	62	38	15	1	25
C-G932NT	2	30	5	121	21	8	6	28
HIL-9865	3	86	5	153	27	27	8	44
SX-2296N	6	35	13	174	40	35	9	44
Average	2	37	3	78	16	11	3	21
LSD (5%)	N.S.	N.S.	N.S.	39.0	16.8	10.2	N.S.	8.7
CV (%)	237.3	82.1	164.4	29.8	75.1	56.2	126.2	69.7
p-value	0.5086	0.0816	0.2560	<0.0001	0.0001	<0.0001	0.1765	<0.0001

Comments: The 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, most of the trials had either a low or very low level of root disease, except for the Schuetz trial which had a moderate disease level. In most locations, all three of the major root diseases in this growing region were observed at varying levels, but Rhizoctonia was the primary disease observed this year. We continue to observe an increasing amount of Fusarium throughout the growing region. See the individual trials for Quadris treatments.

Bold: Results are not significantly less than the highest emerging variety

N.S. – not significant

Emergence Summary Comments: In general, emergence was good for the SBA variety trials this year. Those planted during the last weekend of April, including the Spartan Acres and Sylvester trials, had a little trouble emerging due to some minor crusting issues that occurred shortly after planting. As a result, stands at both locations were slightly lower than ideal. The DVL trial was planted fairly shallow, and so some of the seed was not planted into moisture. Because of this, the early emergence counts were a little low. There was a second group of beets that emerged at this location, which germinated after a rain. Thus, final emergence here was excellent. Averages are of 6 trials for both the early and late counts. Neither average includes the Kearns Trial (Canada) because different seed treatments were used.

All varieties had the standard seed treatment plus Tachigaren 20. The varieties also contained these additional seed treatments by these companies: Seedex - SeedGuard; Hillehog - Vibrance; Crystal - Kabina; Betaseed - Kabina. Kabina is not approved for use in Canada (Kearns).

East District Trials





Official Variety Trial

Maurer, Minden City - 2022

Trial Quality: Very Good

Planted: May 11

Harvested: October 24

Plots: 2 Rows x 38 ft., 8 reps

Row Width: 22 in.

Seeding Rate: 1.9 in. thinned to
200 beets/100'

Soil Info: Clay Loam

Prev Crop: Dry Beans

Added N: 35 lbs. 2x2 + 120 lbs.

Side-dress

Disease Pressure:

Cerc: Low

Rhizoc: Low

Rainfall: 12.39 in.

Variety	\$/A	RWSA	RWST		Yield		Sugar		CJP		Emergence	
			lb/T	Rank	T/A	Rank	%	Rank	%	Rank	%	Rank
C-G675	\$2,336	12980	335	4	38.7	2	21.8	2	96.3	20	64.0	25
BTS-1122	\$2,284	12689	321	28	39.5	1	20.8	29	96.8	8	74.5	2
C-G752NT	\$2,280	12665	328	13	38.7	3	21.2	16	96.6	15	70.2	8
BTS-1065	\$2,256	12536	327	15	38.3	5	21.5	6	95.8	26	75.0	1
BTS-197N	\$2,252	12510	327	14	38.2	6	21.2	19	96.6	12	66.7	19
C-G139	\$2,243	12459	342	1	36.5	12	22.0	1	96.9	7	64.0	26
C-G049	\$2,240	12445	323	25	38.6	4	21.1	26	96.2	21	66.9	17
C-G174NT	\$2,223	12352	330	10	37.4	7	21.4	12	96.7	11	69.6	10
SX-2296N	\$2,209	12273	339	2	36.2	13	21.7	3	97.1	3	66.7	18
C-G151	\$2,184	12133	327	16	37.0	9	21.2	23	96.7	10	74.1	3
BTS-1606N	\$2,167	12038	327	18	36.9	10	21.2	21	96.6	14	66.6	21
C-G932NT	\$2,139	11885	326	21	36.5	11	21.2	24	96.5	16	68.3	13
C-G021	\$2,132	11847	331	9	35.9	15	21.6	4	96.0	25	72.6	5
BTS-1941	\$2,131	11840	318	29	37.2	8	21.2	17	95.2	29	70.0	9
BTS-1183	\$2,128	11823	327	17	36.2	14	21.2	22	96.6	13	67.2	14
SX-2297	\$2,119	11774	331	8	35.6	16	21.2	18	97.1	2	65.1	24
BTS-1703	\$2,065	11473	324	23	35.5	17	21.5	8	95.3	28	67.1	16
SX-2201	\$2,048	11380	323	26	35.3	18	21.1	25	96.2	23	61.2	29
HIL-2361	\$2,034	11300	336	3	33.6	22	21.4	10	97.4	1	65.2	22
MA-709	\$2,025	11252	326	19	34.5	19	21.4	11	96.0	24	66.7	20
HIL-2403	\$2,011	11172	333	6	33.6	23	21.4	9	96.9	5	72.9	4
SX-2295	\$2,009	11160	329	11	33.9	20	21.3	15	96.8	9	68.9	12
HIL-2332NT	\$1,997	11096	334	5	33.2	25	21.5	7	96.9	6	67.2	15
MA-933NT	\$1,980	11000	326	20	33.8	21	21.3	13	96.2	22	69.4	11
SX-2294	\$1,957	10871	328	12	33.2	26	21.3	14	96.5	17	63.7	27
HIL-2238NT	\$1,945	10805	322	27	33.5	24	21.2	20	95.8	27	71.6	7
HIL-2401NT	\$1,891	10504	331	7	31.8	29	21.5	5	96.3	18	72.3	6
HIL-9865	\$1,884	10469	325	22	32.2	28	20.9	28	97.0	4	65.2	23
MA-813NT	\$1,875	10418	323	24	32.2	27	21.1	27	96.3	19	62.8	28
Average	\$2,105.1	11694.8	328		35.6		21.33		96.44		68.13	
LSD 5%	161.3	895.9	9.7		2.7		0.5		0.6		8.0	
CV %	7.8	7.8	3.0		7.7		2.4		0.7		12.0	

See Cercospora Fungicide Application Page 48 for applications

\$/A: Payment calculated using early delivery adjustment where necessary, and a per pound payment of \$0.18.

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

Comments: This trial was planted thick and thinned to a 200 beets/100' equivalent stand. Good emergence conditions resulted in very consistent spacing once thinned. This trial was dry all season but especially dry during July and September. Although dry, beets remained relatively healthy and root growth was rapid after September and October rains. Low levels of root aphids were observed prior to and during harvest.



Official Variety Trial

Grekowicz, Harbor Beach - 2022

Trial Quality: Excellent

Planted: May 12

Harvested: November 1

Plots: 2 Rows x 38 ft., 12 reps

Row Width: 22 in.

Seeding Rate: 4.5 in.

Soil Info: Sandy Clay Loam

Prev Crop: Wheat

Added N: 35 lbs. 2x2 + Manure

Disease Pressure:

Cerc: Very low

Rhizoc: Very low

Rainfall: 13.01 in.

Variety	\$/A	RWSA	RWST		Yield		Sugar		CJP		Emergence	
			lb/T	Rank	T/A	Rank	%	Rank	%	Rank	%	Rank
BTS-197N	\$2,662	14787	329	14	45.0	4	21.6	11	96.0	20	79.9	16
BTS-1122	\$2,659	14774	327	16	45.1	2	21.6	9	95.6	25	84.7	5
C-G139	\$2,650	14720	347	1	42.5	16	22.4	1	96.5	5	81.0	13
C-G932NT	\$2,647	14703	338	5	43.5	10	21.9	4	96.5	6	78.8	20
C-G049	\$2,645	14692	324	20	45.3	1	21.3	18	95.8	23	78.4	22
BTS-1183	\$2,626	14590	331	8	44.1	6	21.9	6	95.4	26	79.6	17
C-G151	\$2,626	14587	324	21	45.1	3	21.2	24	96.2	13	82.2	10
SX-2296N	\$2,596	14420	339	3	42.5	15	22.0	2	96.5	4	80.6	14
C-G752NT	\$2,583	14351	332	7	43.2	12	21.8	7	95.9	22	80.4	15
C-G675	\$2,568	14265	326	19	43.8	8	21.3	17	96.1	17	78.2	25
HIL-2332NT	\$2,556	14200	341	2	41.7	20	22.0	3	96.7	1	77.8	28
BTS-1703	\$2,549	14163	327	17	43.3	11	21.4	15	96.1	18	78.4	21
BTS-1065	\$2,531	14063	320	26	43.9	7	21.2	23	95.6	24	82.9	8
C-G174NT	\$2,512	13958	326	18	42.8	14	21.3	20	96.3	11	86.4	2
BTS-1606N	\$2,505	13919	322	25	43.2	13	21.1	26	96.1	15	78.8	19
SX-2201	\$2,499	13881	329	10	42.2	18	21.6	10	96.0	19	73.4	29
BTS-1941	\$2,487	13816	310	29	44.6	5	20.7	29	95.0	29	81.5	12
C-G021	\$2,483	13796	317	27	43.5	9	21.2	22	95.1	28	78.8	18
SX-2297	\$2,456	13645	339	4	40.2	26	21.9	5	96.7	3	78.2	23
MA-709	\$2,450	13614	323	23	42.2	17	21.1	25	96.1	14	82.1	11
HIL-9865	\$2,445	13582	329	13	41.3	22	21.4	13	96.3	10	78.0	26
HIL-2361	\$2,416	13420	330	9	40.7	24	21.5	12	96.3	9	78.2	24
MA-933NT	\$2,407	13370	323	22	41.3	21	21.1	27	96.3	8	88.0	1
SX-2295	\$2,406	13368	328	15	40.8	23	21.4	14	96.1	16	82.5	9
HIL-2403	\$2,397	13314	329	12	40.4	25	21.3	19	96.7	2	86.2	4
HIL-2238NT	\$2,385	13251	314	28	42.2	19	20.9	28	95.4	27	84.4	6
HIL-2401NT	\$2,360	13111	334	6	39.3	28	21.8	8	96.2	12	86.3	3
SX-2294	\$2,359	13103	329	11	39.8	27	21.4	16	96.4	7	77.9	27
MA-813NT	\$2,207	12261	322	24	38.1	29	21.2	21	95.9	21	83.2	7
Average	\$2,505.9	13921.5	328		42.5		21.46		96.06		80.93	
LSD 5%	92.0	511.2	7.0		1.5		0.4		0.3		5.2	
CV %	4.6	4.6	2.7		4.4		2.4		0.4		8.0	

See Cercospora Fungicide Application Page 48 for applications

\$/A: Payment calculated using early delivery adjustment where necessary, and a per pound payment of \$0.18.

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

Comments: This trial was harvested during permanent pile and had excellent root and sugar yield. This trial was planted to stand and emergence was very uniform. Abnormally dry weather from June through September slowed root growth, but beets remained healthy waiting for rainfall. Rainfall in October rapidly increased root yields.



Official Variety Trial

Gerstenberger, Sandusky - 2022

Trial Quality: Very Good

Planted: May 12

Harvested: October 28

Plots: 2 Rows x 38 ft., 10 reps

Row Width: 22 in.

Seeding Rate: 4.5 in.

Soil Info: Clay Loam

Prev Crop: Corn

Added N: 90 lbs. PPI, 35 Lbs 2x2

Disease Pressure:

Cerc: Low

Rhizoc: Low

Rainfall: 13.21 in.

Variety	\$/A	RWSA	RWST		Yield		Sugar		CJP		Emergence	
			lb/T	Rank	T/A	Rank	%	Rank	%	Rank	%	Rank
BTS-1122	\$2,607	14485	317	15	45.7	2	20.8	20	96.0	14	91.5	1
C-G174NT	\$2,580	14334	320	10	44.8	4	21.0	8	96.0	13	88.2	2
BTS-1941	\$2,543	14126	306	28	46.2	1	20.5	27	95.0	29	84.9	3
C-G049	\$2,533	14070	313	26	45.0	3	20.7	23	95.6	24	79.6	12
C-G752NT	\$2,506	13922	319	11	43.6	5	21.0	7	95.9	15	82.1	6
C-G139	\$2,474	13746	333	1	41.2	21	21.7	1	96.4	3	80.9	8
BTS-1065	\$2,463	13683	314	24	43.6	6	20.9	15	95.4	28	80.2	10
SX-2296N	\$2,459	13662	324	4	42.1	16	21.2	3	96.3	6	80.2	11
C-G151	\$2,458	13657	323	5	42.3	12	21.1	5	96.1	12	83.9	4
C-G675	\$2,454	13636	314	23	43.4	7	20.8	18	95.5	26	75.9	24
C-G021	\$2,454	13634	316	21	43.2	8	20.9	16	95.7	21	76.6	19
HIL-9865	\$2,443	13572	321	6	42.3	13	20.9	14	96.4	2	73.1	27
SX-2294	\$2,425	13472	316	19	42.6	10	20.7	25	96.2	9	77.2	18
C-G932NT	\$2,423	13459	316	18	42.5	11	20.8	19	95.9	19	76.6	21
BTS-1703	\$2,408	13380	318	14	42.1	14	20.9	12	95.9	16	77.5	16
BTS-197N	\$2,392	13286	318	13	41.8	19	20.9	11	95.9	17	71.0	29
MA-709	\$2,390	13276	316	20	42.0	17	21.0	9	95.4	27	80.4	9
BTS-1183	\$2,376	13201	314	22	42.0	18	20.8	21	95.6	23	82.3	5
SX-2295	\$2,375	13194	319	12	41.4	20	20.8	17	96.1	10	76.4	22
HIL-2361	\$2,372	13175	327	2	40.2	23	21.2	2	96.5	1	76.1	23
BTS-1606N	\$2,347	13038	310	27	42.1	15	20.5	28	95.7	22	78.7	13
HIL-2238NT	\$2,341	13005	304	29	42.8	9	20.2	29	95.5	25	81.8	7
SX-2201	\$2,340	13001	317	16	41.1	22	20.7	22	96.1	11	74.0	25
HIL-2332NT	\$2,333	12963	325	3	39.9	26	21.1	4	96.4	4	76.6	20
SX-2297	\$2,319	12886	321	7	40.2	24	20.9	10	96.3	7	73.4	26
MA-933NT	\$2,305	12804	320	8	40.0	25	20.9	13	96.3	5	78.4	14
HIL-2401NT	\$2,230	12388	320	9	38.7	28	21.1	6	95.7	20	77.4	17
HIL-2403	\$2,183	12126	313	25	38.7	27	20.6	26	95.9	18	77.9	15
MA-813NT	\$2,157	11985	317	17	37.9	29	20.7	24	96.2	8	72.7	28
Average	\$2,403.1	13350.5	318		42.1		20.88		95.92		78.82	
LSD 5%	88.5	491.4	6.6		1.4		0.3		0.4		6.1	
CV %	4.2	4.2	2.4		3.7		1.9		0.4		8.8	

See Cercospora Fungicide Application Page 48 for applications

\$/A: Payment calculated using early delivery adjustment where necessary, and a per pound payment of \$0.18.

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

Comments: This trial was harvested during permanent pile. Yield and sugar content were excellent considering multiple dry periods throughout the growing season. This trial was planted to stand and conditions during emergence were very good. Conditions remained favorable for growth until an extremely dry period in late June and July. Rains returned in August to promote rapid root growth. Root and leaf disease levels were low in this trial.



Plant to Stand

Maurer, Minden City - 2022

Trial Quality: Very Good

Planted: May 11

Harvested: October 24

Plots: 6 Rows x 38 ft., 6 reps

Row Width: 22 in.

Seeding Rate: 4.5 in.

Soil Info: Clay Loam

Prev Crop: Dry Beans

Added N: 35 lbs. 2x2 + 120 lbs.

Side-dress

Disease Pressure:

Cerc: Low

Rhizoc: Low

Rainfall: 12.39 in.

Variety	\$/A	RWSA	RWST		Yield		Sugar		CJP		B/100 ft.	
			lb/T	Rank	T/A	Rank	%	Rank	%	Rank	Act.	Rank
C-G049	\$2,144	11912	313	8	38.0	2	21.1	6	94.6	12	214.7	8
BTS-1941	\$2,128	11822	303	19	39.1	1	20.8	17	93.8	20	218.4	4
MA-709	\$2,091	11617	310	13	37.5	3	21.0	9	94.3	17	216.5	5
C-G932NT	\$2,066	11478	310	12	37.0	4	21.0	11	94.4	14	211.8	11
BTS-1606N	\$2,065	11475	311	11	36.8	5	21.1	7	94.4	15	218.7	3
SX-2295	\$2,051	11394	316	3	36.0	10	21.1	8	95.1	2	201.6	15
BTS-1703	\$2,050	11387	315	7	36.2	8	21.0	10	95.1	3	222.3	2
C-G675	\$2,046	11367	315	6	36.1	9	21.2	4	94.6	10	200.3	16
BTS-197N	\$2,039	11330	309	14	36.5	7	20.9	13	94.5	13	205.7	14
SX-2294	\$2,014	11187	312	10	35.9	11	21.0	12	94.8	6	191.4	19
BTS-1065	\$2,010	11167	305	17	36.6	6	20.7	19	94.4	16	215.9	6
SX-2296N	\$1,987	11037	316	4	35.0	13	21.3	3	94.6	9	212.8	10
HIL-2332NT	\$1,982	11009	322	1	34.2	15	21.6	1	94.7	8	187.5	20
HIL-2361	\$1,954	10854	312	9	34.7	14	20.9	14	95.0	4	195.3	17
C-G752NT	\$1,935	10752	304	18	35.3	12	20.9	15	93.9	18	209.9	12
SX-2297	\$1,931	10730	321	2	33.4	18	21.3	2	95.3	1	195.0	18
SX-2201	\$1,906	10589	315	5	33.6	17	21.1	5	94.9	5	169.5	21
HIL-9865	\$1,847	10259	307	16	33.3	19	20.7	18	94.6	11	213.8	9
HIL-2238NT	\$1,827	10150	301	21	33.7	16	20.7	20	93.8	21	227.2	1
C-G021	\$1,815	10081	301	20	33.3	20	20.7	21	93.9	19	206.6	13
MA-813NT	\$1,803	10017	309	15	32.4	21	20.8	16	94.8	7	215.5	7
Average	\$1,985.3	11029.2	311		35.5		21.01		94.55		207.16	
LSD 5%	214.9	1193.7	10.2		3.6		0.5		0.6		34.0	
CV %	9.5	9.5	2.9		8.9		2.2		0.6		14.3	

See Cercospora Fungicide Application Page 48 for applications

\$/A: Payment calculated using early delivery adjustment where necessary, and a per pound payment of \$0.18.

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

Comments: This trial experienced favorable early season conditions. Emergence was very good and final stands resulted in very good yield and sugar content. Dry periods in July, August, and September limited growth, but plants remained relatively healthy. Disease levels in this trial were low.

Variety Trial

Stephen Kearns, Ontario - 2022

Trial Quality: Very good	Soil Type: Loam	Cercospora: Very low level: 8 applications. See comments for materials.
Planted: May 10	Fertilizer: Fall: 300# Potash + 250# MAP; PPI: 36 gal of 28% + 6 gal ATS	Rhizoctonia: Very low level: Quadris I.F. (7 oz)
Harv/Samp: Sept 28 / Sept 28	Prev Crop: Wheat w/ clover	Other Pests: None
Plot Size: 3 reps	Weather: Very dry throughout the growing season.	
Row Spacing: 30 inch		
Seeding Rate: 54,000		

Variety	\$/A	RWSA	RWST	T/A	% Sugar	% CJP	Populations 100 Ft. of Row		Dead Beets / 1200 Ft
							10 Day	30 Day	
BTS-1065	\$2,638	10985	295	37.3	19.5	96.0	133	282	2
C-G021	\$2,593	10796	294	36.8	19.4	95.8	169	281	1
C-G049	\$2,557	10644	294	36.2	19.4	96.0	123	274	0
SX-2296N	\$2,462	10249	308	33.3	20.3	96.0	183	270	13
C-G932NT	\$2,446	10185	303	33.7	20.0	95.9	225	293	5
HIL-2332NT	\$2,402	10002	305	32.8	20.1	96.1	150	270	2
BTS-1703	\$2,364	9842	295	33.4	19.5	96.0	176	272	0
HIL-9865	\$2,333	9714	297	32.7	19.7	96.2	193	268	5
BTS-1606N	\$2,304	9592	288	33.3	19.1	95.7	128	289	3
HIL-2361	\$2,274	9468	308	30.7	20.2	95.9	201	252	0
SX-2295	\$2,231	9289	300	31.0	19.9	96.0	187	267	4
C-G675	\$2,210	9200	293	31.5	19.3	96.0	120	254	4

Average	\$2,401	9997	298	33.5	19.7	96.0	166	273	3
LSD 5%	152.1	633.2	11.1	2.5	0.6	N.S.	N.S.	10.1	N.S.
CV %	3.8	3.8	2.2	4.3	1.9	0.2	25.1	2.3	164.4
p-value	<0.0001	<0.0001	0.0161	<0.0001	0.0084	0.0569	0.0723	<0.0001	0.2560

Comments: This trial was a very dry location that was harvested in early delivery. The trial had very high emergence and population. Root and leaf disease levels were low enough that they likely had a negligible impact on yield. The leaf spot program was as follows: 1. EBDC, 2. EBDC + Copper, 3. EBDC + Copper, 4. Proline + EBDC, 5. EBDC + Copper, 6. Cevya + EBDC, 7. EBDC + Copper, 8. Proline

Key Points:

- Very dry season
- Low level of Cercospora leafspot

\$/A: Gross dollars per acre calculated using \$0.18 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 - 2022

Trial Quality: Excellent	Soil Type: Loam	Cercospora: Very low level: 5 applications and extremely dry conditions. See comments for materials.
Planted: May 7	Fertilizer: 2x2: Dry blend of N, P, K, S, Mn & B. Additional N applied by PPI and streamer. Total N of 150#.	Rhizoctonia: Low - Moderate level: Quadris I.F. only (5 oz)
Harv/Samp: Nov 7 / Oct 21	Prev Crop: Wheat / radish	Other Pests: Root aphid
Plot Size: 3 reps	Weather: Extremely dry all season	
Row Spacing: 28 inch		
Seeding Rate: 54,000		

Variety	\$/A	RWSA	RWST	T/A	% Sugar	% CJP	Populations 100 Ft. of Row		Dead Beets / 1200 Ft
							9 Day	33 Day	
C-G049	\$1,778	9880	318	31.1	20.8	95.9	71	258	15
BTS-1065	\$1,720	9556	323	29.6	21.2	96.2	76	254	30
C-G932NT	\$1,682	9344	319	29.3	20.8	96.1	88	260	30
SX-2296N	\$1,664	9243	325	28.4	21.2	96.3	107	255	35
C-G021	\$1,650	9169	314	29.2	20.5	96.2	108	266	27
HIL-2332NT	\$1,650	9166	333	27.6	21.7	96.1	80	252	5
BTS-1606N	\$1,623	9016	315	28.6	20.7	96.1	50	254	46
C-G675	\$1,607	8930	305	29.2	20.1	95.9	103	258	57
BTS-1703	\$1,602	8902	308	28.9	20.2	96.1	79	252	58
HIL-2361	\$1,582	8788	330	26.7	21.4	96.2	102	242	0
HIL-9865	\$1,517	8425	321	26.3	20.9	96.2	107	246	86
SX-2295	\$1,396	7757	301	25.8	19.8	96.2	70	243	53
Average	\$1,623	9015	318	28.4	20.8	96.1	87	253	37
LSD 5%	84.3	468.3	9.3	1.5	0.5	N.S.	N.S.	10.8	N.S.
CV %	3.1	3.1	1.8	3.1	1.5	0.2	27.8	2.6	82.1
p-value	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0750	0.1052	0.0050	0.0816

Comments: This location was among the driest of the SBA Variety trials. At times, the entire trial was laying down. Root aphid pressure was identified and impacted at least some of the varieties. Root disease ranged from low to moderate, and likely had a small impact on the yield of some varieties. It is worth noting that root disease levels throughout the test were sporadic, and did not always seem to agree with variety performance at other locations, so there may have been other factors besides variety tolerance which influenced the amount of observed disease. The amount of leaf spot that was observed at this location was low and not rated. The leaf spot program was as follows: 7/5 Proline, 7/20 Priaxor, 8/4 Eminent, 8/20 Priaxor, 9/1 Topguard. All included EBDC.

Key Points:

- Extremely dry all season
- Root aphid pressure
- Moderate but sporadic root disease levels on some varieties

\$/A: Gross dollars per acre calculated using \$0.18 per pound of RWSA.

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

N.S. – not significant

Variety Trial

Wadsworth Farms Inc., Sandusky - 2022

Trial Quality: Excellent	Soil Type: Loam	Cercospora: Very low level: See comments for materials
Planted: May 8	Fertilizer: Fall: P 61#, K 157#; PPI: 100# N; 2x2: 40#-27.6#-0-18.6S-0.17Mn-0.3 B	Rhizoctonia: Very low level: I.F.: Quadris (8.4 oz). Foliar: Broadcast Excalia (2.0 oz)
Harv/Samp: Nov 11 / Oct 27		
Plot Size: 3 reps		
Row Spacing: 20 inches	Prev Crop: Drybeans	
Seeding Rate: 67,000	Weather: Drier than normal this year	Other Pests: None

Variety	\$/A	RWSA	RWST	T/A	% Sugar	% CJP	Populations 100 Ft. of Row		Dead Beets / 1200 Ft
							8 Day	29 Day	
C-G049	\$2,353	13073	321	40.7	20.9	96.3	118	189	1
C-G021	\$2,327	12930	324	39.9	21.0	96.3	139	214	2
BTS-1065	\$2,307	12816	333	38.5	21.6	96.6	160	210	4
C-G932NT	\$2,176	12089	326	37.0	21.2	96.8	141	188	6
C-G675	\$2,163	12017	316	38.0	20.6	96.5	131	192	3
BTS-1703	\$2,114	11745	315	37.3	20.5	96.3	141	205	2
SX-2296N	\$2,112	11731	336	34.9	21.8	96.6	139	203	9
BTS-1606N	\$2,110	11720	310	37.9	20.2	96.6	131	196	1
HIL-2332NT	\$2,107	11706	336	34.8	21.8	96.6	114	184	1
HIL-2361	\$2,041	11338	340	33.4	21.9	96.7	131	197	0
HIL-9865	\$2,029	11275	315	35.8	20.6	96.5	149	200	8
SX-2295	\$1,967	10929	324	33.7	21.1	96.4	145	202	1

Average	\$2,151	11947	325	36.8	21.1	96.5	137	198	3
LSD 5%	91.8	510.2	10.7	1.0	0.6	N.S.	N.S.	N.S.	N.S.
CV %	2.5	2.5	2.0	1.6	1.6	0.3	22.1	6.6	126.2
p-value	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.4228	0.8598	0.2193	0.1765

Comments: This is an excellent quality trial with high yields and beet quality. This was the last SBA variety trial to be harvested. The location was dry, but not as bad as other locations. Very few factors influenced the results other than each variety's yield potential. Unlike other fields in this growing area, sugarbeet cyst nematode was not an influence on this trial. Very low levels of root and leaf disease were present. The leaf spot program was as follows: 6/24 EBDC, 7/11 Delaro + Proline, 7/28 Super Tin + Topsin, 8/11 Provysol, 8/25 Super Tin, 9/9 Proline. All included EBDC and Masterlock.

Key Points:

- Excellent trial to evaluate pure yield potential
- Very little disease pressure
- No sugarbeet cyst nematode
- Even stands

\$/A: Gross dollars per acre calculated using \$0.18 per pound of RWSA.

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

N.S. – not significant

CR+ Variety Trial

Guza Farms, Minden City - 2022

Trial Quality: Good	Soil Type: Loam & clay loam	Cercospora: Very low pressure: Trial used a 5 spray program and 3 spray program. See comments.
Planted: May 11	Fertilizer: In-furrow pop-up; 2x2: 40# N; PPI: 75# N; Streamer: 45# N	
Harv/Samp: Nov 1 / Nov 1		
Plot Size: 4 reps		Rhizoctonia: Low to moderate pressure: Foliar Quadris only (16 oz)
Row Spacing: 22 inch	Prev Crop: Corn	
Seeding Rate: 66,000	Weather: Very dry location	Other Pests: Heavy Root Aphid pressure

Variety & Spray Program	Adjusted Revenue	Gross Revenue	RWSA	RWST	T/A	% Sugar	% CJP	Populations 100 Ft. of Row		Dead Beets / 1200 Ft
								9 Day	33 Day	
C-G049 3 sprays	\$1,843	\$1,890	10498	278	37.7	18.5	95.6	86	201	5
BTS-1941 3 sprays	\$1,721	\$1,767	9818	264	37.0	17.5	95.2	77	203	31
C-G021 3 sprays	\$1,680	\$1,726	9591	281	34.0	18.6	95.5	110	218	31
C-G675 5 sprays	\$1,649	\$1,696	9423	280	33.5	18.6	95.6	109	214	9
BTS-1065 3 sprays	\$1,642	\$1,688	9379	279	33.4	18.5	95.5	105	211	70
HIL-2361 5 sprays	\$1,619	\$1,666	9256	296	31.2	19.4	95.6	85	202	3
BTS-1703 5 sprays	\$1,518	\$1,565	8696	272	31.7	18.1	95.6	95	209	30
SX-2295 5 sprays	\$1,424	\$1,471	8172	287	28.4	19.0	95.7	61	168	21
Average	\$1,637	\$1,684	9354	280	33.3	18.5	95.5	91	203	25
LSD 5%	210.6	210.6	1170.2	9.6	3.5	0.6	N.S.	27.1	18.8	22.9
CV %	8.7	8.5	8.5	2.3	7.1	2.1	0.4	20.3	6.3	62.8
p-value	0.0207	0.0211	0.0211	<0.0001	0.0004	<0.0001	0.5018	0.0120	0.0007	0.0001

Comments: The intent of this trial was to compare CR+ varieties with a 3 spray program to conventional varieties with a full spray program. This location was very dry for most of the season. At the end of August and first part of September, this trial experienced heavy root aphid pressure which had an impact on yield and sugar. Root aphid was observed on all of the varieties here, but may have impacted some varieties more than others. Leaf spot levels in this field were very low, so low that the trial was never rated for it. In these results, there are two types of revenue shown. One is the gross revenue, which was calculated by multiplying the RWSA by \$0.18. The other revenue column is the adjusted revenue, which takes into account the difference in cost between the 3 spray CR+ varieties and the 5 spray conventional varieties. This was calculated by first tabulating the difference in seed cost between the CR+ and conventional varieties (\$70 more per unit, which equals \$46.20 more per acre for CR+ varieties) and the difference in spray cost between the 3 spray and 5 spray treatments (\$46.83 per acre). The difference in seed cost was subtracted from the gross revenue of the CR+ varieties, and the extra spray cost was subtracted from the conventional varieties. The 5 spray leaf spot program was as follows: 7/6 Inspire XT, 7/22 Super Tin + Topsin, 8/4 Provysol, 8/23 Super Tin, 9/5 Proline. The 3 spray CR+ leaf spot program was as follows: 7/6 Inspire XT, 8/4 Super Tin + Topsin, 9/5 Proline. All applications for both programs included an EBDC and surfactant.

\$/A: Gross dollars per acre calculated using \$0.18 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 - 2022

Trial Quality: Good

Planted: May 13

Harvested: October 14

Plots: 2 Rows x 38 ft., 10 reps

Row Width: 22 in.

Seeding Rate: 4.5 in.

Soil Info: Clay Loam

Prev Crop: Corn

Added N: 113 lbs. PPI, 35 lbs. 2x2

Disease Pressure:

Cerc: Low

Rhizoc: Low

Rainfall: 8.69 in.

Variety	\$/A	RWSA	RWST		Yield		Sugar		CJP		Emergence	
			lb/T	Rank	T/A	Rank	%	Rank	%	Rank	%	Rank
BTS-1122	\$2,310	10231	326	9	31.3	2	21.7	7	95.3	15	66.5	1
C-G675	\$2,255	9988	309	28	32.3	1	21.0	25	94.3	27	56.6	19
C-G021	\$2,230	9877	321	13	30.8	3	21.7	9	94.5	24	60.1	11
C-G151	\$2,194	9717	323	12	30.1	6	21.4	15	95.3	13	63.0	5
BTS-1065	\$2,187	9685	316	18	30.6	4	21.3	18	94.7	20	61.8	7
SX-2201	\$2,173	9627	326	8	29.5	12	21.6	10	95.5	8	35.8	29
BTS-1703	\$2,147	9509	320	14	29.7	8	21.5	14	94.9	18	61.1	8
C-G049	\$2,146	9503	312	23	30.4	5	21.1	21	94.5	26	57.1	18
C-G932NT	\$2,143	9491	326	10	29.1	14	21.5	13	95.6	5	59.3	12
BTS-1941	\$2,142	9486	316	20	30.0	7	21.6	11	93.9	29	61.9	6
C-G752NT	\$2,126	9416	318	17	29.6	10	21.3	17	94.9	17	64.6	3
SX-2296N	\$2,113	9361	329	5	28.5	15	21.8	2	95.4	11	55.2	22
BTS-1183	\$2,092	9264	312	24	29.7	9	21.1	23	94.6	21	54.2	23
BTS-1606N	\$2,075	9192	310	26	29.6	11	20.8	27	95.0	16	64.1	4
BTS-197N	\$2,060	9122	312	25	29.3	13	21.1	22	94.5	22	58.2	14
HIL-2332NT	\$2,026	8972	331	2	27.1	20	21.8	3	95.7	2	53.7	24
C-G139	\$2,006	8884	335	1	26.5	25	22.0	1	95.8	1	57.4	17
MA-709	\$1,993	8828	319	15	27.6	18	21.6	12	94.5	25	55.7	21
HIL-9865	\$1,983	8784	316	19	27.8	17	21.0	26	95.4	10	50.8	27
HIL-2361	\$1,982	8777	329	6	26.7	23	21.7	8	95.6	4	49.5	28
C-G174NT	\$1,962	8692	310	27	28.0	16	20.6	28	95.3	14	61.0	9
MA-933NT	\$1,944	8608	323	11	26.6	24	21.4	16	95.5	6	57.9	16
SX-2297	\$1,932	8557	330	3	26.0	26	21.8	4	95.5	7	53.6	25
SX-2295	\$1,928	8539	319	16	26.7	21	21.2	20	95.3	12	55.9	20
HIL-2401NT	\$1,898	8407	315	21	26.7	22	21.3	19	94.5	23	65.2	2
SX-2294	\$1,874	8302	329	4	25.2	27	21.7	6	95.7	3	52.1	26
HIL-2238NT	\$1,871	8286	301	29	27.6	19	20.5	29	94.2	28	60.2	10
HIL-2403	\$1,834	8122	328	7	24.7	28	21.8	5	95.4	9	58.8	13
MA-813NT	\$1,712	7581	313	22	24.2	29	21.0	24	94.8	19	58.1	15
Average	\$2,046.1	9062.3	320		28.3		21.37		95.04		57.57	
LSD 5%	144.9	642.0	9.2		1.8		0.5		0.6		7.0	
CV %	8.0	8.0	3.3		7.1		2.6		0.7		13.8	

See Cercospora Fungicide Application Page 48 for applications

\$/A: Payment calculated using early delivery adjustment where necessary, and a per pound payment of \$0.18.

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

Comments: This was the last OVT planted on May 13 and it was planted to stand. This trial struggled slightly with emergence due to dry soil conditions. Once a stand was established, this location continued to remain dry through the entire season recording the least amount of rainfall of all locations. This resulted in lower than average yields but higher than average sugar content for the October 14 harvest date. Disease levels in this trial were low.



Official Variety Trial

SVREC, Richville - 2022

Trial Quality: Very Good

Planted: April 22

Harvested: October 27

Plots: 2 Rows x 38 ft., 8 reps

Row Width: 22 in.

Seeding Rate: 1.9 in. thinned to
170 beets/100'

Soil Info: Clay Loam

Prev Crop: Wheat

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

Disease Pressure:

Cerc: Low

Rhizoc: Low

Rainfall: 16.78 in.

Variety	\$/A	RWSA	RWST		Yield		Sugar		CJP		Emergence	
			lb/T	Rank	T/A	Rank	%	Rank	%	Rank	%	Rank
C-G151	\$2,813	15629	338	7	46.2	2	21.7	7	97.0	4	51.6	3
BTS-1122	\$2,812	15621	337	8	46.4	1	21.6	10	97.1	1	54.7	1
C-G049	\$2,663	14795	324	25	45.7	3	21.1	26	96.5	23	50.2	5
BTS-1183	\$2,612	14512	329	20	44.2	4	21.2	22	96.8	16	42.9	19
BTS-1065	\$2,561	14230	334	11	42.6	6	21.5	12	96.9	12	51.0	4
SX-2201	\$2,562	14229	338	6	42.1	12	21.8	6	96.9	10	31.5	29
C-G174NT	\$2,549	14158	332	15	42.6	7	21.4	18	97.0	7	43.5	17
BTS-1703	\$2,534	14079	333	12	42.3	11	21.5	13	96.8	14	54.3	2
HIL-9865	\$2,529	14049	331	16	42.4	8	21.3	20	97.0	6	45.3	12
C-G675	\$2,527	14037	331	17	42.4	9	21.4	17	96.8	15	46.3	9
BTS-1941	\$2,509	13936	317	27	43.9	5	20.7	27	96.2	27	50.1	7
C-G139	\$2,498	13880	344	1	40.4	17	22.1	1	97.0	5	41.1	21
SX-2296N	\$2,479	13774	340	4	40.5	16	21.9	3	96.9	13	40.2	24
HIL-2332NT	\$2,447	13595	342	2	39.7	21	21.9	2	97.1	3	44.9	14
BTS-197N	\$2,436	13531	326	23	41.6	13	21.3	19	96.2	28	45.3	13
MA-933NT	\$2,435	13528	336	10	40.3	18	21.7	8	96.7	21	40.8	22
C-G932NT	\$2,411	13397	331	18	40.5	15	21.4	15	96.7	20	45.6	11
SX-2294	\$2,407	13372	333	14	40.2	19	21.4	14	96.9	11	38.1	27
HIL-2238NT	\$2,405	13360	316	29	42.3	10	20.7	28	96.1	29	42.7	20
C-G021	\$2,390	13278	327	22	40.7	14	21.1	23	96.7	18	44.1	15
HIL-2361	\$2,388	13265	339	5	39.2	24	21.8	5	96.9	9	43.8	16
C-G752NT	\$2,371	13172	329	21	40.1	20	21.2	21	96.7	17	50.2	6
SX-2297	\$2,354	13076	341	3	38.3	25	21.9	4	97.1	2	37.3	28
HIL-2403	\$2,312	12842	336	9	38.2	27	21.6	9	96.9	8	46.1	10
MA-709	\$2,294	12742	324	24	39.3	23	21.1	24	96.5	24	43.4	18
SX-2295	\$2,291	12728	333	13	38.2	26	21.5	11	96.7	19	39.2	26
BTS-1606N	\$2,254	12525	317	28	39.6	22	20.6	29	96.4	25	47.4	8
HIL-2401NT	\$2,208	12269	323	26	38.1	28	21.1	25	96.3	26	40.8	23
MA-813NT	\$2,101	11672	330	19	35.3	29	21.4	16	96.6	22	39.8	25
Average	\$2,453.5	13630.4	331		41.2		21.40		96.74		44.56	
LSD 5%	166.6	925.7	8.1		2.8		0.5		0.3		6.7	
CV %	6.9	6.9	2.5		7.0		2.2		0.3		15.3	

See Cercospora Fungicide Application Page 48 for applications

\$/A: Payment calculated using early delivery adjustment where necessary, and a per pound payment of \$0.18.

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

Comments: This location was planted in late April and had some of the most favorable growing conditions of all locations, although still receiving less than average rainfall. Slightly weaker emergence required thinning this trial to a 170 beet/100' equivalent to achieve consistent spacing. Excellent plant health throughout the season and levels of disease resulted in excellent root yield and sugar content in this trial harvested in late October.



Official Variety Trial

Sylvester, Fairgrove - 2022

Trial Quality: Good

Planted: May 2

Harvested: September 29

Plots: 2 Rows x 38 ft., 10 reps

Row Width: 22 in.

Seeding Rate: 4.5 in.

Soil Info: Clay Loam

Prev Crop: Wheat/Clover

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

Disease Pressure:

Cerc: Low

Rhizoc: Low

Rainfall: 15.74 in.

Variety	\$/A	RWSA	RWST		Yield		Sugar		CJP		Emergence	
			lb/T	Rank	T/A	Rank	%	Rank	%	Rank	%	Rank
BTS-1122	\$2,893	12172	286	19	42.5	1	19.0	19	95.8	17	61.0	1
C-G151	\$2,832	11914	293	11	40.7	5	19.2	12	96.2	9	56.2	3
BTS-1703	\$2,831	11910	294	9	40.5	7	19.4	10	96.1	11	51.1	16
C-G174NT	\$2,818	11858	295	8	40.2	10	19.5	8	96.0	12	53.7	7
BTS-1065	\$2,797	11768	294	10	40.1	12	19.5	4	95.6	20	53.3	9
C-G139	\$2,795	11758	306	1	38.4	15	19.9	1	96.7	1	49.1	21
C-G049	\$2,781	11699	281	24	41.6	2	18.8	27	95.4	23	50.2	18
C-G021	\$2,780	11696	282	23	41.5	3	19.0	18	94.8	28	49.8	19
C-G752NT	\$2,719	11440	284	21	40.3	8	18.9	21	95.5	21	58.6	2
BTS-1941	\$2,715	11424	280	26	40.8	4	19.0	20	94.8	29	52.1	13
C-G932NT	\$2,705	11379	288	17	39.5	14	19.1	17	95.7	18	51.8	14
BTS-1183	\$2,687	11303	283	22	40.0	13	18.9	23	95.4	24	50.8	17
BTS-197N	\$2,686	11301	281	25	40.2	9	18.9	22	95.0	27	48.8	22
BTS-1606N	\$2,685	11295	278	29	40.7	6	18.6	29	95.3	25	54.6	6
C-G675	\$2,665	11214	280	27	40.1	11	18.8	26	95.2	26	49.8	20
HIL-9865	\$2,626	11049	291	15	38.1	17	19.2	13	95.8	16	48.5	24
SX-2296N	\$2,608	10974	303	2	36.2	22	19.8	2	96.3	6	53.0	10
SX-2201	\$2,605	10958	296	6	37.1	18	19.4	9	96.3	7	42.2	29
HIL-2332NT	\$2,601	10941	295	7	37.0	19	19.5	7	95.9	15	43.4	28
SX-2297	\$2,592	10905	301	3	36.3	21	19.6	3	96.6	2	48.5	23
HIL-2238NT	\$2,532	10652	280	28	38.1	16	18.7	28	95.5	22	52.3	12
SX-2295	\$2,483	10447	292	12	35.8	23	19.1	16	96.4	4	47.8	26
SX-2294	\$2,468	10385	296	5	35.1	25	19.5	6	95.9	14	52.0	15
MA-933NT	\$2,468	10382	292	13	35.5	24	19.2	14	96.1	10	55.7	4
MA-709	\$2,466	10376	286	20	36.4	20	18.9	24	95.9	13	47.7	27
HIL-2361	\$2,452	10318	299	4	34.5	27	19.5	5	96.5	3	48.2	25
HIL-2401NT	\$2,366	9954	290	16	34.3	28	19.2	11	95.7	19	54.8	5
HIL-2403	\$2,361	9933	287	18	34.6	26	18.8	25	96.4	5	52.8	11
MA-813NT	\$2,207	9284	292	14	31.9	29	19.1	15	96.3	8	53.5	8
Average	\$2,628.4	11058.3	290		38.2		19.18		95.84		51.41	
LSD 5%	157.0	660.6	11.0		2.0		0.6		0.5		6.2	
CV %	6.8	6.8	4.3		6.0		3.6		0.6		13.7	

See Cercospora Fungicide Application Page 48 for applications

\$/A: Payment calculated using early delivery adjustment where necessary, and a per pound payment of \$0.18.

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

Comments: This trial was planted to stand. Conditions during emergence were less than ideal and resulted in lower than desired final stands. Rainfall was below average in July but more consistent throughout the rest of the season than other locations. Disease control in this trial was good.



Plant to Stand

SVREC, Richville - 2022

Trial Quality: Very Good

Planted: April 22

Harvested: Oct 11

Plots: 6 Rows x 38 ft., 6 reps

Row Width: 22 in.

Seeding Rate: 4.5 in.

Soil Info: Clay Loam

Prev Crop: Wheat

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

Disease Pressure:

Cerc: Low

Rhizoc: Low

Rainfall: 15.42 in.

Variety	\$/A	RWSA	RWST		Yield		Sugar		CJP		B/100 ft.	
			lb/T	Rank	T/A	Rank	%	Rank	%	Rank	Act.	Rank
BTS-1065	\$2,204	12246	318	9	38.4	2	20.6	12	96.7	1	159.2	5
C-G049	\$2,125	11804	306	18	38.6	1	20.2	19	95.9	14	160.8	3
SX-2296N	\$2,101	11674	328	1	35.6	6	21.2	1	96.6	3	143.1	11
C-G021	\$2,046	11369	318	11	35.8	5	20.7	11	96.4	8	159.8	4
BTS-1941	\$2,018	11211	302	21	37.2	3	20.1	20	95.4	21	152.4	6
HIL-2332NT	\$1,981	11007	327	2	33.6	11	21.2	2	96.7	2	137.4	15
BTS-1606N	\$1,971	10952	306	19	35.8	4	20.2	18	95.8	18	151.1	8
SX-2201	\$1,969	10940	318	10	34.4	9	20.9	7	95.9	16	91.8	21
HIL-9865	\$1,956	10866	315	13	34.4	8	20.5	14	96.4	6	138.5	14
C-G675	\$1,939	10774	320	6	33.7	10	21.0	6	96.1	13	145.7	10
SX-2295	\$1,927	10707	324	5	33.1	12	21.1	5	96.4	7	118.0	17
SX-2294	\$1,919	10664	325	4	32.9	13	21.2	3	96.3	9	108.9	20
HIL-2361	\$1,916	10645	326	3	32.7	14	21.1	4	96.5	5	126.1	16
HIL-2238NT	\$1,891	10506	304	20	34.6	7	20.1	21	95.9	17	146.3	9
SX-2297	\$1,876	10424	320	7	32.6	15	20.8	9	96.5	4	114.8	19
C-G752NT	\$1,848	10268	317	12	32.4	17	20.7	10	96.2	11	160.8	2
BTS-1703	\$1,842	10233	318	8	32.1	18	20.8	8	96.2	10	166.2	1
MA-709	\$1,822	10124	311	16	32.5	16	20.5	15	95.8	19	139.2	13
MA-813NT	\$1,788	9931	312	15	31.9	19	20.4	17	96.2	12	118.0	18
C-G932NT	\$1,784	9914	312	14	31.8	20	20.5	16	95.9	15	152.0	7
BTS-197N	\$1,674	9297	311	17	29.9	21	20.5	13	95.7	20	140.1	12
Average	\$1,933.3	10740.8	316		34.0		20.68		96.17		11.50	
LSD 5%	158.0	877.7	9.2		2.6		0.4		0.8		18.4	
CV %	7.1	7.1	2.5		6.6		1.7		0.7		11.5	

See Cercospora Fungicide Application Page 48 for applications

\$/A: Payment calculated using early delivery adjustment where necessary, and a per pound payment of \$0.18.

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

Comments: This Plant to Stand trial was planted in late April and experienced difficulties during emergence. Some slight crusting was observed and varietal differences can be observed in the data. Overall root and sugar yields were very good even though stands were lower than desired. This location was on the high end of precipitation received, especially during the months of August and September. Disease control in this trial was good.

Variety Trial

Schuette Farms, Elkton - 2022

Trial Quality: Very Good	Soil Type: Loam	Cercospora: Low level: 5 applications. See below for materials.
Planted: May 10	Fertilizer: Manure: 13,000 gal dairy manure; 2x2: 18 gal 18.9-11.4-0-3.9S; S.D.: 26 gal 28%	Rhizoctonia: Moderate level: Foliar only (11 oz of Aframe, 3.4 oz Fastac)
Harv/Samp: Oct 14 / Oct 13	Prev Crop: Silage corn	Other Pests: Sugarbeet cyst nematode, root aphid
Plot Size: 3 reps	Weather: Very dry all season	
Row Spacing: 30 inch		
Seeding Rate: 49,000		

Variety	\$/A	RWSA	RWST	T/A	% Sugar	% CJP	Populations 100 Ft. of Row		Dead Beets / 1200 Ft
							8 Day	29 Day	
BTS-1065	\$2,191	10699	315	34.0	20.7	95.7	200	257	79
C-G049	\$2,129	10398	307	33.9	20.2	95.9	192	240	3
C-G021	\$2,080	10159	303	33.6	19.9	95.8	199	256	90
C-G932NT	\$2,074	10130	305	33.2	20.1	95.8	168	245	121
SX-2296N	\$2,063	10076	322	31.3	21.1	95.8	200	254	174
BTS-1606N	\$2,058	10053	299	33.7	19.7	95.9	160	236	60
C-G675	\$2,056	10039	304	33.1	20.0	95.8	201	250	54
BTS-1703	\$2,045	9987	304	32.8	20.0	95.7	197	257	76
HIL-2332NT	\$2,031	9918	316	31.4	20.7	95.9	191	247	43
HIL-2361	\$1,928	9414	311	30.3	20.4	95.9	186	241	16
SX-2295	\$1,881	9186	308	29.7	20.2	95.9	188	246	62
HIL-9865	\$1,820	8888	298	29.8	19.6	95.9	192	245	153

Average	\$2,030	9912	308	32.2	20.2	95.9	189	248	78
LSD 5%	164.3	802.3	13.5	1.6	0.8	N.S.	N.S.	13.3	39.0
CV %	4.8	4.8	2.6	3.0	2.3	0.1	10.9	3.2	29.8
p-value	0.0063	0.0063	0.0356	<0.0001	0.0347	0.5508	0.3566	0.0399	<0.0001

Comments: This trial was a very dry location harvested just prior to permanent piling. The trial was influenced by sugarbeet cyst nematode and moderate root disease pressure. Root aphid was found in this field, and may have influenced the yield of some varieties. The trial had excellent emergence and high stands. Leaf spot levels were low. The leaf spot program was as follows: 7/7 Proline, 7/23 Priaxor + Topsin, 8/7 Tin, 8/24 Inspire XT, 9/8 Tin. All included EBDC, Masterlock, and boron. NDemand included on 1st and 3rd.

Key Points:

- Root disease impacted variety performance
- Sugarbeet cyst nematode was present

\$/A: Gross dollars per acre calculated using \$0.18 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, Fairgrove - 2022

Trial Quality: Very good	Soil Type: Loam	Cercospora: Low level: 7 applications. See below for materials.
Planted: April 30	Fertilizer: 2x2: 8 gal 28%, 5 gal 10-34-0, 7 gal Thiosul, 1 qt B, 1 qt Mn; PPI: 55 gal 28%	Rhizoctonia: Low level: Quadris I.F. (12 oz); Foliar (8 leaf at 12 oz)
Harv/Samp: Oct 6 / Oct 5	Prev Crop: Corn	Other Pests: Sugarbeet cyst nematode
Plot Size: 3 reps	Weather: Dry at times, but not as dry as other locations	
Row Spacing: 20 inch		
Seeding Rate: 64,000		

Variety	\$/A	RWSA	RWST	T/A	% Sugar	% CJP	Populations 100 Ft. of Row		Dead Beets / 1200 Ft
							11 Day	31 Day	
HIL-2332NT	\$2,038	9210	293	31.4	19.4	95.5	44	132	5
C-G932NT	\$2,029	9170	279	32.9	18.5	95.4	75	140	8
SX-2296N	\$1,971	8906	294	30.3	19.3	95.5	40	126	35
BTS-1606N	\$1,950	8813	268	32.9	17.9	95.4	54	141	7
C-G021	\$1,911	8636	269	32.0	18.0	95.5	85	158	7
BTS-1065	\$1,890	8539	270	31.7	18.0	95.3	66	149	15
C-G049	\$1,869	8447	274	30.8	18.3	95.3	79	153	0
HIL-9865	\$1,793	8104	274	29.6	18.3	95.5	52	128	27
C-G675	\$1,784	8063	274	29.4	18.2	95.4	60	128	6
HIL-2361	\$1,764	7973	287	27.8	19.0	95.5	40	101	0
BTS-1703	\$1,728	7811	270	28.9	18.0	95.2	76	156	6
SX-2295	\$1,625	7344	279	26.3	18.5	95.5	24	130	15
Average	\$1,863	8418	277	30.4	18.5	95.4	58	137	11
LSD 5%	175.9	794.8	12.6	2.8	0.7	N.S.	22.5	20.9	10.2
CV %	5.6	5.6	2.7	5.5	2.4	0.2	23.0	9.4	56.2
p-value	0.0014	0.0014	0.0014	0.0014	0.0023	0.3204	0.0002	0.0009	<0.0001

Comments: Rain and crusting after planting led to lower than ideal stands. The trial was harvested in early October during early delivery. Sugarbeet cyst nematode had the largest impact on trial results. Root and leaf disease levels were both low. The leaf spot program was as follows: 1. EBDC, 2. Delaro + Proline, 3. Tin, 4. Provysol, 5. Tin, 6. Propulse, 7. Tin. All included EBDC & Masterlock.

Key Points:

- Less than perfect emergence
- Sugarbeet cyst nematode had largest influence

\$/A: Gross dollars per acre calculated using \$0.18 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

Schlicker, Bay City - 2022

Trial Quality: Good

Planted: April 29

Harvested: September 19

Plots: 2 Rows x 38 ft., 8 reps

Row Width: 22 in.

Seeding Rate: 1.9 in. thinned to
150 beets/100'

Soil Info: Clay Loam

Prev Crop: Corn

Added N: 126 lbs. PPI, 35 lbs. 2x2

Disease Pressure:

Cerc: Low

Rhizoc: Low

Rainfall: 14.06 in.

Variety	\$/A	RWSA	RWST		Yield		Sugar		CJP		Emergence	
			lb/T	Rank	T/A	Rank	%	Rank	%	Rank	%	Rank
C-G151	\$2,164	9604	259	18	37.2	2	16.5	20	94.4	14	34.3	7
C-G139	\$2,151	9547	281	1	33.9	11	17.4	2	95.9	1	40.6	3
BTS-1606N	\$2,140	9496	257	19	37.0	3	16.5	18	94.2	17	32.3	12
BTS-1122	\$2,115	9387	264	12	35.6	6	16.9	9	94.4	15	41.3	2
BTS-1183	\$2,087	9261	255	23	36.3	4	16.8	15	93.2	28	32.7	11
C-G049	\$2,082	9241	243	29	37.9	1	15.8	29	93.6	25	30.5	17
BTS-1065	\$2,078	9224	255	22	36.1	5	16.6	17	93.7	24	30.8	16
C-G675	\$2,051	9101	263	14	34.6	9	16.5	19	95.2	8	28.3	21
C-G174NT	\$2,031	9014	267	10	33.8	13	16.9	12	95.0	11	45.6	1
C-G021	\$2,025	8986	256	21	35.0	8	16.6	16	93.9	21	31.9	14
SX-2296N	\$2,018	8955	272	6	32.9	16	17.1	7	95.2	7	28.3	20
SX-2295	\$2,015	8942	273	5	32.8	17	16.9	8	95.8	2	30.3	18
HIL-9865	\$2,013	8931	269	8	33.1	15	16.8	14	95.5	5	26.6	25
BTS-1703	\$2,001	8880	262	15	33.8	12	16.9	10	94.1	18	35.0	6
BTS-197N	\$1,996	8858	253	25	35.1	7	16.4	23	93.7	23	26.3	27
BTS-1941	\$1,916	8504	245	28	34.6	10	16.1	28	93.1	29	33.8	8
MA-933NT	\$1,905	8455	277	2	30.5	24	17.3	3	95.7	3	40.4	4
C-G752NT	\$1,897	8417	257	20	32.7	18	16.2	26	95.0	10	32.8	10
HIL-2238NT	\$1,891	8392	251	26	33.4	14	16.3	25	93.6	26	32.0	13
C-G932NT	\$1,873	8312	259	17	32.1	19	16.4	24	94.9	12	31.4	15
SX-2201	\$1,860	8253	263	13	31.3	20	16.5	22	95.4	6	23.6	29
SX-2297	\$1,840	8167	273	4	30.0	26	17.6	1	94.1	19	26.5	26
HIL-2332NT	\$1,822	8084	268	9	30.2	25	16.9	11	95.0	9	28.5	19
SX-2294	\$1,797	7975	261	16	30.6	23	16.9	13	93.9	20	27.8	23
MA-813NT	\$1,777	7887	254	24	31.0	22	16.5	21	93.8	22	28.1	22
HIL-2361	\$1,774	7871	272	7	28.9	28	17.2	4	94.8	13	26.1	28
HIL-2403	\$1,770	7854	276	3	28.5	29	17.2	5	95.7	4	38.0	5
MA-709	\$1,760	7809	249	27	31.3	21	16.2	27	93.5	27	27.4	24
HIL-2401NT	\$1,752	7774	267	11	29.2	27	17.1	6	94.2	16	33.6	9
Average	\$1,951.8	8661.4	262		33.1		16.73		94.50		31.90	
LSD 5%	162.9	722.7	12.1		2.4		0.6		1.1		5.6	
CV %	8.5	8.5	4.7		7.2		3.6		1.1		17.8	

See Cercospora Fungicide Application Page 48 for applications

\$/A: Payment calculated using early delivery adjustment where necessary, and a per pound payment of \$0.18.

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

Comments: This trial was planted thick and thinned to a 150 beet/100' equivalent due to weaker than desired emergence. Although this trial had a thinner stand than desired, it received more rainfall than many other trials. Both root yield and sugar content were respectable considering a mid-September harvest date. Disease control in this trial was good.



Official Variety Trial

Mininger, Middleton - 2022

Trial Quality: Very Good

Planted: April 20

Harvested: September 22

Plots: 2 Rows x 38 ft., 8 reps

Row Width: 22 in.

Seeding Rate: 1.9 in. thinned to
200 beets/100'

Soil Info: Sandy Clay Loam

Prev Crop: Corn

Added N: 35 lbs. 2x2 + Manure

Disease Pressure:

Cerc: Low

Rhizoc: Low

Rainfall: 16.68 in.

Variety	\$/A	RWSA	RWST		Yield		Sugar		CJP		Emergence	
			lb/T	Rank	T/A	Rank	%	Rank	%	Rank	%	Rank
SX-2296N	\$3,037	11851	270	1	43.9	17	18.1	1	95.5	6	50.9	24
C-G049	\$3,019	11785	242	25	48.7	2	16.9	21	93.8	29	63.6	8
BTS-197N	\$3,009	11742	248	19	47.4	3	17.1	18	94.1	25	64.2	6
BTS-1122	\$3,008	11738	260	9	45.2	6	17.8	4	94.6	20	68.9	1
C-G139	\$2,983	11641	267	2	43.6	19	18.0	2	95.2	8	55.7	16
BTS-1941	\$2,981	11633	237	27	49.2	1	16.5	26	94.0	26	65.8	3
SX-2295	\$2,977	11621	261	7	44.6	10	17.5	9	95.6	4	50.0	25
C-G675	\$2,963	11566	253	16	45.8	5	17.2	17	95.1	12	62.2	12
BTS-1183	\$2,937	11461	254	15	45.1	7	17.3	13	94.8	18	55.0	17
C-G174NT	\$2,932	11443	260	10	44.1	16	17.6	6	95.1	10	61.2	13
HIL-2332NT	\$2,930	11435	256	14	44.6	9	17.3	15	95.1	11	52.8	22
HIL-9865	\$2,918	11389	259	11	44.1	15	17.5	8	95.1	13	56.6	15
HIL-2361	\$2,888	11273	262	6	43.1	22	17.5	7	95.5	5	54.9	18
SX-2294	\$2,882	11248	260	8	43.3	21	17.4	11	95.7	3	46.3	26
MA-933NT	\$2,839	11080	262	5	42.3	24	17.6	5	95.5	7	45.1	27
C-G021	\$2,826	11031	248	18	44.4	12	17.2	16	94.0	27	63.4	10
C-G151	\$2,823	11018	250	17	44.2	14	17.0	19	94.8	17	62.8	11
C-G932NT	\$2,818	10999	247	20	44.5	11	16.8	24	94.9	16	63.6	9
C-G752NT	\$2,807	10954	237	28	46.4	4	16.4	28	94.1	24	67.3	2
HIL-2238NT	\$2,787	10878	246	22	44.4	13	16.9	22	94.6	19	58.9	14
SX-2201	\$2,764	10786	256	13	42.1	25	17.4	12	95.0	14	30.0	29
HIL-2403	\$2,763	10784	267	3	40.3	28	17.8	3	95.8	2	53.5	20
MA-709	\$2,749	10729	257	12	41.9	26	17.3	14	95.2	9	53.0	21
SX-2297	\$2,737	10681	263	4	40.7	27	17.5	10	95.9	1	44.2	28
BTS-1065	\$2,718	10609	244	23	43.4	20	17.0	20	93.9	28	65.3	4
HIL-2401NT	\$2,691	10504	246	21	42.6	23	16.8	25	95.0	15	54.6	19
BTS-1703	\$2,686	10482	235	29	44.7	8	16.3	29	94.1	23	64.5	5
BTS-1606N	\$2,681	10465	239	26	43.8	18	16.5	27	94.4	21	63.7	7
MA-813NT	\$2,279	8895	243	24	36.5	29	16.8	23	94.2	22	52.6	23
Average	\$2,842.5	11093.9	253		44.0		17.20		94.85		56.92	
LSD 5%	226.2	882.7	11.4		3.3		0.7		0.7		5.5	
CV %	8.1	8.1	4.6		7.6		4.0		0.7		9.8	

See Cercospora Fungicide Application Page 48 for applications

\$/A: Payment calculated using early delivery adjustment where necessary, and a per pound payment of \$0.18.

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

Comments: This trial was planted thick and thinned to an equivalent stand of 200 beets/100'. Early growth was very good and continued until a dry period in June. Although drier than normal, this location was among the top two variety locations for rainfall in 2022. More consistent rain, along with good fertility produced very high yields despite being harvested during early delivery. Sugar content was lower than other locations but respectable for the date of harvest. Disease pressure in this trial was low.



Plant to Stand

Schlicker, Bay City - 2022

Trial Quality: Good

Planted: April 29

Harvested: September 19

Plots: 6 Rows x 38 ft., 6 reps

Row Width: 22 in.

Seeding Rate: 4.5 in.

Soil Info: Clay Loam

Prev Crop: Corn

Added N: 126 lbs. PPI, 35 lbs. 2x2

Disease Pressure:

Cerc: Low

Rhizoc: Low

Rainfall: 14.06 in.

Variety	\$/A	RWSA	RWST		Yield		Sugar		CJP		B/100 ft.	
			lb/T	Rank	T/A	Rank	%	Rank	%	Rank	Act.	Rank
C-G049	\$2,185	8247	223	13	36.9	2	16.2	12	92.2	16	110.6	2
BTS-1941	\$2,176	8214	216	20	37.8	1	16.3	9	90.5	21	102.6	9
SX-2296N	\$2,115	7984	242	2	32.9	11	16.8	3	94.0	2	101.6	10
C-G752NT	\$2,091	7894	222	17	35.6	3	15.9	17	92.6	15	116.1	1
C-G021	\$2,073	7823	224	12	34.8	5	16.4	7	91.7	19	100.6	11
BTS-1606N	\$2,055	7757	220	18	35.3	4	15.7	21	92.9	10	109.8	3
SX-2295	\$2,052	7744	232	6	33.3	9	16.5	6	93.2	6	107.8	5
C-G675	\$2,040	7701	224	9	34.2	6	16.0	14	93.0	9	103.6	8
BTS-1703	\$2,018	7616	229	7	33.3	10	16.3	10	93.1	7	108.8	4
BTS-1065	\$2,012	7593	223	14	33.9	7	16.3	11	91.9	18	92.4	15
SX-2294	\$1,999	7546	240	3	31.3	16	16.9	2	93.5	4	96.4	12
C-G932NT	\$1,988	7505	229	8	32.8	12	16.3	8	92.9	12	106.9	7
HIL-2361	\$1,968	7428	246	1	30.2	19	17.0	1	94.2	1	94.1	14
HIL-2332NT	\$1,966	7422	237	4	31.2	17	16.6	5	93.5	3	94.3	13
SX-2201	\$1,941	7325	224	11	32.7	13	16.0	16	93.1	8	77.6	21
BTS-197N	\$1,898	7164	215	21	33.3	8	15.9	18	91.5	20	89.1	18
HIL-2238NT	\$1,889	7129	222	16	32.0	15	15.9	19	92.9	11	107.8	6
MA-709	\$1,863	7030	217	19	32.3	14	15.9	20	92.1	17	89.9	17
SX-2297	\$1,817	6859	236	5	29.1	20	16.7	4	93.3	5	91.1	16
HIL-9865	\$1,788	6750	223	15	30.2	18	16.0	15	92.7	14	80.5	20
MA-813NT	\$1,707	6445	224	10	28.4	21	16.0	13	92.8	13	86.9	19
Average	\$1,982.9	7484.6	227		32.9		16.26		92.74		98.49	
LSD 5%	217.2	820.0	15.4		2.6		0.7		1.4		13.6	
CV %	9.6	9.6	5.9		7.0		3.7		1.4		12.1	

See Cercospora Fungicide Application Page 48 for applications

\$/A: Payment calculated using early delivery adjustment where necessary, and a per pound payment of \$0.18.

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

Comments: This trial was planted in late April and experienced a heavy crusting situation just as seedlings were about to emerge. Slight differences in emergence appeared to affect final yields. Even with the lower than desired stands, root yield and sugar content were very good for a mid-September harvest date. This location received more rainfall than others throughout the season although still below average. Disease control in this trial was good.



Plant to Stand

Mininger, Middleton - 2022

Trial Quality: Very Good

Planted: April 20

Harvested: September 22

Plots: 6 Rows x 38 ft., 6 reps

Row Width: 22 in.

Seeding Rate: 4.5 in.

Soil Info: Sandy Clay Loam

Prev Crop: Corn

Added N: 35 lbs. 2x2 + Manure

Disease Pressure:

Cerc: Low

Rhizoc: Low

Rainfall: 16.68

Variety	\$/A	RWSA	RWST		Yield		Sugar		CJP		B/100 ft.	
			lb/T	Rank	T/A	Rank	%	Rank	%	Rank	Act.	Rank
C-G049	\$3,053	11917	237	17	50.2	1	16.5	18	94.1	14	195.7	5
BTS-1065	\$2,995	11688	242	13	48.4	3	16.9	8	93.6	19	208.6	2
HIL-2361	\$2,931	11439	260	4	44.1	11	17.4	4	95.6	1	166.8	13
SX-2296N	\$2,591	11284	261	3	43.3	14	17.9	1	94.3	9	157.5	16
BTS-1606N	\$2,866	11185	238	16	47.0	4	16.6	15	93.7	17	192.8	9
C-G932NT	\$2,860	11163	248	6	44.9	10	17.1	5	94.5	6	186.6	10
BTS-1941	\$2,852	11131	229	20	48.6	2	16.4	19	92.8	21	204.3	4
C-G021	\$2,821	11010	242	12	45.3	9	16.9	9	93.9	16	194.1	6
C-G752NT	\$2,820	11005	237	18	46.4	5	16.5	17	93.9	15	210.6	1
HIL-2332NT	\$2,814	10982	264	1	41.5	17	17.8	2	95.4	2	157.8	15
C-G675	\$2,807	10955	241	14	45.5	7	16.7	14	94.2	13	194.1	7
BTS-197N	\$2,801	10930	240	15	45.5	8	16.6	16	94.3	10	193.5	8
HIL-9865	\$2,798	10922	248	7	44.0	12	16.9	10	94.9	4	164.7	14
SX-2295	\$2,770	10810	247	8	43.7	13	17.0	7	94.5	7	117.2	20
BTS-1703	\$2,745	10712	233	19	46.1	6	16.3	20	93.7	18	207.9	3
SX-2297	\$2,710	10578	262	2	40.4	18	17.7	3	95.0	3	134.2	18
HIL-2238NT	\$2,676	10445	244	9	42.9	15	16.8	12	94.3	11	174.0	11
MA-709	\$2,630	10264	243	11	42.1	16	16.8	13	94.4	8	155.0	17
SX-2294	\$2,571	10035	249	5	40.4	19	17.1	6	94.5	5	117.2	19
MA-813NT	\$2,362	9217	244	10	37.8	20	16.8	11	94.2	12	169.4	12
SX-2201	\$2,013	7857	225	21	35.0	21	15.8	21	93.5	20	63.6	21
Average	\$2,751.7	10739.4	244		44.0		16.88		94.24		169.80	
LSD 5%	232.2	906.1	11.6		3.0		0.6		0.8		20.2	
CV %	7.4	7.4	4.1		6.0		3.2		0.8		10.4	

See Cercospora Fungicide Application Page 48 for applications

\$/A: Payment calculated using early delivery adjustment where necessary, and a per pound payment of \$0.18.

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

Comments: This trial was the first Plant to Stand planted in 2022. Emergence differences between varieties were observed as can be seen in the data. Favorable conditions throughout most of the season resulted in very high root yields and respectable sugar content for a mid-September harvest date. Disease control in this trial was good.

Variety Trial

Spartan Acres Farms, Freeland - 2022

Trial Quality: Very good	Soil Type: Loam	Cercospora: Low level: 5 applications. See comments for materials.
Planted: April 30	Fertilizer: 2x2: 15 gal of 28%, 4 gal 10-34-0, 3 gal Thiosul, B; Broadcast 75# N by 28%	Rhizoctonia: Low to moderate level: Azteroid I.F. only (5.5 oz)
Harv/Samp: Sept 14 / Sept 13		
Plot Size: 4 reps	Prev Crop: Wheat	Other Pests: None
Row Spacing: 20 inch	Weather: Dry at times, but not as dry as other areas	
Seeding Rate: 64,500		

Variety	\$/A	RWSA	RWST	T/A	% Sugar	% CJP	Populations 100 Ft. of Row		Dead Beets / 1200 Ft
							12 Day	41 Day	
C-G049	\$2,168	7728	242	31.9	16.5	95.0	90	143	0
C-G932NT	\$2,168	7727	240	32.1	16.3	95.0	68	112	21
BTS-1065	\$2,133	7601	242	31.5	16.5	94.9	87	137	12
BTS-1703	\$2,096	7470	237	31.5	16.2	95.1	82	119	1
C-G675	\$2,054	7320	239	30.6	16.3	95.0	111	159	9
BTS-1606N	\$2,027	7223	227	31.8	15.6	94.7	72	124	10
C-G021	\$2,023	7210	234	30.8	16.0	94.9	80	130	7
HIL-2332NT	\$2,005	7146	254	28.1	17.2	95.1	47	122	12
SX-2296N	\$1,989	7087	250	28.4	16.9	94.9	43	116	40
HIL-2361	\$1,893	6748	251	26.8	17.0	95.2	63	119	9
SX-2295	\$1,814	6464	246	26.2	16.7	95.0	31	117	38
HIL-9865	\$1,808	6445	239	26.9	16.3	95.2	68	119	27

Average	\$2,015	7181	242	29.7	16.5	95.0	70	126	16
LSD 5%	159	568	9.3	1.6	0.5	N.S.	23.5	26.0	16.79
CV %	5.5	6	2.7	3.8	2.3	0.2	23.4	14.3	75.08
p-value	0.0002	0	<0.0001	<0.0001	<0.0001	0.2458	<0.0001	0.0357	0.0001

Comments: Rain and crusting after planting led to lower than ideal stands. This was the earliest harvested SBA trial. The trial received more rain than most of the other SBA locations and had very good yield for the harvest date. There was some root disease, but it probably had little influence on yields. Leaf spot levels were low. The leaf spot program was as follows: 7/1 Provysol, 7/16 Agritin, 7/31 Priaxor, 8/5 Inspire XT, 9/1 Copper. All applications except last included an EBDC.

Key Points:

- Had some emergence issues
- Root disease was present, but not likely much impact on yields

\$/A: Gross dollars per acre calculated using \$0.18 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, St. Johns - 2022

Trial Quality: Good
Planted: May 9
Harv/Samp: Oct 7 / Oct 6
Plot Size: 4 reps
Row Spacing: 20 inch
Seeding Rate: 68,000

Soil Type: Loam
Fertilizer: Fall: 2 ton of turkey manure;
Broadcast: 90#N-5#K₂O-
10#S-1#Zn
Prev Crop: Alfalfa
Weather: Very dry throughout the season.

Cercospora: Low levels: 4 applications
Rhizoctonia: Very low levels: Azoxystrobin I.F.
Other Pests: None

Variety	\$/A	RWSA	RWST	T/A	% Sugar	% CJP	Populations 100 Ft. of Row		Dead Beets / 1200 Ft
							8 Day	31 Day	
C-G049	\$2,119	9669	308	31.4	20.3	96.2	131	191	0
BTS-1065	\$1,969	8986	303	29.7	20.0	96.2	158	195	4
C-G021	\$1,929	8804	300	29.3	19.8	96.2	144	195	2
HIL-9865	\$1,845	8422	312	27.3	20.4	96.4	141	184	3
SX-2296N	\$1,832	8361	327	25.6	21.4	96.2	144	184	6
C-G932NT	\$1,832	8359	298	28.1	19.6	96.2	160	205	2
SX-2295	\$1,772	8088	319	25.3	20.9	96.3	125	186	0
C-G675	\$1,759	8028	302	26.7	19.9	96.1	129	178	1
BTS-1606N	\$1,739	7938	297	26.7	19.6	96.1	123	192	0
BTS-1703	\$1,715	7828	297	26.4	19.6	96.1	151	191	0
HIL-2332NT	\$1,691	7719	318	24.3	20.8	96.2	109	187	2
HIL-2361	\$1,680	7668	319	24.1	20.8	96.3	125	166	0
Average	\$1,824	8323	308	27.1	20.3	96.2	136	188	2
LSD 5%	179.6	819.6	17.9	2.5	1.0	N.S.	28.4	N.S.	N.S.
CV %	6.8	6.8	4.0	6.4	3.6	0.2	14.5	10.2	237.3
p-value	0.0006	0.0006	0.0106	<0.0001	0.0104	0.4173	0.0209	0.4592	0.5086

Comments: This trial location received manure and had alfalfa as a previous crop. The trial was very dry throughout the entire growing season. The dryness contributed to the excellent beet quality even considering manure and alfalfa. The field was stale seed bed planted and early growth was slow due to lack of moisture. The trial had very low levels of root disease and low leaf disease pressure.

Key Points:

- Dry throughout season
- Manured field
- Low root disease pressure

\$/A: Gross dollars per acre calculated using \$0.18 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

CR+ Variety Trial

Reif Farms, Saginaw - 2022

Trial Quality: Very good
Planted: April 30
Harv/Samp: Oct 23 / Oct 23
Plot Size: 4 reps
Row Spacing: 22 inch
Seeding Rate: 62,000

Soil Type: Clay loam
Fertilizer: PPI: 63 gal of 28%, 7 gal Thiosul; All sprays included NDemand & boron

Cercospora: Very low pressure: Trial used a 5 spray program and 3 spray program. See comments.

Rhizoctonia: Low pressure: Quadris: I.F. only with Levesol (2qt)

Prev Crop: Corn

Weather: Dry at times, but not as dry as other locations
Other Pests: None

Variety & Spray Program	Adjusted Revenue	Gross Revenue	RWSA	RWST	T/A	% Sugar	% CJP	Populations 100 Ft. of Row		Dead Beets / 1200 Ft
								12 Day	31 Day	
BTS-1065 3 sprays	\$1,977	\$2,020	11222	310	36.2	20.4	96.0	98	159	23
C-G049 3 sprays	\$1,956	\$1,999	11107	304	36.6	20.0	95.6	107	163	5
C-G675 5 sprays	\$1,920	\$1,952	10847	306	35.5	20.1	95.9	116	167	32
BTS-1941 3 sprays	\$1,917	\$1,961	10893	298	36.6	19.7	95.9	111	168	19
BTS-1703 5 sprays	\$1,889	\$1,921	10675	306	34.9	20.2	95.8	115	166	20
C-G021 3 sprays	\$1,885	\$1,928	10711	304	35.3	20.0	95.7	115	177	20
SX-2295 5 sprays	\$1,851	\$1,883	10463	317	33.0	20.8	96.0	39	128	20
HIL-2361 5 sprays	\$1,776	\$1,808	10045	320	31.4	21.0	95.9	48	99	2

Average	\$1,896	\$1,934	10745	308	34.9	20.3	95.8	94	153	17
LSD 5%	97.0	97.0	538.7	7.8	1.5	0.4	N.S.	17.5	14.0	N.S.
CV %	3.5	3.4	3.4	1.7	3.0	1.4	0.2	12.7	6.2	72.0
p-value	0.0100	0.0055	0.0055	0.0001	<0.0001	<0.0001	0.1156	<0.0001	<0.0001	0.0505

Comments: The intent of this trial was to compare CR+ varieties with a 3 spray program to conventional varieties with a full spray program. The Reif CR+ variety trial was one of the earliest SBA trials to be planted. Rain which occurred shortly after planting caused some crusting which led to less than perfect emergence. For the rest of the season, this location experienced abnormally dry weather, but it was not as dry as some other SBA locations. This trial had very low levels of leaf spot, so low that the trial could not be rated for it. In these results, there are two types of revenue shown. One is the gross revenue, which was calculated by multiplying the RWSA by \$0.18. The other revenue column is the adjusted revenue, which takes into account the difference in cost between the 3 spray CR+ varieties and the 5 spray conventional varieties. This was calculated by first tabulating the difference in seed cost between the CR+ and conventional varieties (\$70 more per unit, which equals \$43.40 more per acre for CR+ varieties) and the difference in spray cost between the 3 spray and 5 spray treatments (\$32.30 per acre). The difference in seed cost was subtracted from the gross revenue of the CR+ varieties, and the extra spray cost was subtracted from the conventional varieties. The 5 spray leaf spot program was as follows: 7/1 Inspire + EBDC, 7/15 Super Tin + Topsin + EBDC, 8/1 Proline + Delaro + EBDC, 8/15 Super Tin + EBDC, 9/6 EBDC. The 3 spray leaf spot program was as follows: 7/1 Inspire + EBDC, 8/1 Super Tin + EBDC, 9/1 Proline + Delaro + EBDC. All applications for both programs included NDemand, Boron, and Masterlock.

\$/A: Gross dollars per acre calculated using \$0.18 per pound of RWSA.

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

N.S. – not significant

CR+ Variety Trial

Crumbaugh Legacy Inc., Breckenridge - 2022

Trial Quality: Good	Soil Type: Sandy loam	Cercospora: Very low pressure: Trial used a 6 spray program and 3 spray program. See comments.
Planted: May 8	Fertilizer: PPI: 30 gal 28%; 2x2: 19 gal 18-9-0-4S-0.1Mn-0.1 B	
Harv/Samp: Oct 10 / Oct 10		
Plot Size: 4 reps	Prev Crop: Corn	Rhizoctonia: Very low pressure: A Frame I.F. (6 oz) and foliar (10.5 oz)
Row Spacing: 30 inch	Weather: Drier than normal	Other Pests: None
Seeding Rate: 55,000		

Variety & Spray Program	Adjusted Revenue	Gross Revenue	RWSA	RWST	T/A	% Sugar	% CJP	Populations 100 Ft. of Row		Dead Beets / 1200 Ft
								8 Day	33 Day	
C-G049 3 sprays	\$1,844	\$1,883	8850	268	33.1	17.9	95.6	151	250	1
BTS-1941 3 sprays	\$1,818	\$1,856	8726	261	33.4	17.5	95.7	142	256	6
C-G021 3 sprays	\$1,780	\$1,819	8550	271	31.6	18.1	95.6	154	268	17
BTS-1065 3 sprays	\$1,750	\$1,788	8404	274	30.7	18.3	95.7	171	274	21
BTS-1703 6 sprays	\$1,727	\$1,783	8382	268	31.3	17.9	95.8	155	261	9
C-G675 6 sprays	\$1,709	\$1,765	8296	270	30.8	18.0	95.7	157	251	7
SX-2295 6 sprays	\$1,657	\$1,713	8050	279	28.9	18.5	95.7	132	248	14
HIL-2361 6 sprays	\$1,623	\$1,679	7893	284	27.8	18.8	95.9	123	234	1
Average	\$1,739	\$1,786	8394	272	30.9	18.1	95.7	148	255	9
LSD 5%	117.0	117.0	549.9	5.5	2.0	0.3	N.S.	N.S.	12.2	12.2
CV %	4.6	4.5	4.5	1.4	4.3	1.2	0.2	16.9	3.3	89.0
p-value	0.0098	0.0258	0.0258	<0.0001	<0.0001	<0.0001	0.2969	0.2098	<0.0001	0.0205

Comments: The intent of this trial was to compare CR+ varieties with a 3 spray program to conventional varieties with a full spray program. Root disease levels were low. The level of leaf spot was very low, to the point where this trial was never rated for it. In these results, there are two types of revenue shown. One is the gross revenue, which was calculated by multiplying the RWSA by \$0.18. The other revenue column is the adjusted revenue, which takes into account the difference in cost between the 3 spray CR+ varieties and the 6 spray conventional varieties. This was calculated by first tabulating the difference in seed cost between the CR+ and conventional varieties (\$70 more per unit, which equals \$38.50 more per acre for CR+ varieties) and the difference in spray cost between the 3 spray and 6 spray treatments (\$56.18 per acre). The difference in seed cost was subtracted from the gross revenue of the CR+ varieties, and the extra spray cost was subtracted from the conventional varieties. The 6 spray leaf spot program was as follows: 6/28 EBDC, 7/4 Inspire XT, 7/20 Super Tin, 8/2 Provysol, 8/23 Super Tin, 9/6 Topguard. The 3 spray leaf spot program was as follows: 7/4 Inspire XT, 8/6 Super Tin, 9/6 Topguard. All applications for both programs included an EBDC and surfactant.

\$/A: Gross dollars per acre calculated using \$0.18 per pound of RWSA and 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, 2021 & 2022

Trial Quality: Good
Location: 2020 - SVREC, 2021 - SVREC
Plot Size: 2 Rows x 25 ft., 6 reps
Inoculation: Inoculated with Rhizoctonia Solani AG 2-2 IIIB

Variety	Root Rating* 0-7	Estimated Root Rot %
SX-2297	4.30	35.0
HIL-2403	4.51	41.3
HIL-2361	4.52	40.0
Resistant Check	4.58	42.5
HIL-2332NT	4.59	41.3
MA-933NT	4.64	43.8
SX-2295	4.83	48.8
BTS-197N	4.92	50.0
BTS-1183	4.94	51.3
C-G049	4.95	51.3
HIL-9865	5.03	53.8
BTS-1703	5.07	53.8
C-G021	5.12	55.0
SX-2296N	5.14	56.3
C-G151	5.16	56.3
MA-709	5.17	56.3
C-G675	5.19	57.5
BTS-1606N	5.19	57.5
HIL-2401NT	5.20	57.5
C-G932NT	5.21	57.5
C-G174NT	5.27	60.0
BTS-1941	5.34	61.3
SX-2201	5.34	61.3
C-G752NT	5.37	62.5
MA-813NT	5.47	65.0
C-G139	5.55	66.3
BTS-1122	5.57	66.1
Susceptible Check	5.61	67.5
HIL-2238NT	5.64	68.8
SX-2294	5.70	69.6
BTS-1065	5.77	72.5
Average	5.13	55.71
LSD 5%	0.6	16.0
CV %	6.2	14.1

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

*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 for all six replications.



Cercospora Nursery

Average of 2 years, 2021 & 2022

Trial Quality: Good

Locations:

2021 - Blumfield East, SVREC

2022 - Blumfield East, SVREC

Inoculation: Trials were Inoculated

Plot Size:

Blumfield East 2021/2022 - 2 Rows x 25 ft.,

6 reps

SVREC 2021- 2 Rows x 20 ft., 6 reps

Variety	Avg of 2 Years CLS Rate 0-9	2021 CLS Rate 0-9	2022 CLS Rate 0-9
BTS-1941	1.8	1.9	1.7
C-G021	1.8	2.0	1.7
BTS-1065	2.0	2.1	2.0
C-G049	2.1	2.2	2.0
BTS-1183	2.2	2.2	2.1
C-G151	2.2	2.4	2.0
BTS-1122	2.2	2.5	2.0
HIL-2401NT	3.4	3.5	3.3
BTS-1703	3.4	3.5	3.4
MA-813NT	3.6	3.4	3.8
MA-709	3.7	3.7	3.7
Resistant Check	3.7	3.7	3.8
SX-2201	3.8	4.2	3.4
SX-2294	3.8	4.0	3.7
C-G174NT	3.9	3.9	3.9
HIL-2361	4.0	4.2	3.9
SX-2297	4.1	4.3	3.9
HIL-2403	4.1	4.1	4.0
SX-2295	4.1	4.2	4.0
HIL-2238NT	4.1	4.1	4.0
C-G675	4.1	4.3	3.9
C-G139	4.1	4.2	3.9
MA-933NT	4.2	4.2	4.2
BTS-1606N	4.3	4.5	4.0
HIL-9865	4.3	4.3	4.3
C-G752NT	4.5	4.8	4.1
C-G932NT	4.6	4.9	4.3
HIL-2332NT	4.7	4.8	4.6
BTS-197N	4.7	4.9	4.6
SX-2296N	4.7	5.0	4.5
Susceptible Check	5.1	6.0	4.2
Average	3.65	3.80	3.50

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.

Comments: Disease pressure was slightly lower and slower to progress in 2022 than 2021. Differences in varietal tolerances were still easily observed. Trials are rated every 2-3 days once susceptible varieties reach economic impact (rating of 3) and are rated until either burn down or until regrowth complicates ratings.



Cyst Nematode Nursery

Average of 2 Years, 2021 & 2022

Trial Quality: Good

Cerc Control: Good

Locations: 2021 - VanDenBoom

Rhizoc Control: Good

2022 - Sylvester Nematode

Plot Size: 2021 - 2 Rows x 25 ft., 6 reps

Plot Size: 2022 - 2 Rows x 38 ft., 6 reps

Variety	\$/A	RWSA	RWST		Yield		Sugar		CJP	
			lb/T	Rank	T/A	Rank	%	Rank	%	Rank
C-G675	\$2,522	13133	282.8	5	46.2	1	18.6	7	96.3	1
C-G174NT	\$2,420	12632	285.6	3	44.7	5	19.0	3	95.7	5
C-G752NT	\$2,365	12341	274.8	10	45.5	3	18.4	11	95.6	8
BTS-1606N	\$2,371	12326	273.7	13	45.7	2	18.3	13	95.6	7
BTS-197N	\$2,359	12307	278.6	8	44.7	6	18.6	8	95.5	10
C-G932NT	\$2,339	12207	274.0	11	44.9	4	18.3	12	95.6	9
SX-2296N	\$2,329	12182	292.2	1	42.0	10	19.2	1	96.2	2
HIL9865	\$2,292	11985	285.0	4	42.2	9	18.9	4	95.8	4
MA-933NT	\$2,297	11962	281.2	6	43.1	7	18.7	6	95.7	6
HIL-2332NT	\$2,288	11947	289.2	2	41.6	11	19.1	2	95.9	3
HIL-2238NT	\$2,225	11595	273.9	12	42.7	8	18.4	10	95.2	13
MA-813NT	\$2,142	11186	280.4	7	40.3	13	18.8	5	95.4	12
HIL-2401NT	\$2,143	11163	277.7	9	40.6	12	18.6	9	95.5	11
Average	\$2,314.6	12074.4	280.7		43.40		18.68		95.70	
LSD 5%	224.4	1149.2	7.9		3.9		0.5		0.4	
CV %	4.5	4.4	1.3		4.1		1.3		0.2	

\$/A: Payment calculated using early delivery adjustment where necessary, and a per pound payment of \$0.1767 for 2021, and \$0.18 for 2022.

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



Root Aphid Nursery

Magno Seed, LLC & KWS

Average of 2 years 2021 & 2022

Variety	% Infected
BTS-1606N	1.2
C-G932NT	1.3
BTS-1183	1.7
HIL-2401NT	1.7
HIL-2332NT	1.8
C-G049	1.9
SX-2201	2.3
HIL-2238NT	2.8
C-G752NT	3.1
HIL-2403	3.3
SX-2297	3.6
C-G151	3.6
HIL-9865	3.7
C-G139	3.8
C-G174NT	3.9
C-G675	4.0
BTS-1065	4.0
SX-2294	4.0
BTS-197N	4.1
SX-2296N	4.8
BTS-1703	4.9
BTS-1941	5.3
HIL-2361	5.4
MA-709	5.6
BTS-1122	7.2
MA-813NT	7.2
MA-933NT	7.5
C-G021	9.2
SX-2295	11.1
Average	4.3
LSD 5%	6.5
CV %	74.4

Magno conducts a replicated field trial (plots 4 Rows x 30 ft).

KWS conducts a greenhouse trial.

Beets are rated for Root Aphids at harvest.

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



Aphanomyces Nursery

Magno Seed, LLC & KWS

Average of 2 years 2021 & 2022

Variety	Root Rating 1 - 9 Scale	Canopy Rating 1 - 9 Scale	Stand Loss 1 - 5 Scale
C-G932NT	2.3	1.9	1.0
Resistant Check	2.3	1.6	1.0
SX-2296N	2.7	1.8	1.0
C-G049	2.8	2.2	1.0
SX-2201	2.9	1.7	1.0
C-G021	2.9	2.5	1.0
BTS-1183	2.9	2.3	1.0
C-G139	3.0	2.6	1.0
BTS-1122	3.0	2.1	1.0
BTS-1941	3.1	2.4	1.0
BTS-1065	3.1	3.1	1.0
C-G151	3.1	2.3	1.0
HIL-2332NT	3.1	2.6	1.0
SX-2295	3.1	2.1	1.0
C-G752NT	3.2	2.6	1.0
BTS-197N	3.2	2.8	1.0
HIL-2361	3.3	2.6	1.0
HIL-2403	3.3	2.4	1.0
MA-933NT	3.3	2.9	1.0
BTS1606N	3.3	3.1	1.0
HIL-9865	3.4	2.5	1.0
SX-2294	3.5	2.3	1.0
MA-709	3.5	3.2	1.0
C-G174NT	3.5	2.8	1.0
SX-2297	3.6	3.0	1.0
BTS-1703	3.6	3.1	1.0
C-G675	3.7	2.8	1.0
HIL-2401NT	3.7	3.2	1.0
HIL-2238NT	3.7	2.8	1.0
Susceptible Check	4.0	2.7	1.0
MA-813NT	4.4	3.9	1.0
Average	3.25	2.55	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.

Note: Root rating is the average of Magno Seed, LLC and KWS ratings. Foliar ratings and Stand Loss are from KWS only.



Rhizomania Nursery

USDA, Kimberly, Idaho

Average of 2 Years, 2021 & 2022

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
BTS-1065	2.6	10102	17.2	34.4	3.6
BTS-1122	2.6	9684	17.1	33.4	1.8
C-G675	2.6	9476	16.9	32.9	2.8
BTS-1183	2.6	10129	17.4	33.9	1.4
HIL-2238NT	2.6	9449	16.8	32.8	4.0
BTS-1941	2.6	9672	16.8	33.9	0.5
C-G752NT	2.7	9844	17.2	33.3	2.3
C-G021	2.7	9905	17.3	32.9	8.7
BTS-1606N	2.7	9625	17.1	32.9	2.3
BTS-197N	2.8	9241	17.4	30.5	2.7
C-G139	2.8	10003	17.9	32.0	2.3
C-G932NT	2.8	9590	17.6	31.1	0.2
C-G151	2.9	9143	17.2	30.9	9.4
HIL-9865	2.9	8680	17.1	29.7	3.7
BTS-1703	2.9	8487	16.8	29.5	2.0
HIL-2332NT	3.0	8777	17.2	30.2	0.6
C-G049	3.0	8274	16.9	28.5	2.2
C-G174NT	3.1	8072	17.0	27.5	11.8
HIL-2401NT	3.1	7933	16.9	27.6	7.1
MA-709	3.1	7941	16.9	27.4	5.3
SX-2296N	3.1	7887	16.9	27.5	1.3
SX-2201	3.1	7394	16.4	26.0	30.1
SX-2294	3.2	7113	16.2	25.6	27.5
HIL-2361	3.3	7478	17.3	25.3	1.2
SX-2297	3.5	6578	17.1	22.5	3.3
SX-2295	3.5	6243	16.6	21.8	2.7
HIL-2403	3.6	6313	16.8	22.1	2.6
MA-813NT	3.9	5274	16.3	19.1	15.5
MA-933NT	3.9	6231	16.6	22.1	7.3
Check	5.5	2701	15.0	11.0	100.0
Average	3.1	8241.2	16.93	28.27	8.87
LSD 5%	0.9	2106.2	0.5	6.5	9.1
CV %	13.6	12.5	1.6	11.3	50.4

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.

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



Fusarium Nursery

American Crystal Sugar Company

Average of 2 years, 2021 & 2022

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	2021 Rating 1-9	2022 Rating 1-9
BTS-1065	2.9	2.7	3.1
BTS-1122	2.9	2.7	3.0
C-G151	3.1	3.3	3.0
C-G752NT	3.7	3.9	3.6
C-G049	3.7	3.5	3.9
C-G021	3.9	4.1	3.7
BTS-1183	4.0	4.3	3.7
C-G932NT	4.1	4.4	3.8
BTS-1941	4.2	4.4	4.0
C-G139	4.2	4.6	3.9
BTS-1606N	4.3	4.7	3.9
BTS-197N	4.4	4.8	4.0
C-G174NT	4.9	5.2	4.6
SX-2294	5.1	5.7	4.5
SX-2295	5.2	5.4	5.0
MA-933NT	5.3	5.2	5.4
HIL-2403	5.4	5.3	5.4
BTS-1703	5.5	5.5	5.6
SX-2201	5.6	6.4	4.8
HIL-2401NT	5.8	6.1	5.4
C-G675	5.8	5.9	5.7
SX-2296N	5.8	6.5	5.0
SX-2297	5.8	6.1	5.4
MA-709	5.8	6.0	5.6
MA-813NT	5.8	6.2	5.5
HIL-2361	5.9	5.9	5.8
HIL-9865	5.9	5.9	6.0
HIL-2332NT	6.0	6.4	5.6
HIL-2238NT	6.1	6.4	5.7
Average	4.87	5.09	4.66

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

	Sandusky	Harbor Beach	Minden City	Middleton	Bay City	Richville	Akron	Pigeon
Grower	Gerstenberger	Grekowicz	Maurer	Mininger	Schlicker	SVREC	Sylvester	Trost
Trial Quality	OVT - Very Good	OVT - Excellent	OVT - Very Good PTS - Very Good	OVT - Very Good PTS - Very Good	OVT - Good PTS - Good	OVT - Very Good PTS - Very Good	OVT - Good	OVT - Good
Planted	May 12	May 12	May 11	April 20	April 29	April 22	May 2	May 13
Harvested	October 28	November 1	October 24	September 22	September 19	OVT - October 27 PTS - October 11	September 29	October 4
Soil Texture	Clay Loam	Sandy Clay Loam	Clay Loam	Sandy Clay Loam	Clay Loam	Clay Loam	Clay Loam	Clay Loam
Soil pH	6.5	7.5	7.3	6.5	6.0	7.3	7.6	6.0
Soil OM	2.6%	2.9%	3.2%	3.1%	2.5%	2.4%	3.2%	3.0%
Phosphorus	Very High	Very High	High	Very High	High	High	Very High	Very High
Potassium	Medium	High	High	High	Medium	Medium	Medium	High
Magnesium	Medium	High	High	High	High	Very High	Medium	Medium
Manganese	High	High	High	High	High	High	High	High
Boron	Medium	High	High	Medium	Medium	Medium	High	Medium
Zinc	Medium	High	High	High	Medium	Medium	Medium	High
Nitrogen Added	125 lbs.	35 lbs + Manure	155 lbs.	35 lbs. + manure	161 lbs.	155 lbs.	155 lbs.	148 lbs.

Seasonal Rainfall									
April				2.1	0.44	1.57	1.57		
May	2.21	1.77	1.83	3.20	2.15	1.74	1.74	3.06	1.02
June	2.67	2.77	2.77	1.90	2.33	2.5	2.5	3.35	1.62
July	1.34	1.80	1.8	3.36	2.25	2.13	2.13	1.70	1.82
August	4.21	2.38	2.38	3.96	4.65	4.41	4.41	4.33	1.97
September	1.42	1.01	1.01	2.16	2.24	2.89	2.89	3.3	2.26
October	1.36	3.23	2.6			1.54	0.18		0
November		0.05							
Total	13.21	13.01	12.39	16.68	14.06	16.78	15.42	15.74	8.69

* Rainfall amounts include 2 weeks before planting to the date of harvest at each location.



Official Variety Trials

Cercospora Fungicides: Application Dates and Products

Location	Treatment 1**	Treatment 2**	Treatment 3**	Treatment 4**
Gerstenberger	6/30 - EBDC	7/14 - Delaro, Proline, EBDC	7/26 - SuperTin, Topsin, EBDC	8/2 - Inspire XT, EBDC
Grekowicz	6/30 - EBDC	7/14 - Delaro, Proline, EBDC	7/26 - SuperTin, Topsin, EBDC	8/2 - Inspire XT, EBDC
Maurer	6/30 - EBDC	7/14 - Delaro, Proline, EBDC	7/26 - SuperTin, Topsin, EBDC	8/2 - Inspire XT, EBDC
Mininger	6/24 - EBDC	7/6 - Delaro, Proline, EBDC	7/18 - SuperTin, Topsin, EBDC	7/29 - Inspire XT, EBDC
Schlicker	6/24 - EBDC	7/5 - Delaro, Proline, EBDC	7/19 - SuperTin, Topsin, EBDC	7/29 - Inspire XT, EBDC
SVREC	6/24 - EBDC	7/5 - Delaro, Proline, EBDC	7/18 - SuperTin, Topsin, EBDC	7/28 - Inspire XT, EBDC
Sylvester	6/23 - EBDC	7/6 - Delaro, Proline, EBDC	7/18 - SuperTin, Topsin, EBDC	7/28 - Inspire XT, EBDC
Trost	6/30 - EBDC	7/12 - Delaro, Proline, EBDC	7/25 - SuperTin, Topsin, EBDC	8/2 - Inspire XT, EBDC

Location	Treatment 5**	Treatment 6**	Treatment 7**	Treatment 8**
Gerstenberger	8/16 - SuperTin, EBDC	8/30 - Veltyma, EBDC	9/14 - SuperTin, EBDC	
Grekowicz	8/16 - SuperTin, EBDC	8/29 - Veltyma, EBDC	9/14 - SuperTin, EBDC	
Maurer	8/16 - SuperTin, EBDC	8/30 - Veltyma, EBDC	9/14 - SuperTin, EBDC	
Mininger	8/12 - SuperTin, EBDC	8/25 - Veltyma, EBDC		
Schlicker	8/12 - SuperTin, EBDC	8/25 - Veltyma, EBDC		
SVREC	8/11 - SuperTin, EBDC	8/24 - Veltyma, EBDC	9/7 - SuperTin, EBDC	9/15 - Minerva, Badge
Sylvester	8/11 - SuperTin, EBDC	8/24 - Veltyma, EBDC	9/7 - SuperTin, EBDC	9/15 - Minerva, Badge
Trost	8/15 - SuperTin, EBDC	8/29 - Veltyma, EBDC	9/13 - SuperTin, EBDC	

EBDC* = Manzate Max, Koverall, or Manzate Pro-Stick

**Masterlock included in all Treatments.

Comments: Cercospora Leafspot control was very good in all trials in 2022. Dry conditions reduced disease pressure and allowed for timely applications.