

2015

VARIETY
TRIAL
RESULTS

*GROWING
THE BEST
SUGARBEETS*



MICHIGAN SUGARBEET
REACH
Research & Education Advisory Council

REACH/SUGARBEET ADVANCEMENT COMMITTEE LIST

2014 Voting Membership

24 Voting Members

| Company & Name | Terms | Expire |
|--|-------|-----------|
| Michigan Sugar Company | | |
| Paul Pfenninger (5th Member) | | Permanent |
| David Pratt | | Permanent |
| Jim Stewart | | Permanent |
| Brian Groulx | | Permanent |
| Russ Wegener | 4 | 2019 |
| Glenn Martus | 2 | 2017 |
| Dexter Auernhamer | 3 | 2018 |
| Michigan Sugar Company District Board Members | | |
| Chris Guza (Vice Chair) | 1 | 2016 |
| Mark Sylvester (Treasurer) | 1 | 2016 |
| Rick Leach | 1 | 2016 |
| Michigan Sugar Company At Large Growers | | |
| Nathan Gulick | 1 | 2016 |
| Kurt Hrabal | 3 | 2018 |
| Scott Roggenbuck (Chairman) | 2 | 2017 |
| Andy Shaffner (Secretary) | 1 | 2016 |
| Michigan State University, University of Guelph, and USDA | | |
| Linda Hanson | 2 | 2017 |
| Janice LeBoeuf | 3 | 2018 |
| Christy Sprague | 2 | 2016 |
| Sugar Beet Seed Company | | |
| Corey Guza | 2 | 2017 |
| Agri-Business Retail | | |
| Jacob Hecht (Retail) | 2 | 2017 |
| Brian Devine (Manufacturing) | 1 | 2016 |
| Michigan Sugar Company Board of Directors | | |
| Mark Richards | 1 | 2015 |
| Kent Houghtaling | 1 | 2015 |
| SBA Director | | |
| Steve Poindexter | | Permanent |

Ex-Officio Members

| Company | Name |
|---|--------------------|
| Chairman of Board of Directors Michigan Sugar Company | Rick Gerstenberger |
| CEO of Michigan Sugar Company | Mark Flegenheimer |

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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.



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Approval of Seed Varieties for the 2016 Crop

| Fully Approved Varieties | |
|--------------------------|------------|
| Unlimited Quantities | |
| B-12RR2N | C-G351NT |
| C-RR059 | HM-28RR |
| SX-1228RR | HM-173RR |
| SX-1212RR | SX-RR1235N |
| C-RR202 | B-1399 |

| Limited Approved Varieties | |
|------------------------------------|------------|
| Quantities limited to 10% of acres | |
| B-149N | SX-RR1245N |
| SX-RR1243 | HM-9616RR |
| HM-NT9607RR | |

| Specialty Approved Varieties | | |
|------------------------------|------------|-------------|
| Variety | Specialty | Quantity |
| C-G333NT** | Nem/Rhizoc | Unlimited |
| B-18RR4N** | Nematode | Unlimited |
| SX-1211N RR* | Nematode | 5,000 Units |
| B-133N** | Nem/Rhizoc | 7,500 Units |
| HM-NT9617RR** | Nematode | Unlimited |

*Approved to plant through 2016

**Approved to plant through 2017

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Approved Varieties for 2016

2014 - 2015 Data

| Variety | Approval Status | \$/A | All Values are % of Check | | | | | | | | | |
|-------------|------------------|---------|---------------------------|-------|-----------|------------|-------------|------------|-------------|----------|------------|--|
| | | | RWSA | RWST | Emergence | Cercospora | Rhizoctonia | Root Aphid | Aphanomyces | Fusarium | Rhizomania | |
| B-149N | Limited Approval | \$2,196 | 106.2 | 99.5 | 92 F- | 117 P | 101 F | 58 G+ | 102 G- | 82 G | 97 G | |
| B-12RR2N | Full Approval | \$2,169 | 104.8 | 102.2 | 100 F | 104 F | 99 F | 128 F- | 82 G+ | 83 G | 101 G | |
| SX-RR1243 | Limited Approval | \$2,156 | 103.3 | 100.3 | 101 G- | 95 G- | 91 G | 133 F- | 73 G+ | 102 G- | 99 G | |
| C-RR059 | Full Approval | \$2,147 | 103.0 | 102.0 | 104 G | 96 G- | 92 G | 60 G+ | 93 G | 72 G | 96 G | |
| C-G333NT | Special Approval | \$2,136 | 103.4 | 98.2 | 96 F | 112 F- | 84 G | 58 G+ | 90 G | 79 G | 92 G+ | |
| SX-1228RR | Full Approval | \$2,129 | 102.8 | 100.2 | 104 G | 108 F | 97 G- | 140 P | 117 F | 110 F | 96 G | |
| SX-RR1245N | Limited Approval | \$2,119 | 101.8 | 101.9 | 101 G- | 103 F | 101 F | 126 F- | 90 G | 111 F | 100 G | |
| B-18RR4N | Special Approval | \$2,103 | 102.1 | 101.5 | 102 G- | 105 F | 105 F- | 63 G+ | 86 G | 91 G- | 106 G- | |
| SX-1212RR | Full Approval | \$2,088 | 100.8 | 99.9 | 104 G | 105 F | 103 F- | 146 P | 102 G- | 115 F | 99 G | |
| C-RR202 | Full Approval | \$2,087 | 100.5 | 101.2 | 106 G | 84 G | 100 F | 58 G+ | 139 P | 132 F- | 100 G | |
| SX-1211N RR | Special Approval | \$2,086 | 100.2 | 95.8 | 102 G- | 113 F- | 102 F | 122 F- | 68 G+ | 75 G | 91 G+ | |
| B-1399 | Full Approval | \$2,081 | 100.2 | 98.8 | 102 G- | 79 G+ | 85 G | 69 G+ | 93 G | 52 G+ | 102 G | |
| B-133N | Special Approval | \$2,068 | 99.8 | 96.7 | 99 F | 110 F | 72 G+ | 58 G+ | 86 G | 61 G+ | 101 G | |
| SX-RR1235N | Full Approval | \$2,052 | 99.1 | 100.7 | 103 G- | 101 F | 104 F- | 134 F- | 96 G- | 118 F | 103 G | |
| C-G351NT | Full Approval | \$2,030 | 97.8 | 104.6 | 102 G- | 98 G- | 101 F | 58 G+ | 97 G- | 82 G | 105 G- | |
| HM-28RR | Full Approval | \$2,004 | 96.5 | 95.4 | 107 G+ | 93 G- | 97 G- | 142 P | 125 F- | 135 P | 92 G+ | |
| HM-NT9617RR | Special Approval | \$1,998 | 96.3 | 98.0 | 91 F- | 110 F | 93 G | 92 G | 97 G- | 84 G | 100 G | |
| HM-9616RR | Limited Approval | \$1,975 | 95.2 | 105.1 | 86 F- | 97 G- | 62 G+ | 95 G | 120 F- | 121 F- | 109 G- | |
| HM-173RR | Full Approval | \$1,949 | 94.1 | 96.6 | 91 F- | 94 G- | 100 F | 131 F- | 119 F- | 122 F- | 99 G | |
| HM-NT9607RR | Limited Approval | \$1,939 | 93.3 | 103.1 | 102 G- | 103 F | 98 G- | 63 G+ | 121 F- | 111 F | 109 G- | |

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

\$/A: Gross dollars per acre assuming \$51 Payment



Rhizoctonia & Cercospora

Varieties for 2016 - Average of 2 Years

Rhizoctonia

| Variety | % of Check | | | | Comments |
|-------------|------------|-------|-------|-------|---|
| | Rhizoc | RWSA | RWST | Cerc | |
| HM-RR9616 | 62.0 | 95.2 | 105.1 | 97.3 | Lower yielding nematode tolerant variety with very high quality, fairly good on Cerc, good on other traits except for Aph and Fusarium. |
| B-133N | 72.3 | 99.8 | 96.7 | 109.8 | High yielding nematode tolerant variety but quality is low, Cerc tolerance is acceptable, good on other traits. |
| C-G333NT | 83.8 | 103.4 | 98.2 | 112.5 | Very high yielding nematode tolerant variety that is a little low on sugar, Cerc tolerance is fair to poor, other traits are in a good range. |
| B-1399 | 84.7 | 100.2 | 98.8 | 79.2 | Good yielding variety that is a little low on sugar, very good Cerc tolerance, other traits are also good. |
| SX-RR1243 | 90.7 | 103.3 | 100.3 | 94.9 | Very high yielding variety with good quality, fairly good Cerc tolerance, other traits are good except for root aphid. |
| C-RR059 | 91.7 | 103.0 | 102.0 | 95.5 | Very high yielding and high quality variety. Fairly good Cerc tolerance, other traits are also in a good range. |
| HM-NT9617RR | 93.3 | 96.3 | 98.0 | 110.5 | A lower yielding and lower quality nematode tolerant variety that has good overall traits except for Cerc which is acceptable. |

Note: Lower values are better for Rhizoctonia and Cercospora. Rhizoctonia ratings include Sugarbeet Advancement information, the worst approved variety had a rating of 175.

Cercospora

| Variety | % of Check | | | | Comments |
|---------|------------|-------|-------|--------|---|
| | Cerc | RWSA | RWST | Rhizoc | |
| B-1399 | 79.2 | 100.2 | 98.8 | 84.7 | A good yielding variety that is a little low on sugar that also has good Rhizoc tolerance. Other traits are also in good ranges. |
| C-RR202 | 84.2 | 100.5 | 101.2 | 99.7 | A good yielding variety with high quality that has fairly good Rhizoc tolerance. Other traits except for Aph and Fusarium are good. |

B-1399 and **C-RR202** are the only two varieties that are considered to be "good" Cercospora tolerant varieties. Several other varieties (SX-RR1243, C-RR059, C-G351NT, HM-28RR, HM-9616RR and HM-173RR) have fairly good Cercospora tolerance (between 90 and 100% of check).

Note: Lower values are better for Cercospora and Rhizoctonia



High Quality Varieties for 2016 - Average of 2 Years

| Variety | % of Check | | | | Comments |
|-------------|------------|-------|--------|-------|---|
| | RWST | RWSA | Rhizoc | Cerc | |
| HM-9616RR | 105.1 | 95.2 | 62.0 | 97.3 | Low yielding variety with very high quality, also has very good Rhizoc tolerance and fairly good Cerc tolerance. |
| C-G351NT | 104.6 | 97.8 | 101.1 | 97.6 | A moderate yielder with very high quality, also has fairly good Cerc tolerance and fair Rhizoc tolerance. Nematode tolerance. |
| HM-NT9607RR | 103.1 | 93.3 | 97.7 | 102.9 | Low yielding variety with high quality, also has fairly good Rhizoc and Cerc tolerance. Nematode tolerance. |
| C-RR059 | 102.0 | 103.0 | 91.7 | 95.5 | A high yielding high quality variety with good overall disease tolerances. |
| SX-RR1245N | 101.9 | 101.8 | 100.8 | 102.5 | A good yielder with high quality. Has fairly good Cerc and Rhizoc tolerance. R Aphid tolerance is weak. Nematode tolerance. |
| B-18RR4N | 101.5 | 102.1 | 105.1 | 105.3 | A high yielding high quality variety with fair Cerc tolerance and fair to poor Rhizoc tolerance. Nematode tolerance. |
| C-RR202 | 101.2 | 100.5 | 99.7 | 84.2 | A good yielder with high quality and good Cerc tolerance. Also has fairly good Rhizoc tolerance. |

Note: Lower values are better for Rhizoctonia and Cercospora



Sugarbeet Cyst Nematode

Varieties for 2016 - Average of 2 Years

| Variety | All Values are % of Check | | | | | Comments |
|-------------|---------------------------|-------|-------|--------|-------|---|
| | Nem* | RWSA | RWST | Rhizoc | Cerc | |
| B-149N | 124.0 | 106.2 | 99.5 | 101.0 | 117.0 | Very high yielding variety with average quality, fairly good Rhizoc tolerance but poor Cerc tolerance. R Aphid, Aph and Fusarium scores are good. Emergence is fair-. |
| B-18RR4N | 121.8 | 102.1 | 101.5 | 105.1 | 105.3 | High yielding high quality variety, Cerc level is fair, Rhizoc is poor. R Aphid, Aph and Fusarium scores are good. Emergence is fair to good. |
| C-G333NT | 113.5 | 103.4 | 98.2 | 83.8 | 112.5 | High yielding variety, quality a little low, Cerc tolerance is fair to poor but Rhizoc tolerance is good. R Aphid, Aph and Fusarium scores are good. Emergence is fair. |
| SX-1211N RR | 111.5 | 100.2 | 95.8 | 101.5 | 112.8 | High yielding variety with low quality. Cerc tolerance is fair to poor and Rhizoc tolerance is fair. Very good on Aph and Fusarium but poor on R Aphid. Emergence is fair/good. |
| C-G351NT | 110.8 | 97.8 | 104.6 | 101.1 | 97.6 | Moderate yielding variety with very high sugar. Fairly good on Cerc and fair Rhizoc tolerance. R Aphid, Aph and Fusarium scores are good. Emergence is fair/good. |
| SX-RR1235N | 110.4 | 99.1 | 100.7 | 104.5 | 100.8 | Fairly good yielding and quality variety. Fair Cerc tolerance and fair to poor Rhizoc tolerance. Poor R Aphid, good Aph and fair Fusarium tolerance. Emergence is fair/good. |
| B-133N | 110.2 | 99.8 | 96.7 | 72.3 | 109.8 | High yielding variety that is low on sugar. Good Rhizoc tolerance and fair Cerc tolerance. R Aphid, Aph and Fusarium scores are good. Emergence is fair. |
| SX-RR1245N | 109.6 | 101.8 | 101.9 | 100.8 | 102.5 | High yielding variety with fairly good quality. Fair Cerc and Rhizoc tolerance. Poor R Aphid, Good Aph and Fair Fusarium tolerance. Emergence is fair/good. |
| HM-NT9617RR | 106.0 | 96.3 | 98.0 | 93.3 | 110.5 | Moderate producing variety with good Rhizoc tolerance and fair Cerc tolerance. R Aphid, Aph and Fusarium scores are good. Emergence is Fair-. |
| HM-NT9607NT | 99.7 | 93.3 | 103.1 | 97.7 | 102.9 | Low yielding variety with high quality. Good Rhizoc and fair Cerc tolerance. Good R Aphid, Fair to Poor Aph and Fair Fusarium scores. Emergence is fair/good. |

* The Nematode Score is an average of root ratings, yield and nematode counts

Note: Higher is better for Nematode, RWSA and RWST and lower is better for Cercospora and Rhizoctonia



Variety Approval "Points" System

A Variety Evaluation Tool - 2 Year Average

The Point System summary page is a great variety evaluation tool. On one page, varieties can be compared, and all factors can be viewed. For all factors, a larger number is better. Just look for the larger numbers to find the best varieties for a certain trait. The good and poor qualities of each variety can also be found. Varieties accumulate points based on RWSA, RWST, Cercospora, Rhizoctonia, Root Aphid, Rhizomania, Emergence, Aphanomyces, and Nematode levels.

| Variety | % Check | | 1.5X RWSA Variance | 3X RWST Variance | Higher Points are Better | | | | | | | Total Points | Points % Check |
|-------------|---------|-------|-----------------------|---------------------|--------------------------|--------|-------|-----|-------|-----|-----|-----------------|-------------------|
| | RWSA | RWST | | | Cerc | Rhizoc | R Aph | Rzm | Emerg | Aph | Nem | | |
| C-RR059 | 103.0 | 102.0 | 107.1 | 6.0 | 4.0 | 6.0 | 5.0 | 2.8 | 2.0 | 5.0 | 2.0 | 139.8 | 118.2 |
| B-12RR2N | 104.8 | 102.2 | 109.8 | 6.7 | 1.5 | 3.3 | 2.5 | 2.0 | 1.0 | 5.0 | 5.0 | 136.7 | 115.5 |
| B-18RR4N | 102.1 | 101.5 | 103.7 | 4.5 | 2.0 | 3.0 | 5.0 | 1.5 | 1.5 | 5.0 | 4.0 | 130.2 | 110.0 |
| C-G351NT | 97.8 | 104.6 | 95.7 | 13.8 | 3.5 | 2.5 | 5.0 | 1.8 | 0.0 | 5.0 | 3.0 | 130.2 | 110.0 |
| SX RR1243 | 103.3 | 100.3 | 109.0 | 1.0 | 3.5 | 4.5 | 2.3 | 2.3 | 0.0 | 5.0 | 1.0 | 128.5 | 108.6 |
| HM-9616RR | 95.2 | 105.1 | 90.7 | 15.4 | 3.5 | 10.0 | 2.8 | 1.5 | 0.0 | 3.0 | 1.0 | 127.8 | 108.0 |
| SX RR1245N | 101.8 | 101.9 | 104.4 | 5.6 | 1.5 | 2.3 | 2.8 | 2.3 | 0.0 | 5.0 | 3.0 | 126.8 | 107.1 |
| C-RR202 | 100.5 | 101.2 | 101.6 | 3.5 | 6.0 | 3.5 | 5.0 | 2.0 | 3.0 | 1.0 | 1.0 | 126.6 | 106.9 |
| B-149N | 106.2 | 99.5 | 112.7 | -1.4 | -4.5 | 4.5 | 3.8 | 2.5 | 0.0 | 3.0 | 4.0 | 124.6 | 105.3 |
| B-1399 | 100.2 | 98.8 | 101.1 | -3.7 | 8.0 | 5.5 | 4.5 | 2.3 | 0.5 | 5.0 | 1.0 | 124.2 | 105.0 |
| C-G333NT | 103.4 | 98.2 | 106.6 | -5.5 | -1.5 | 5.5 | 5.0 | 3.0 | 0.0 | 5.0 | 4.0 | 122.1 | 103.2 |
| SX 1228RR | 102.8 | 100.2 | 105.5 | 0.6 | 1.0 | 4.0 | 2.0 | 2.8 | 2.0 | 3.0 | 1.0 | 121.9 | 103.0 |
| SX 1212RR | 100.8 | 99.9 | 101.6 | -0.4 | 1.5 | 3.5 | 1.5 | 2.3 | 2.5 | 5.0 | 1.0 | 118.5 | 100.1 |
| B-133N | 99.8 | 96.7 | 100.6 | -10.0 | 1.0 | 9.0 | 5.0 | 2.3 | 0.0 | 5.0 | 3.0 | 115.8 | 97.9 |
| SX RR1235N | 99.1 | 100.7 | 97.6 | 2.0 | 1.0 | 2.5 | 2.5 | 1.8 | 0.5 | 4.0 | 3.0 | 114.8 | 97.0 |
| HM-NT9607RR | 93.3 | 103.1 | 87.2 | 9.3 | 1.5 | 2.8 | 3.8 | 1.3 | 0.0 | 3.0 | 1.0 | 109.8 | 92.8 |
| SX 1211N RR | 100.2 | 95.8 | 101.3 | -12.5 | -1.5 | 3.3 | 3.0 | 3.0 | 1.0 | 5.0 | 4.0 | 106.5 | 90.0 |
| HM-NT9617RR | 96.3 | 98.0 | 93.0 | -5.9 | -1.5 | 4.5 | 2.8 | 2.3 | 0.0 | 5.0 | 4.0 | 104.1 | 88.0 |
| HM-28RR | 96.5 | 95.4 | 93.8 | -14.0 | 5.0 | 3.0 | 2.0 | 3.0 | 3.0 | 3.0 | 1.0 | 99.8 | 84.3 |
| HM-173RR | 94.1 | 96.6 | 87.6 | -10.2 | 4.5 | 2.5 | 2.5 | 2.3 | -3.0 | 3.0 | 1.0 | 90.2 | 76.2 |

% check (B-18RR4N, HM-173RR, SX-1212RR, C-RR059) = 100 X .8577 = 85.77 (approval level)



Official Variety Trial

Average of 5 Locations - 2015

Trial Quality: Good
Plant/Harv: April 17 to Oct 21
Plots: 2 rows X 38 ft, 8 reps
Row Spacing: 22 inches
Seeding Rate: 2 inches,
 thinned to 215 beets/100 ft

Locations: Akron
 Freeland
 Pigeon
 Ruth
 Breckenridge

Cerc Control: Good Control
 4 to 5 Applic.
Rhizoc Control: Good Control
 Quadris IF T-Band, 6-8 lf

| Variety | \$/A | RWSA | RWST | | Yield | | Sugar | | CJP | | CLS* | |
|-------------|----------------|--------------|------------|----------|-------------|----------|-------------|----------|-------------|-----------|-------------|----------|
| | | | Lb/T | Rank | T/A | Rank | % | Rank | % | Rank | 0-9 | Rank |
| SX-RR1243 | \$2,510 | 12502 | 263 | 7 | 47.8 | 2 | 17.4 | 8 | 96.1 | 1 | 1.92 | 2 |
| B-149N | \$2,462 | 12338 | 256 | 13 | 48.5 | 1 | 17.1 | 14 | 95.8 | 12 | 2.16 | 15 |
| C-RR059 | \$2,445 | 12153 | 264 | 6 | 46.7 | 6 | 17.6 | 4 | 95.6 | 17 | 2.13 | 9 |
| B-12RR2N | \$2,434 | 12172 | 266 | 3 | 46.0 | 10 | 17.7 | 3 | 95.9 | 4 | 2.27 | 20 |
| SX-RR1245N | \$2,407 | 11963 | 262 | 8 | 46.1 | 9 | 17.5 | 7 | 95.8 | 9 | 2.04 | 6 |
| C-G333NT | \$2,378 | 11914 | 253 | 16 | 47.6 | 3 | 16.9 | 17 | 95.6 | 14 | 2.15 | 12 |
| SX-1211N RR | \$2,375 | 11788 | 251 | 18 | 47.5 | 4 | 16.8 | 19 | 95.8 | 8 | 2.15 | 12 |
| SX-1228RR | \$2,374 | 11871 | 261 | 9 | 45.8 | 11 | 17.3 | 9 | 95.9 | 5 | 2.18 | 16 |
| B-1399 | \$2,358 | 11755 | 255 | 15 | 46.6 | 7 | 16.9 | 15 | 96.0 | 3 | 1.85 | 1 |
| C-RR202 | \$2,353 | 11754 | 260 | 10 | 45.5 | 12 | 17.3 | 10 | 95.7 | 13 | 2.13 | 9 |
| B-133N | \$2,345 | 11746 | 252 | 17 | 46.9 | 5 | 16.9 | 16 | 95.4 | 19 | 2.23 | 18 |
| B-18RR4N | \$2,329 | 11676 | 264 | 4 | 44.3 | 15 | 17.6 | 6 | 95.9 | 6 | 2.18 | 16 |
| SX-1212RR | \$2,327 | 11637 | 258 | 11 | 45.2 | 13 | 17.2 | 12 | 95.8 | 7 | 2.10 | 8 |
| C-G351NT | \$2,275 | 11337 | 268 | 2 | 42.6 | 18 | 17.8 | 2 | 95.8 | 10 | 2.00 | 4 |
| SX-RR1235N | \$2,272 | 11317 | 258 | 12 | 44.4 | 14 | 17.3 | 11 | 95.4 | 18 | 2.05 | 7 |
| HM-28RR | \$2,270 | 11331 | 246 | 20 | 46.4 | 8 | 16.5 | 20 | 95.6 | 16 | 2.15 | 12 |
| HM-NT9617RR | \$2,246 | 11221 | 256 | 14 | 44.1 | 16 | 17.1 | 13 | 95.6 | 15 | 2.25 | 19 |
| HM-9616RR | \$2,216 | 11072 | 271 | 1 | 40.9 | 20 | 17.9 | 1 | 96.1 | 2 | 1.98 | 3 |
| HM-NT9607RR | \$2,192 | 10926 | 264 | 5 | 41.7 | 19 | 17.6 | 5 | 95.8 | 11 | 2.13 | 9 |
| HM-173RR | \$2,151 | 10748 | 248 | 19 | 43.6 | 17 | 16.8 | 18 | 95.1 | 20 | 2.03 | 5 |
| Average | \$2,336.1 | 11661.1 | 258.8 | | 45.40 | | 17.27 | | 95.73 | | 2.10 | |
| LSD 5% | 119.9 | 574.1 | 6.5 | | 2.4 | | 0.3 | | 0.4 | | 0.2 | |
| CV % | 4.1 | 3.9 | 2.0 | | 3.6 | | 1.5 | | 0.3 | | 5.1 | |

*CLS: Cercospora rating taken from the individual variety trials not from the Cercospora Nurseries.

Ratings were taken one week prior to harvesting.

\$/A: Gross dollars per acre assuming a \$51 payment and trial average RWST.

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

Comments: The five OVT's used for approval in 2015 were good quality (Avg RWSA CV 3.9%).

The trials were planted very close to grower's planting dates and were harvested Sep 14, Oct 2, Oct 5, Oct 6 and Oct 21. Quadris was applied in-furrow at planting and at the 8 leaf stage and Rhizoctonia control was very good. The average sugarbeet stand in the trials was 215 beets/100 ft. One site had water damage and one site had a minor nematode infestation. An average of 4.8 Cercospora applications were made. The average Cerc. rating was a 2.1 which is well below the economic damage threshold of 2.75.



2015 Variety Trial Averages

Average of Five Locations

Farms: Couture Flatland Farms (Ontario) DVL Farms (Ruth)
 J & L Gremel Farms (Sebewaing) Hrabal Farms (Breckenridge)
 Sylvester Farms (Quanicassee)

| Variety | \$/A | RWSA | RWST | T/A | % Sugar | % CJP |
|------------|---------|--------------|------------|-------------|-------------|-------------|
| C-G333NT | \$2,142 | 11003 | 277 | 39.9 | 18.2 | 96.4 |
| B-12RR2N | \$2,114 | 10864 | 289 | 37.8 | 18.9 | 96.4 |
| C-RR059 | \$2,078 | 10656 | 285 | 37.6 | 18.7 | 96.3 |
| B-133N | \$2,055 | 10530 | 274 | 38.6 | 18.1 | 96.2 |
| B-18RR4N | \$2,048 | 10510 | 284 | 37.2 | 18.6 | 96.4 |
| C-G351NT | \$2,035 | 10439 | 291 | 36.1 | 19.1 | 96.2 |
| SX-1235NRR | \$2,023 | 10381 | 282 | 37.0 | 18.6 | 96.1 |
| SX-1228RR | \$2,016 | 10363 | 278 | 37.4 | 18.3 | 96.4 |
| C-RR202 | \$2,014 | 10325 | 281 | 36.9 | 18.5 | 96.4 |
| B-1399 | \$1,988 | 10211 | 279 | 36.8 | 18.3 | 96.4 |
| SX-1212RR | \$1,975 | 10166 | 279 | 36.6 | 18.3 | 96.3 |
| HM-173RR | \$1,901 | 9727 | 272 | 36.0 | 18.1 | 95.9 |
| Average | \$2,032 | 10431 | 281 | 37.3 | 18.5 | 96.3 |
| LSD 5% | — | 548 | 6 | 1.9 | 0.3 | 0.3 |
| CV % | — | 4 | 2 | 3.9 | 1.3 | 0.2 |

Comments: These results are the combined data of the 5 most reliable Sugarbeet Advancement variety trials from 2015. These trials experienced a wide variation of environmental conditions, disease pressure and soil types. Individual trial data will give the best indication on how a variety will perform given specific conditions. Field placement of varieties should be based on past history of field issues and growers ability to manage them. For example, in nematode fields, tolerant varieties perform the best (see Sylvester trial). Since a few of these trials were impacted by sugarbeet cyst nematode, the averaged results will favor nematode resistant varieties. Varieties may also respond differently based on soil texture (see DVL trial). Varieties vary greatly in disease resistance, yield potential and quality. This year had a high pressure level for Cercospora leafspot and low pressure for Rhizoctonia. Use this data in conjunction with Michigan Sugar variety/nursery data and seed company information.

\$/A: Gross dollars per acre assuming a \$51 payment and company average RWST of 263.

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



Plant To Stand

Average of 3 Locations - 2015

Trial Quality: Good **Locations:** Sandusky **Cerc Control:** Good Control
Plant/Harv: April 17- Oct 21 Akron **Rhizoc Control:** Good Control
Plots: 6 rows X 38 ft, 6 reps Pigeon
Row Spacing: 22 inches
Seeding Rate: 4.1 inches

| Variety | \$/A | RWSA | RWST | | Yield | | Sugar | | CJP | | CLS | | Beets/100 ft | |
|-------------|----------------|--------------|--------------|----------|-------------|----------|-------------|----------|-------------|-----------|-------------|-----------|--------------|-----------|
| | | | Lb/T | Rank | T/A | Rank | % | Rank | % | Rank | 0-9 | Rank | Act. | Rank |
| C-G333NT | \$2,290 | 11677 | 265.4 | 3 | 44.1 | 1 | 17.7 | 4 | 95.7 | 4 | 2.26 | 6 | 174 | 12 |
| B-12RR2N | \$2,222 | 11366 | 273.0 | 2 | 41.6 | 4 | 18.2 | 2 | 95.7 | 3 | 2.33 | 14 | 178 | 8 |
| C-G351NT | \$2,218 | 11337 | 277.0 | 1 | 40.9 | 6 | 18.5 | 1 | 95.7 | 7 | 2.15 | 3 | 176 | 10 |
| B-18RR4N | \$2,198 | 11264 | 262.8 | 6 | 42.8 | 2 | 17.6 | 7 | 95.7 | 5 | 2.30 | 12 | 174 | 11 |
| B-133N | \$2,191 | 11222 | 264.7 | 5 | 42.2 | 3 | 17.7 | 3 | 95.6 | 8 | 2.25 | 5 | 179 | 6 |
| SX-RR1235N | \$2,097 | 10747 | 262.6 | 7 | 40.9 | 5 | 17.6 | 6 | 95.5 | 10 | 2.08 | 2 | 182 | 4 |
| C-RR059 | \$2,056 | 10514 | 260.6 | 9 | 40.3 | 7 | 17.4 | 9 | 95.7 | 6 | 2.28 | 9 | 188 | 1 |
| B-1399 | \$2,007 | 10250 | 265.4 | 4 | 38.6 | 12 | 17.7 | 5 | 95.8 | 2 | 2.01 | 1 | 188 | 2 |
| SX-1212RR | \$2,002 | 10242 | 254.4 | 10 | 40.3 | 8 | 17.1 | 12 | 95.5 | 9 | 2.27 | 7 | 181 | 5 |
| C-RR202 | \$1,975 | 10126 | 261.5 | 8 | 38.5 | 13 | 17.4 | 8 | 95.8 | 1 | 2.31 | 13 | 178 | 7 |
| SX-1211N RR | \$1,964 | 9988 | 253.4 | 12 | 39.6 | 9 | 17.2 | 10 | 95.1 | 13 | 2.28 | 9 | 170 | 14 |
| HM-173RR | \$1,930 | 9886 | 251.6 | 13 | 39.1 | 10 | 17.1 | 13 | 95.0 | 14 | 2.22 | 4 | 171 | 13 |
| HM-28RR | \$1,898 | 9708 | 250.6 | 14 | 38.8 | 11 | 17.0 | 14 | 95.2 | 12 | 2.28 | 9 | 177 | 9 |
| SX-1228RR | \$1,874 | 9556 | 254.0 | 11 | 37.6 | 14 | 17.1 | 11 | 95.3 | 11 | 2.27 | 7 | 186 | 3 |
| Average | \$2,056.6 | 10518.4 | 260.9 | | 40.26 | | 17.51 | | 95.49 | | 2.24 | | 177.7 | |
| LSD 5% | 225.1 | 1156.3 | 13.5 | | 4.7 | | 0.8 | | 0.5 | | n.s. | | 17.4 | |
| CV % | 6.5 | 6.6 | 3.1 | | 7.0 | | 2.7 | | 0.3 | | 5.0 | | 5.9 | |

\$/A: Gross dollars per acre assuming a \$51 payment and trial average RWST.

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

Comments: Plant to stand trials include varieties that are approved for sale. Varieties are planted at a 4.1 inch seed spacing. The trials were treated with Quadris at planting and at the 8 leaf stage and Cercospora leafspot was sprayed following the BEETcast predictive model. Four or five applications were made using: 1. Inspire + Manzate; followed by 2. Super Tin + Dithane; followed by 3. Topguard + Manzate; followed by 4. Super Tin + Dithane.



OVT Emergence

Average of 2 Years, 2014 - 2015

Locations: 2014 - Vaders
2015 - Maurer, Rayl, Shaffner, Trost, Stoneman

Plot Size: 2 rows X 38 ft, 8 reps

Seeding Rate: 1.9 inch seed spacing

| Variety | % Emerge |
|-------------|----------|
| HM-28RR | 72.4 |
| C-RR202 | 71.8 |
| SX-1228RR | 70.5 |
| C-RR059 | 70.4 |
| SX-1212RR | 70.3 |
| SX-RR1235N | 69.5 |
| SX-1211N RR | 69.3 |
| C-G351NT | 69.3 |
| HM-NT9607RR | 69.3 |
| B-1399 | 69.1 |
| B-18RR4N | 69.0 |
| SX-RR1245N | 68.7 |
| SX-RR1243 | 68.5 |
| B-12RR2N | 68.1 |
| B-133N | 67.4 |
| C-G333NT | 64.9 |
| B-149N | 62.6 |
| HM-NT9617RR | 61.4 |
| HM-173RR | 61.3 |
| HM-9616RR | 58.1 |
| Average | 67.6 |
| LSD 5% | 8.3 |
| CV % | 5.9 |

Comments: The emergence trial in 2014 was designed specifically as an emergence trial with 75 seeds planted per plot and emergence percentage determined. In 2015, emergence counts were taken from all of the OVT trials full emergence and % emergence was determined.

Early Counts

| Trial | Couture | Sylvester | Gremel | Hrabal | DVL | Gardner | Shaffner | Average |
|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------|
| | Ontario | Tuscola | Huron | Gratiot | Huron | Sanilac | Midland | |
| Plant Date | 4/15/2015 | 4/18/2015 | 4/18/2015 | 4/25/2015 | 4/26/2015 | 4/28/2015 | 4/30/2015 | |
| Count Days | 13 | 16 | 16 | 11 | 11 | 10 | 11 | |
| C-RR202 | 12 | 183 | 117 | 200 | 139 | 130 | 82 | 151 |
| HM-173RR | 1 | 136 | 112 | 202 | 116 | 150 | 101 | 139 |
| B-18RR4N | 34 | 178 | 107 | 176 | 109 | 113 | 81 | 136 |
| B-12RR2N | 2 | 158 | 94 | 186 | 128 | 112 | 65 | 134 |
| C-RR059 | 7 | 171 | 101 | 187 | 111 | 125 | 63 | 133 |
| C-G333NT | 34 | 175 | 107 | 178 | 121 | 110 | 49 | 131 |
| C-G351NT | 5 | 171 | 92 | 157 | 114 | 109 | 77 | 130 |
| SX-1212RR | 11 | 131 | 78 | 162 | 109 | 116 | 73 | 119 |
| SX-1235NRR | 3 | 136 | 88 | 170 | 65 | 147 | 99 | 118 |
| B-133N | 17 | 148 | 106 | 150 | 103 | 106 | 58 | 115 |
| SX-1228RR | 3 | 135 | 80 | 176 | 78 | 143 | 59 | 112 |
| B-1399 | 32 | 149 | 101 | 157 | 77 | 100 | 49 | 108 |
| Average | 13 | 156 | 99 | 175 | 106 | 122 | 71 | 127 |
| LSD 5% | 28 | 25 | 34 | 31 | 15 | ns (61) | 28 | 23 |
| CV % | 124 | 9 | 20 | 11 | 8 | 30 | 23 | 13 |

Late Counts

| Trial | Couture | Sylvester | Gremel | Hrabal | DVL | Gardner | Shaffner | Average |
|------------|------------|-----------|--------|--------|-----|---------|----------|---------|
| | Count Days | 26 | 33 | 39 | 31 | 31 | 29 | |
| B-18RR4N | 225 | 256 | 209 | 273 | 208 | 226 | 212 | 231 |
| C-RR059 | 197 | 240 | 199 | 280 | 210 | 232 | 208 | 228 |
| SX-1235NRR | 170 | 239 | 193 | 281 | 199 | 240 | 214 | 228 |
| B-133N | 143 | 240 | 199 | 261 | 215 | 237 | 207 | 227 |
| SX-1212RR | 163 | 234 | 189 | 265 | 214 | 229 | 200 | 222 |
| C-RR202 | 127 | 235 | 187 | 268 | 204 | 230 | 208 | 222 |
| C-G333NT | 174 | 231 | 198 | 260 | 204 | 222 | 205 | 220 |
| B-12RR2N | 209 | 227 | 188 | 259 | 213 | 224 | 203 | 219 |
| B-1399 | 188 | 231 | 196 | 281 | 181 | 220 | 202 | 219 |
| HM-173RR | 153 | 214 | 190 | 263 | 200 | 241 | 194 | 217 |
| SX-1228RR | 140 | 224 | 188 | 266 | 192 | 227 | 194 | 215 |
| C-G351NT | 174 | 232 | 186 | 252 | 200 | 223 | 196 | 215 |
| Average | 172 | 233 | 193 | 267 | 203 | 229 | 204 | 222 |
| LSD 5% | 28 | 15 | 12 | 18 | 13 | 14 | ns (19) | 8 |
| CV % | 25 | 4 | 4 | 4 | 4 | 4 | 5 | 3 |

Comments: The counts are the number of beets per 100 foot of row. The early counts contained a high amount of variation, in part due to soil moisture conditions (dry) after planting. The Gardner, Gremel, and Couture trials were not included in the early count average due to variability, mostly from dry conditions. In the late counts the Couture trial was not included in the average due to variability. The Gardner and Gremel trials were included since they emerged well after they received rain. All varieties had the standard seed treatment plus Tachigaren 20. The varieties also contained these additional seed treatments by company: Seedex - Metlock, Rhizolex, Kabina; Crystal - Kabina (Diamond Plated Silver); Beta - Kabina (Betashield+); Hilleshog - Dynasty & Cruiser Maxx. Kabina is not approved for use in Canada (Couture).

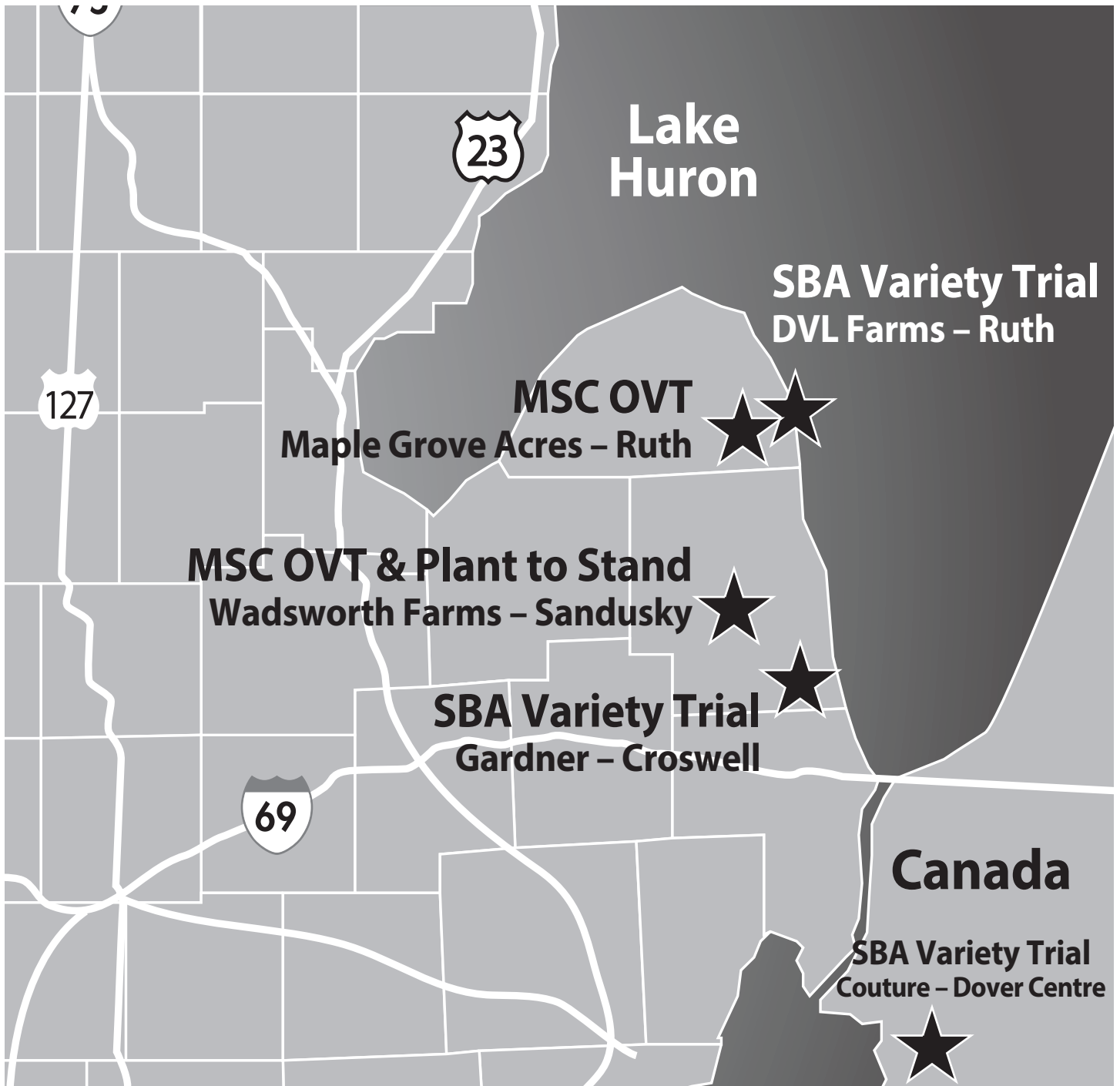
September Counts of Dead Beets in 1200 Foot of Row

| | Couture | DVL | Gardner | Gremel | Hrabal | Shaffner | Sylvester | Average |
|------------|---|---|---------|---|--------|----------|-----------|---------|
| HM-173RR | Trial not counted due to no disease pressure. | Trial not counted due to no disease pressure. | 0 | Trial not counted due to no disease pressure. | 2 | 2 | 3 | 2 |
| B-133N | | | 0 | | 1 | 8 | 0 | 2 |
| C-RR059 | | | 1 | | 1 | 7 | 2 | 3 |
| B-1399 | | | 0 | | 3 | 7 | 2 | 3 |
| C-G333NT | | | 2 | | 7 | 9 | 2 | 5 |
| C-RR202 | | | 3 | | 21 | 12 | 12 | 12 |
| B-12RR2N | | | 8 | | 47 | 13 | 9 | 19 |
| SX-1228RR | | | 3 | | 52 | 18 | 18 | 23 |
| SX-1212RR | | | 8 | | 77 | 46 | 7 | 35 |
| C-G351NT | | | 5 | | 90 | 23 | 19 | 35 |
| B-18RR4N | | | 2 | | 68 | 36 | 33 | 35 |
| SX-1235NRR | | | 11 | | 87 | 124 | 12 | 58 |
| AVERAGE | — | — | 4 | — | 38 | 25 | 10 | 19 |
| LSD (5%) | — | — | 8 | — | 51 | 70 | 19 | 29 |
| CV (%) | — | — | 130 | — | 79 | 162 | 115 | 105 |

Comments: Rhizoctonia dead/dying beet counts from Sugarbeet Advancement variety trials. The 2015 SBA Variety Trials had some of the lowest levels of Rhizoctonia that have been seen in these trials. Quadris applications in trials were as follows: Couture and Shaffner trials had only one T-band in-furrow application at planting time. DVL, Gardner, Gremel, Hrabal and Sylvester trials had a T-band in-furrow and 6-8 leaf stage application of Quadris.

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

East District Trials





Official Variety Trial - Nematode*

Wadsworth Farms Inc., Sandusky - 2015

Trial Quality: Fair-Good
Plant/Harv: May 6/Oct 15
Plots: 2 rows X 38 ft, 8 reps
Row Spacing: 22 inches
Seeding Rate: 2 inches,
 thinned to 215 beets/100 ft

Soil Type: Loam
% OM: 4.9 **pH:** 7.8 **CEC:** 18.6
Nutrient Levels: Above Opt: P, K
 High: Mn, Medium: B
Added N: 140 lbs
Prev Crop: Dry Beans

Cerc Control: Good Control
 5 applications**
Rhizoc Control: Good Control
 Quadris IF T-Band, 6-8 lf
Other Problems: Cyst Nematode
Rainfall: 17.8 inches

| Variety | \$/A | RWSA | RWST | | Yield | | Sugar | | CJP | | CLS* | |
|-------------|----------------|--------------|------------|----------|-------------|----------|-------------|----------|-------------|-----------|-------------|----------|
| | | | Lb/T | Rank | T/A | Rank | % | Rank | % | Rank | 0-9 | Rank |
| C-G333NT | \$2,056 | 11309 | 288 | 4 | 39.3 | 1 | 18.8 | 6 | 96.5 | 6 | 2.57 | 15 |
| B-12RR2N | \$2,000 | 11001 | 294 | 1 | 37.4 | 7 | 19.3 | 1 | 96.4 | 13 | 2.57 | 15 |
| B-149N | \$1,986 | 10928 | 283 | 9 | 38.6 | 2 | 18.6 | 9 | 96.3 | 15 | 2.46 | 7 |
| SX-RR1235N | \$1,984 | 10916 | 283 | 8 | 38.5 | 4 | 18.7 | 8 | 96.2 | 17 | 2.29 | 1 |
| B-18RR4N | \$1,967 | 10824 | 288 | 3 | 37.6 | 6 | 18.9 | 4 | 96.5 | 9 | 2.46 | 7 |
| B-133N | \$1,927 | 10604 | 281 | 10 | 37.7 | 5 | 18.4 | 11 | 96.5 | 7 | 2.50 | 12 |
| SX-1211N RR | \$1,912 | 10518 | 273 | 18 | 38.5 | 3 | 18.0 | 16 | 96.3 | 16 | 2.79 | 20 |
| C-G351NT | \$1,870 | 10286 | 287 | 7 | 35.8 | 8 | 18.9 | 3 | 96.1 | 19 | 2.39 | 4 |
| SX-RR1245N | \$1,786 | 9827 | 287 | 6 | 34.2 | 11 | 18.8 | 7 | 96.5 | 5 | 2.46 | 7 |
| HM-NT9617RR | \$1,785 | 9823 | 279 | 12 | 35.2 | 9 | 18.5 | 10 | 96.0 | 20 | 2.54 | 13 |
| B-1399 | \$1,724 | 9484 | 277 | 15 | 34.2 | 10 | 18.1 | 15 | 96.7 | 3 | 2.32 | 3 |
| C-RR059 | \$1,647 | 9063 | 279 | 13 | 32.6 | 13 | 18.4 | 12 | 96.2 | 18 | 2.46 | 7 |
| C-RR202 | \$1,624 | 8935 | 272 | 19 | 32.9 | 13 | 17.8 | 19 | 96.6 | 4 | 2.71 | 18 |
| HM-NT9607RR | \$1,610 | 8857 | 292 | 2 | 30.3 | 16 | 19.2 | 2 | 96.3 | 14 | 2.43 | 5 |
| HM-173RR | \$1,607 | 8842 | 277 | 14 | 32.0 | 14 | 18.2 | 14 | 96.5 | 10 | 2.46 | 7 |
| HM-28RR | \$1,499 | 8249 | 271 | 20 | 30.4 | 15 | 17.8 | 20 | 96.5 | 8 | 2.54 | 13 |
| SX-1228RR | \$1,483 | 8161 | 276 | 16 | 29.6 | 17 | 18.0 | 17 | 96.8 | 2 | 2.64 | 17 |
| SX-RR1243 | \$1,449 | 7972 | 276 | 17 | 29.0 | 18 | 18.0 | 18 | 96.9 | 1 | 2.43 | 5 |
| SX-1212RR | \$1,423 | 7830 | 279 | 11 | 28.0 | 19 | 18.3 | 13 | 96.4 | 11 | 2.75 | 19 |
| HM-9616RR | \$1,281 | 7049 | 287 | 5 | 24.6 | 20 | 18.8 | 5 | 96.4 | 12 | 2.29 | 1 |
| Average | \$1,731.0 | 9524.1 | 281.5 | | 33.82 | | 18.47 | | 96.43 | | 2.50 | |
| LSD 5% | 164.1 | 902.9 | 7.6 | | 3.2 | | 0.4 | | 0.4 | | 0.2 | |
| CV % | 9.0 | 9.0 | 2.5 | | 8.9 | | 2.1 | | 0.4 | | 8.1 | |

* Nematode pressure impacted variety yield.

***CLS:** Cercospora rating from this trial not the Cercospora Nurseries. Rating taken one week prior to harvest.

**Cercospora Applications: 6/29 - Insp.+Manz., 7/21 - ST+Dith., 8/7 - Topguard+Manz., 8/27 - ST+Dith., 9/11 - Dith.

\$/A: Gross dollars per acre assuming a \$51 payment and trial average RWST.

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

Comments: This trial experienced a significant amount of nematode pressure and was not used for variety approval but is a valuable tool in evaluation of Nematode Varieties. Cercospora control was below economic impact. Results from this trial should be used to help select varieties for known nematode situations.



Official Variety Trial

Maple Grove Acres Inc., Ruth - 2015

Trial Quality: Good
Plant/Harv: May 6/Oct 2
Plots: 2 rows X 38 ft, 8 reps
Row Spacing: 22 inches
Seeding Rate: 2 inches,
 thinned to 215 beets/100 ft

Soil Type: Loam
% OM: 2.9 **pH:** 7.7 **CEC:** 10.8
Nutrient Levels: Opt: P, Above Opt:K
 High: Mn, Medium: B
Added N: 125 lbs
Prev Crop: Soybeans

Cerc Control: Good Control
 5 applications**
Rhizoc Control: Good Control
 Quadris IF T-Band, 6-8 lf
Other Problems: None
Rainfall: 16.3 inches

| Variety | \$/A | RWSA | RWST | | Yield | | Sugar | | CJP | | CLS* | |
|-------------|----------------|--------------|------------|----------|-------------|----------|-------------|----------|-------------|----------|-------------|-----------|
| | | | Lb/T | Rank | T/A | Rank | % | Rank | % | Rank | 0-9 | Rank |
| B-149N | \$2,165 | 13205 | 319 | 5 | 41.5 | 1 | 20.5 | 9 | 97.0 | 2 | 1.38 | 15 |
| C-G333NT | \$2,119 | 12921 | 318 | 7 | 40.7 | 3 | 20.5 | 8 | 96.9 | 4 | 1.44 | 19 |
| B-12RR2N | \$2,113 | 12887 | 325 | 1 | 39.7 | 7 | 20.9 | 2 | 97.1 | 1 | 1.47 | 20 |
| C-RR059 | \$2,080 | 12683 | 318 | 8 | 39.9 | 5 | 20.6 | 5 | 96.7 | 15 | 1.38 | 15 |
| B-133N | \$2,056 | 12540 | 308 | 15 | 40.7 | 2 | 20.0 | 17 | 96.7 | 13 | 1.31 | 10 |
| SX-RR1243 | \$2,050 | 12501 | 310 | 14 | 40.3 | 4 | 20.1 | 14 | 96.7 | 14 | 1.25 | 4 |
| SX-1228RR | \$2,050 | 12498 | 313 | 10 | 39.9 | 6 | 20.3 | 10 | 96.7 | 8 | 1.31 | 10 |
| SX-RR1245N | \$1,961 | 11960 | 317 | 9 | 37.7 | 10 | 20.6 | 7 | 96.7 | 11 | 1.25 | 4 |
| B-18RR4N | \$1,958 | 11938 | 323 | 3 | 37.0 | 14 | 20.8 | 4 | 97.0 | 3 | 1.31 | 9 |
| HM-9616RR | \$1,915 | 11679 | 321 | 4 | 36.4 | 16 | 20.8 | 3 | 96.7 | 12 | 1.22 | 1 |
| SX-1211N RR | \$1,906 | 11623 | 306 | 19 | 38.0 | 9 | 19.9 | 19 | 96.6 | 16 | 1.34 | 13 |
| C-RR202 | \$1,899 | 11578 | 313 | 12 | 37.1 | 13 | 20.3 | 12 | 96.7 | 9 | 1.34 | 13 |
| HM-NT9617RR | \$1,895 | 11553 | 307 | 16 | 37.6 | 11 | 20.1 | 15 | 96.2 | 20 | 1.41 | 17 |
| SX-1212RR | \$1,890 | 11528 | 307 | 17 | 37.6 | 12 | 19.9 | 18 | 96.7 | 10 | 1.41 | 17 |
| HM-28RR | \$1,888 | 11513 | 295 | 20 | 39.0 | 8 | 19.3 | 20 | 96.3 | 19 | 1.31 | 10 |
| HM-NT9607RR | \$1,874 | 11426 | 318 | 6 | 35.9 | 17 | 20.6 | 6 | 96.8 | 7 | 1.28 | 8 |
| B-1399 | \$1,871 | 11408 | 313 | 11 | 36.5 | 15 | 20.2 | 13 | 96.8 | 6 | 1.22 | 1 |
| C-G351NT | \$1,845 | 11250 | 324 | 2 | 34.7 | 20 | 20.9 | 1 | 96.9 | 5 | 1.25 | 4 |
| HM-173RR | \$1,793 | 10934 | 306 | 18 | 35.7 | 18 | 20.0 | 16 | 96.3 | 18 | 1.25 | 4 |
| SX-RR1235N | \$1,770 | 10793 | 311 | 13 | 34.7 | 19 | 20.3 | 11 | 96.4 | 17 | 1.22 | 1 |
| Average | \$1,954.9 | 11920.9 | 313.5 | | 38.04 | | 20.33 | | 96.69 | | 1.32 | |
| LSD 5% | 144.1 | 878.9 | 8.8 | | 2.7 | | 0.5 | | 0.3 | | n.s. | |
| CV % | 7.5 | 7.5 | 2.8 | | 7.1 | | 2.5 | | 0.4 | | 14.4 | |

***CLS:** Cercospora rating from this trial not from the Cercospora Nurseries. Rating taken one week prior to harvest.

** Cercospora Applications: 7/1 - Insp.+Manz., 7/22 - ST+Dith., 8/7 - Topguard+Manz., 8/27 - ST+Dith., 9/11 - Dith.

\$/A: Gross dollars per acre assuming a \$51 payment and trial average RWST.

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

Comments: Excellent mid-season growing conditions, low disease levels, and a dry fall produced high yields, excellent sugar content and quality.



Plant To Stand

Wadsworth Farms Inc., Sandusky - 2015

Trial Quality: Good
Plant/Harv: May 6/Oct 15
Plots: 6 rows X 38 ft, 6 reps
Row Spacing: 22 inches
Seeding Rate: 4.1 inches

Soil Type: Loam
% OM: 4.9 **pH:** 7.8 **CEC:** 18.6
Nutrient Levels: Above Opt: P,K
 High: Mn, Medium: B
Added N: 140 lbs
Prev Crop: Dry Beans

Cerc Control: Fair-Good Control
 5 applications**
Rhizoc Control: Good Control
 Quadris IF T-Band, 6-8 lf
Other Problems: Cyst Nematodes
Rainfall: 17.8 inches

| Variety | \$/A | RWSA | RWST | | Yield | | Sugar | | CJP | | CLS | | Beets/100 ft | |
|-------------|----------------|--------------|--------------|----------|-------------|----------|-------------|----------|-------------|-----------|-------------|----------|--------------|----------|
| | | | Lb/T | Rank | T/A | Rank | % | Rank | % | Rank | 0-9 | Rank | Act. | Rank |
| B-18RR4N | \$1,990 | 10326 | 274.6 | 3 | 37.5 | 2 | 18.4 | 4 | 95.4 | 7 | 2.63 | 11 | 169 | 7 |
| C-G333NT | \$1,959 | 10170 | 269.1 | 5 | 37.9 | 1 | 18.0 | 6 | 95.5 | 5 | 2.46 | 5 | 161 | 12 |
| B-12RR2N | \$1,907 | 9900 | 279.3 | 1 | 35.5 | 4 | 18.6 | 2 | 95.5 | 6 | 2.71 | 14 | 166 | 9 |
| C-G351NT | \$1,850 | 9603 | 277.3 | 2 | 34.7 | 6 | 18.6 | 3 | 95.2 | 11 | 2.38 | 3 | 167 | 8 |
| SX-RR1235N | \$1,837 | 9533 | 272.9 | 4 | 34.9 | 5 | 18.2 | 5 | 95.6 | 4 | 2.33 | 2 | 176 | 3 |
| B-133N | \$1,812 | 9407 | 264.0 | 8 | 35.6 | 3 | 17.8 | 8 | 95.2 | 10 | 2.42 | 4 | 155 | 14 |
| C-RR059 | \$1,593 | 8269 | 266.0 | 7 | 31.0 | 8 | 17.7 | 9 | 95.7 | 2 | 2.46 | 5 | 190 | 1 |
| SX-1211N RR | \$1,571 | 8152 | 245.6 | 14 | 33.2 | 7 | 16.8 | 14 | 94.7 | 13 | 2.67 | 13 | 173 | 4 |
| SX-1212RR | \$1,545 | 8019 | 260.0 | 9 | 30.8 | 9 | 17.5 | 1 | 95.4 | 8 | 2.51 | 8 | 163 | 10 |
| B-1399 | \$1,424 | 7391 | 266.4 | 6 | 27.7 | 12 | 17.8 | 7 | 95.6 | 3 | 2.29 | 1 | 182 | 2 |
| C-RR202 | \$1,392 | 7224 | 257.9 | 10 | 28.0 | 11 | 17.2 | 12 | 95.7 | 1 | 2.58 | 9 | 163 | 11 |
| HM-28RR | \$1,382 | 7171 | 254.2 | 12 | 28.1 | 10 | 17.3 | 11 | 94.8 | 12 | 2.63 | 11 | 171 | 6 |
| HM-173RR | \$1,321 | 6857 | 249.5 | 13 | 27.5 | 13 | 17.2 | 13 | 94.3 | 14 | 2.50 | 7 | 156 | 13 |
| SX-1228RR | \$1,267 | 6575 | 256.6 | 11 | 25.6 | 14 | 17.3 | 10 | 95.3 | 9 | 2.61 | 10 | 171 | 5 |
| Average | \$1,632.1 | 8471.2 | 263.8 | | 32.00 | | 17.75 | | 95.28 | | 2.51 | | 168.8 | |
| LSD 5% | 129.2 | 670.5 | 12.3 | | 2.1 | | 0.6 | | 0.8 | | 0.1 | | 18.4 | |
| CV % | 6.9 | 6.9 | 4.0 | | 5.6 | | 2.7 | | 0.8 | | 4.3 | | 9.5 | |

**Cercospora Applications: 6/29 - Insp.+Manz., 7/21 - ST+Dith., 8/7 - Topguard+Manz., 8/27 - ST+Dith., 9/11 - Dith.

\$/A: Gross dollars per acre assuming a \$51 payment and trial average RWST.

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

Comments: This trial was planted on May 6th and harvested on October 15th at the very end of early delivery. This trial experienced a significant amount of nematode pressure. Cercospora was controlled to a level below economic impact. Adequate rainfall and growing conditions throughout the season produced a trial with good yield and sugar.

Variety Trial

DVL Farms, Ruth - 2015

| | | |
|----------------------------------|---|--|
| Trial Quality: Excellent | Soil Type: Sand | Cerc Control: Good Control: 1. Proline + EBDC, 2. EBDC, 3. EBDC, 4. Eminent + EBDC, 5. EBDC |
| Planted: April 26 | Fertilizer: Fall: 200# K ₂ O, 2x2: 237# of 17-18-13-4S-1Mn-B, Post emerg: 200# urea | Rhizoc Control: Excellent Control: Quadris in furrow & 8 leaf |
| Harv/Samp: Nov 5 / Oct 22 | Prev Crop: Black Beans | Other Pests: None |
| Plot Size: 3 reps | Weather: Good weather with periods of dry | |
| Row Spacing: 28 inch | | |
| Seeding Rate: 56,000 | | |

| Variety | \$/A | RWSA | RWST | T/A | % Sugar | % CJP | Populations 100 Ft. of Row | | Dead Beets / 1200 Ft |
|------------|---------|--------------|------------|-------------|-------------|-------------|-------------------------------|------------|-------------------------|
| | | | | | | | 10 Day | 30 Day | |
| SX-1228RR | \$2,072 | 10681 | 307 | 34.8 | 20.0 | 96.6 | 78 | 192 | — |
| SX-1212RR | \$2,046 | 10549 | 303 | 34.8 | 19.7 | 96.7 | 109 | 214 | — |
| B-12RR2N | \$2,015 | 10393 | 316 | 32.9 | 20.4 | 96.8 | 128 | 213 | — |
| C-G333NT | \$1,997 | 10298 | 301 | 34.2 | 19.6 | 96.5 | 121 | 204 | — |
| SX-1235NRR | \$1,948 | 10051 | 310 | 32.4 | 20.1 | 96.7 | 65 | 199 | — |
| B-18RR4N | \$1,896 | 9771 | 309 | 31.6 | 20.1 | 96.7 | 109 | 208 | — |
| B-1399 | \$1,886 | 9730 | 300 | 32.4 | 19.6 | 96.4 | 77 | 181 | — |
| C-RR059 | \$1,882 | 9707 | 311 | 31.2 | 20.2 | 96.6 | 111 | 210 | — |
| C-G351NT | \$1,859 | 9587 | 319 | 30.0 | 20.7 | 96.5 | 114 | 200 | — |
| B-133N | \$1,855 | 9566 | 303 | 31.5 | 19.7 | 96.6 | 103 | 215 | — |
| HM-173RR | \$1,830 | 9440 | 307 | 30.8 | 20.0 | 96.4 | 116 | 200 | — |
| C-RR202 | \$1,830 | 9440 | 306 | 30.8 | 19.9 | 96.7 | 139 | 204 | — |
| Average | \$1,926 | 9934 | 308 | 32.3 | 20.0 | 96.6 | 106 | 203 | — |
| LSD 5% | — | 565 | 7 | 1.6 | 0.4 | ns (0.3) | 15 | 13 | — |
| CV % | — | 3 | 1 | 3.0 | 1.2 | 0.2 | 8 | 4 | — |

Comments: This variety trial was conducted to evaluate performance of varieties on non-traditional soil types (sand). These soil types are droughty, prone to blow out and generally not conducive to high yields. Rainfall was adequate with occasional periods of dry conditions. Sugarbeets were stale seedbed planted into a wheat cover crop to prevent seedling blowout. Disease issues with root and foliage were very minimal. This is the second year in a row this trial was conducted on sandy soils. Based on 2 years of data, it appears that some varieties perform better than others under these conditions. In 2014, the top three varieties in RWSA were SX-1212RR, SX-1228RR and B-12RR2N. The 2015 harvest data produced almost identical results with SX-1228RR, SX-1212RR, B-12RR2N and C-G333NT being the top 4 varieties. The Crystal variety was a new entry for SBA trials for 2015. Growers may want to consider variety selection related to soil type in the future.

\$/A: Gross dollars per acre assuming a \$51 payment and company average RWST of 263.

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

Variety Trial

Couture Flatland Farms, Ontario- 2015

| | | |
|---------------------------------|---|--|
| Trial Quality: Excellent | Soil Type: Loam | Cerc Control: Good Control: 1. EBDC, 2. Proline, 3. EBDC, 4. Proline, 5. EBDC, 6. Proline |
| Planted: April 15 | Fertilizer: 400# K ₂ O, 100# MAP; 2x2: 100# of MAP; Side-dress 140# N | Rhizoc Control: Excellent Control: Quadris in furrow |
| Harv/Samp: Oct 6 / Oct 6 | Prev Crop: Corn | Other Pests: None |
| Plot Size: 3 reps | Weather: Good except for a dry September | |
| Row Spacing: 30 inch | | |
| Seeding Rate: 50,000 | | |

| Variety | \$/A | RWSA | RWST | T/A | % Sugar | % CJP | Populations 100 Ft. of Row | | Dead Beets / 1200 Ft |
|------------|---------|--------------|------------|-------------|-------------|-------------|-------------------------------|------------|----------------------------|
| | | | | | | | 13 Day | 26 Day | |
| C-G333NT | \$2,954 | 13200 | 280 | 47.1 | 18.4 | 96.3 | 34 | 174 | — |
| C-RR059 | \$2,907 | 12992 | 284 | 45.7 | 18.9 | 95.6 | 7 | 197 | — |
| B-12RR2N | \$2,857 | 12765 | 292 | 43.6 | 19.3 | 96.0 | 2 | 209 | — |
| C-RR202 | \$2,771 | 12385 | 275 | 45.1 | 18.3 | 95.5 | 12 | 127 | — |
| B-18RR4N | \$2,765 | 12354 | 283 | 43.6 | 18.8 | 95.7 | 34 | 225 | — |
| C-G351NT | \$2,744 | 12262 | 286 | 42.8 | 19.0 | 95.7 | 5 | 174 | — |
| B-133N | \$2,733 | 12215 | 268 | 45.5 | 18.0 | 95.5 | 17 | 143 | — |
| SX-1228RR | \$2,731 | 12202 | 271 | 45.0 | 18.1 | 95.7 | 3 | 140 | — |
| SX-1212RR | \$2,716 | 12137 | 276 | 44.0 | 18.3 | 95.8 | 11 | 163 | — |
| B-1399 | \$2,662 | 11896 | 279 | 42.7 | 18.5 | 95.9 | 32 | 188 | — |
| SX-1235NRR | \$2,492 | 11136 | 272 | 40.9 | 18.3 | 95.3 | 3 | 170 | — |
| HM-173RR | \$2,457 | 10978 | 258 | 42.5 | 17.7 | 94.4 | 1 | 153 | — |
| Average | \$2,733 | 12210 | 277 | 44.1 | 18.5 | 95.6 | 13 | 172 | — |
| LSD 5% | — | 399 | 7 | 1.4 | 0.4 | 0.6 | 28 | 73 | — |
| CV % | — | 2 | 2 | 1.9 | 1.1 | 0.4 | 124 | 25 | — |

Comments: Trial planted on April 15th and harvested during early dig (October 6th). Revenue was calculated using early dig premium and company average RWST of 263. Emergence was somewhat uneven between varieties but overall adequate for high yields. This trial had minimal disease issues and was in a high yielding environment/management. Conditions were dry in September slowing tonnage increase during that period.

\$/A: Gross dollars per acre assuming a \$51 payment and company average RWST of 263.

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

Variety Trial

Gardner Farms, Croswell - 2015

| | | |
|-------------------------------------|---|--|
| Trial Quality: Fair | Soil Type: Loam | Cerc Control: Fair Control: 1. Proline, 2. Gem |
| Planted: April 28 | Fertilizer: PPI: 19 gal of 28%, 2x2: 15 gal of 10-34-0, Side-dress: 20 gal of 28% | Rhizoc Control: Excellent Control: Quadris in furrow & 8 leaf |
| Harv/Samp: Sept 17 / Sept 17 | Prev Crop: Soybeans | Other Pests: Heavy Aphanomyces |
| Plot Size: 2 reps | Weather: Excessively wet in June | |
| Row Spacing: 22 inch | | |
| Seeding Rate: 67,000 | | |

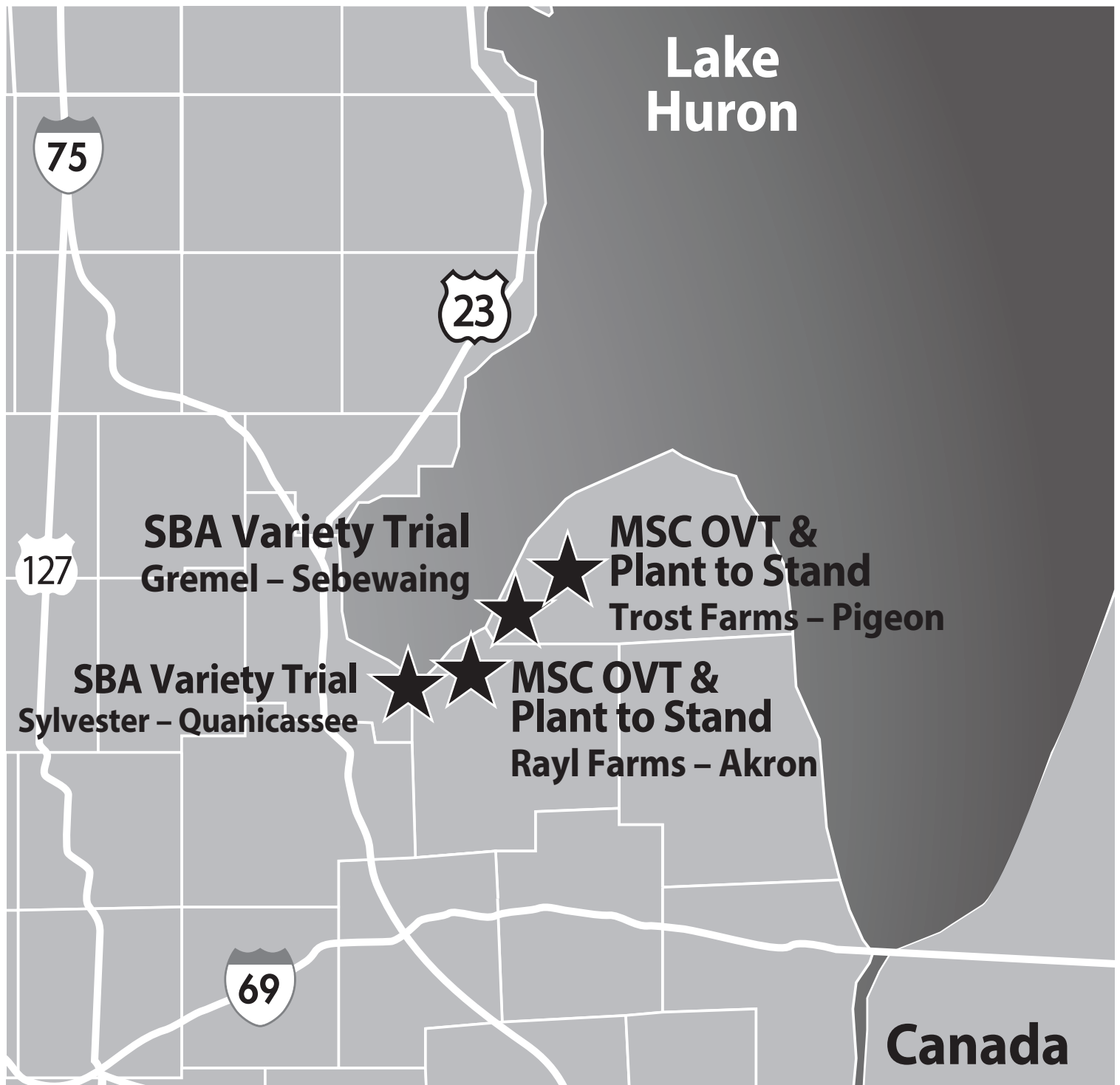
| Variety | \$/A | RWSA | RWST | T/A | % Sugar | % CJP | Populations 100 Ft. of Row | | Dead Beets / 1200 Ft |
|------------|---------|-------------|------------|-------------|-------------|-------------|-------------------------------|------------|----------------------------|
| | | | | | | | 10 Day | 29 Day | |
| B-12RR2N | \$2,197 | 8076 | 245 | 32.5 | 16.5 | 95.6 | 112 | 224 | 8 |
| C-G333NT | \$2,008 | 7240 | 229 | 31.8 | 15.5 | 95.6 | 110 | 222 | 2 |
| B-18RR4N | \$2,004 | 7355 | 239 | 30.4 | 16.1 | 95.8 | 113 | 226 | 8 |
| C-RR059 | \$1,942 | 7045 | 241 | 29.2 | 16.2 | 95.7 | 125 | 232 | 1 |
| SX-1235NRR | \$1,917 | 7054 | 238 | 29.3 | 16.1 | 95.5 | 147 | 240 | 11 |
| B-1399 | \$1,910 | 6886 | 233 | 29.8 | 15.7 | 95.6 | 100 | 220 | 0 |
| HM-173RR | \$1,899 | 6940 | 224 | 30.8 | 15.4 | 95.0 | 150 | 241 | 0 |
| SX-1228RR | \$1,889 | 6875 | 239 | 28.7 | 16.0 | 95.9 | 143 | 227 | 3 |
| B-133N | \$1,886 | 6832 | 222 | 30.9 | 15.2 | 95.0 | 106 | 237 | 0 |
| C-G351NT | \$1,873 | 6899 | 240 | 28.4 | 16.2 | 95.3 | 109 | 223 | 5 |
| C-RR202 | \$1,861 | 6842 | 238 | 28.4 | 16.1 | 95.5 | 130 | 230 | 3 |
| SX-1212RR | \$1,844 | 6683 | 234 | 28.6 | 15.9 | 95.3 | 116 | 229 | 2 |
| Average | \$1,936 | 7061 | 235 | 29.9 | 15.9 | 95.5 | 122 | 229 | 4 |
| LSD 5% | — | 1158 | 9 | 3.5 | 0.5 | 0.3 | ns (61) | 14 | 8 |
| CV % | — | 8 | 2 | 5.3 | 1.9 | 0.2 | 30 | 4 | 130 |

Comments: USE TRIAL DATA WITH CAUTION. In this trial only two replications of tonnage are being used because uneven soil variation in the first rep. Front 1/4 of the trial emerged faster than the back of the trial. Stand establishment was good, but heavy Aphanomyces pressure impacted the back of the trial. Cercospora was prevalent but not expected to significantly affect yield and quality. Revenue calculation is based on early dig premium schedule and company average 263 RWST.

\$/A: Gross dollars per acre assuming a \$51 payment.

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

Central District Trials





Official Variety Trial

Trost Farms, Inc., Pigeon - 2015

Trial Quality: Good
Plant/Harv: April 29/Oct 21
Plots: 2 rows X 38 ft, 8 reps
Row Spacing: 22 inches
Seeding Rate: 2 inches,
 thinned to 215 beets/100 ft

Soil Type: Sandy Clay Loam
% OM: 2.7 **pH:** 7.2 **CEC:** 9.9
Nutrient Levels: Above Opt: P, K
 Medium High: Mn, Medium: B
Added N: 125 Lbs
Prev Crop: Corn

Cerc Control: Good Control
 5 applications**
Rhizoc Control: Good Control
 Quadris IF T-Band, 6-8 lf
Other Problems: Minor Nematodes
Rainfall: 17.0 inches

| Variety | \$/A | RWSA | RWST | | Yield | | Sugar | | CJP | | CLS* | |
|-------------|----------------|--------------|------------|----------|-------------|-----------|-------------|----------|-------------|----------|-------------|----------|
| | | | Lb/T | Rank | T/A | Rank | % | Rank | % | Rank | 0-9 | Rank |
| SX-RR1243 | \$2,593 | 14518 | 295 | 4 | 49.2 | 3 | 19.3 | 4 | 96.5 | 2 | 1.56 | 2 |
| SX-1212RR | \$2,527 | 14149 | 289 | 10 | 48.9 | 4 | 19.0 | 12 | 96.2 | 7 | 1.72 | 7 |
| B-149N | \$2,512 | 14062 | 285 | 15 | 49.4 | 2 | 18.8 | 14 | 96.1 | 11 | 1.78 | 11 |
| B-12RR2N | \$2,484 | 13906 | 290 | 9 | 47.9 | 7 | 19.2 | 8 | 96.0 | 15 | 2.25 | 20 |
| SX-1228RR | \$2,480 | 13886 | 292 | 6 | 47.6 | 9 | 19.2 | 6 | 96.1 | 10 | 1.75 | 8 |
| B-18RR4N | \$2,473 | 13842 | 293 | 5 | 47.3 | 11 | 19.2 | 5 | 96.2 | 6 | 1.91 | 18 |
| C-RR202 | \$2,455 | 13741 | 288 | 12 | 47.7 | 8 | 19.1 | 10 | 95.9 | 18 | 1.78 | 11 |
| B-1399 | \$2,446 | 13695 | 285 | 14 | 48.0 | 6 | 18.6 | 16 | 96.7 | 1 | 1.50 | 1 |
| SX-1211N RR | \$2,427 | 13585 | 274 | 18 | 49.6 | 1 | 18.2 | 19 | 96.0 | 14 | 1.75 | 9 |
| SX-RR1245N | \$2,417 | 13531 | 289 | 11 | 46.8 | 13 | 19.0 | 11 | 96.1 | 13 | 1.78 | 11 |
| SX-RR1235N | \$2,413 | 13509 | 291 | 8 | 46.5 | 14 | 19.2 | 7 | 96.0 | 16 | 1.75 | 9 |
| B-133N | \$2,367 | 13252 | 280 | 16 | 47.3 | 12 | 18.6 | 15 | 95.7 | 19 | 1.78 | 11 |
| HM-28RR | \$2,365 | 13240 | 273 | 19 | 48.4 | 5 | 18.0 | 20 | 96.3 | 3 | 1.88 | 17 |
| C-G333NT | \$2,361 | 13216 | 279 | 17 | 47.4 | 10 | 18.5 | 17 | 95.9 | 17 | 1.66 | 5 |
| HM-NT9617RR | \$2,357 | 13197 | 285 | 13 | 46.3 | 15 | 18.8 | 13 | 96.1 | 12 | 2.03 | 19 |
| C-G351NT | \$2,347 | 13139 | 298 | 2 | 44.0 | 17 | 19.6 | 2 | 96.2 | 8 | 1.59 | 3 |
| HM-9616RR | \$2,301 | 12884 | 305 | 1 | 42.2 | 19 | 20.0 | 1 | 96.3 | 4 | 1.59 | 3 |
| C-RR059 | \$2,293 | 12834 | 296 | 3 | 43.5 | 18 | 19.5 | 3 | 96.1 | 9 | 1.78 | 11 |
| HM-173RR | \$2,224 | 12447 | 273 | 20 | 45.6 | 16 | 18.3 | 18 | 95.5 | 20 | 1.69 | 6 |
| HM-NT9607RR | \$2,151 | 12039 | 291 | 7 | 41.3 | 22 | 19.1 | 9 | 96.2 | 5 | 1.81 | 16 |
| Average | \$2,399.7 | 13433.5 | 287.6 | | 46.74 | | 18.95 | | 96.10 | | 1.77 | |
| LSD 5% | 181.7 | 1017.2 | 7.9 | | 3.2 | | 0.4 | | 0.5 | | 0.2 | |
| CV % | 7.7 | 7.7 | 2.9 | | 7.0 | | 2.2 | | 0.5 | | 12.8 | |

***CLS:** Cercospora rating from this trial not from the Cercospora Nurseries. Rating taken one week prior to harvest.

**Cercospora Applications: 7/1 - Insp. + Manz., 7/27 - ST+Dith., 8/13 - Topguard+Manz., 8/25 - ST+Dith., 9/11 - Emin+Dith.

\$/A: Gross dollars per acre assuming a \$51 payment and trial average RWST.

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

Comments: Excellent growing conditions and low disease levels throughout the season produced a trial with high yields, sugar content, and quality.



Official Variety Trial

Rayl Farms Inc., Akron - 2015

Trial Quality: Good
Plant/Harv: April 17/Sept 14
Plots: 2 rows X 38 ft, 8 reps
Row Spacing: 22 inches
Seeding Rate: 2 inches,
 thinned to 215 beets/100 ft

Soil Type: Sandy Clay Loam
% OM: 3.1 **pH:** 7.4 **CEC:** 14.4
Nutrient Levels: Above Opt: P,K
 High: Mn, Medium: B
Added N: 150 lbs
Prev Crop: Wheat

Cerc Control: Fair Control
 4 applications**
Rhizoc Control: Good Control
 Quadris IF T-Band, 6-8 lf
Other Problems: None
Rainfall: 24.4 inches

| Variety | \$/A | RWSA | RWST | | Yield | | Sugar | | CJP | | CLS | |
|-------------|----------------|--------------|------------|----------|-------------|----------|-------------|----------|-------------|----------|-------------|----------|
| | | | Lb/T | Rank | T/A | Rank | % | Rank | % | Rank | 0-9 | Rank |
| C-RR059 | \$2,525 | 11623 | 238 | 8 | 48.9 | 1 | 16.0 | 7 | 95.6 | 18 | 2.97 | 11 |
| B-12RR2N | \$2,461 | 11329 | 247 | 1 | 46.0 | 11 | 16.5 | 1 | 95.9 | 5 | 2.91 | 7 |
| B-149N | \$2,426 | 11167 | 236 | 10 | 47.3 | 4 | 15.9 | 10 | 95.8 | 11 | 3.13 | 18 |
| SX-RR1243 | \$2,417 | 11129 | 238 | 7 | 46.8 | 7 | 15.9 | 9 | 96.1 | 3 | 2.78 | 3 |
| C-G333NT | \$2,409 | 11091 | 232 | 15 | 47.8 | 2 | 15.6 | 15 | 95.8 | 9 | 3.00 | 12 |
| B-133N | \$2,388 | 10996 | 234 | 12 | 47.0 | 5 | 15.7 | 12 | 95.7 | 15 | 3.25 | 20 |
| C-RR202 | \$2,375 | 10935 | 238 | 9 | 46.0 | 10 | 15.9 | 8 | 95.9 | 6 | 2.88 | 6 |
| B-18RR4N | \$2,369 | 10908 | 246 | 2 | 44.3 | 14 | 16.4 | 2 | 96.2 | 2 | 3.06 | 15 |
| SX-RR1245N | \$2,369 | 10906 | 245 | 3 | 44.5 | 13 | 16.3 | 4 | 96.3 | 1 | 2.94 | 9 |
| B-1399 | \$2,355 | 10842 | 231 | 17 | 46.9 | 6 | 15.6 | 17 | 95.8 | 13 | 2.44 | 1 |
| SX-1228RR | \$2,353 | 10831 | 235 | 11 | 46.0 | 9 | 15.8 | 11 | 95.8 | 12 | 3.16 | 19 |
| SX-1211N RR | \$2,310 | 10635 | 229 | 18 | 46.5 | 8 | 15.4 | 18 | 95.8 | 8 | 3.00 | 12 |
| HM-28RR | \$2,255 | 10381 | 218 | 20 | 47.5 | 3 | 14.9 | 20 | 95.4 | 19 | 2.91 | 7 |
| SX-1212RR | \$2,253 | 10373 | 232 | 14 | 44.7 | 12 | 15.6 | 16 | 95.9 | 7 | 2.94 | 9 |
| HM-NT9617RR | \$2,224 | 10241 | 232 | 16 | 44.2 | 15 | 15.6 | 14 | 95.7 | 16 | 3.06 | 15 |
| C-G351NT | \$2,216 | 10204 | 240 | 5 | 42.5 | 18 | 16.1 | 5 | 95.7 | 14 | 2.84 | 5 |
| SX-RR1235N | \$2,199 | 10123 | 234 | 13 | 43.3 | 16 | 15.7 | 13 | 95.8 | 10 | 3.00 | 12 |
| HM-9616RR | \$2,138 | 9841 | 244 | 4 | 40.5 | 20 | 16.3 | 3 | 96.0 | 4 | 2.78 | 3 |
| HM-NT9607RR | \$2,129 | 9802 | 238 | 6 | 41.1 | 19 | 16.1 | 6 | 95.6 | 17 | 3.09 | 17 |
| HM-173RR | \$2,072 | 9537 | 221 | 19 | 43.2 | 17 | 15.1 | 19 | 95.0 | 20 | 2.75 | 2 |
| Average | \$2,312.1 | 10644.7 | 235.3 | | 45.25 | | 15.82 | | 95.79 | | 2.94 | |
| LSD 5% | 100.6 | 463.3 | 6.7 | | 1.7 | | 0.4 | | 0.4 | | 0.2 | |
| CV % | 4.4 | 4.4 | 2.9 | | 4.0 | | 2.4 | | 0.4 | | 6.8 | |

***CLS:** Cercospora rating taken from this trial not the Cercospora Nurseries. Rating taken one week prior to harvest.

**Cercospora Applications: 7/1 - Insp. + Manz., 7/21 - ST+Dith., 8/13 - Topguard+Manz., 8/25 - ST+Dith.

\$/A: Gross dollars per acre assuming a \$51 payment and trial average RWST.

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

Comments: This trial had a level of leafspot that may have economic impact and was harvested early to prevent the increase in disease. Yield and quality were still high considering the September harvest and the presence of Cercospora.



Plant To Stand

Trost Farms, Inc., Pigeon - 2015

Trial Quality: Very Good
Plant/Harv: April 29/Oct 21
Plots: 6 rows X 38 ft, 6 reps
Row Spacing: 22 inches
Seeding Rate: 4.1 inches

Soil Type: Sandy Clay Loam
% OM: 2.7 **pH:** 7.2 **CEC:** 9.9
Nutrient Levels: Above Opt: P,K
 Medium High:Mn, Medium:B
Added N: 125 lbs
Prev Crop: Corn

Cerc Control: Good Control
 5 applications**
Rhizoc Control: Good Control
 Quadris IF T-Band, 6-8 lf
Other Problems: Minor Nematodes
Rainfall: 17.0 Inches

| Variety | \$/A | RWSA | RWST | | Yield | | Sugar | | CJP | | CLS | | Beets/100 ft | |
|-------------|-----------|---------|-------|------|-------|------|-------|------|-------|------|------|------|--------------|------|
| | | | Lb/T | Rank | T/A | Rank | % | Rank | % | Rank | 0-9 | Rank | Act. | Rank |
| C-RR059 | \$2,490 | 14000 | 293 | 6 | 47.8 | 3 | 19.6 | 5 | 95.4 | 11 | 1.50 | 5 | 203 | 2 |
| C-RR202 | \$2,440 | 13721 | 299 | 2 | 45.8 | 8 | 19.9 | 2 | 95.6 | 6 | 1.54 | 9 | 191 | 11 |
| C-G351NT | \$2,440 | 13720 | 305 | 1 | 45.0 | 10 | 20.1 | 1 | 95.8 | 2 | 1.46 | 4 | 179 | 14 |
| B-18RR4N | \$2,412 | 13563 | 294 | 5 | 46.0 | 7 | 19.5 | 6 | 95.6 | 7 | 1.63 | 11 | 193 | 7 |
| B-12RR2N | \$2,412 | 13562 | 297 | 3 | 45.7 | 9 | 19.6 | 4 | 95.8 | 3 | 1.67 | 12 | 191 | 10 |
| C-G333NT | \$2,400 | 13497 | 277 | 12 | 48.8 | 1 | 18.5 | 12 | 95.4 | 10 | 1.50 | 6 | 184 | 13 |
| SX-1228RR | \$2,358 | 13262 | 285 | 8 | 46.6 | 6 | 18.9 | 8 | 95.7 | 5 | 1.50 | 7 | 200 | 4 |
| B-133N | \$2,347 | 13201 | 279 | 11 | 47.4 | 4 | 18.7 | 11 | 95.2 | 14 | 1.71 | 13 | 192 | 8 |
| SX-RR1235N | \$2,333 | 13120 | 296 | 4 | 44.3 | 13 | 19.6 | 3 | 95.7 | 4 | 1.38 | 2 | 191 | 12 |
| B-1399 | \$2,330 | 13104 | 292 | 7 | 44.8 | 11 | 19.3 | 7 | 95.9 | 1 | 1.29 | 1 | 192 | 9 |
| HM-28RR | \$2,310 | 12991 | 276 | 13 | 47.2 | 5 | 18.4 | 13 | 95.5 | 8 | 1.54 | 10 | 204 | 1 |
| SX-1211N RR | \$2,256 | 12689 | 265 | 14 | 47.8 | 2 | 17.9 | 14 | 95.2 | 13 | 1.75 | 14 | 194 | 6 |
| SX-1212RR | \$2,235 | 12567 | 283 | 9 | 44.4 | 12 | 18.9 | 9 | 95.5 | 9 | 1.50 | 8 | 197 | 5 |
| HM-173RR | \$2,180 | 12261 | 280 | 10 | 43.7 | 14 | 18.8 | 10 | 95.2 | 12 | 1.38 | 3 | 202 | 3 |
| Average | \$2,353.1 | 13232.7 | 287.2 | | 46.09 | | 19.13 | | 95.53 | | 1.52 | | 193.8 | |
| LSD 5% | 164.3 | 924.1 | 12.3 | | 2.5 | | 0.6 | | 0.5 | | 0.2 | | 16.6 | |
| CV % | 6.1 | 6.1 | 3.7 | | 4.8 | | 2.9 | | 0.5 | | 8.8 | | 7.5 | |

**Cercospora Applications: 7/1 - Insp.+Manz., 7/27 - ST+Dith., 8/13 - Topguard+Manz., 8/25 - ST+Dith., 9/11 - Emin+Dith.

\$/A: Gross dollars per acre assuming a \$51 payment and trial average RWST.

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

Comments: This trial was planted on April 29th and harvested on October 21st during permanent pile. Excellent growing conditions throughout the year, as well as adequate disease control produced a trial with excellent yield and good sugar content. Low levels of cyst nematodes were detected, but not severe enough to impact non-tolerent varieties.



Plant To Stand

Rayl Farms Inc., Akron - 2015

Trial Quality: Fair
Plant/Harv: April 17/Sept 14
Plots: 6 rows X 38 ft, 6 reps
Row Spacing: 22 inches
Seeding Rate: 4.1 inches

Soil Type: Sandy Clay Loam
% OM: 3.1 **pH:** 7.4 **CEC:** 14.4
Nutrient Levels: Above Opt: P,K
 High: Mn, Medium: B
Added N: 150 lbs
Prev Crop: Wheat

Cerc Control: Fair Control
 4 applications**
Rhizoc Control: Good Control
 Quadris IF T-Band, 6-8 lf
Other Problems: None
Rainfall: 24.4 inches

| Variety | \$/A | RWSA | RWST | | Yield | | Sugar | | CJP | | CLS | | Beets/100 ft | |
|-------------|----------------|--------------|------------|----------|-------------|----------|-------------|----------|-------------|----------|-------------|----------|--------------|----------|
| | | | Lb/T | Rank | T/A | Rank | % | Rank | % | Rank | 0-9 | Rank | Act. | Rank |
| C-G333NT | \$2,500 | 11299 | 233 | 7 | 48.5 | 1 | 15.6 | 7 | 96.0 | 6 | 2.71 | 7 | 167 | 12 |
| C-G351NT | \$2,365 | 10688 | 249 | 1 | 43.0 | 10 | 16.6 | 1 | 96.0 | 7 | 2.60 | 2 | 183 | 3 |
| B-12RR2N | \$2,318 | 10478 | 240 | 2 | 43.5 | 6 | 16.0 | 2 | 96.1 | 2 | 2.73 | 8 | 176 | 8 |
| B-133N | \$2,270 | 10259 | 237 | 5 | 43.3 | 7 | 15.8 | 3 | 96.1 | 5 | 2.83 | 14 | 180 | 6 |
| B-1399 | \$2,265 | 10238 | 234 | 6 | 43.9 | 3 | 15.6 | 6 | 96.1 | 4 | 2.38 | 1 | 190 | 1 |
| SX-1211N RR | \$2,261 | 10217 | 222 | 12 | 45.9 | 2 | 15.1 | 12 | 95.4 | 11 | 2.81 | 12 | 176 | 10 |
| C-RR059 | \$2,228 | 10072 | 237 | 4 | 42.5 | 12 | 15.8 | 4 | 96.1 | 3 | 2.67 | 5 | 183 | 4 |
| B-18RR4N | \$2,206 | 9969 | 237 | 3 | 42.1 | 13 | 15.8 | 5 | 96.2 | 1 | 2.77 | 10 | 169 | 11 |
| SX-1228RR | \$2,175 | 9832 | 226 | 10 | 43.6 | 5 | 15.3 | 10 | 95.4 | 10 | 2.81 | 12 | 184 | 2 |
| SX-1212RR | \$2,150 | 9715 | 228 | 9 | 42.8 | 11 | 15.4 | 9 | 95.6 | 9 | 2.77 | 10 | 176 | 9 |
| SX-RR1235N | \$2,125 | 9603 | 223 | 11 | 43.1 | 9 | 15.2 | 11 | 95.0 | 14 | 2.63 | 3 | 179 | 7 |
| C-RR202 | \$2,123 | 9593 | 230 | 8 | 41.8 | 14 | 15.4 | 8 | 95.9 | 8 | 2.69 | 6 | 181 | 5 |
| HM-173RR | \$2,111 | 9540 | 221 | 13 | 43.3 | 8 | 15.1 | 13 | 95.1 | 13 | 2.65 | 4 | 158 | 14 |
| HM-28RR | \$2,077 | 9386 | 215 | 14 | 43.8 | 4 | 14.7 | 14 | 95.2 | 12 | 2.73 | 8 | 163 | 13 |
| Average | \$2,226.6 | 10063.5 | 230.7 | | 43.64 | | 15.54 | | 95.73 | | 2.70 | | 176.1 | |
| LSD 5% | 225.0 | 1016.8 | 11.0 | | 4.0 | | 0.6 | | 0.5 | | 0.1 | | 14 | |
| CV % | 8.8 | 8.8 | 4.1 | | 8.1 | | 3.3 | | 0.5 | | 4.0 | | 7 | |

**Cercospora Applications: 7/1 - Insp.+Manz., 7/21 - St+Dith., 8/13 - Topguard+Manz., 8/25 - ST+Dith.

\$/A: Gross dollars per acre assuming a \$51 payment and trial average RWST.

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

Comments: This trial was planted on April 17th and harvested during early delivery on September 14th. Because of Cercospora Leafspot infections the trial was harvested early. The Cercospora levels are believed to be near the economic impact level, but less tolerant varieties are still near the top of the trial. Even with early harvest, yields for this trial were excellent and sugar content was consistent with an early delivery harvest.

Variety Trial

J & L Gremel Farms, Sebewaing - 2015

| | | |
|-------------------------------------|---|--|
| Trial Quality: Excellent | Soil Type: Loam | Cerc Control: Fair Control: 1. Proline + EBDC, 2. Super Tin + EBDC, 3. Inspire + EBDC |
| Planted: April 18 | Fertilizer: Fall: 10,000 gal. Dairy Manure, Side-dress 20 gal. 28% | Rhizoc Control: Excellent Control: Quadris in furrow & 8 leaf |
| Harv/Samp: Sept 23 / Sept 21 | Prev Crop: Black Beans | Other Pests: Sugarbeet cyst nematode |
| Plot Size: 3 reps | Weather: Good moisture | |
| Row Spacing: 20 inch | | |
| Seeding Rate: 65,000 | | |

| Variety | \$/A | RWSA | RWST | T/A | % Sugar | % CJP | Populations 100 Ft. of Row | | Dead Beets / 1200 Ft |
|------------|---------|--------------|------------|-------------|-------------|-------------|-------------------------------|------------|----------------------------|
| | | | | | | | 16 Day | 39 Day | |
| C-G333NT | \$2,805 | 10831 | 250 | 43.3 | 16.6 | 96.1 | 107 | 198 | — |
| B-12RR2N | \$2,791 | 10772 | 262 | 41.2 | 17.3 | 96.4 | 94 | 188 | — |
| C-RR059 | \$2,781 | 10731 | 255 | 42.1 | 17.0 | 95.9 | 101 | 199 | — |
| B-133N | \$2,765 | 10672 | 252 | 42.3 | 16.7 | 96.2 | 106 | 199 | — |
| B-18RR4N | \$2,736 | 10561 | 259 | 40.7 | 17.2 | 96.1 | 107 | 209 | — |
| SX-1235NRR | \$2,694 | 10396 | 262 | 39.7 | 17.5 | 95.7 | 88 | 193 | — |
| B-1399 | \$2,603 | 10051 | 250 | 40.1 | 16.6 | 96.3 | 101 | 196 | — |
| C-G351NT | \$2,596 | 10022 | 265 | 37.8 | 17.6 | 96.0 | 92 | 186 | — |
| C-RR202 | \$2,557 | 9873 | 251 | 39.3 | 16.8 | 96.0 | 117 | 187 | — |
| SX-1228RR | \$2,509 | 9686 | 250 | 38.7 | 16.7 | 96.1 | 80 | 188 | — |
| HM-173RR | \$2,500 | 9648 | 244 | 39.6 | 16.3 | 96.0 | 112 | 190 | — |
| SX-1212RR | \$2,385 | 9208 | 250 | 36.8 | 16.7 | 96.1 | 78 | 189 | — |
| Average | \$2,644 | 10204 | 254 | 40.1 | 16.9 | 96.1 | 99 | 193 | — |
| LSD 5% | — | 536 | 8 | 1.7 | 0.5 | 0.4 | 34 | 12 | — |
| CV % | — | 3 | 2 | 2.5 | 1.7 | 0.3 | 20 | 4 | — |

Comments: This trial was in a high yielding environment. Manure applied fall of 2014 created a dense canopy. Varietal differences were able to be seen in Cercospora leafspot resistance. Rhizoctonia and other root diseases were minimal. Sugarbeet cyst nematodes were present in this field. Revenue was calculated using early dig premium schedule and company average of 263 RWST.

\$/A: Gross dollars per acre assuming a \$51 payment and company average RWST of 263.

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

Variety Trial

Sylvester Farms, Quanicassee - 2015

| | | |
|----------------------------------|--|---|
| Trial Quality: Good | Soil Type: Loam | Cerc Control: Fair Control: 6 Applications. See below for materials |
| Planted: April 18 | Fertilizer: Fall: Variable K ₂ O; PPI: 55 gal. 28%, 2x2: 36-28-0-9 + Mn & B | Rhizoc Control: Good Control: Quadris in furrow and 8 leaf |
| Harv/Samp: Nov 4 / Oct 21 | Prev Crop: Corn | Other Pests: Heavy sugarbeet cyst nematode |
| Plot Size: 3 reps | Weather: Good moisture | |
| Row Spacing: 24 inch | | |
| Seeding Rate: 65,000 | | |

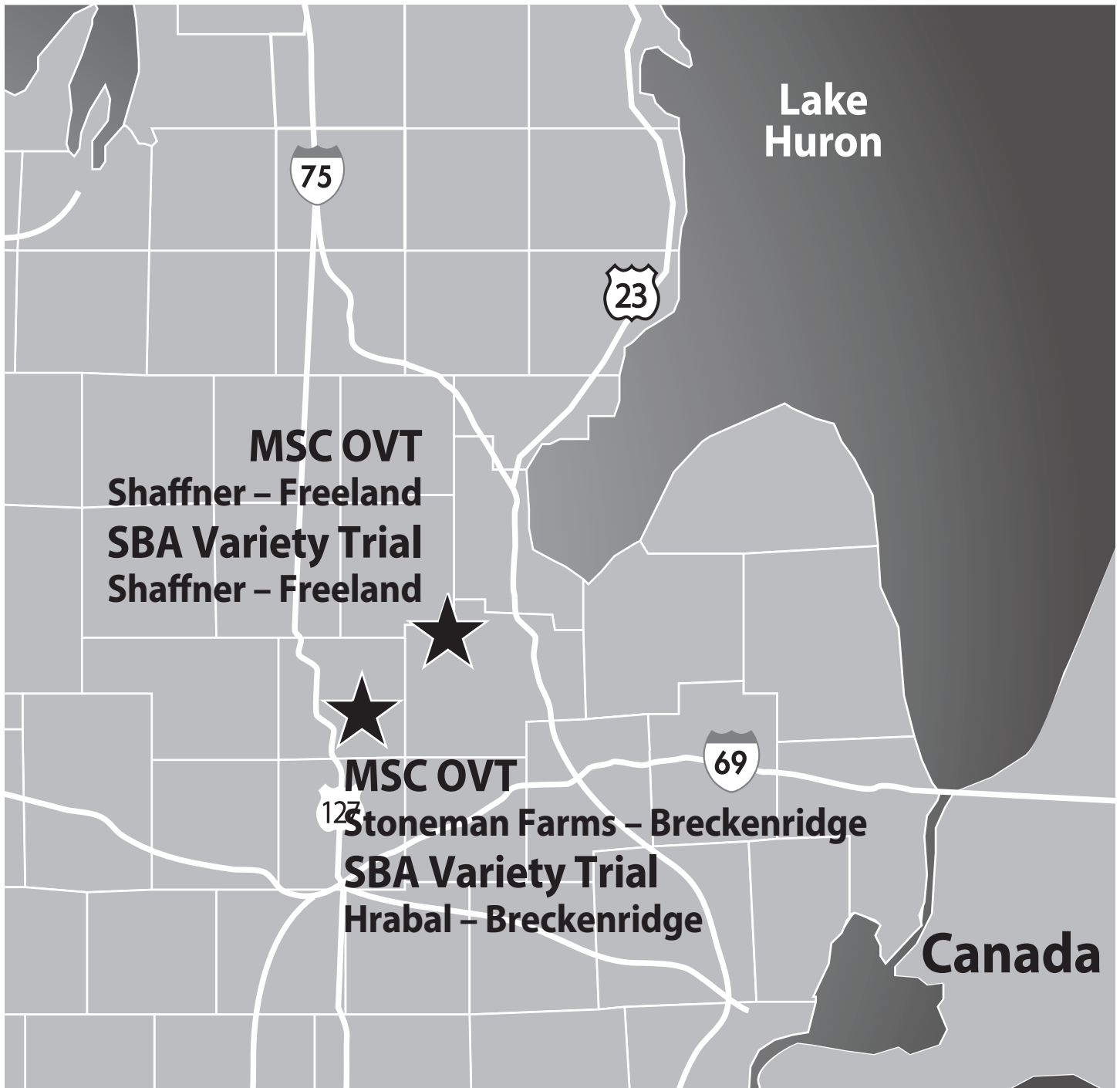
| Variety | \$/A | RWSA | RWST | T/A | % Sugar | % CJP | Populations 100 Ft. of Row | | Dead Beets / 1200 Ft |
|------------|---------|--------------|------------|-------------|-------------|-------------|-------------------------------|------------|----------------------------|
| | | | | | | | 16 Day | 33 Day | |
| C-G351NT | \$2,102 | 10842 | 287 | 37.7 | 18.8 | 96.6 | 171 | 232 | 19 |
| SX-1235NRR | \$1,994 | 10284 | 274 | 37.5 | 18.1 | 96.3 | 136 | 239 | 12 |
| B-12RR2N | \$1,984 | 10232 | 286 | 35.7 | 18.7 | 96.6 | 158 | 227 | 9 |
| B-133N | \$1,983 | 10218 | 268 | 38.2 | 17.7 | 96.1 | 148 | 240 | 0 |
| B-18RR4N | \$1,978 | 10203 | 277 | 36.9 | 18.1 | 96.6 | 178 | 256 | 7 |
| C-G333NT | \$1,968 | 10147 | 270 | 37.6 | 17.7 | 96.5 | 175 | 231 | 2 |
| C-RR202 | \$1,904 | 9833 | 275 | 35.7 | 18.0 | 96.7 | 183 | 235 | 12 |
| C-RR059 | \$1,881 | 9716 | 278 | 34.9 | 18.2 | 96.7 | 171 | 240 | 2 |
| B-1399 | \$1,857 | 9582 | 280 | 34.3 | 18.3 | 96.7 | 149 | 231 | 2 |
| HM-173RR | \$1,822 | 9394 | 278 | 33.8 | 18.2 | 96.6 | 136 | 214 | 3 |
| SX-1212RR | \$1,783 | 9203 | 283 | 32.5 | 18.5 | 96.5 | 131 | 234 | 33 |
| SX-1228RR | \$1,779 | 9192 | 275 | 33.4 | 17.9 | 96.8 | 135 | 224 | 18 |
| Average | \$1,920 | 9904 | 278 | 35.7 | 18.2 | 96.6 | 156 | 233 | 10 |
| LSD 5% | — | 869 | 11 | 2.8 | 0.6 | 0.3 | 25 | 15 | 19 |
| CV % | — | 5 | 2 | 4.6 | 1.9 | 0.2 | 9 | 4 | 115 |

Comments: Trial had six applications of leaf spot fungicides 1) Inspire XT + EBDC, 2) Headline + EBDC, 3) Tin + EBDC, 4) Eminent + EBDC, 5) Tin + EBDC, 6) Badge. Varietal differences were able to be seen in Cercospora resistance. Low levels of other root diseases but trial did have heavy sugarbeet cyst nematode. All nematode tolerant varieties performed better than non-tolerant varieties.

\$/A: Gross dollars per acre assuming a \$51 payment and company average RWST of 263.

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

West District Trials





Official Variety Trial

Shaffner Brothers LLC., Freeland - 2015

Trial Quality: Very Good
Plant/Harv: May 1/Oct 5
Plots: 2 rows X 38 ft, 8 reps
Row Spacing: 22 inches
Seeding Rate: 2 inches,
 thinned to 215 beets/100 ft

Soil Type: Silt Loam
% OM: 3.2 **pH:** 7.8 **CEC:** 12.4
Nutrient Levels: Above Opt: P,K
 Medium: Mn, Medium: B
Added N: 150 lbs
Prev Crop: Soybeans

Cerc Control: Good Control
 5 applications**
Rhizoc Control: Good Control,
 Quadris IF T-Band, 6-8 lf
Other Problems: None
Rainfall: 22.8 inches

| Variety | \$/A | RWSA | RWST | | Yield | | Sugar | | CJP | | CLS* | |
|-------------|----------------|--------------|------------|----------|-------------|----------|-------------|----------|-------------|-----------|-------------|----------|
| | | | Lb/T | Rank | T/A | Rank | % | Rank | % | Rank | 0-9 | Rank |
| B-149N | \$2,875 | 13903 | 248 | 14 | 56.0 | 1 | 16.5 | 13 | 96.3 | 9 | 2.38 | 9 |
| SX-RR1243 | \$2,839 | 13729 | 253 | 8 | 54.4 | 3 | 16.7 | 8 | 96.3 | 5 | 2.09 | 1 |
| C-RR202 | \$2,797 | 13526 | 254 | 7 | 53.3 | 6 | 16.9 | 6 | 96.1 | 16 | 2.50 | 14 |
| B-1399 | \$2,783 | 13458 | 246 | 16 | 54.7 | 2 | 16.3 | 16 | 96.3 | 6 | 2.25 | 4 |
| C-G333NT | \$2,777 | 13429 | 248 | 15 | 54.2 | 4 | 16.4 | 15 | 96.4 | 2 | 2.50 | 14 |
| C-RR059 | \$2,738 | 13242 | 255 | 5 | 51.9 | 10 | 17.0 | 3 | 95.9 | 17 | 2.41 | 10 |
| B-18RR4N | \$2,729 | 13194 | 255 | 4 | 51.6 | 11 | 17.0 | 4 | 96.1 | 15 | 2.44 | 11 |
| B-12RR2N | \$2,708 | 13097 | 254 | 6 | 51.6 | 12 | 16.9 | 7 | 96.1 | 13 | 2.44 | 11 |
| B-133N | \$2,707 | 13090 | 243 | 17 | 53.9 | 5 | 16.2 | 17 | 96.1 | 14 | 2.59 | 20 |
| SX-1212RR | \$2,693 | 13024 | 248 | 13 | 52.5 | 9 | 16.5 | 12 | 96.2 | 12 | 2.34 | 8 |
| SX-RR1245N | \$2,679 | 12954 | 256 | 3 | 50.7 | 15 | 16.9 | 5 | 96.3 | 7 | 2.19 | 2 |
| SX-RR1235N | \$2,655 | 12839 | 250 | 10 | 51.3 | 14 | 16.6 | 10 | 96.3 | 11 | 2.22 | 3 |
| C-G351NT | \$2,631 | 12722 | 261 | 2 | 48.8 | 17 | 17.3 | 1 | 96.3 | 10 | 2.31 | 5 |
| SX-1228RR | \$2,585 | 12499 | 250 | 11 | 50.0 | 16 | 16.6 | 11 | 96.4 | 4 | 2.50 | 14 |
| HM-28RR | \$2,561 | 12384 | 233 | 20 | 53.1 | 7 | 15.7 | 20 | 95.8 | 19 | 2.50 | 14 |
| SX-1211N RR | \$2,560 | 12380 | 236 | 19 | 52.5 | 8 | 15.8 | 19 | 95.9 | 18 | 2.50 | 14 |
| HM-173RR | \$2,541 | 12286 | 239 | 18 | 51.4 | 13 | 16.1 | 18 | 95.6 | 20 | 2.44 | 11 |
| HM-NT9607RR | \$2,533 | 12247 | 252 | 9 | 48.7 | 18 | 16.7 | 9 | 96.3 | 8 | 2.31 | 5 |
| HM-NT9617RR | \$2,491 | 12046 | 249 | 12 | 48.4 | 19 | 16.5 | 14 | 96.4 | 3 | 2.50 | 14 |
| HM-9616RR | \$2,432 | 11759 | 261 | 1 | 45.0 | 20 | 17.2 | 2 | 96.5 | 1 | 2.31 | 5 |
| Average | \$2,665.8 | 12890.5 | 249.5 | | 51.70 | | 16.58 | | 96.18 | | 2.39 | |
| LSD 5% | 123.3 | 596.4 | 7.9 | | 1.9 | | 0.4 | | 0.4 | | 0.2 | |
| CV % | 4.7 | 4.7 | 3.2 | | 3.7 | | 2.6 | | 0.4 | | 10.1 | |

***CLS:** Cercospora rating from this trial not from the Cercospora Nurseries. Rating taken one week prior to harvest.

**Cercospora Applications: 6/25 - Insp. + Manz., 7/20 - ST+Dith., 8/6 - Topguard+Manz., 8/26 - ST+Dith., 9/14 - Dith.

\$/A: Gross dollars per acre assuming a \$51 payment and trial average RWST.

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

Comments: This trial was exceptionally high in yield, RWSA, and revenue. Sugar content was good considering an early October harvest.



Official Variety Trial

Stoneman Farms LLC., Breckenridge - 2015

Trial Quality: Fair-Good
Plant/Harv: April 30/Oct 6
Plots: 2 rows X 38 ft, 5 reps
Row Spacing: 22 inches
Seeding Rate: 2 inches,
 thinned to 215 beets/100 ft

Soil Type: Sandy Loam
% OM: 3.3 **pH:** 7.2 **CEC:** 7.5
Nutrient Levels: Above Opt:P, Opt:K
 Medium High: Mn, Low: B
Added N: 80 lbs + Manure
Prev Crop: Corn Silage

Cerc Control: Good Control
 5 applications**
Rhizoc Control: Good
 Quadris IF T-Band, 6-8 lf
Other Problems: Water
Rainfall: 17.5 inches

| Variety | \$/A | RWSA | RWST | | Yield | | Sugar | | CJP | |
|-------------|-----------|--------|-------|------|-------|------|-------|------|------|------|
| | | | Lb/T | Rank | T/A | Rank | % | Rank | % | Rank |
| SX-1211N RR | \$2,673 | 10719 | 211 | 9 | 50.8 | 2 | 14.5 | 13 | 94.8 | 3 |
| SX-RR1243 | \$2,652 | 10634 | 222 | 2 | 48.0 | 5 | 15.1 | 4 | 95.2 | 1 |
| SX-RR1245N | \$2,610 | 10466 | 205 | 13 | 51.0 | 1 | 14.5 | 15 | 93.8 | 13 |
| C-RR059 | \$2,589 | 10381 | 211 | 8 | 49.3 | 3 | 14.9 | 7 | 93.5 | 16 |
| B-12RR2N | \$2,404 | 9641 | 216 | 5 | 44.6 | 11 | 15.0 | 5 | 94.4 | 4 |
| SX-1228RR | \$2,404 | 9639 | 214 | 7 | 45.3 | 10 | 14.9 | 8 | 94.3 | 5 |
| B-1399 | \$2,337 | 9372 | 200 | 17 | 46.8 | 7 | 14.0 | 17 | 94.3 | 6 |
| C-G351NT | \$2,337 | 9371 | 219 | 4 | 42.8 | 15 | 15.3 | 3 | 94.0 | 10 |
| B-149N | \$2,333 | 9355 | 194 | 19 | 48.1 | 4 | 13.8 | 19 | 93.6 | 15 |
| SX-RR1235N | \$2,325 | 9323 | 203 | 15 | 46.0 | 8 | 14.6 | 10 | 92.8 | 20 |
| HM-9616RR | \$2,294 | 9198 | 226 | 1 | 40.7 | 20 | 15.5 | 1 | 94.9 | 2 |
| HM-28RR | \$2,279 | 9139 | 208 | 11 | 43.9 | 12 | 14.6 | 12 | 94.1 | 9 |
| HM-NT9607RR | \$2,274 | 9116 | 220 | 3 | 41.3 | 19 | 15.4 | 2 | 94.1 | 8 |
| SX-1212RR | \$2,273 | 9113 | 215 | 6 | 42.6 | 16 | 15.0 | 6 | 94.2 | 7 |
| HM-NT9617RR | \$2,261 | 9067 | 208 | 10 | 43.8 | 13 | 14.7 | 9 | 93.7 | 14 |
| C-RR202 | \$2,241 | 8988 | 207 | 12 | 43.5 | 14 | 14.6 | 11 | 93.8 | 12 |
| C-G333NT | \$2,223 | 8913 | 187 | 20 | 47.7 | 6 | 13.5 | 20 | 93.0 | 17 |
| B-133N | \$2,208 | 8855 | 194 | 18 | 45.7 | 9 | 14.0 | 18 | 93.0 | 18 |
| HM-173RR | \$2,129 | 8535 | 202 | 16 | 42.3 | 17 | 14.5 | 14 | 92.9 | 19 |
| B-18RR4N | \$2,119 | 8496 | 205 | 14 | 41.4 | 18 | 14.4 | 16 | 93.8 | 11 |
| Average | \$2,348.2 | 9416.0 | 208.3 | | 45.28 | | 14.65 | | 93.9 | |
| LSD 5% | 233.2 | 935.3 | 15.2 | | 3.7 | | 0.8 | | 1.3 | |
| CV % | 7.9 | 7.9 | 5.8 | | 6.5 | | 4.1 | | 1.0 | |

**Cercospora Applications: 6/29 - Insp., 7/20 - ST+Dith., 8/6 - Topguard+Manz., 8/28 - ST+Dith., 9/10 - Emin+Manz

\$/A: Gross dollars per acre assuming a \$51 payment and trial average RWST.

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

Comments: This trial had excellent yield, but low percent sugar; possibly due to the application of manure and additional nitrogen. Only 5 replications out of 8 were used due to water damage.

Variety Trial

Hrabal Farms, Breckenridge - 2015

| | | |
|-----------------------------------|---|---|
| Trial Quality: Good | Soil Type: Loam | Cerc Control: Good Control: 1. Inspire + EBDC, 2. Tin + Topsin, 3. Eminent + EBDC, 4. EBDC, 5. Tin |
| Planted: April 25 | Fertilizer: 2x2: 270# 12-12-12 w/ 2 Mn & 0.5 B, PPI: 120# N by 28% | Rhizoc Control: Good Control: Quadris in furrow & 8 leaf |
| Harv/Samp: Oct 18 / Oct 15 | Prev Crop: Wheat / Radish | Other Pests: None |
| Plot Size: 3 reps | Weather: Excessive rain in June | |
| Row Spacing: 30 inch | | |
| Seeding Rate: 56,500 | | |

| Variety | \$/A | RWSA | RWST | T/A | % Sugar | % CJP | Populations 100 Ft. of Row | | Dead Beets / 1200 Ft |
|------------|---------|--------------|------------|-------------|-------------|-------------|-------------------------------|------------|----------------------------|
| | | | | | | | 11 Day | 31 Day | |
| C-G333NT | \$2,044 | 10539 | 283 | 37.3 | 18.5 | 96.5 | 178 | 260 | 7 |
| B-12RR2N | \$1,970 | 10155 | 287 | 35.3 | 18.9 | 96.3 | 186 | 259 | 47 |
| C-RR059 | \$1,965 | 10133 | 296 | 34.3 | 19.3 | 96.5 | 187 | 280 | 1 |
| C-RR202 | \$1,959 | 10093 | 299 | 33.8 | 19.4 | 96.9 | 200 | 268 | 21 |
| SX-1228RR | \$1,952 | 10053 | 286 | 35.1 | 18.7 | 96.7 | 176 | 266 | 52 |
| SX-1235NRR | \$1,947 | 10039 | 292 | 34.3 | 19.1 | 96.5 | 170 | 281 | 87 |
| B-133N | \$1,933 | 9977 | 281 | 35.5 | 18.5 | 96.3 | 150 | 261 | 1 |
| B-1399 | \$1,899 | 9795 | 285 | 34.4 | 18.6 | 96.6 | 157 | 281 | 3 |
| SX-1212RR | \$1,888 | 9734 | 281 | 34.6 | 18.4 | 96.5 | 162 | 265 | 68 |
| B-18RR4N | \$1,874 | 9662 | 289 | 33.4 | 18.8 | 96.8 | 176 | 273 | 77 |
| C-G351NT | \$1,838 | 9481 | 296 | 32.0 | 19.4 | 96.4 | 157 | 252 | 90 |
| HM-173RR | \$1,779 | 9173 | 275 | 33.4 | 18.2 | 96.0 | 202 | 263 | 2 |
| Average | \$1,921 | 9903 | 288 | 34.5 | 18.8 | 96.5 | 175 | 267 | 38 |
| LSD 5% | — | 800 | 8 | 2.6 | 0.4 | 0.4 | 31 | 18 | 51 |
| CV % | — | 5 | 2 | 4.4 | 1.3 | 0.2 | 11 | 4 | 79 |

Comments: Trial had excellent emergence and a very high population (267 plants/100 foot). Some light patches of Rhizoctonia rot on some varieties. Heavy rainfall (5 inches) occurred in June and negatively impacted the trial. Some leafspot was present, but overall good control.

\$/A: Gross dollars per acre assuming a \$51 payment and company average RWST of 263.

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

Variety Trial

Shaffner Brothers LLC, Freeland - 2015

| | | |
|-----------------------------------|---|--|
| Trial Quality: Fair | Soil Type: Clay Loam | Cerc Control: Good Control: 1. Topsin, 2. Tin + EBDC, 3. Inspire + EBDC, 4. Tin + Eminent |
| Planted: April 30 | Fertilizer: PPI: 90lb/ac N from ESN/urea, 2x2: 25 gal 15-17-1 + micros | Rhizoc Control: Good Control: Quadris in furrow only |
| Harv/Samp: Nov 11 / Oct 15 | Prev Crop: Soybeans | Other Pests: Sugarbeet cyst nematode |
| Plot Size: 3 reps | Weather: Excessively wet in June | |
| Row Spacing: 22 inch | | |
| Seeding Rate: 65,000 | | |

| Variety | \$/A | RWSA | RWST | T/A | % Sugar | % CJP | Populations 100 Ft. of Row | | Dead Beets / 1200 Ft |
|------------|---------|--------------|------------|-------------|-------------|-------------|-------------------------------|------------|----------------------------|
| | | | | | | | 11 Day | 28 Day | |
| B-12RR2N | \$2,213 | 11411 | 318 | 35.9 | 20.5 | 96.9 | 65 | 203 | 13 |
| C-G333NT | \$2,104 | 10854 | 309 | 35.1 | 19.9 | 97.1 | 49 | 205 | 9 |
| B-133N | \$2,086 | 10752 | 303 | 35.5 | 19.6 | 97.0 | 58 | 207 | 8 |
| B-18RR4N | \$2,003 | 10323 | 309 | 33.4 | 19.9 | 97.1 | 81 | 212 | 46 |
| C-RR059 | \$1,984 | 10224 | 319 | 32.0 | 20.6 | 97.0 | 63 | 208 | 7 |
| SX-1212RR | \$1,946 | 10045 | 309 | 32.5 | 19.9 | 97.1 | 73 | 200 | 36 |
| SX-1235NRR | \$1,920 | 9919 | 312 | 31.7 | 20.1 | 97.0 | 99 | 214 | 124 |
| C-RR202 | \$1,864 | 9623 | 303 | 31.7 | 19.6 | 96.9 | 82 | 208 | 12 |
| SX-1228RR | \$1,860 | 9585 | 304 | 31.6 | 19.6 | 96.9 | 59 | 194 | 18 |
| B-1399 | \$1,810 | 9334 | 300 | 31.1 | 19.4 | 97.1 | 49 | 202 | 7 |
| C-G351NT | \$1,809 | 9325 | 321 | 29.1 | 20.6 | 97.1 | 77 | 196 | 23 |
| HM-173RR | \$1,787 | 9218 | 306 | 30.1 | 19.8 | 96.8 | 101 | 194 | 2 |
| Average | \$1,949 | 10051 | 309 | 32.5 | 20.0 | 97.0 | 71 | 204 | 25 |
| LSD 5% | — | 1473 | 8 | 4.8 | 0.5 | ns (0.2) | 28 | ns (19) | 70 |
| CV % | — | 9 | 1 | 8.8 | 1.4 | 0.2 | 23 | 5 | 162 |

Comments: Trial was planted later (April 30th) due to wet soil conditions, utilizing a 24 row 22 inch planter. Center 8 rows for harvest were effected by planter/tractor pinch rows. Each of the 12 varieties were in the center equally (one time). A heavy June rain event (5 inches) caused saturated soils, allowing some Aphanomyces development. A low level of sugarbeet cyst nematode was also detected. Trial was slow to canopy. Late harvest produced very good yields and high sugar content.

\$/A: Gross dollars per acre assuming a \$51 payment and company average RWST of 263.

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



Nursery Data





Rhizoctonia Nursery

Average of 2 years, 2014-2015

Location: Blumfield East, 2014 and 2015
Plot Size: 2 rows X 25 ft, 5 reps
Inoculation: Inoculated with Rhizoctonia solani AG 2-2 IIIB

| Variety | Root Rating | Estimated Root |
|-------------|-------------|----------------|
| | 0-7 | Rot % |
| HM-9616RR | 2.7 | 4.5 |
| B-133N | 3.1 | 9.0 |
| C-G333NT | 3.6 | 19.0 |
| B-1399 | 3.7 | 20.0 |
| SX-RR1243 | 3.9 | 25.0 |
| C-RR059 | 4.0 | 26.0 |
| HM-NT9617RR | 4.0 | 27.5 |
| HM-28RR | 4.2 | 32.5 |
| SX-1228RR | 4.2 | 32.5 |
| HM-NT9607RR | 4.2 | 32.7 |
| B-12RR2N | 4.3 | 34.9 |
| C-RR202 | 4.3 | 35.1 |
| HM-173RR | 4.3 | 35.3 |
| SX-RR1245N | 4.4 | 36.3 |
| B-149N | 4.4 | 36.3 |
| C-G351NT | 4.4 | 36.4 |
| SX-1211N RR | 4.4 | 36.5 |
| SX-1212RR | 4.5 | 38.0 |
| SX-RR1235N | 4.5 | 40.0 |
| B-18RR4N | 4.5 | 41.0 |
| Average | 4.1 | 29.9 |
| LSD 5% | 0.5 | |
| CV % | 9.6 | |

Bolded means are not significantly different from the top ranking variety in each column

*Rating System:

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

During evaluations, roots were dug and assigned values from 0 to 7. Plots contained approximately 50 roots.



Cercospora Nursery

Average of 2 years, 2014-2015

Trial Quality: Good
Locations: 2015 - Blumfield, SVREC, Yoder (Pigeon)
 2014 - Blumfield and SVREC
Plot Size: MSC - 2 rows X 17.5 ft, 5 reps
 SVREC - 2 row X 20 ft, 6 reps
Inoculation: Trials are inoculated

| Variety | Avg of 2 Years | 2014 | 2015 |
|-------------------|----------------|----------|----------|
| | CLS Rate | CLS Rate | CLS Rate |
| | 0-9 | 0-9 | 0-9 |
| B-1399 | 3.5 | 3.5 | 3.5 |
| C-RR202 | 3.7 | 3.8 | 3.6 |
| Resistant Check | 3.9 | 4.1 | 3.7 |
| HM-28RR | 4.1 | 4.2 | 4.0 |
| HM-173RR | 4.1 | 4.4 | 3.9 |
| SX-RR1243 | 4.2 | 4.6 | 3.8 |
| C-RR059 | 4.2 | 4.4 | 4.0 |
| HM-9616RR | 4.3 | 4.7 | 3.9 |
| C-G351NT | 4.3 | 4.6 | 4.0 |
| SX-RR1235N | 4.4 | 5.0 | 3.9 |
| SX-RR1245N | 4.5 | 5.1 | 3.9 |
| HM-NT9607RR | 4.5 | 5.1 | 4.0 |
| B-12RR2N | 4.6 | 4.9 | 4.3 |
| B-18RR4N | 4.6 | 4.9 | 4.3 |
| SX-1212RR | 4.6 | 4.9 | 4.3 |
| SX-1228RR | 4.7 | 5.2 | 4.3 |
| B-133N | 4.8 | 5.0 | 4.6 |
| HM-NT9617RR | 4.9 | 5.4 | 4.3 |
| C-G333NT | 4.9 | 5.3 | 4.6 |
| SX-1211RR | 5.0 | 5.4 | 4.5 |
| B-149N | 5.1 | 5.5 | 4.8 |
| Susceptible Check | 6.5 | 6.6 | 6.4 |
| Average | 4.5 | 4.8 | 4.2 |
| LSD 5% | 0.5 | | |
| CV % | 5.3 | | |

Cercospora 0-9 Rating 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 desiccation), 4 = up to 10% leaf desiccation, 5 = up to 25% desiccated, 6 = up to 50% desiccated, 7 = up to 75% desiccated, 8 = up to 90% desiccated, 9 = leaves completely dead.



Cyst Nematode Nursery

Average of 2 Years, 2014 - 2015

Trial Quality: Fair - Good

Locations: 2014 - Kirkpatrick, 2015 - Yoder and VanDenBoom

Plot Size: 2 Rows X 25 ft X 6 Reps

| Variety | \$/A | RWSA | RWST | | Yield | | Sugar | | CJP | |
|------------------------|----------------|-------------|------------|----------|-------------|----------|-------|------|-------------|----------|
| | | | Lb/T | Rank | T/A | Rank | % | Rank | % | Rank |
| B-12RR2N | \$1,907 | 9244 | 256 | 2 | 36.1 | 1 | 16.9 | 2 | 96.4 | 2 |
| B-149N | \$1,781 | 8633 | 243 | 11 | 35.5 | 2 | 16.2 | 11 | 96.0 | 12 |
| B-18RR4N | \$1,751 | 8485 | 253 | 3 | 33.5 | 3 | 16.8 | 3 | 96.3 | 3 |
| C-G333NT | \$1,631 | 7902 | 241 | 12 | 32.8 | 4 | 16.1 | 14 | 96.2 | 8 |
| SX-1211N RR | \$1,602 | 7763 | 237 | 15 | 32.8 | 5 | 15.8 | 15 | 96.1 | 9 |
| C-G351NT | \$1,593 | 7718 | 251 | 5 | 30.8 | 8 | 16.7 | 5 | 96.2 | 5 |
| SX-RR1235N | \$1,586 | 7686 | 250 | 7 | 30.8 | 7 | 16.6 | 6 | 96.0 | 10 |
| B-133 | \$1,583 | 7674 | 244 | 10 | 31.5 | 6 | 16.3 | 10 | 96.0 | 11 |
| SX-RR1245 | \$1,575 | 7632 | 250 | 6 | 30.5 | 10 | 16.6 | 7 | 96.2 | 7 |
| HM-NT9617RR | \$1,522 | 7378 | 241 | 13 | 30.7 | 9 | 16.2 | 12 | 95.8 | 14 |
| SX-1212RR -Susc | \$1,461 | 7082 | 246 | 8 | 28.7 | 12 | 16.3 | 9 | 96.3 | 4 |
| C-RR059 - Susc | \$1,439 | 6975 | 253 | 4 | 27.7 | 14 | 16.7 | 4 | 96.4 | 1 |
| HM-RR9607NT | \$1,433 | 6946 | 257 | 1 | 27.1 | 15 | 17.0 | 1 | 96.2 | 6 |
| HM-173 - Susc | \$1,410 | 6834 | 240 | 14 | 28.5 | 13 | 16.1 | 13 | 95.9 | 13 |
| Average | \$1,591.0 | 7710.9 | 247.3 | | 31.21 | | 16.45 | | 96.14 | |
| LSD 5% | 207.7 | 1006.3 | 6.2 | | 3.9 | | 0.4 | | 0.3 | |
| CV % | 6.1 | 6.1 | 1.2 | | 5.9 | | 1.0 | | 0.2 | |

\$/A: Gross dollars per acre assuming a \$51 payment and average RWST.

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



Root Aphid Nursery

BETASEED Shakopee, MN - 2014 and 2015

Greenhouse Trial

| Variety | RA Score* 1 - 4 |
|-------------------|-----------------|
| B-133N | 1.0 |
| C-G351NT | 1.0 |
| B-149N | 1.0 |
| C-RR202 | 1.0 |
| C-G333NT | 1.0 |
| C-RR059 | 1.0 |
| HM-NT9607RR | 1.1 |
| B-18RR4N | 1.1 |
| Resistant Check | 1.2 |
| B-1399 | 1.3 |
| HM-NT9617RR | 1.7 |
| HM-9616RR | 1.7 |
| SX-1211N RR | 2.2 |
| SX-RR1245N | 2.2 |
| B-12RR2N | 2.3 |
| SX-RR1243 | 2.3 |
| SX-RR1235N | 2.4 |
| HM-173RR | 2.4 |
| SX-1228RR | 2.5 |
| HM-28RR | 2.6 |
| SX-1212RR | 2.6 |
| Susceptible Check | 3.3 |
| Average | 1.8 |
| LSD 5% | 0.6 |
| CV | 17.3 |

Plants are grown in pots which are infested with Root Aphids
 Root balls are evaluated for Aphid colonization on a 1-4 scale with
 1 = none and 4 = extensive Root Aphid colonization.



Root Aphid Nursery

Syngenta Longmont, CO - 2015

Field Trial

| Variety | % Infected* |
|-------------------|-------------|
| B-133N | 0.0 |
| HM-NT9607RR | 0.0 |
| HM-9616RR | 0.0 |
| C-G333NT | 0.0 |
| C-RR202 | 0.0 |
| B-1399 | 0.5 |
| B-149N | 0.6 |
| Resistant Check | 0.7 |
| B-18RR4N | 1.2 |
| C-RR059 | 1.2 |
| HM-NT9617RR | 2.1 |
| HM-173RR | 2.1 |
| HM-28RR | 5.9 |
| C-G351NT | 6.5 |
| SX-RR1245N | 15.1 |
| SX-RR1235N | 22.2 |
| B-12RR2N | 22.5 |
| SX-1211N RR | 24.3 |
| SX-1212RR | 39.2 |
| SX-1228RR | 40.0 |
| Susceptible check | 45.3 |
| SX-RR1243 | 49.0 |
| Average | 12.6 |
| LSD 5% | 14.4 |
| CV | 86.9 |

*% Infected Roots at Rating.

Field trial, 4 rows X 30 ft plots

Roots are dug and evaluated for Root Aphid infection



Aphanomyces Nursery

BETASEED, Shakopee, MN

Average of 2 years, 2014 - 2015

| Variety | Root Rating 1 - 9 Scale | Canopy Rating 1 - 9 Scale | Stand Loss 1 - 5 Scale |
|----------------------|----------------------------|------------------------------|---------------------------|
| SX-1211N RR | 2.9 | 1.5 | 1.5 |
| SX-RR1243 | 3.1 | 2.6 | 1.0 |
| Moderately Resistant | 3.4 | 2.6 | 1.0 |
| Resistant Check | 3.5 | 2.4 | 1.1 |
| B-12RR2N | 3.5 | 2.8 | 1.0 |
| B-18RR4N | 3.7 | 2.5 | 1.2 |
| B-133N | 3.7 | 3.2 | 1.4 |
| C-G333NT | 3.9 | 2.5 | 1.0 |
| SX-RR1245N | 3.9 | 2.4 | 1.2 |
| B-1399 | 4.0 | 3.1 | 1.0 |
| C-RR059 | 4.0 | 3.1 | 1.0 |
| SX-RR1235N | 4.1 | 2.8 | 1.2 |
| HM-NT9617RR | 4.2 | 3.1 | 1.0 |
| C-G351NT | 4.2 | 2.9 | 1.0 |
| B-149N | 4.4 | 3.0 | 1.4 |
| SX-1212RR | 4.4 | 3.3 | 1.4 |
| Susceptible Check | 5.0 | 3.6 | 1.1 |
| SX-1228RR | 5.0 | 3.9 | 1.0 |
| HM-173RR | 5.1 | 3.6 | 1.4 |
| HM-9616RR | 5.2 | 3.9 | 1.0 |
| HM-NT9607RR | 5.2 | 4.3 | 1.2 |
| HM-28RR | 5.4 | 4.3 | 1.0 |
| C-RR202 | 6.0 | 4.8 | 1.2 |
| Average | 4.2 | 3.1 | 1.1 |

Root and canopy Ratings (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.

Stand Rating (1 to 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.



Rhizomania Nursery

USDA, Kimberly, Idaho

Average of 2 Years, 2014 & 2015

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 |
|-------------------|--------------------|--------|------------|------|---------------------------|
| SX-1211N RR | 2.1 | 10058 | 16.0 | 37.2 | 0.0 |
| C-G333NT | 2.2 | 11352 | 17.0 | 39.3 | 0.0 |
| HM-28RR | 2.2 | 10636 | 16.4 | 38.2 | 0.1 |
| C-RR059 | 2.3 | 11609 | 17.7 | 38.5 | 0.0 |
| SX-1228RR | 2.3 | 10674 | 16.9 | 36.7 | 0.3 |
| B-149N | 2.3 | 10848 | 17.0 | 37.2 | 0.0 |
| HM-173RR | 2.3 | 10468 | 16.5 | 37.8 | 0.2 |
| SX-RR1243 | 2.3 | 10192 | 16.9 | 35.2 | 0.0 |
| SX-1212RR | 2.3 | 10468 | 16.4 | 36.9 | 0.5 |
| SX-RR1245N | 2.4 | 11066 | 17.0 | 37.8 | 0.2 |
| HM-NT9617RR | 2.4 | 9223 | 16.7 | 32.3 | 0.0 |
| C-RR202 | 2.4 | 10430 | 17.1 | 35.9 | 0.1 |
| B-133N | 2.4 | 9996 | 17.1 | 34.6 | 0.0 |
| B-12RR2N | 2.4 | 10436 | 17.2 | 35.3 | 0.2 |
| B-1399 | 2.4 | 9571 | 16.5 | 34.1 | 0.0 |
| SX-RR1235N | 2.4 | 10385 | 16.9 | 35.9 | 0.2 |
| C-G351NT | 2.5 | 9773 | 17.5 | 32.4 | 0.1 |
| B-18RR4N | 2.5 | 9526 | 16.5 | 34.0 | 0.1 |
| HM-NT9607RR | 2.6 | 8880 | 17.1 | 30.0 | 0.8 |
| HM-9616RR | 2.6 | 9262 | 17.3 | 30.9 | 1.8 |
| Susceptible Check | 3.6 | 5567 | 14.7 | 23.0 | 89.0 |
| Average | 2.4 | 10020 | 16.8 | 34.9 | 4.5 |
| LSD 5% | 0.3 | 1398.8 | 0.6 | 4.4 | 6.7 |
| CV % | 5.7 | 6.7 | 1.8 | 6.1 | 79.6 |

Root and Foliar Rating: Lower numbers are better.



Fusarium Nursery

American Crystal Sugar Company

Average of 2 years, 2014 - 2015

Trial Quality: Good
Evaluated: 4 evaluation dates towards end of season
Plot Size: 2 rows X 17 ft, 4 reps

| Variety | Avg of 2 Years Rating 1-9 | 2014 Rating 1-9 | 2015 Rating 1-9 |
|-------------------|------------------------------|--------------------|--------------------|
| B-1399 | 2.0 | 1.9 | 2.2 |
| Tolerant Check | 2.4 | 2.4 | 2.3 |
| B-133N | 2.4 | 2.2 | 2.6 |
| C-RR059 | 2.8 | 2.9 | 2.7 |
| SX-1211N RR | 2.9 | 2.9 | 2.9 |
| C-G333NT | 3.1 | 3.1 | 3.1 |
| C-G351NT | 3.2 | 3.2 | 3.2 |
| B-149N | 3.2 | 3.4 | 3.0 |
| HM-NT9617RR | 3.3 | 3.1 | 3.4 |
| B-12RR2N | 3.3 | 3.2 | 3.4 |
| B-18RR4N | 3.6 | 3.9 | 3.2 |
| SX-RR1243 | 4.0 | 3.9 | 4.0 |
| SX-1228RR | 4.3 | 4.7 | 3.9 |
| HM-NT9607RR | 4.3 | 4.8 | 3.9 |
| SX-RR1245N | 4.4 | 4.8 | 3.9 |
| SX-1212RR | 4.5 | 4.9 | 4.1 |
| SX-RR1235N | 4.6 | 5.8 | 3.4 |
| HM-9616RR | 4.7 | 5.6 | 3.9 |
| HM-173RR | 4.8 | 5.0 | 4.5 |
| Susceptible Check | 4.8 | 5.4 | 4.2 |
| C-RR202 | 5.1 | 5.4 | 4.9 |
| HM-28RR | 5.2 | 5.4 | 5.1 |
| Average | 3.8 | 4.0 | 3.5 |
| LSD 5% | 1.0 | | |
| CV% | 12.5 | | |

Rating Scale: 1 to 9
 1 = no symptoms
 9 = dead plants
 Values are an average of 4 ratings



Official Variety Trials

Location Information

| | Ruth | Akron | Freeland | Breckenridge | Pigeon | Sandusky |
|----------------|--------------|-----------------|--------------|-----------------|-----------------|--------------|
| Grower | Maurer | Rayl | Shaffner | Stoneman | Trost | Wadsworth |
| Trial Quality | Good | Good | Very Good | Fair-Good | Good | Fair-Good |
| Planted | May 6 | April 17 | May 1 | April 30 | April 29 | May 6 |
| Harvested | Oct 2 | Sept 14 | Oct 5 | Oct 6 | Oct 21 | Oct 15 |
| Soil Type | Loam | Sandy Clay Loam | Silt Loam | Sandy Loam | Sandy Clay Loam | Loam |
| Soil pH | 7.7 | 7.4 | 7.8 | 7.2 | 7.2 | 7.8 |
| Soil OM | 2.9% | 3.1% | 3.2% | 3.3% | 2.7% | 4.9% |
| Phosphorus | Optimum | Abv. Optimum | Abv. Optimum | Abv. Optimum | Abv. Optimum | Abv. Optimum |
| Potassium | Abv. Optimum | Abv. Optimum | Abv. Optimum | Optimum | Abv. Optimum | Abv. Optimum |
| Magnesium | Abv. Optimum | Abv. Optimum | Abv. Optimum | Abv. Optimum | Abv. Optimum | Abv. Optimum |
| Manganese | High | High | Medium | Medium | Medium-High | High |
| Boron | Medium | Medium | Medium | Low | Medium | Medium |
| Zinc | Medium | High | Medium | Medium | High | Medium |
| Nitrogen Added | 125 lbs | 150 lbs | 150 lbs | 80 lbs + Manure | 125 lbs | 140 lbs |

Seasonal Rainfall*

| | | | | | | |
|-----------|-------|-------|-------|------|-------|-------|
| April | | 2.21 | | | 0.75 | |
| May | 3.49 | 2.67 | 3.74 | 2.13 | 1.20 | 2.13 |
| June | 4.34 | 4.53 | 4.54 | 3.95 | 2.85 | 3.95 |
| July | 2.47 | 3.06 | 2.44 | 3.26 | 2.15 | 3.26 |
| August | 2.88 | 7.37 | 6.08 | 4.04 | 4.56 | 3.93 |
| September | 2.18 | 4.55 | 5.78 | 2.93 | 4.36 | 2.93 |
| October | 0.91 | | 0.26 | 1.19 | 1.16 | 1.61 |
| Total | 16.27 | 24.39 | 22.84 | 17.5 | 17.03 | 17.81 |

* Rainfall amounts included from month of planting to the date of harvest at each location.

NOTES

NOTES

PRESENTED IN PARTNERSHIP





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