

# ***Michigan Sugar Company***

***2007***

## ***Variety Results***

Reported by

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Michigan Sugar Company  
Official Variety Trials - 2007

General Trial Information

	<u>Breckenridge</u>	<u>Swan Creek</u>	<u>Ruth</u>	<u>Sandusky</u>	<u>Pigeon</u>
Grower	Bebow	Beet & Bean	Bischer	Stoutenburg	Maust
Trial Quality	Good	Good	Very Good	Good	Good
Planted	7-May	17-Apr	20-Apr	4-May	4-May
Harvested	19-Sep	19-Sep	17-Oct	9-Oct	25-Oct
Soil Type	Sandy Loam	Clay	Sandy Loam	Sandy Loam	Sandy Loam
Soil pH	7.6	8.0	7.9	6.6	7.6
Soil %OM	2.8	3.6	2.7	3.1	3.3
CEC meq/100 g	12.4	23.5	11.3	9.0	13.0
Phosphorus	Abv. Optimum	Optimum	Abv. Optimum	Abv. Optimun	Abv. Optimum
Potassium	Optimum	Optimum	Optimum	Abv. Optimun	Abv. Optimum
Magnesium	Abv. Optimum	Abv. Optimum	Abv. Optimum	Optimum	Abv. Optimum
Manganese	High	High	High	High	High
Boron	Low	Low	Very Low	Low	Low
Zinc	Medium	Medium	Medium	High	Medium
Nitrogen Added	110	125	110	125	100

\*Seasonal Rainfall

	<u>Breckenridge</u>	<u>Swan Creek</u>	<u>Ruth</u>	<u>Sandusky</u>	<u>Pigeon</u>
April	4.20	3.80	3.30	2.53	3.00
May	1.90	3.10	2.20	3.40	3.80
June	2.10	2.90	0.60	0.85	1.20
July	3.90	3.60	0.40	2.25	0.90
August	5.20	6.50	4.20	4.00	2.60
September	1.80	2.60	2.10	1.90	2.40
October			1.30	0.75	1.40
<b>Total</b>	<b>19.10</b>	<b>22.50</b>	<b>14.10</b>	<b>15.68</b>	<b>15.30</b>

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

## Michigan Sugar 2007 Variety Entries\*

	Variety	Ploidy	Commercially Prepared	RZOC	Root Aphid	RZOM	APH	Bio Tech	Other	Years In Test
1	HM 7172RZ	Dip	Yes	X	X	X	X			5
2	HM 79RZ(2779RZ)	Dip	Yes	X	X	X	X			3
3	HM 80RZ(2780RZ)	Dip	Yes		X	X	X			3
4	HM 2781RZ	Dip	No		X	X	X			2
5	HM 9027RR	Dip	No	X	X	X		X		2
6	HM 9028RR	Dip	No	X	X	X	X	X		2
7	HM 9029RR	Dip	No	X	X	X		X		2
8	HM 9032RR	Dip	No		X	X	X	X		1
9	HM 9038RR	Dip	No		X	X	X	X		1
10	HM 9039RR	Dip	No	X	X	X		X		1
11	HM 9042RR	Dip	No	X	X	X		X		1
12	HM 9050RR	Dip	No	X	X	X		X		1
13	HM 9051RR	Dip	No	X	X	X		X		1
14	HM 9055RR	Dip	No	X	X	X	X	X		1
15	HM 9056RR	Dip	No	X	X	X	X	X	Fus	1
16	Beta 5451	Trip	Yes		X		X			C
17	Beta 5833R(1383R)	Dip	Yes	X	X	X				5
18	Beta 5411R(1411R)	Trip	Yes		X	X	X			5
19	Beta 5930(1531R)	Trip	Yes		X	X	X			3
20	Beta 5200R	Dip	No	X	X	X				
21	Beta 1643N	Dip	No		X	X	X		Nem	2
22	BTS 17RR32	Dip	No		X	X	X	X		1
23	BTS 17RR42	Dip	No		X	X	X	X		1
24	BTS 17RR52	Dip	No		X	X	X	X		1
25	BTS 17RR62	Dip	No		X	X	X	X		1
26	Crystal 963	Trip	Yes		X		X			C
27	Crystal 271	Trip	Yes		X		X			6
28	Crystal 355	Trip	Yes	X	X		X			5
29	Crystal R442(R451)	Trip	Yes		X	X	X			4
30	Crystal R509(Z589)	Dip	Yes	X	X	X				3
31	Crystal R757	Dip	No		X	X	X			1
32	Crystal RR818	Dip	No		X	X	X	X		1
33	Crystal RR827	Dip	No		X	X	X	X		1
34	Crystal RR836	Dip	No		X	X	X	X		1
35	SX 1233	Dip	No		X	X	X			2
36	SX 1234	Dip	No		X	X				1
37	SX 1235	Dip	No		X	X				1
38	HM 90707RR	Dip	No		X	X	X	X		1
	HM 2771RZ	Dip	Yes		X	X	X	<b>Check Variety</b>		

\* Traits are only claimed and not an indication of tolerance level.

Michigan Sugar Company  
**Official Variety Trial 2007**  
 2007  
**Average of 2 Years**

	Variety	RWSA	RWST	% Suc	% CJP	Tons/ Acre	% Emerg	CLS* Rating	Nurseries			
									Root Aphid	Rhizoc- tonia	Aphano- myces	Rhizo- mania
	Crystal 271	7477	255.4	17.59	94.18	29.11	68.3	2.92	Fair	Poor	Excel.	NA
	Beta 5451	7463	257.5	17.72	94.20	28.86	61.6	2.66	Fair	Poor	Excel.	NA
	Beta 5930R	7406	256.0	17.81	93.68	28.66	59.1	2.89	Fair	Poor	Good	Fair
<b>Fully Approved</b>	Crystal R442	7306	250.7	17.47	93.65	29.10	64.1	2.70	Good -	Fair	Excel.	Fair
	Beta 5833R	7290	248.9	17.06	94.51	29.16	66.9	3.49	Excel.	Good -	Good	Good
	Crystal 963	7280	252.9	17.44	94.17	28.60	66.7	2.92	Good -	Fair -	Excel.	NA
	Beta 5411R	7216	252.0	17.55	93.66	28.42	59.1	2.94	Good -	Poor	Good	Fair
	Crystal 355	7106	248.0	17.22	93.88	28.48	61.9	1.82	Good -	Good -	Excel.	NA
	HM 7172RZ	6756	244.5	17.14	93.49	27.52	62.1	3.10	Fair -	V Good	Fair	Good
<b>Limited Approval</b>	HM 81RZ(2781RZ)	7276	251.0	17.34	94.12	28.88	65.8	3.19	Good	Poor	Excel.	Good
	SX 1233	7026	251.9	17.34	94.24	27.69	66.0	3.36	Fair -	Poor	Good	V Good
	Beta 1643N	7966	257.2	17.62	94.46	30.79	77.0	4.64	Excel.	Poor	Excel.	Good
	HM 28RR(9028RR)	7683	245.4	16.97	94.12	31.19	65.3	3.50	Fair -	Good -	Good	V Good
<b>Specialty Varieties</b>	HM 29RR(9029RR)	7428	244.2	16.97	93.91	30.19	59.7	3.53	Fair	Fair	Fair	Good
	HM 27RR(9027RR)	7398	242.3	16.89	93.81	30.38	65.2	3.34	Fair	Good	Fair	V Good
	HM 79RZ	7256	245.4	17.12	93.69	29.49	66.3	3.29	Fair	Good	Fair	Excel.
	Crystal R509	6957	244.3	17.01	93.80	28.22	64.9	3.20	Good	Excel.	Good	Good
	Mean	7311	249.9	17.31	93.97	29.10	64.7	3.15				

\* Lower number indicates more resistance.

Rows: 2 Row Spacing: 30"

Sprayed with Amistar/Quadris for Rhizoctonia control.

# Michigan Sugar Company

## Sugarbeet Variety Approval System for 2007

Revised 1/11/07

### **Objective:**

The purpose of the Official Variety Trials (OVT) testing program is to identify and evaluate improved sugarbeet varieties for Michigan Sugar Company growers. The variety approval process is based primarily on a mathematical system which measures the yield, quality, storability and Cercospora leafspot levels of new varieties. Minimum levels for RWSA, RWST, RWST-Storage and Cercospora leafspot tolerance must be met before a variety will be fully approved. Additional testing is conducted to measure other varietal traits such as emergence and tolerance to pests and diseases. No variety may be sold or given away unless approved by Michigan Sugar Company.

The yield, quality, storability and Cercospora tolerance of new varieties are measured against approved “check varieties”. The current check varieties for yield, quality, storability and Cercospora are: **HM 2771Rz, Crystal R442, Beta 5833R, and HM 7172Rz.**

The Performance Standards used to approve a variety will include:

**RWSA:** 96.4% or more of the check varieties.

**RWST:** 98.7% or more of the check varieties.

**RWST-Storage:** 92.7% or more of the check varieties.

**Cercospora Leafspot:** 113.7% or less of the check varieties.

These performance standards are based on an average of the most recent 3 years of data.

### **Limited Approval (5%):**

After 2 consecutive years of successful testing (performance standards passed) a variety will be advanced to Limited Approval (5%). This is intended to be a test marketing period and the variety can be planted on up to 5% of the Co-op’s acreage. Commercially processed seed must be used. If the OVT performance standards are maintained during this test marketing period the variety will become fully approved.

### **Limited Approval (10%):**

If the performance standards are maintained after 3 consecutive years of successful testing, but the variety was not test marketed or if commercial seed is not available after 2 years of successful testing, the variety will be advanced to Limited Approval (10%). Varieties in this category can be planted on up to 10% of the Co-op’s acreage. If the performance standards are maintained during this test marketing period and commercial plantings were successful the variety will become fully approved.

**Full Approval:**

After 3 consecutive years of testing a variety will be advanced from Limited Approval to Full Approval assuming the 3 year OVT data averages pass all requirements and the variety has been test marketed and commercial seed is available. Fully approved varieties do not have limits on the amount of seed that can be sold or planted. A fully approved variety must maintain a leafspot level of 118.7% or less or it will be **disapproved**. If a variety's 3 year leafspot level exceeds the limit of 118.7% it will be disapproved and put on a 2 year plant out. A disapproved variety can be reinstated if the latest 3 year average meets the leafspot level.

If a fully approved variety is not submitted for testing, it will be disapproved and put on a 2 year plant out.

**Specialty Approval:**

Varieties may be approved as "Specialty Varieties" if they do not meet the performance standards but have other desirable characteristics such as insect or disease tolerance. To be considered for a specialty approval the variety must be designated by the seed company as having the specialty trait and must be successfully tested by the Company in an approved nursery. Commercial seed must also be available. If approved by the Seed Committee, the variety can be sold for 2 years after approval and the seed committee will determine the quantity of seed that can be sold each year.

**Seed Committee:**

The Michigan Sugar Company Seed Committee is comprised of the following members: 4 employees from the Agricultural Department, 4 members from the Board of Directors and 5 Grower members representing different growing districts. The chairman will be elected from the 5 Grower members. Each member on the Seed Committee has 1 vote.

**Variety Approval and Policy Changes are Subject to Board of Director Approval**



## Michigan Sugar Company 2007 Variety Approval

### Fully Approved Varieties for 2008

<u>Variety</u>	<u>RWST</u> <u>Need 98.7%</u>	<u>RWSA</u> <u>Need 96.4%</u>	<u>LEAFSPOT</u> <u>Need 113.7 or Less</u>	<u>STORAGE-RWST</u> <u>Need 92.7%</u>
Crystal 271	Yes 102.2	Yes 105.3	Yes 103.1	Yes 96.8
Crystal 963	Yes 100.6	Yes 102.3	Yes 95.2	Yes 98.0
Beta 5451	Yes 102.3	Yes 104.8	Yes 92.0	Yes 101.5
Beta 5833R(1383)	Yes 99.4	Yes 102.7	Yes 113.6	Yes 99.5
HM 2771Rz**	Yes 101.8	Yes 97.0	Yes 95.7	Yes 102.8
Crystal 355	Yes 99.3	Yes 99.6	Yes 55.1	Yes 100.5
HM 7172 Rz	<b>No</b> 98.1	Yes 96.6	Yes 98.2	Yes 98.9
Beta 5411R(1411)	Yes 100.9	Yes 102.8	Yes 99.6	Yes 100.2
Beta 5930R(1531R)*	Yes 102.5	Yes 104.4	Yes 94.1	Yes 99.2
Crystal R442(R451)*	Yes 100.7	Yes 103.7	Yes 92.5	Yes 98.9

\*New Approvals for 2008

\*\* Check Variety, not submitted for testing

### Limited Approval for 2008 (10%)

<u>Variety</u>	<u>RWST</u> <u>Need 98.7%</u>	<u>RWSA</u> <u>Need 96.4%</u>	<u>LEAFSPOT</u> <u>Need 113.7 or Less</u>	<u>STORAGE-RWST</u> <u>Need 92.7%</u>
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### 3rd Year Varieties Not Meeting Limited Approval

<u>Variety</u>	<u>RWST</u> <u>Need 98.7%</u>	<u>RWSA</u> <u>Need 96.4%</u>	<u>LEAFSPOT</u> <u>Need 113.7 or Less</u>	<u>STORAGE-RWST</u> <u>Need 92.7%</u>
HM 80RZ(2780RZ)	Yes 100.4	Yes 101.7	Yes 107.6	<b>No</b> 91.9

### Limited Approval for 2008 (5% Acreage)

<u>Variety</u>	<u>RWST</u> <u>Need 98.7%</u>	<u>RWSA</u> <u>Need 96.4%</u>	<u>LEAFSPOT</u> <u>Need 113.7 or Less</u>	<u>STORAGE-RWST</u> <u>Need 92.7%</u>
SX 1233	Yes 100.9	Yes 99.6	Yes 109.2	Yes 104.5
HM 81RZ(2781Rz)	Yes 100.5	Yes 103.1	Yes 103.9	Yes 100.5

## Michigan Sugar Company 2007 Variety Approval

### 2nd Year Varieties Not Meeting Limited Approval

<u>Variety</u>	<u>RWST</u> <u>Need 98.7%</u>	<u>RWSA</u> <u>Need 96.4%</u>	<u>LEAFSPOT</u> <u>Need 113.7 or Less</u>	<u>STORAGE-RWST</u> <u>Need 92.7%</u>
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### Special Approval for 2008

<u>Variety</u>	<u>RWST</u> <u>Need 98.7%</u>	<u>RWSA</u> <u>Need 96.4%</u>	<u>LEAFSPOT</u> <u>Need 113.7 or Less</u>	<u>STORAGE-RWST</u> <u>Need 92.7%</u>
HM 79RZ(2779RZ)*	<b>No</b> 98.1	Yes 102.4	Yes 106.2	Yes 99.7
Beta 1643N	Yes 101.9	Yes 113.2	<b>No</b> 149.1	Yes 99.7
HM 27RR(9027RR)	<b>No</b> 96.0	Yes 105.3	Yes 108.6	Yes 102.0
HM 28RR(9028RR)	<b>No</b> 97.3	Yes 109.4	<b>No</b> 113.8	Yes 97.9
HM 29RR(9029RR)	<b>No</b> 96.8	Yes 105.7	<b>No</b> 114.9	Yes 99.7
Crystal 509	<b>No</b> 98.4	Yes 99.2	Yes 107.0	Yes 103.1

\* Can be planted in 2008 because it had Special Approval for 2007.

### First Year Varieties

<u>Variety</u>	<u>RWST</u> <u>Need 98.7%</u>	<u>RWSA</u> <u>Need 96.4%</u>	<u>LEAFSPOT</u> <u>Need 113.7 or Less</u>
HM 9050RR	Yes 101.4	Yes 108.2	Yes 101.3
HM 9042RR	Yes 102.0	Yes 107.2	Yes 93.7
HM 9051RR	Yes 99.8	Yes 101.4	Yes 101.2
HM 90707RR	Yes 98.8	Yes 112.3	<b>No</b> 114.3
HM 9055RR	Yes 100.0	Yes 108.8	<b>No</b> 115.3
BTS 17RR32	Yes 100.3	Yes 118.9	<b>No</b> 132.6
Crystal RR827	Yes 102.6	Yes 113.4	<b>No</b> 151.4
HM 9032RR	<b>No</b> 97.0	Yes 117.1	<b>No</b> 121.4
BTS 17RR42	Yes 100.5	Yes 114.0	<b>No</b> 173.4
HM 9039RR	<b>No</b> 98.5	Yes 110.7	Yes 112.4
HM 9056RR	<b>No</b> 97.5	Yes 110.0	Yes 111.5
HM 9038RR	<b>No</b> 97.2	Yes 108.7	Yes 109.1
Crystal RR836	Yes 100.0	Yes 107.8	<b>No</b> 157.9
BTS 17RR62	Yes 102.0	Yes 103.7	<b>No</b> 132.7
Crystal R757	<b>No</b> 98.5	Yes 103.5	Yes 106.4
Beta 5200R	<b>No</b> 92.3	Yes 101.8	Yes 108.0
Crystal RR818	<b>No</b> 95.2	Yes 110.2	<b>No</b> 114.4
BTS 17RR52	<b>No</b> 91.3	Yes 106.8	<b>No</b> 118.9
SX 1234	<b>No</b> 97.7	Yes 109.3	<b>No</b> 176.1
SX 1235	<b>No</b> 95.0	Yes 107.5	<b>No</b> 201.2

# MICHIGAN SUGAR COMPANY

## ***Approval of Seed Varieties for the 2008 Crop***

***The Seed Committee and Board of Michigan Sugar Company approved quantities of seed for commercial planting of the following varieties for the 2008 crop:***

<b>Fully Approved Varieties</b>			<b>Specialty Approved Varieties</b>			
<i>(Unlimited Quantities)</i>			<i>(Limited Quantities)</i>			
	<b>Until 2009</b>	<b>Until 2008</b>	<b>Units</b>	<b>Specialty</b>		
Beta 5833R	Crystal 271	HM 2761RZ**	Beta 4381R*	Crystal 509	8,000	Rhizoctonia
Beta 5930R	Crystal 963	HM 2763RZ**		HM 79 Rz*	2,500	Rhizoctonia
Beta 5411R	Crystal 355	HM 2767**		Beta 1643 N	8,000	Nematode
Beta 5451	Crystal R442	SX Prompt**		HM 9027RR***		RoundUp
	HM 7172 Rz	Beta 5310**		HM 9028RR***		RoundUp
		HM 2771RZ**		HM 9029RR***		RoundUp
<b>Experimental Varieties</b>				Crystal RR827*	5,000	RoundUp
	Beta 5534N*					
		1,000				Nematode

\*Last year to plant is 2008

\*\*Last year to plant is 2009

\*\*\*Three variety total of 40,000 units

### **Limited Approved Varieties**

*(Quantities limited to 10% of acres)*

- -

### **Limited Approved Varieties**

*(Quantities limited to 5% of acres)*

SX 1233  
HM 81RZ(2781RZ)

### **Committee Members Approval:**

The meeting was held in Bay City, Michigan on November 19, 2007.

Paul Pfenninger

Lee Hubbell

Clay Crumbaugh, Chairman - West District

Marshall Lewis - Board of Directors

Lee Butts - Central District

Scott Shaw - East District

Mark Lumley - East District

Jim Stewart

Corey Guza

Richard Sylvester - Board of Directors

Tom Gettel - Board of Directors

Doug Vader - Central District

Steve Hoard - West District



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## Michigan Sugar Company RWST Summary 2007

Variety	2007		2006		2005		2 Yr	3 Yr
	<u>Lbs</u>	<u>%ck</u>	<u>Lbs</u>	<u>%ck</u>	<u>Lbs</u>	<u>%ck</u>	<u>Avg</u>	<u>Avg</u>
<i>4 Var Check</i>	246.75	100.0	252.72	100.0	244.94	100.0	100.0	100.0
Crystal 963	247.5	100.3	258.4	102.2	242.9	99.2	101.3	100.6
Beta 5451	252.8	102.5	262.2	103.8	246.9	100.8	103.1	102.3
Crystal 271	251.6	102.0	259.2	102.6	250.2	102.2	102.3	102.2
<i>Beta 5833R(1383)</i>	245.9	99.7	251.8	99.6	242.0	98.8	99.6	99.4
Crystal 355	243.1	98.5	252.9	100.1	243.0	99.2	99.3	99.3
<i>HM 2771Rz</i>	252.7	102.4	257.0	101.7	248.0	101.3	102.1	101.8
<i>HM 7172Rz</i>	243.4	98.7	245.6	97.2	241.2	98.5	97.9	98.1
Beta 5411R(1411R)	250.9	101.7	253.1	100.1	247.3	101.0	100.9	100.9
<i>Crystal R442(R451)</i>	244.9	99.2	256.5	101.5	248.5	101.4	100.4	100.7
Crystal R509(Z589)	240.1	97.3	248.6	98.4	243.5	99.4	97.8	98.4
HM 80Rz	251.4	101.9	253.3	100.2	242.5	99.0	101.1	100.4
Beta 5930R(1531R)	254.8	103.3	257.3	101.8	251.2	102.6	102.5	102.5
HM 79Rz	242.6	98.3	248.2	98.2	239.7	97.9	98.3	98.1

### Others Tested - 2007 & 2006

	2007		2006		2 Yr
	<u>Lbs</u>	<u>%ck</u>	<u>Lbs</u>	<u>%ck</u>	<u>Avg</u>
SX 1233	246.4	99.9	257.4	101.9	100.9
HM 81RZ(2781Rz)	247.5	100.3	254.6	100.7	100.5
Beta 1643N*	250.9	101.7	258.2	102.2	101.9
HM 27RR(9027RR)*	236.8	96.0	242.8	96.1	96.0
HM 28RR(9028RR)*	240.0	97.3	245.8	97.3	97.3
HM 29RR(9029RR)*	240.3	97.4	243.2	96.2	96.8

### First Year Varieties- 2007

	2007			2007	
	<u>Lbs</u>	<u>%ck</u>		<u>Lbs</u>	<u>%ck</u>
BTS 17RR32	247.5	100.3	HM 9038RR	239.9	97.2
HM 9032RR	239.4	97.0	HM 9050RR	250.2	101.4
BTS 17RR42	248.1	100.5	Crystal RR836	246.7	100.0
Crystal RR827	253.2	102.6	SX 1235	234.5	95.0
HM 90707RR	243.8	98.8	HM 9042RR	251.6	102.0
HM 9039RR	243.0	98.5	BTS 17RR52	225.4	91.3
Crystal RR818	234.9	95.2	BTS 17RR62	251.7	102.0
HM 9056RR	240.5	97.5	Crystal R757	243.2	98.5
SX 1234	241.0	97.7	Beta 5200R	227.8	92.3
HM 9055RR	246.7	100.0	HM 9051RR	246.2	99.8

\* In 2006 these varieties were tested in a separate trial from the Official Variety Trial and were factored to be comparable.

## Michigan Sugar Company RWSA Summary 2007

Variety	2007		2006		2005		2 Yr	3 Yr
	<u>Lbs</u>	<u>%ck</u>	<u>Lbs</u>	<u>%ck</u>	<u>Lbs</u>	<u>%ck</u>	<u>Avg</u>	<u>Avg</u>
<i>4 Var Check</i>	6446.1	100.0	7674.9	100.0	6567.3	100.0	100.0	100.0
Crystal 963	6467	100.3	8093	105.5	6643	101.2	102.9	102.3
Beta 5451	6899	107.0	8028	104.6	6748	102.8	105.8	104.8
Crystal 271	6815	105.7	8139	106.1	6845	104.2	105.9	105.3
<i>Beta 5833R(1383)</i>	6559	101.8	8020	104.5	6696	102.0	103.1	102.7
Crystal 355	6455	100.1	7758	101.1	6408	97.6	100.6	99.6
<i>HM 2771Rz</i>	6343	98.4	7437	96.9	6283	95.7	97.6	97.0
<i>HM 7172Rz</i>	6169	95.7	7343	95.7	6456	98.3	95.7	96.6
Beta 5411R(1411R)	6774	105.1	7658	99.8	6793	103.4	102.4	102.8
<i>Crystal R442(R451)</i>	6713	104.1	7900	102.9	6834	104.1	103.5	103.7
Crystal R509(Z589)	6263	97.2	7652	99.7	6615	100.7	98.4	99.2
HM 80Rz	6894	106.9	7587	98.9	6524	99.3	102.9	101.7
Beta 5930R(1531R)	6895	107.0	7917	103.2	6760	102.9	105.1	104.4
HM 79Rz	6640	103.0	7872	102.6	6680	101.7	102.8	102.4

### Others Tested - 2007 & 2006

	2007		2006		2 Yr
	<u>Lbs</u>	<u>%ck</u>	<u>Lbs</u>	<u>%ck</u>	<u>Avg</u>
SX 1233	6499	100.8	7552	98.4	99.6
HM 81RZ(2781Rz)	6669	103.5	7883	102.7	103.1
Beta 1643N*	7089	110.0	8931	116.4	113.2
HM 27RR(9027RR)*	6774	105.1	8103	105.6	105.3
HM 28RR(9028RR)*	7086	109.9	8364	109.0	109.4
HM 29RR(9029RR)*	6728	104.4	8209	107.0	105.7

### First Year Varieties- 2007

	2007			2007	
	<u>Lbs</u>	<u>%ck</u>		<u>Lbs</u>	<u>%ck</u>
BTS 17RR32	7666	118.9	HM 9038RR	7007	108.7
HM 9032RR	7549	117.1	HM 9050RR	6974	108.2
BTS 17RR42	7346	114.0	Crystal RR836	6951	107.8
Crystal RR827	7309	113.4	SX 1235	6929	107.5
HM 90707RR	7241	112.3	HM 9042RR	6907	107.2
HM 9039RR	7137	110.7	BTS 17RR52	6885	106.8
Crystal RR818	7101	110.2	BTS 17RR62	6683	103.7
HM 9056RR	7090	110.0	Crystal R757	6673	103.5
SX 1234	7047	109.3	Beta 5200R	6563	101.8
HM 9055RR	7014	108.8	HM 9051RR	6534	101.4

\* In 2006 these varieties were tested in a separate trial from the Official Variety Trial and were factored to be comparable.

## Michigan Sugar Company Cercospora Leaf Spot Summary 2007

Variety	2007		2006		2005		2 Yr	3 Yr
	<u>0-9</u>	<u>%ck</u>	<u>0-9</u>	<u>%ck</u>	<u>0-9</u>	<u>%ck</u>	<u>Avg</u>	<u>Avg</u>
<i>4 Var Check</i>	2.819	100.0	3.338	100.0	3.036	100.0	100.0	100.0
Crystal 963	2.67	94.5	3.17	95.0	2.91	96.0	94.8	95.2
Beta 5451	2.36	83.8	2.95	88.4	3.16	103.9	86.1	92.0
Crystal 271	2.80	99.4	3.34	100.1	3.33	109.8	99.7	103.1
<i>Beta 5833R(1383)</i>	3.10	109.9	3.89	116.6	3.47	114.4	113.2	113.6
Crystal 355	1.72	60.8	1.92	57.5	1.43	47.0	59.2	55.1
<i>HM 2771Rz</i>	2.79	99.1	3.23	96.8	2.77	91.3	97.9	95.7
<i>HM 7172Rz</i>	2.91	103.1	3.30	98.9	2.81	92.6	101.0	98.2
Beta 5411R(1411R)	2.96	104.9	2.92	87.5	3.23	106.3	96.2	99.6
<i>Crystal R442(R451)</i>	2.48	87.9	2.93	87.8	3.09	101.7	87.8	92.5
Crystal R509(Z589)	2.81	99.8	3.58	107.3	3.46	114.0	103.5	107.0
HM 80Rz	2.97	105.3	3.81	114.2	3.14	103.4	109.7	107.6
Beta 5930R(1531R)	2.75	97.5	3.04	91.1	2.84	93.6	94.3	94.1
HM 79Rz	3.08	109.3	3.49	104.6	3.18	104.9	106.9	106.2

### Others Tested - 2007 & 2006

	2007		2006		2 Yr
	<u>0-9</u>	<u>%ck</u>	<u>0-9</u>	<u>%ck</u>	<u>Avg</u>
SX 1233	3.08	109.1	3.65	109.4	109.2
HM 81RZ(2781Rz)	3.00	106.2	3.39	101.6	103.9
Beta 1643N	3.97	140.9	5.25	157.3	149.1
HM 27RR(9027RR)	3.08	109.4	3.60	107.9	108.6
HM 28RR(9028RR)	3.28	116.3	3.71	111.2	113.8
HM 29RR(9029RR)	3.28	116.3	3.79	113.6	114.9

### First Year Varieties- 2007

	2007			2007	
	<u>0-9</u>	<u>%ck</u>		<u>0-9</u>	<u>%ck</u>
BTS 17RR32	3.74	132.6	HM 9038RR	3.08	109.1
HM 9032RR	3.42	121.4	HM 9050RR	2.86	101.3
BTS 17RR42	4.89	173.4	Crystal RR836	4.45	157.9
Crystal RR827	4.27	151.4	SX 1235	5.67	201.2
HM 90707RR	3.22	114.3	HM 9042RR	2.64	93.7
HM 9039RR	3.17	112.4	BTS 17RR52	3.35	118.9
Crystal RR818	3.23	114.4	BTS 17RR62	3.74	132.7
HM 9056RR	3.14	111.5	Crystal R757	3.00	106.4
SX 1234	4.97	176.1	Beta 5200R	3.05	108.0
HM 9055RR	3.25	115.3	HM 9051RR	2.85	101.2

## Michigan Sugar Company Storage RWST Summary 2006

Variety	2006		2005		2004		2 Yr	3 Yr.
	<u>Act.</u>	<u>% ck</u>	<u>Act.</u>	<u>% ck</u>	<u>Act.</u>	<u>% ck</u>	<u>Avg.</u>	<u>Avg</u>
<i>4 Var Check</i>	278.79	100.0	250.25	100.0	207.05	100.0	100.0	100.0
Crystal 963	257.8	92.5	244.8	97.8	214.9	103.8	95.1	98.0
Beta 5451	285.9	102.6	243.5	97.3	216.5	104.6	99.9	101.5
Crystal 271	261.5	93.8	247.6	98.9	202.0	97.6	96.4	96.8
<i>Beta 5833R(1383)</i>	270.6	97.1	245.6	98.1	213.9	103.3	97.6	99.5
Crystal 355	265.4	95.2	248.2	99.2	222.0	107.2	97.2	100.5
<i>HM 2771 Rz</i>	286.4	102.7	256.7	102.6	213.2	103.0	102.6	102.8
Beta 5411R(1411R)	286.1	102.6	251.7	100.6	201.9	97.5	101.6	100.2
<i>Crystal R442(R451)</i>	281.7	101.1	256.2	102.4	192.8	93.1	101.7	98.9
<i>HM 7172 Rz</i>	276.5	99.2	242.5	96.9	208.3	100.6	98.0	98.9

### 2nd & 3rd Year Varieties (2006 & 2005)

	2006		2005		2 Yr
	<u>Act.</u>	<u>% ck</u>	<u>Act.</u>	<u>% ck</u>	<u>Avg.</u>
Crystal R509(Z589)	283.7	101.7	261.5	104.5	103.1
Beta 5930R(1531R)	270.8	97.1	253.6	101.4	99.2
HM 79Rz	275.7	98.9	251.5	100.5	99.7
HM 80Rz	252.2	90.4	233.7	93.4	91.9

### First Year Varieties (2006)

	2006	
	<u>Act.</u>	<u>% ck</u>
SX 1233	291.4	104.5
Beta 1643N*	277.8	99.7
HM 27RR(9027RR)*	284.4	102.0
HM 29RR(9029RR)*	278.0	99.7
HM 28RR(9028RR)*	273.0	97.9
HM 81RZ(2781RZ)	280.2	100.5

\* In 2006 these varieties were tested in a separate trial from the Official Variety Trial and were factored to be comparable.

**Michigan Sugar Company**  
**Official Variety Trials - 2007**  
**Average of 5 Locations**  
Sorted by RWSA

No	Variety	RWSA	RWST	% Suc	% CJP	Tons/A	% Emerg	CLS*
32	BTS 17RR32	7666	247.5	17.16	93.97	31.08	70.7	3.74
28	HM 9032RR	7549	239.4	16.95	93.00	31.65	69.4	3.42
33	BTS 17RR42	7346	248.1	17.27	93.75	29.63	71.5	4.89
37	Crystal RR827	7309	253.2	17.64	93.67	28.84	67.6	4.27
39	HM 90707RR	7241	243.8	16.98	93.78	29.65	73.1	3.22
29	HM 9039RR	7137	243.0	17.00	93.61	29.39	68.7	3.17
36	Crystal RR818	7101	234.9	16.60	93.21	30.28	43.7	3.23
26	HM 9056RR	7090	240.5	16.82	93.65	29.56	70.8	3.14
16	Beta 1643N	7089	250.9	17.38	93.99	28.22	76.5	3.97
27	HM 28RR(9028RR)	7086	240.0	16.77	93.65	29.56	72.6	3.28
17	SX 1234	7047	241.0	16.73	94.00	29.17	76.2	4.97
31	HM 9055RR	7014	246.7	17.20	93.70	28.47	64.6	3.25
23	HM 9038RR	7007	239.9	16.82	93.51	29.19	68.0	3.08
30	HM 9050RR	6974	250.2	17.54	93.38	27.91	64.1	2.86
38	Crystal RR836	6951	246.7	17.21	93.64	28.15	61.1	4.45
18	SX 1235	6929	234.5	16.42	93.66	29.60	77.9	5.67
24	HM 9042RR	6907	251.6	17.57	93.57	27.50	62.6	2.64
14	Beta 5451	6899	252.8	17.62	93.64	27.36	58.5	2.36
12	Beta 5930R	6895	254.8	17.88	93.28	27.04	67.8	2.75
4	HM 80RZ	6894	251.4	17.42	93.95	27.41	68.3	2.97
34	BTS 17RR52	6885	225.4	16.01	93.09	30.49	70.2	3.35
7	Crystal 271	6815	251.6	17.45	93.89	27.12	68.9	2.80
21	HM 27RR(9027RR)	6774	236.8	16.70	93.30	28.61	72.6	3.08
15	Beta 5411R	6774	250.9	17.60	93.34	27.04	61.4	2.96
22	HM 29RR(9029RR)	6728	240.3	16.89	93.36	27.94	67.4	3.28
9	Crystal R442	6713	244.9	17.26	93.21	27.57	68.6	2.48
35	BTS 17RR62	6683	251.7	17.51	93.74	26.36	54.8	3.74
8	Crystal R757	6673	243.2	17.05	93.47	27.47	73.9	3.00
1	HM 81RZ(2781RZ)	6669	247.5	17.32	93.52	26.97	65.8	3.00
2	HM 79RZ	6640	242.6	17.11	93.20	27.37	65.3	3.08
13	Beta 5200R	6563	227.8	16.41	92.41	28.84	72.2	3.05
11	Beta 5833R	6559	245.9	17.07	93.91	26.58	68.3	3.10
25	HM 9051RR	6534	246.2	17.31	93.29	26.53	62.7	2.85
19	SX 1233	6499	246.4	17.16	93.73	26.32	70.6	3.08
6	Crystal 963	6467	247.5	17.29	93.63	26.18	64.0	2.67
5	Crystal 355	6455	243.1	17.11	93.30	26.53	65.6	1.72
20	HM 2771Rz	6343	252.7	17.54	93.83	25.07	62.0	2.79
10	Crystal R509	6263	240.1	17.00	93.02	26.10	65.3	2.81
3	HM 7172RZ	6169	243.4	17.17	93.16	25.28	64.3	2.91
LSD (P=.05)		416.3	8.7	0.47	0.53	1.52	6.6	0.41
CV		4.9	2.8	2.20	0.45	4.34	7.9	7.70
Grand Mean		6854.7	244.6	17.13	93.51	28.05	67.1	3.26

Plot Size: 2 row X 35 ft

Row Spacing: 30 inch

\* Lower Number indicates more leafspot tolerance.

Quadris: 4-6 leaf stage

Cercospora Sprays: 2-3 sprays (controlled well)



**Michigan Sugar Company**  
**Official Variety Trials - 2007**  
**Average of 5 Locations**  
Sorted by RWST

No	Variety	RWSA	RWST	% Suc	% CJP	Tons/A	% Emerg	CLS*
12	Beta 5930R	6895	254.8	17.88	93.28	27.04	67.8	2.75
37	Crystal RR827	7309	253.2	17.64	93.67	28.84	67.6	4.27
14	Beta 5451	6899	252.8	17.62	93.64	27.36	58.5	2.36
20	HM 2771Rz	6343	252.7	17.54	93.83	25.07	62.0	2.79
35	BTS 17RR62	6683	251.7	17.51	93.74	26.36	54.8	3.74
24	HM 9042RR	6907	251.6	17.57	93.57	27.50	62.6	2.64
7	Crystal 271	6815	251.6	17.45	93.89	27.12	68.9	2.80
4	HM 80RZ	6894	251.4	17.42	93.95	27.41	68.3	2.97
16	Beta 1643N	7089	250.9	17.38	93.99	28.22	76.5	3.97
15	Beta 5411R	6774	250.9	17.60	93.34	27.04	61.4	2.96
30	HM 9050RR	6974	250.2	17.54	93.38	27.91	64.1	2.86
33	BTS 17RR42	7346	248.1	17.27	93.75	29.63	71.5	4.89
1	HM 81RZ(2781RZ)	6669	247.5	17.32	93.52	26.97	65.8	3.00
6	Crystal 963	6467	247.5	17.29	93.63	26.18	64.0	2.67
32	BTS 17RR32	7666	247.5	17.16	93.97	31.08	70.7	3.74
31	HM 9055RR	7014	246.7	17.20	93.70	28.47	64.6	3.25
38	Crystal RR836	6951	246.7	17.21	93.64	28.15	61.1	4.45
19	SX 1233	6499	246.4	17.16	93.73	26.32	70.6	3.08
25	HM 9051RR	6534	246.2	17.31	93.29	26.53	62.7	2.85
11	Beta 5833R	6559	245.9	17.07	93.91	26.58	68.3	3.10
9	Crystal R442	6713	244.9	17.26	93.21	27.57	68.6	2.48
39	HM 90707RR	7241	243.8	16.98	93.78	29.65	73.1	3.22
3	HM 7172RZ	6169	243.4	17.17	93.16	25.28	64.3	2.91
8	Crystal R757	6673	243.2	17.05	93.47	27.47	73.9	3.00
5	Crystal 355	6455	243.1	17.11	93.30	26.53	65.6	1.72
29	HM 9039RR	7137	243.0	17.00	93.61	29.39	68.7	3.17
2	HM 79RZ	6640	242.6	17.11	93.20	27.37	65.3	3.08
17	SX 1234	7047	241.0	16.73	94.00	29.17	76.2	4.97
26	HM 9056RR	7090	240.5	16.82	93.65	29.56	70.8	3.14
22	HM 29RR(9029RR)	6728	240.3	16.89	93.36	27.94	67.4	3.28
10	Crystal R509	6263	240.1	17.00	93.02	26.10	65.3	2.81
27	HM 28RR(9028RR)	7086	240.0	16.77	93.65	29.56	72.6	3.28
23	HM 9038RR	7007	239.9	16.82	93.51	29.19	68.0	3.08
28	HM 9032RR	7549	239.4	16.95	93.00	31.65	69.4	3.42
21	HM 27RR(9027RR)	6774	236.8	16.70	93.30	28.61	72.6	3.08
36	Crystal RR818	7101	234.9	16.60	93.21	30.28	43.7	3.23
18	SX 1235	6929	234.5	16.42	93.66	29.60	77.9	5.67
13	Beta 5200R	6563	227.8	16.41	92.41	28.84	72.2	3.05
34	BTS 17RR52	6885	225.4	16.01	93.09	30.49	70.2	3.35
LSD (P=.05)		416.3	8.7	0.47	0.53	1.52	6.6	0.41
CV		4.9	2.8	2.20	0.45	4.34	7.9	7.70
Grand Mean		6854.7	244.6	17.13	93.51	28.05	67.1	3.26

Plot Size: 2 row X 35 ft

Row Spacing: 30 inch

\* Lower Number indicates more leafspot tolerance.

Quadrats: 4-6 leaf stage

Cercospora Sprays: 2-3 sprays (controlled well)

**Michigan Sugar Company**  
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**Average of 5 Locations**  
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No	Variety	RWSA	RWST	% Suc	% CJP	Tons/A	% Emerg	CLS*
12	Beta 5930R	6895	254.8	17.88	93.28	27.04	67.8	2.75
37	Crystal RR827	7309	253.2	17.64	93.67	28.84	67.6	4.27
14	Beta 5451	6899	252.8	17.62	93.64	27.36	58.5	2.36
15	Beta 5411R	6774	250.9	17.60	93.34	27.04	61.4	2.96
24	HM 9042RR	6907	251.6	17.57	93.57	27.50	62.6	2.64
20	HM 2771Rz	6343	252.7	17.54	93.83	25.07	62.0	2.79
30	HM 9050RR	6974	250.2	17.54	93.38	27.91	64.1	2.86
35	BTS 17RR62	6683	251.7	17.51	93.74	26.36	54.8	3.74
7	Crystal 271	6815	251.6	17.45	93.89	27.12	68.9	2.80
4	HM 80RZ	6894	251.4	17.42	93.95	27.41	68.3	2.97
16	Beta 1643N	7089	250.9	17.38	93.99	28.22	76.5	3.97
1	HM 81RZ(2781RZ)	6669	247.5	17.32	93.52	26.97	65.8	3.00
25	HM 9051RR	6534	246.2	17.31	93.29	26.53	62.7	2.85
6	Crystal 963	6467	247.5	17.29	93.63	26.18	64.0	2.67
33	BTS 17RR42	7346	248.1	17.27	93.75	29.63	71.5	4.89
9	Crystal R442	6713	244.9	17.26	93.21	27.57	68.6	2.48
38	Crystal RR836	6951	246.7	17.21	93.64	28.15	61.1	4.45
31	HM 9055RR	7014	246.7	17.20	93.70	28.47	64.6	3.25
3	HM 7172RZ	6169	243.4	17.17	93.16	25.28	64.3	2.91
19	SX 1233	6499	246.4	17.16	93.73	26.32	70.6	3.08
32	BTS 17RR32	7666	247.5	17.16	93.97	31.08	70.7	3.74
5	Crystal 355	6455	243.1	17.11	93.30	26.53	65.6	1.72
2	HM 79RZ	6640	242.6	17.11	93.20	27.37	65.3	3.08
11	Beta 5833R	6559	245.9	17.07	93.91	26.58	68.3	3.10
8	Crystal R757	6673	243.2	17.05	93.47	27.47	73.9	3.00
10	Crystal R509	6263	240.1	17.00	93.02	26.10	65.3	2.81
29	HM 9039RR	7137	243.0	17.00	93.61	29.39	68.7	3.17
39	HM 90707RR	7241	243.8	16.98	93.78	29.65	73.1	3.22
28	HM 9032RR	7549	239.4	16.95	93.00	31.65	69.4	3.42
22	HM 29RR(9029RR)	6728	240.3	16.89	93.36	27.94	67.4	3.28
23	HM 9038RR	7007	239.9	16.82	93.51	29.19	68.0	3.08
26	HM 9056RR	7090	240.5	16.82	93.65	29.56	70.8	3.14
27	HM 28RR(9028RR)	7086	240.0	16.77	93.65	29.56	72.6	3.28
17	SX 1234	7047	241.0	16.73	94.00	29.17	76.2	4.97
21	HM 27RR(9027RR)	6774	236.8	16.70	93.30	28.61	72.6	3.08
36	Crystal RR818	7101	234.9	16.60	93.21	30.28	43.7	3.23
18	SX 1235	6929	234.5	16.42	93.66	29.60	77.9	5.67
13	Beta 5200R	6563	227.8	16.41	92.41	28.84	72.2	3.05
34	BTS 17RR52	6885	225.4	16.01	93.09	30.49	70.2	3.35
LSD (P=.05)		416.3	8.7	0.47	0.53	1.52	6.6	0.41
CV		4.9	2.8	2.20	0.45	4.34	7.9	7.70
Grand Mean		6854.7	244.6	17.13	93.51	28.05	67.1	3.26

Plot Size: 2 row X 35 ft

Row Spacing: 30 inch

\* Lower Number indicates more leafspot tolerance.

Quadris: 4-6 leaf stage

Cercospora Sprays: 2-3 sprays (controlled well)

**Michigan Sugar Company**  
**Official Variety Trials - 2007**  
**Average of 5 Locations**  
Sorted by Purity %

No	Variety	RWSA	RWST	% Suc	% CJP	Tons/A	% Emerg	CLS*
17	SX 1234	7047	241.0	16.73	94.00	29.17	76.2	4.97
16	Beta 1643N	7089	250.9	17.38	93.99	28.22	76.5	3.97
32	BTS 17RR32	7666	247.5	17.16	93.97	31.08	70.7	3.74
4	HM 80RZ	6894	251.4	17.42	93.95	27.41	68.3	2.97
11	Beta 5833R	6559	245.9	17.07	93.91	26.58	68.3	3.10
7	Crystal 271	6815	251.6	17.45	93.89	27.12	68.9	2.80
20	HM 2771Rz	6343	252.7	17.54	93.83	25.07	62.0	2.79
39	HM 90707RR	7241	243.8	16.98	93.78	29.65	73.1	3.22
33	BTS 17RR42	7346	248.1	17.27	93.75	29.63	71.5	4.89
35	BTS 17RR62	6683	251.7	17.51	93.74	26.36	54.8	3.74
19	SX 1233	6499	246.4	17.16	93.73	26.32	70.6	3.08
31	HM 9055RR	7014	246.7	17.20	93.70	28.47	64.6	3.25
37	Crystal RR827	7309	253.2	17.64	93.67	28.84	67.6	4.27
18	SX 1235	6929	234.5	16.42	93.66	29.60	77.9	5.67
26	HM 9056RR	7090	240.5	16.82	93.65	29.56	70.8	3.14
27	HM 28RR(9028RR)	7086	240.0	16.77	93.65	29.56	72.6	3.28
38	Crystal RR836	6951	246.7	17.21	93.64	28.15	61.1	4.45
14	Beta 5451	6899	252.8	17.62	93.64	27.36	58.5	2.36
6	Crystal 963	6467	247.5	17.29	93.63	26.18	64.0	2.67
29	HM 9039RR	7137	243.0	17.00	93.61	29.39	68.7	3.17
24	HM 9042RR	6907	251.6	17.57	93.57	27.50	62.6	2.64
1	HM 81RZ(2781RZ)	6669	247.5	17.32	93.52	26.97	65.8	3.00
23	HM 9038RR	7007	239.9	16.82	93.51	29.19	68.0	3.08
8	Crystal R757	6673	243.2	17.05	93.47	27.47	73.9	3.00
30	HM 9050RR	6974	250.2	17.54	93.38	27.91	64.1	2.86
22	HM 29RR(9029RR)	6728	240.3	16.89	93.36	27.94	67.4	3.28
15	Beta 5411R	6774	250.9	17.60	93.34	27.04	61.4	2.96
21	HM 27RR(9027RR)	6774	236.8	16.70	93.30	28.61	72.6	3.08
5	Crystal 355	6455	243.1	17.11	93.30	26.53	65.6	1.72
25	HM 9051RR	6534	246.2	17.31	93.29	26.53	62.7	2.85
12	Beta 5930R	6895	254.8	17.88	93.28	27.04	67.8	2.75
9	Crystal R442	6713	244.9	17.26	93.21	27.57	68.6	2.48
36	Crystal RR818	7101	234.9	16.60	93.21	30.28	43.7	3.23
2	HM 79RZ	6640	242.6	17.11	93.20	27.37	65.3	3.08
3	HM 7172RZ	6169	243.4	17.17	93.16	25.28	64.3	2.91
34	BTS 17RR52	6885	225.4	16.01	93.09	30.49	70.2	3.35
10	Crystal R509	6263	240.1	17.00	93.02	26.10	65.3	2.81
28	HM 9032RR	7549	239.4	16.95	93.00	31.65	69.4	3.42
13	Beta 5200R	6563	227.8	16.41	92.41	28.84	72.2	3.05
LSD (P=.05)		416.3	8.7	0.47	0.53	1.52	6.6	0.41
CV		4.9	2.8	2.20	0.45	4.34	7.9	7.70
Grand Mean		6854.7	244.6	17.13	93.51	28.05	67.1	3.26

Plot Size: 2 row X 35 ft

Row Spacing: 30 inch

\* Lower Number indicates more leafspot tolerance.

Quadris: 4-6 leaf stage

Cercospora Sprays: 2-3 sprays (controlled well)

**Michigan Sugar Company**  
**Official Variety Trials - 2007**  
**Average of 5 Locations**  
**Sorted by Tons/Acre**

No	Variety	RWSA	RWST	% Suc	% CJP	Tons/A	% Emerg	CLS*
28	HM 9032RR	7549	239.4	16.95	93.00	31.65	69.4	3.42
32	BTS 17RR32	7666	247.5	17.16	93.97	31.08	70.7	3.74
34	BTS 17RR52	6885	225.4	16.01	93.09	30.49	70.2	3.35
36	Crystal RR818	7101	234.9	16.60	93.21	30.28	43.7	3.23
39	HM 90707RR	7241	243.8	16.98	93.78	29.65	73.1	3.22
33	BTS 17RR42	7346	248.1	17.27	93.75	29.63	71.5	4.89
18	SX 1235	6929	234.5	16.42	93.66	29.60	77.9	5.67
26	HM 9056RR	7090	240.5	16.82	93.65	29.56	70.8	3.14
27	HM 28RR(9028RR)	7086	240.0	16.77	93.65	29.56	72.6	3.28
29	HM 9039RR	7137	243.0	17.00	93.61	29.39	68.7	3.17
23	HM 9038RR	7007	239.9	16.82	93.51	29.19	68.0	3.08
17	SX 1234	7047	241.0	16.73	94.00	29.17	76.2	4.97
37	Crystal RR827	7309	253.2	17.64	93.67	28.84	67.6	4.27
13	Beta 5200R	6563	227.8	16.41	92.41	28.84	72.2	3.05
21	HM 27RR(9027RR)	6774	236.8	16.70	93.30	28.61	72.6	3.08
31	HM 9055RR	7014	246.7	17.20	93.70	28.47	64.6	3.25
16	Beta 1643N	7089	250.9	17.38	93.99	28.22	76.5	3.97
38	Crystal RR836	6951	246.7	17.21	93.64	28.15	61.1	4.45
22	HM 29RR(9029RR)	6728	240.3	16.89	93.36	27.94	67.4	3.28
30	HM 9050RR	6974	250.2	17.54	93.38	27.91	64.1	2.86
9	Crystal R442	6713	244.9	17.26	93.21	27.57	68.6	2.48
24	HM 9042RR	6907	251.6	17.57	93.57	27.50	62.6	2.64
8	Crystal R757	6673	243.2	17.05	93.47	27.47	73.9	3.00
4	HM 80RZ	6894	251.4	17.42	93.95	27.41	68.3	2.97
2	HM 79RZ	6640	242.6	17.11	93.20	27.37	65.3	3.08
14	Beta 5451	6899	252.8	17.62	93.64	27.36	58.5	2.36
7	Crystal 271	6815	251.6	17.45	93.89	27.12	68.9	2.80
12	Beta 5930R	6895	254.8	17.88	93.28	27.04	67.8	2.75
15	Beta 5411R	6774	250.9	17.60	93.34	27.04	61.4	2.96
1	HM 81RZ(2781RZ)	6669	247.5	17.32	93.52	26.97	65.8	3.00
11	Beta 5833R	6559	245.9	17.07	93.91	26.58	68.3	3.10
25	HM 9051RR	6534	246.2	17.31	93.29	26.53	62.7	2.85
5	Crystal 355	6455	243.1	17.11	93.30	26.53	65.6	1.72
35	BTS 17RR62	6683	251.7	17.51	93.74	26.36	54.8	3.74
19	SX 1233	6499	246.4	17.16	93.73	26.32	70.6	3.08
6	Crystal 963	6467	247.5	17.29	93.63	26.18	64.0	2.67
10	Crystal R509	6263	240.1	17.00	93.02	26.10	65.3	2.81
3	HM 7172RZ	6169	243.4	17.17	93.16	25.28	64.3	2.91
20	HM 2771Rz	6343	252.7	17.54	93.83	25.07	62.0	2.79
LSD (P=.05)		416.3	8.7	0.47	0.53	1.52	6.6	0.41
CV		4.9	2.8	2.20	0.45	4.34	7.9	7.70
Grand Mean		6854.7	244.6	17.13	93.51	28.05	67.1	3.26

Plot Size: 2 row X 35 ft

Row Spacing: 30 inch

\* Lower Number indicates more leafspot tolerance.

Quadris: 4-6 leaf stage

Cercospora Sprays: 2-3 sprays (controlled well)

**Michigan Sugar Company**  
**Official Variety Trials - 2007**  
**Average of 5 Locations**  
Sorted by Emergence %

No	Variety	RWSA	RWST	% Suc	% CJP	Tons/A	% Emerg	CLS*
18	SX 1235	6929	234.5	16.42	93.66	29.60	77.9	5.67
16	Beta 1643N	7089	250.9	17.38	93.99	28.22	76.5	3.97
17	SX 1234	7047	241.0	16.73	94.00	29.17	76.2	4.97
8	Crystal R757	6673	243.2	17.05	93.47	27.47	73.9	3.00
39	HM 90707RR	7241	243.8	16.98	93.78	29.65	73.1	3.22
27	HM 28RR(9028RR)	7086	240.0	16.77	93.65	29.56	72.6	3.28
21	HM 27RR(9027RR)	6774	236.8	16.70	93.30	28.61	72.6	3.08
13	Beta 5200R	6563	227.8	16.41	92.41	28.84	72.2	3.05
33	BTS 17RR42	7346	248.1	17.27	93.75	29.63	71.5	4.89
26	HM 9056RR	7090	240.5	16.82	93.65	29.56	70.8	3.14
32	BTS 17RR32	7666	247.5	17.16	93.97	31.08	70.7	3.74
19	SX 1233	6499	246.4	17.16	93.73	26.32	70.6	3.08
34	BTS 17RR52	6885	225.4	16.01	93.09	30.49	70.2	3.35
28	HM 9032RR	7549	239.4	16.95	93.00	31.65	69.4	3.42
7	Crystal 271	6815	251.6	17.45	93.89	27.12	68.9	2.80
29	HM 9039RR	7137	243.0	17.00	93.61	29.39	68.7	3.17
9	Crystal R442	6713	244.9	17.26	93.21	27.57	68.6	2.48
4	HM 80RZ	6894	251.4	17.42	93.95	27.41	68.3	2.97
11	Beta 5833R	6559	245.9	17.07	93.91	26.58	68.3	3.10
23	HM 9038RR	7007	239.9	16.82	93.51	29.19	68.0	3.08
12	Beta 5930R	6895	254.8	17.88	93.28	27.04	67.8	2.75
37	Crystal RR827	7309	253.2	17.64	93.67	28.84	67.6	4.27
22	HM 29RR(9029RR)	6728	240.3	16.89	93.36	27.94	67.4	3.28
1	HM 81RZ(2781RZ)	6669	247.5	17.32	93.52	26.97	65.8	3.00
5	Crystal 355	6455	243.1	17.11	93.30	26.53	65.6	1.72
10	Crystal R509	6263	240.1	17.00	93.02	26.10	65.3	2.81
2	HM 79RZ	6640	242.6	17.11	93.20	27.37	65.3	3.08
31	HM 9055RR	7014	246.7	17.20	93.70	28.47	64.6	3.25
3	HM 7172RZ	6169	243.4	17.17	93.16	25.28	64.3	2.91
30	HM 9050RR	6974	250.2	17.54	93.38	27.91	64.1	2.86
6	Crystal 963	6467	247.5	17.29	93.63	26.18	64.0	2.67
25	HM 9051RR	6534	246.2	17.31	93.29	26.53	62.7	2.85
24	HM 9042RR	6907	251.6	17.57	93.57	27.50	62.6	2.64
20	HM 2771Rz	6343	252.7	17.54	93.83	25.07	62.0	2.79
15	Beta 5411R	6774	250.9	17.60	93.34	27.04	61.4	2.96
38	Crystal RR836	6951	246.7	17.21	93.64	28.15	61.1	4.45
14	Beta 5451	6899	252.8	17.62	93.64	27.36	58.5	2.36
35	BTS 17RR62	6683	251.7	17.51	93.74	26.36	54.8	3.74
36	Crystal RR818	7101	234.9	16.60	93.21	30.28	43.7	3.23
LSD (P=.05)		416.3	8.7	0.47	0.53	1.52	6.6	0.41
CV		4.9	2.8	2.20	0.45	4.34	7.9	7.70
Grand Mean		6854.7	244.6	17.13	93.51	28.05	67.1	3.26

Plot Size: 2 row X 35 ft

Row Spacing: 30 inch

\* Lower Number indicates more leafspot tolerance.

Quadrats: 4-6 leaf stage

Cercospora Sprays: 2-3 sprays (controlled well)

**Michigan Sugar Company**  
**Official Variety Trials - 2007**  
**Average of 5 Locations**  
Sorted by Cercospora Resistance

No	Variety	RWSA	RWST	% Suc	% CJP	Tons/A	% Emerg	CLS*
5	Crystal 355	6455	243.1	17.11	93.30	26.53	65.6	1.72
14	Beta 5451	6899	252.8	17.62	93.64	27.36	58.5	2.36
9	Crystal R442	6713	244.9	17.26	93.21	27.57	68.6	2.48
24	HM 9042RR	6907	251.6	17.57	93.57	27.50	62.6	2.64
6	Crystal 963	6467	247.5	17.29	93.63	26.18	64.0	2.67
12	Beta 5930R	6895	254.8	17.88	93.28	27.04	67.8	2.75
20	HM 2771Rz	6343	252.7	17.54	93.83	25.07	62.0	2.79
7	Crystal 271	6815	251.6	17.45	93.89	27.12	68.9	2.80
10	Crystal R509	6263	240.1	17.00	93.02	26.10	65.3	2.81
25	HM 9051RR	6534	246.2	17.31	93.29	26.53	62.7	2.85
30	HM 9050RR	6974	250.2	17.54	93.38	27.91	64.1	2.86
3	HM 7172RZ	6169	243.4	17.17	93.16	25.28	64.3	2.91
15	Beta 5411R	6774	250.9	17.60	93.34	27.04	61.4	2.96
4	HM 80RZ	6894	251.4	17.42	93.95	27.41	68.3	2.97
1	HM 81RZ(2781RZ)	6669	247.5	17.32	93.52	26.97	65.8	3.00
8	Crystal R757	6673	243.2	17.05	93.47	27.47	73.9	3.00
13	Beta 5200R	6563	227.8	16.41	92.41	28.84	72.2	3.05
19	SX 1233	6499	246.4	17.16	93.73	26.32	70.6	3.08
23	HM 9038RR	7007	239.9	16.82	93.51	29.19	68.0	3.08
2	HM 79RZ	6640	242.6	17.11	93.20	27.37	65.3	3.08
21	HM 27RR(9027RR)	6774	236.8	16.70	93.30	28.61	72.6	3.08
11	Beta 5833R	6559	245.9	17.07	93.91	26.58	68.3	3.10
26	HM 9056RR	7090	240.5	16.82	93.65	29.56	70.8	3.14
29	HM 9039RR	7137	243.0	17.00	93.61	29.39	68.7	3.17
39	HM 90707RR	7241	243.8	16.98	93.78	29.65	73.1	3.22
36	Crystal RR818	7101	234.9	16.60	93.21	30.28	43.7	3.23
31	HM 9055RR	7014	246.7	17.20	93.70	28.47	64.6	3.25
22	HM 29RR(9029RR)	6728	240.3	16.89	93.36	27.94	67.4	3.28
27	HM 28RR(9028RR)	7086	240.0	16.77	93.65	29.56	72.6	3.28
34	BTS 17RR52	6885	225.4	16.01	93.09	30.49	70.2	3.35
28	HM 9032RR	7549	239.4	16.95	93.00	31.65	69.4	3.42
32	BTS 17RR32	7666	247.5	17.16	93.97	31.08	70.7	3.74
35	BTS 17RR62	6683	251.7	17.51	93.74	26.36	54.8	3.74
16	Beta 1643N	7089	250.9	17.38	93.99	28.22	76.5	3.97
37	Crystal RR827	7309	253.2	17.64	93.67	28.84	67.6	4.27
38	Crystal RR836	6951	246.7	17.21	93.64	28.15	61.1	4.45
33	BTS 17RR42	7346	248.1	17.27	93.75	29.63	71.5	4.89
17	SX 1234	7047	241.0	16.73	94.00	29.17	76.2	4.97
18	SX 1235	6929	234.5	16.42	93.66	29.60	77.9	5.67
LSD (P=.05)		416.3	8.7	0.47	0.53	1.52	6.6	0.41
CV		4.9	2.8	2.20	0.45	4.34	7.9	7.70
Grand Mean		6854.7	244.6	17.13	93.51	28.05	67.1	3.26

Plot Size: 2 row X 35 ft

Row Spacing: 30 inch

\* Lower Number indicates more leafspot tolerance.

Quadris: 4-6 leaf stage

Cercospora Sprays: 2-3 sprays (controlled well)

# Michigan Sugar Company Official Variety Trial - 2007

A. Bisher, Ruth, MI

No	Variety	RWSA	RWST	% Suc	% CJP	Tons/A	% Emerg
28	HM 9032RR	9212	297.0	19.76	95.50	31.05	59.6
32	BTS 17RR32	9089	288.1	19.23	95.42	31.61	68.4
35	BTS 17RR62	8866	299.5	19.93	95.47	29.59	46.1
37	Crystal RR827	8815	302.4	20.15	95.36	29.13	58.9
33	BTS 17RR42	8608	295.4	19.76	95.23	29.14	63.6
12	Beta 5930R	8529	301.5	20.29	94.87	28.26	62.5
38	Crystal RR836	8508	296.2	19.69	95.57	28.74	52.3
34	BTS 17RR52	8387	274.0	18.35	95.43	30.62	63.7
39	HM 90707RR	8378	285.0	18.99	95.55	29.37	60.1
17	SX 1234	8295	278.7	18.77	95.08	29.78	72.4
36	Crystal RR818	8271	288.0	19.41	94.93	28.77	36.9
4	HM 80RZ	8258	295.9	19.66	95.57	27.92	62.3
23	HM 9038RR	8228	284.5	19.12	95.14	28.89	53.3
16	Beta 1643N	8213	290.1	19.48	95.10	28.29	67.0
14	Beta 5451	8149	305.2	20.21	95.67	26.70	53.3
29	HM 9039RR	8138	278.9	18.65	95.45	29.23	56.8
15	Beta 5411R	8130	304.5	20.21	95.55	26.70	59.6
30	HM 9050RR	8117	300.0	20.12	95.05	27.03	53.9
27	HM 28RR(9028RR)	8088	283.4	18.93	95.44	28.56	57.0
7	Crystal 271	8048	298.0	19.81	95.54	27.01	62.0
11	Beta 5833R	7982	290.5	19.37	95.45	27.49	69.2
2	HM 79RZ	7980	287.5	19.31	95.11	27.79	58.2
31	HM 9055RR	7972	288.6	19.17	95.68	27.60	52.9
21	HM 27RR(9027RR)	7911	279.4	18.87	94.92	28.33	61.6
22	HM 29RR(9029RR)	7832	281.2	18.79	95.47	27.86	51.7
13	Beta 5200R	7830	277.1	18.96	94.28	28.25	60.5
24	HM 9042RR	7798	295.5	19.91	94.87	26.40	47.2
18	SX 1235	7796	277.7	18.57	95.47	28.03	70.1
26	HM 9056RR	7787	282.2	18.95	95.18	27.61	58.7
8	Crystal R757	7773	287.5	19.23	95.34	27.04	69.7
19	SX 1233	7768	297.3	19.77	95.54	26.10	60.9
5	Crystal 355	7733	290.1	19.63	94.73	26.64	61.0
6	Crystal 963	7648	296.5	19.87	95.12	25.80	56.9
9	Crystal R442	7631	292.9	19.73	94.94	26.05	60.6
10	Crystal R509	7594	287.5	19.45	94.72	26.45	55.9
25	HM 9051RR	7593	288.7	19.41	95.06	26.34	47.4
1	HM 81RZ(2781RZ)	7554	288.2	19.45	94.86	26.20	57.9
3	HM 7172RZ	7493	284.8	19.23	94.88	26.31	54.9
20	HM 2771Rz	7407	295.3	19.68	95.44	25.07	50.0
LSD (P=.05)		569.8	9.1	0.51	0.78	1.84	6.5
CV		7.2	3.2	2.66	0.83	6.72	11.5
Grand Mean		8087.5	290.1	19.43	95.23	27.89	58.2

Trial Quality: Very Good  
Plant/Harvest: Apr 20 / Oct 17  
Problems: No major problems

Reps Harvested: 8  
Quadris: 6 leaf stage, Rhizoc controlled  
Cercospora Sprays: 2 sprays (controlled well)

**Michigan Sugar Company**  
**Official Variety Trial - 2007**  
 B. Maust, Bayport, MI

No	Variety	RWSA	RWST	% Suc	% CJP	Tons/A	% Emerg
32	BTS 17RR32	7934	250.6	17.49	93.66	31.66	63.1
16	Beta 1643N	7835	260.7	17.87	94.39	30.01	73.4
33	BTS 17RR42	7769	261.6	18.11	93.87	29.71	67.9
37	Crystal RR827	7707	259.3	18.24	93.15	29.76	66.1
39	HM 90707RR	7705	251.1	17.47	93.77	30.63	69.6
28	HM 9032RR	7658	232.9	16.86	92.14	32.85	66.0
23	HM 9038RR	7651	245.6	17.22	93.51	31.18	68.8
38	Crystal RR836	7416	252.5	17.48	94.02	29.38	51.4
27	HM 28RR(9028RR)	7415	247.1	17.24	93.70	30.00	71.5
24	HM 9042RR	7395	252.2	17.77	93.16	29.34	61.8
26	HM 9056RR	7364	239.6	16.84	93.45	30.86	67.4
18	SX 1235	7316	242.3	16.75	94.23	30.21	80.1
17	SX 1234	7300	249.4	17.25	94.07	29.25	74.1
29	HM 9039RR	7300	244.2	17.35	92.89	29.86	68.1
14	Beta 5451	7227	254.4	17.95	93.07	28.42	62.6
8	Crystal R757	7157	248.7	17.60	92.98	28.83	68.5
25	HM 9051RR	7146	243.3	17.49	92.35	29.37	64.9
20	HM 2771Rz	7125	248.6	17.54	93.13	28.63	61.4
31	HM 9055RR	7123	245.8	17.45	92.89	28.98	58.2
34	BTS 17RR52	7122	226.0	16.20	92.72	31.48	67.3
36	Crystal RR818	7107	229.1	16.38	92.81	31.04	42.1
22	HM 29RR(9029RR)	7041	242.6	17.25	92.85	28.99	63.7
21	HM 27RR(9027RR)	7011	244.4	17.07	93.70	28.72	70.3
1	HM 81RZ(2781RZ)	6996	247.9	17.50	93.11	28.21	66.4
2	HM 79RZ	6966	240.6	16.98	93.23	28.89	64.3
11	Beta 5833R	6955	250.2	17.30	94.08	27.75	68.6
7	Crystal 271	6943	256.0	17.65	94.18	27.12	72.9
30	HM 9050RR	6925	248.2	17.61	92.89	27.86	59.5
9	Crystal R442	6910	252.3	17.77	93.21	27.33	69.6
4	HM 80RZ	6859	252.4	17.63	93.59	27.16	64.5
35	BTS 17RR62	6814	261.9	17.96	94.39	26.03	47.7
5	Crystal 355	6746	245.0	17.16	93.55	27.53	68.0
19	SX 1233	6741	247.0	17.36	93.37	27.29	66.1
12	Beta 5930R	6694	252.2	17.85	92.95	26.54	73.6
6	Crystal 963	6645	247.8	17.37	93.46	26.82	69.9
10	Crystal R509	6607	237.4	17.03	92.52	27.86	63.4
13	Beta 5200R	6591	226.2	16.45	92.07	29.08	68.5
15	Beta 5411R	6552	251.1	17.86	92.72	26.15	63.4
3	HM 7172RZ	6226	238.6	17.19	92.28	26.10	63.9
LSD (P=.05)		612.5	10.58	0.60	0.88	2.17	11.5
CV		8.1	4.1	3.24	0.90	7.09	16.8
Grand Mean		7128.1	246.84	17.37	93.28	28.89	65.6

Trial Quality: Good  
 Plant/Harvest: May 4 / Oct 25  
 Plot Size: 2 row X 35 ft  
 Problems: Nematodes, Rhizomania (Minor) Root symptoms observed but not leaf color  
 Rhizoctonia present. Some plots not used because of Rhizoctonia.

Reps Used: 7  
 Quadris: 6 leaf stage  
 Cercospora Sprays: 2 sprays (controlled well)



**Michigan Sugar Company**  
**Official Variety Trial - 2007**  
 Bebow, St. Louis, MI

No	Variety	RWSA	RWST	% Suc	% CJP	Tons/A	% Emerg
28	HM 9032RR	6706	241.1	17.03	93.16	27.85	69.1
39	HM 90707RR	6580	235.7	16.67	93.21	27.94	76.0
32	BTS 17RR32	6479	246.2	16.94	94.39	26.33	81.6
26	HM 9056RR	6465	237.4	16.79	93.19	27.26	67.5
37	Crystal RR827	6355	237.9	16.58	93.90	26.71	63.5
17	SX 1234	6195	219.1	15.58	93.13	28.07	86.7
27	HM 28RR(9028RR)	6125	217.3	15.73	92.37	28.15	75.7
6	Crystal 963	6104	244.0	17.09	93.54	25.03	68.0
33	BTS 17RR42	6054	228.9	16.19	93.29	26.41	73.0
30	HM 9050RR	6022	243.4	17.19	93.18	24.73	63.1
31	HM 9055RR	5973	233.4	16.64	92.85	25.65	58.7
14	Beta 5451	5965	240.1	17.02	93.04	24.86	58.1
7	Crystal 271	5927	242.7	17.02	93.52	24.46	72.2
29	HM 9039RR	5920	231.1	16.56	92.67	25.63	67.3
16	Beta 1643N	5888	242.6	16.96	93.67	24.24	89.5
9	Crystal R442	5870	231.8	16.48	92.98	25.54	71.7
12	Beta 5930R	5859	248.3	17.54	93.06	23.61	73.1
4	HM 80RZ	5824	238.7	16.69	93.69	24.37	75.6
24	HM 9042RR	5810	244.2	17.16	93.37	23.82	55.0
1	HM 81RZ(2781RZ)	5763	234.3	16.55	93.27	24.69	67.5
35	BTS 17RR62	5758	231.1	16.60	92.53	24.92	54.9
22	HM 29RR(9029RR)	5749	225.7	16.23	92.50	25.46	70.5
36	Crystal RR818	5730	214.3	15.60	92.19	26.73	43.9
23	HM 9038RR	5730	214.5	15.44	92.68	26.69	64.6
18	SX 1235	5677	214.7	15.56	92.37	26.47	84.6
5	Crystal 355	5636	232.6	16.60	92.81	24.23	69.5
13	Beta 5200R	5584	211.4	15.49	91.92	26.45	76.2
10	Crystal R509	5534	236.2	16.71	93.16	23.47	70.1
15	Beta 5411R	5490	231.4	16.47	92.94	23.63	59.8
3	HM 7172RZ	5489	244.0	17.24	93.12	22.48	68.4
11	Beta 5833R	5478	226.4	16.08	93.11	24.16	62.7
2	HM 79RZ	5469	233.9	16.87	92.30	23.48	73.9
34	BTS 17RR52	5446	201.6	15.00	91.40	27.12	72.5
21	HM 27RR(9027RR)	5367	217.6	15.96	91.80	24.59	77.9
8	Crystal R757	5352	217.1	15.52	92.95	24.76	85.5
19	SX 1233	5288	223.8	16.21	92.27	23.63	78.5
38	Crystal RR836	5213	218.2	15.84	92.20	24.01	61.2
25	HM 9051RR	5131	223.5	16.04	92.60	23.12	59.5
20	HM 2771Rz	5046	242.4	16.95	93.65	20.75	68.7
LSD (P=.05)		712.3	19.2	0.97	1.23	2.36	12.8
CV		8.8	5.95	4.21	0.95	6.71	13.2
Grand Mean		5796.2	230.7	16.43	92.92	25.17	69.6

Trial Quality: Good  
 Plant/Harvest: May 5 / Oct19  
 Plot Size: 2 row X 35 ft  
 Problems: Poor emergence in four reps.

Reps Harvested: 4  
 Quadris: 6-8 leaf stage  
 Cercospora Sprays: 2 sprays (controlled well)

**Michigan Sugar Company**  
**Official Variety Trial - 2007**  
 Stoutenburg, Sandusky, MI

No	Variety	RWSA	RWST	% Suc	% CJP	Tons/A	% Emerg
29	HM 9039RR	6696	223.7	16.19	92.32	29.96	80.8
12	Beta 5930R	6682	240.0	17.55	91.62	27.84	66.0
14	Beta 5451	6589	245.6	17.65	92.32	26.88	56.3
33	BTS 17RR42	6521	226.2	16.49	91.91	28.85	86.8
31	HM 9055RR	6514	229.3	16.56	92.30	28.36	80.1
4	HM 80RZ	6498	235.6	17.09	92.01	27.60	77.4
15	Beta 5411R	6492	234.9	17.33	91.26	27.65	60.8
32	BTS 17RR32	6479	225.4	16.48	91.81	29.02	80.1
1	HM 81RZ(2781RZ)	6371	229.1	16.77	91.72	27.81	67.3
28	HM 9032RR	6364	209.4	15.84	90.54	30.41	83.6
7	Crystal 271	6335	235.3	17.05	92.08	26.91	72.2
24	HM 9042RR	6263	229.0	16.71	91.82	27.40	79.9
8	Crystal R757	6226	230.5	16.82	91.80	27.10	76.0
30	HM 9050RR	6207	219.4	16.25	91.30	28.30	75.3
37	Crystal RR827	6181	230.9	16.79	91.98	26.82	79.0
21	HM 27RR(9027RR)	6166	218.9	16.13	91.58	28.22	81.3
27	HM 28RR(9028RR)	6153	221.9	16.13	92.10	27.80	82.4
36	Crystal RR818	6104	216.4	15.97	91.54	28.21	54.7
13	Beta 5200R	6089	208.2	15.83	90.34	29.28	83.9
23	HM 9038RR	6086	229.1	16.70	91.88	26.60	83.3
9	Crystal R442	6070	219.4	16.44	90.82	27.73	73.1
18	SX 1235	6057	217.2	15.88	91.93	27.89	76.9
17	SX 1234	6051	228.3	16.29	92.90	26.52	75.6
5	Crystal 355	6022	229.7	16.90	91.46	26.22	64.3
38	Crystal RR836	6001	237.0	17.16	92.11	25.35	72.2
2	HM 79RZ	5998	219.9	16.41	90.99	27.29	61.5
6	Crystal 963	5979	231.3	17.05	91.38	25.86	63.7
26	HM 9056RR	5959	211.7	15.54	91.86	28.12	85.8
16	Beta 1643N	5941	229.6	16.74	91.87	25.86	79.4
39	HM 90707RR	5854	214.2	15.90	91.28	27.37	84.2
20	HM 2771Rz	5822	230.2	16.78	91.88	25.36	62.5
25	HM 9051RR	5759	232.4	16.99	91.74	24.83	73.0
11	Beta 5833R	5756	231.6	16.66	92.44	24.82	72.4
19	SX 1233	5636	222.5	16.02	92.56	25.33	72.0
22	HM 29RR(9029RR)	5615	217.0	15.94	91.73	25.85	79.4
34	BTS 17RR52	5571	207.1	15.39	91.37	26.96	79.9
35	BTS 17RR62	5537	228.9	16.76	91.66	24.10	67.4
10	Crystal R509	5480	214.2	15.86	91.40	25.61	66.7
3	HM 7172RZ	5099	212.3	15.82	91.15	23.92	63.5
LSD (P=.05)		616.6	15.3	0.78	1.05	2.31	12.3
CV		8.9	6.0	4.14	1.00	7.47	14.6
Grand Mean		6082.7	225.0	16.48	91.71	27.08	73.8

Trial Quality: Good

Plant/Harvest: May 4 / Oct 9

Plot Size: 2 row X 35 ft

Problems: Two reps not used because of uneven growth.

Reps Harvested: 6

Quadris: 6 leaf stage, Rhizoc controlled

Cercospora Sprays: 2 sprays (controlled well)

**Michigan Sugar Company**  
**Official Variety Trial - 2007**  
 B&B Farm, Saginaw, MI

No	Variety	RWSA	RWST	% Suc	% CJP	Tons/A	% Emerg
32	BTS 17RR32	8347	227.0	15.66	94.59	36.80	60.2
36	Crystal RR818	8291	226.5	15.62	94.56	36.63	40.8
34	BTS 17RR52	7897	218.2	15.11	94.54	36.26	67.6
26	HM 9056RR	7873	231.8	15.97	94.57	33.93	74.6
28	HM 9032RR	7804	216.4	15.27	93.64	36.11	68.5
18	SX 1235	7800	220.4	15.33	94.28	35.40	77.9
33	BTS 17RR42	7777	228.3	15.78	94.45	34.06	66.1
39	HM 90707RR	7690	233.2	15.89	95.10	32.96	75.8
27	HM 28RR(9028RR)	7647	230.1	15.84	94.63	33.27	76.6
29	HM 9039RR	7630	237.0	16.25	94.71	32.25	70.5
38	Crystal RR836	7619	229.4	15.90	94.29	33.26	68.5
30	HM 9050RR	7600	240.2	16.53	94.48	31.64	68.7
16	Beta 1643N	7570	231.4	15.83	94.93	32.70	73.4
31	HM 9055RR	7490	236.2	16.18	94.79	31.76	72.9
37	Crystal RR827	7486	235.7	16.42	93.96	31.79	70.7
21	HM 27RR(9027RR)	7417	223.9	15.48	94.52	33.18	71.9
22	HM 29RR(9029RR)	7404	234.8	16.26	94.26	31.54	71.6
17	SX 1234	7395	229.6	15.74	94.82	32.21	72.0
23	HM 9038RR	7338	225.6	15.64	94.33	32.58	70.2
24	HM 9042RR	7269	237.3	16.29	94.63	30.56	68.9
15	Beta 5411R	7205	232.5	16.11	94.24	31.08	63.5
9	Crystal R442	7085	228.0	15.87	94.10	31.19	68.1
19	SX 1233	7062	241.3	16.46	94.92	29.25	75.7
25	HM 9051RR	7043	242.9	16.64	94.68	29.00	68.8
4	HM 80RZ	7030	234.6	16.05	94.87	30.02	61.9
8	Crystal R757	6855	232.0	16.07	94.29	29.63	70.0
7	Crystal 271	6820	226.1	15.74	94.13	30.11	65.2
2	HM 79RZ	6787	231.3	15.99	94.38	29.40	68.5
13	Beta 5200R	6719	216.0	15.30	93.45	31.15	71.9
12	Beta 5930R	6712	232.0	16.19	93.92	28.96	63.6
1	HM 81RZ(2781RZ)	6660	238.1	16.34	94.66	27.94	69.8
11	Beta 5833R	6624	231.0	15.94	94.48	28.68	68.8
14	Beta 5451	6564	218.7	15.27	94.08	29.96	62.1
3	HM 7172RZ	6540	237.5	16.39	94.39	27.57	70.7
35	BTS 17RR62	6440	237.2	16.29	94.65	27.15	57.9
20	HM 2771Rz	6314	247.1	16.77	95.07	25.53	67.4
5	Crystal 355	6137	218.1	15.28	93.93	28.03	65.0
10	Crystal R509	6098	225.4	15.96	93.31	27.13	70.4
6	Crystal 963	5959	217.8	15.06	94.66	27.38	61.7
LSD (P=.05)		635.7	10.1	0.55	0.74	2.56	5.8
CV		9.0	4.5	3.51	0.80	8.37	8.7
Grand Mean		7179.4	230.3	15.91	94.42	31.23	68.2

Trial Quality: Good  
 Plant/Harvest: Apr 17 / Sept 19  
 Problems: Rhizomania(moderate) Visual leaf color

Reps Harvested: 8  
 Quadris: 6 leaf stage, Rhizoc controlled  
 Cercospora Sprays: 2 sprays (controlled well)

**Michigan Sugar Company**  
**Official Variety Trial**  
 Jurek, Twining  
**Rhizoctonia (Tip Rot) Evaluation**

No	Variety	RWSA	RWST	% Suc	% CJP	Tons/A	% Emerg	Ft/Plot Gaps*
26	HM 9056RR	5574	260.0	18.45	92.75	21.41	73.4	1.4
29	HM 9039RR	5482	253.6	17.88	93.17	21.57	76.4	0.8
25	HM 9051RR	5466	266.5	18.73	93.12	20.45	70.2	3.4
28	HM 9032RR	5449	242.5	17.63	91.82	22.16	69.1	6.3
10	Crystal R509	5400	249.2	17.72	92.78	21.53	74.0	0.8
24	HM 9042RR	5394	264.2	18.74	92.73	20.46	68.2	2.9
2	HM 79RZ	5316	251.4	18.01	92.39	20.82	71.5	4.1
23	HM 9038RR	5305	248.6	17.63	92.75	21.14	72.0	5.0
27	HM 28RR(9028RR)	5268	249.5	17.99	92.13	21.00	78.1	4.9
36	Crystal RR818	5260	221.7	16.33	91.45	22.65	49.5	14.8
21	HM 27RR(9027RR)	5239	247.2	17.57	92.77	20.55	75.7	3.4
34	BTS 17RR52	5183	228.9	16.74	91.72	22.73	83.6	4.3
3	HM 7172RZ	5163	246.2	17.87	92.07	21.08	78.2	0.8
32	BTS 17RR32	5105	252.1	17.75	93.21	20.25	72.8	11.5
31	HM 9055RR	5027	248.1	17.82	92.32	20.40	73.5	6.0
22	HM 29RR(9029RR)	5013	250.5	18.07	92.09	20.10	75.1	0.5
5	Crystal 355	4985	254.3	18.13	92.60	19.52	77.5	8.3
30	HM 9050RR	4914	259.8	18.68	92.12	18.90	68.2	3.6
13	Beta 5200R	4840	232.3	17.08	91.47	20.78	82.2	8.4
9	Crystal R442	4838	254.9	18.32	92.22	18.92	70.0	10.4
12	Beta 5930R	4693	257.1	18.68	91.61	18.04	67.3	8.6
39	HM 90707RR	4660	239.8	17.35	92.13	19.28	75.9	5.9
1	HM 81RZ(2781RZ)	4621	235.3	17.54	90.77	19.40	75.1	10.1
4	HM 80RZ	4290	258.6	17.99	93.70	16.32	72.5	15.8
11	Beta 5833R	4288	245.4	17.63	92.29	18.02	76.4	8.4
37	Crystal RR827	4278	255.2	18.39	92.46	16.58	70.2	19.9
20	HM 2771Rz	4255	248.0	17.73	92.53	17.06	72.2	11.0
15	Beta 5411R	4249	254.3	18.20	92.38	16.65	69.3	14.5
7	Crystal 271	4007	256.1	18.15	92.80	15.36	69.8	18.4
8	Crystal R757	3974	249.0	17.64	93.03	15.83	79.0	19.6
35	BTS 17RR62	3910	249.8	18.09	91.97	16.37	56.8	14.1
16	Beta 1643N	3832	236.0	17.19	91.99	16.13	80.1	22.8
38	Crystal RR836	3788	230.6	16.99	91.38	16.32	66.3	17.4
19	SX 1233	3779	234.6	16.99	92.06	15.93	82.2	14.5
17	SX 1234	3773	245.0	17.45	92.74	15.02	84.4	19.6
14	Beta 5451	3679	253.0	18.11	92.73	14.41	69.6	21.6
6	Crystal 963	3611	245.0	17.82	91.70	14.33	70.6	20.9
33	BTS 17RR42	3558	229.2	17.04	91.01	15.08	77.6	18.5
18	SX 1235	3430	220.4	16.03	92.12	15.50	82.9	22.1
LSD (P=.05)		919.7	17.6	0.86	1.31	3.21	6.1	7.7
CV		20.2	7.3	4.95	1.45	17.57	8.5	76.0
Grand Mean		4638	246.8	17.75	92.28	18.67	73.3	10.4

\* Gaps = Number of feet/plot without beets, highest possible is 55 feet

Trial Quality: Poor for yield trial, good for disease trial

Quadris: 6 leaf stage

Plant/Harvest: May 3 / Sept 24

Leafspot Sprays: 2 Sprays (controlled well)

Problems: Too many missing beets for a yield trial

Reps Used: 8

Michigan Sugar Company  
**OVT Storage Trial**  
 2006 Harvest  
 Russell Farm, Akron, MI

No	Variety	After Storage*			Interior Rot <sup>1</sup>	Exterior Rot <sup>2</sup>
		RWST	% Sucrose	% CJP		
30	Crystal Z627	303.3	18.93	95.09	1.1	0.5
7	SX 1233	291.4	18.30	94.94	0.9	0.8
16	HM E-17	288.8	18.14	94.83	1.9	0.5
14	HM 2761Rz	287.0	18.18	94.40	1.4	0.9
15	SX Prompt	286.4	18.31	93.90	1.9	0.7
31	HM 2771Rz	286.4	18.08	94.63	1.8	0.9
9	Beta 5411R	286.1	18.21	93.51	2.1	1.0
24	Beta 5451	285.9	18.03	94.77	2.1	1.1
13	Beta 1642R	284.5	18.11	94.28	2.3	1.6
21	HM 7235Rz	283.8	18.15	94.02	1.0	0.9
11	Crystal Z589	283.7	17.90	94.72	0.9	0.6
3	HM 74Rz	281.9	17.98	94.20	1.6	1.1
25	HM 73Rz	281.8	17.98	94.23	2.5	1.1
26	Crystal R442	281.7	18.11	93.95	2.3	1.0
1	Beta 5310	280.5	17.96	94.17	1.4	0.7
27	HM 81RZ(2781RZ)	280.2	17.87	94.11	2.1	1.2
2	Crystal R626	279.5	18.21	92.94	5.3	1.6
4	Beta BK1641R	278.5	17.76	94.19	2.2	1.0
6	Crystal Z588	277.6	17.56	94.63	1.3	0.6
5	HM 2782Rz	276.8	17.66	94.36	2.0	1.6
18	HM 7172Rz	276.5	17.97	93.11	1.7	2.8
8	HM 2767	275.7	17.74	93.64	4.4	1.5
12	HM 79RZ	275.7	17.72	93.83	1.7	0.8
29	HM 2763Rz	274.1	17.45	94.28	3.9	1.1
28	Beta 1531R	270.8	17.87	92.39	6.1	2.4
19	Beta 5833R	270.6	17.39	93.77	4.4	1.4
22	Crystal 355	265.4	17.29	93.20	3.6	1.9
23	HM 2784Rz	262.4	17.24	92.50	5.0	1.9
17	Crystal 271	261.5	17.31	92.37	4.6	1.9
20	Crystal 963	257.8	17.40	91.34	8.9	2.3
10	HM 80RZ	252.2	16.69	92.72	4.3	1.6
LSD (P=.05)		15.9	0.66	1.27	3.3	0.96
CV		5.0	3.2	1.2	101.7	66.7
Grand Mean		278.3	17.85	93.84	2.8	1.3

\* Beets were stored for 120 days and then analyzed.

<sup>1</sup> Interior Rot: Estimated % of rot (rated after beets were sawed in half)

<sup>2</sup> Exterior Rot: 0 = No Rot

.5 = 2 to 3 rotted tips

1 = Slight surface rot and/or 4 to 5 rotted tips

2 = Localized surface infection and/or 1 deep rot

3 = Numerous shallow and/or 1 rotted beet

3.5 = 2 rotted beets

4 = More than 2 rotted beets

5 = Most beets are rotted

Michigan Sugar Company  
**Biotech Variety Storage Trial**  
 2006 Harvest  
 Russell Farm, Akron, MI

No	Variety	After Storage*			Interior Rot <sup>1</sup>	Exterior Rot <sup>2</sup>
		RWST	% Sucrose	% CJP		
5	Beta B5902RR	300.6	19.19	93.98	0.8	0.4
4	HM E-17	292.4	18.67	94.02	1.2	0.6
7	Crystal C9642RR	285.6	18.32	93.34	3.1	0.6
6	HM 9013RR	282.8	18.07	94.07	1.0	0.5
9	HM 27RR(9027RR)	282.7	18.16	93.78	1.4	0.8
3	HM 29RR(9029RR)	276.3	17.90	93.36	2.4	1.1
8	SX Prompt	274.9	17.98	92.88	2.0	0.8
13	HM 2761Rz	273.6	17.80	93.09	2.3	1.0
12	HM 28RR(9028RR)	271.3	17.63	93.24	3.7	1.8
2	Crystal C9641RR	267.9	17.22	93.73	1.5	0.7
10	Crystal 963	267.5	17.97	91.54	3.8	1.5
11	Beta B6904RR	263.7	16.76	94.51	0.9	0.5
1	Beta B6905RR	260.0	16.58	94.32	1.8	0.7
LSD (P=.05)		21.0	0.89	1.47	2.5	0.87
CV		6.6	4.3	1.4	108.4	91.3
Grand Mean		276.9	17.86	93.53	2.0	0.83

\* Beets were stored for 120 days and then analyzed.

<sup>1</sup> Interior Rot: Estimated % of rot (rated after beets were sawed in half)

<sup>2</sup> Exterior Rot: 0 = No Rot  
 .5 = 2 to 3 rotted tips  
 1 = Slight surface rot and/or 4 to 5 rotted tips  
 2 = Localized surface infection and/or 1 deep rot  
 3 = Numerous shallow and/or 1 rotted beet  
 3.5 = 2 rotted beets  
 4 = More than 2 rotted beets  
 5 = Most beets are rotted

Michigan Sugar Company  
**Nematode Variety Storage Trial**  
 2006 Harvest  
 Russell Farm, Akron, MI

No	Variety	After Storage*			Interior Rot <sup>1</sup>	Exterior Rot <sup>2</sup>
		RWST	%Suc	%CJP		
3	HM 2761Rz	278.5	17.77	94.15	2.2	1.1
6	SX Prompt	278.0	17.96	93.47	2.2	0.9
5	HM E-17	276.4	17.81	93.66	3.9	1.2
1	Beta 1643N	270.9	17.80	92.66	10.2	2.2
2	Crystal 963	254.4	17.05	91.82	8.4	1.8
4	Beta 5534N	233.0	16.30	89.94	12.0	2.4
LSD (P=.05)		25.1	1.00	1.97	8.3	0.95
CV		7.9	4.8	1.8	108.1	49.8
Grand Mean		265.2	17.45	92.61	6.5	1.6

\* Beets were stored for 120 days and then analyzed.

<sup>1</sup> Interior Rot: Estimated % of rot (rated after beets were sawed in half)

<sup>2</sup> Exterior Rot: 0 = No Rot  
 .5 = 2 to 3 rotted tips  
 1 = Slight surface rot and/or 4 to 5 rotted tips  
 2 = Localized surface infection and/or 1 deep r  
 3 = Numerous shallow and/or 1 rotted beet  
 3.5 = 2 rotted beets  
 4 = More than 2 rotted beets  
 5 = Most beets are rotted

Michigan Sugar Company  
**Plant To Stand Trials**  
 2007  
 Average of 4 Trials

No.	Variety	RWSA	RWST	% Sucrose	% CJP	Tons/ Acre	% Emerg
11	HM 80RZ	7481	255.5	17.69	93.95	29.32	59.3
8	Beta 5833R	7280	252.1	17.54	93.75	28.95	66.4
3	Crystal R442	7259	258.2	18.01	93.53	28.23	58.3
2	Crystal 271	7186	260.1	18.05	93.78	27.72	62.4
5	Crystal 963	7058	259.3	18.03	93.68	27.30	59.3
9	Beta 5930R	7021	255.8	18.03	93.02	27.57	56.1
1	Crystal 355	6884	244.8	17.24	93.24	28.23	58.2
6	Beta 5411R	6876	250.8	17.74	92.91	27.44	54.9
13	HM 2771RZ	6851	237.4	16.80	93.10	28.88	58.8
7	Beta 5451	6849	259.1	18.02	93.61	26.46	49.1
4	Crystal R509	6831	240.6	17.07	92.92	28.47	57.7
12	HM 7172RZ	6798	236.7	16.84	92.79	28.78	56.1
LSD (P=.05)		533.5	9.8	0.47	0.78	1.45	4.7
CV		5.3	2.7	1.8	0.6	3.6	5.7
Grand Mean		7031.1	250.9	17.59	93.35	28.11	58.1

Leaf Spot Sprays: 2  
 Row Spacing: 30"

Quadris: 6 leaf for Rhizoc. control



Michigan Sugar Company  
**Plant To Stand Trial**  
 2007  
 R. Sylvester, Quanicassee, MI

No.	Variety	RWSA	RWST	% Sucrose	% CJP	Tons/ Acre	% Emerg
2	Crystal 271	8369	256.4	17.78	93.88	32.65	56.3
3	Crystal R442	8337	249.9	17.58	93.23	33.35	48.2
11	HM 80RZ	7987	246.7	17.15	93.88	32.34	52.8
13	HM 2771RZ	7945	236.3	16.84	92.83	33.64	52.6
8	Beta 5833R	7931	243.2	17.05	93.53	32.64	51.1
6	Beta 5411R	7927	248.7	17.58	93.02	31.96	50.5
1	Crystal 355	7856	236.6	16.85	92.85	33.21	47.3
5	Crystal 963	7656	245.4	17.34	93.12	31.26	52.0
4	Crystal R509	7646	235.4	16.84	92.66	32.51	52.6
9	Beta 5930R	7464	238.0	17.24	92.05	31.38	46.9
7	Beta 5451	7411	255.8	17.78	93.76	28.93	44.5
12	HM 7172RZ	7217	225.8	16.36	92.20	32.03	49.5
LSD (P=.05)		714.4	14.0	0.70	0.95	2.49	6.9
CV		7.9	5.0	3.5	0.9	6.7	11.9
Grand Mean		7812.0	243.2	17.20	93.08	32.16	50.4

Trial Quality: Good  
 Plant/Harvest Dates: Apr 24 / Oct 8  
 Reps: 6  
 Problems: No major problems

Quadris: 6 lf, Rhizoc controlled  
 Leaf Spot Sprays: 2, Cerc controlled  
 Row Spacing: 30 inches

Michigan Sugar Company  
**Plant To Stand Trial**  
 2007  
 A. Bisher - Ruth, MI

No.	Variety	RWSA	RWST	% Sucrose	% CJP	Tons/ Acre	% Emerg
8	Beta 5833R	7855	285.1	19.36	94.59	27.56	67.4
11	HM 80RZ	7811	286.4	19.26	95.09	27.30	52.4
12	HM 7172RZ	7706	280.9	19.04	94.74	27.43	50.2
2	Crystal 271	7696	291.7	19.64	94.94	26.48	61.5
9	Beta 5930R	7657	299.0	20.11	94.92	25.61	54.0
3	Crystal R442	7616	295.7	20.00	94.67	25.76	58.9
7	Beta 5451	7554	296.5	19.98	94.85	25.47	44.1
6	Beta 5411R	7381	288.3	19.44	94.91	25.68	53.9
4	Crystal R509	7310	273.9	18.96	93.75	26.67	53.6
5	Crystal 963	7109	287.3	19.77	93.87	24.64	55.1
1	Crystal 355	6969	271.9	18.70	94.10	25.61	58.0
13	HM 2771RZ	6860	259.9	17.76	94.54	26.42	51.9
LSD (P=.05)		752.4	17.1	1.02	0.90	2.21	7.3
CV		7.9	4.7	4.1	0.8	6.6	10.4
Grand Mean		7460.3	284.7	19.33	94.58	26.22	55.1

Trial Quality: Good  
 Plant/Harvest Dates: Apr 20 / Oct 17  
 Reps: 6  
 Problems: None

Quadris: 6 lf, Rhizoc controlled  
 Leaf Spot Sprays: 2, Cerc controlled  
 Row Spacing: 30 inches

Michigan Sugar Company  
**Plant To Stand Trial**

2007

B. Maust - Bayport, MI

No.	Variety	RWSA	RWST	% Sucrose	% CJP	Tons/ Acre	% Emerg
1	Crystal 355	6546	244.7	17.02	93.88	26.75	60.6
2	Crystal 271	6289	262.3	17.92	94.56	23.98	59.9
3	Crystal R442	6657	256.4	17.64	94.28	25.96	56.2
4	Crystal R509	6365	241.0	16.92	93.49	26.40	54.8
5	Crystal 963	6428	257.3	17.72	94.19	24.92	58.5
6	Beta 5411R	6650	251.1	17.67	93.23	26.43	48.4
7	Beta 5451	6400	253.7	17.57	94.00	25.26	50.3
8	Beta 5833R	6797	246.3	17.17	93.74	27.59	68.7
9	Beta 5930R	6909	258.2	18.01	93.58	26.73	59.3
11	HM 80RZ	7701	259.4	17.87	94.15	29.68	63.0
12	HM 7172RZ	7026	242.2	17.01	93.46	28.95	59.5
13	HM 2771RZ	6777	245.0	17.13	93.64	27.59	58.4
LSD (P=.05)		696.0	13.1	0.71	1.07	2.16	8.0
CV		9.0	4.5	3.5	1.0	7.0	12.0
Grand Mean		6712.2	251.5	17.47	93.85	26.68	58.1

Trial Quality: Fair - Good  
 Plant/Harvest Dates: May 4 / Oct 25  
 Reps: 6  
 Problems: Nematodes, Rhizomania

Quadris: 6 lf, Rhizoc control fair  
 Leaf Spot Sprays: 2, Cerc controlled  
 Row Spacing: 30 inch

Michigan Sugar Company  
**Plant To Stand Trial**  
 2007  
 Stoutenburg - Sandusky, MI

No.	Variety	RWSA	RWST	% Sucrose	% CJP	Tons/ Acre	% Emerg
5	Crystal 963	7036	247.1	17.27	93.53	28.39	71.8
8	Beta 5833R	6539	233.7	16.57	93.14	27.99	78.5
3	Crystal R442	6426	230.8	16.82	91.93	27.84	70.0
11	HM 80RZ	6424	229.7	16.48	92.68	27.97	69.0
2	Crystal 271	6387	230.2	16.85	91.72	27.76	71.9
1	Crystal 355	6164	226.2	16.37	92.13	27.34	66.9
9	Beta 5930R	6053	227.8	16.73	91.52	26.58	64.2
7	Beta 5451	6031	230.3	16.76	91.86	26.20	57.4
4	Crystal R509	6004	212.0	15.54	91.77	28.28	70.0
13	HM 2771RZ	5823	208.2	15.46	91.39	27.89	72.3
6	Beta 5411R	5547	214.9	16.27	90.46	25.70	67.0
12	HM 7172RZ	5243	198.0	14.97	90.78	26.69	64.9
LSD (P=.05)		656.6	16.27	0.83	1.27	1.7	10.5
CV		9.2	6.2	4.4	1.2	5.2	13.3
Grand Mean		6139.9	224.07	16.34	91.91	27.4	68.7

Trial Quality: Fair - Good  
 Plant/Harvest Dates: May 4 / Oct 9  
 Reps: 6

Quadris: 6 leaf stage, Rhizoc controlled  
 Leaf Spot Sprays: 2, Cerc controlled  
 Row Spacing: 30 inch

**Michigan Sugar Company**  
**Cercospora Variety Trials - 2007**

Average of 3 Locations

No.	Variety	Avg 3 Loc	Blumfield	BB Farm	Richville
		0-9	0-9	0-9	0-9
5	Crystal 355	1.72	1.77	1.40	1.97
14	Beta 5451	2.36	2.65	2.12	2.32
9	Crystal R442	2.48	2.64	2.42	2.38
24	HM 9042RR	2.64	2.87	2.27	2.78
6	Crystal 963	2.67	3.16	2.36	2.48
12	Beta 5930R	2.75	3.15	2.59	2.50
20	HM 2771RZ	2.79	3.04	2.55	2.80
7	Crystal 271	2.80	3.05	2.61	2.75
10	Crystal R509	2.81	3.02	2.55	2.87
25	HM 9051RR	2.85	3.03	2.57	2.96
30	HM 9050RR	2.86	3.28	2.40	2.89
3	HM 7172RZ	2.91	3.09	2.89	2.74
15	Beta 5411R	2.96	3.20	3.01	2.67
4	HM 80RZ	2.97	3.30	2.65	2.95
1	HM 81RZ(2781RZ)	3.00	3.22	2.80	2.96
8	Crystal R757	3.00	3.42	2.85	2.73
13	Beta 5200R	3.05	3.51	2.53	3.10
19	SX 1233	3.08	3.56	2.73	2.94
23	HM 9038RR	3.08	3.25	3.19	2.80
2	HM 79RZ	3.08	3.16	3.05	3.03
21	HM 27RR(9027RR)	3.08	3.18	3.06	3.01
11	Beta 5833R	3.10	3.71	2.50	3.09
26	HM 9056RR	3.14	3.08	3.21	3.15
29	HM 9039RR	3.17	3.27	3.21	3.03
39	HM 90707RR	3.22	3.29	3.25	3.12
36	Crystal RR818	3.23	3.69	2.93	3.06
31	HM 9055RR	3.25	3.59	2.98	3.19
22	HM 29RR(9029RR)	3.28	3.37	3.53	2.93
27	HM 28RR(9028RR)	3.28	3.37	3.29	3.18
34	BTS 17RR52	3.35	3.56	3.43	3.07
28	HM 9032RR	3.42	3.75	3.52	3.00
32	BTS 17RR32	3.74	4.04	3.75	3.42
35	BTS 17RR62	3.74	4.62	3.07	3.54
16	Beta 1643N	3.97	4.41	3.72	3.78
37	Crystal RR827	4.27	4.69	4.46	3.65
38	Crystal RR836	4.45	5.05	4.16	4.15
33	BTS 17RR42	4.89	5.29	4.37	5.01
17	SX 1234	4.97	4.82	5.26	4.81
18	SX 1235	5.67	6.23	5.36	5.43
LSD (P=.05)		0.41	0.54	0.45	0.54
CV		7.66	10.80	11.60	13.81
Grand Mean		3.26	3.55	3.09	3.13

Lower Number indicates more leafspot tolerance using 0-9 rating scale.

# Michigan Sugar Company Cercorpora Variety Trial Blumfield, MI - 2007

Trial Quality: Good

No.	Variety	Avg.	2-Sep	4-Sep	10-Sep	10-Sep	13-Sep	16-Sep	17-Sep	20-Sep	24-Sep	25-Sep
		of 10 0-9	0-9	0-9	0-9	0-9	0-9	0-9	0-9	0-9	0-9	0-9
5	Crystal 355	1.77	1.06	1.13	1.50	1.85	1.38	1.88	1.88	2.63	1.88	2.53
9	Crystal R442	2.64	1.88	1.95	2.25	2.93	2.25	2.88	2.80	3.50	2.63	3.33
14	Beta 5451	2.65	2.13	2.00	2.50	2.83	2.13	2.81	2.80	3.31	2.88	3.13
24	HM 9042RR	2.87	2.13	2.20	2.81	2.98	2.25	3.38	3.13	3.63	2.75	3.50
10	Crystal R509	3.02	2.25	2.50	2.81	2.93	2.38	3.19	3.23	4.06	3.13	3.75
25	HM 9051RR	3.03	2.19	2.50	2.63	3.13	2.50	3.44	3.13	3.94	3.25	3.60
20	HM 2771RZ	3.04	2.25	2.10	2.75	3.18	2.50	3.56	3.15	4.06	3.00	3.80
7	Crystal 271	3.05	2.38	2.53	2.88	3.05	2.38	3.44	3.20	3.94	3.00	3.68
26	HM 9056RR	3.08	2.44	2.43	2.69	3.18	2.38	3.50	3.30	4.06	3.13	3.70
3	HM 7172RZ	3.09	2.38	2.73	2.69	3.18	2.50	3.44	3.23	4.06	3.00	3.68
12	Beta 5930R	3.15	2.31	2.63	2.63	3.10	2.75	3.50	3.25	3.81	3.63	3.93
6	Crystal 963	3.16	2.19	2.70	2.81	3.00	2.75	3.19	3.33	4.06	3.75	3.78
2	HM 79RZ	3.16	2.38	2.50	2.63	3.25	2.50	3.44	3.38	4.06	3.38	4.10
21	HM 27RR(9027RR)	3.18	2.50	2.68	2.88	3.08	2.63	3.38	3.30	4.19	3.25	3.90
15	Beta 5411R	3.20	2.38	2.58	2.88	3.15	2.50	3.38	3.35	4.25	3.50	4.05
1	HM 81RZ(2781RZ)	3.22	2.50	2.68	2.94	3.18	2.75	3.50	3.20	4.44	3.38	3.68
23	HM 9038RR	3.25	2.38	2.58	2.94	3.25	2.63	3.88	3.25	4.19	3.50	3.93
29	HM 9039RR	3.27	2.75	2.73	3.13	3.15	2.75	3.56	3.30	4.31	3.25	3.73
30	HM 9050RR	3.28	2.56	2.68	2.88	3.25	2.63	4.00	3.28	4.31	3.25	3.93
39	HM 90707RR	3.29	2.56	2.78	3.06	3.20	2.63	3.63	3.43	4.13	3.50	4.00
4	HM 80RZ	3.30	2.25	2.60	2.88	3.43	2.88	3.75	3.45	4.06	4.00	3.73
27	HM 28RR(9028RR)	3.37	2.56	2.85	2.88	3.50	2.75	3.75	3.50	4.00	3.63	4.25
22	HM 29RR(9029RR)	3.37	2.63	2.80	3.00	3.33	2.63	3.50	3.40	4.50	3.75	4.20
8	Crystal R757	3.42	2.69	2.88	3.06	3.45	2.75	3.56	3.58	4.06	4.00	4.18
13	Beta 5200R	3.51	2.69	2.93	3.25	3.33	2.75	3.63	3.65	4.63	3.88	4.38
19	SX 1233	3.56	2.56	3.08	3.56	3.33	3.00	4.06	3.40	4.63	3.88	4.13
34	BTS 17RR52	3.56	2.75	3.05	3.25	3.48	2.75	3.56	3.78	4.50	4.00	4.50
31	HM 9055RR	3.59	2.69	2.88	3.13	3.68	2.88	3.88	3.88	4.75	3.75	4.38
36	Crystal RR818	3.69	2.50	2.68	3.19	3.68	3.00	3.88	4.00	4.81	4.00	5.15
11	Beta 5833R	3.71	2.67	2.67	3.17	3.27	2.83	3.92	3.60	5.08	4.33	5.57
28	HM 9032RR	3.75	2.63	2.93	3.50	3.60	2.88	4.50	3.98	4.81	3.88	4.78
32	BTS 17RR32	4.04	2.56	3.05	3.75	3.80	3.13	4.38	4.50	5.06	4.50	5.70
16	Beta 1643N	4.41	2.83	3.40	3.83	4.00	3.00	4.58	4.60	6.25	5.00	6.57
35	BTS 17RR62	4.62	2.92	3.50	4.00	4.27	3.33	4.83	5.17	6.08	5.50	6.60
37	Crystal RR827	4.69	3.00	3.55	4.38	4.70	3.63	5.25	4.85	6.19	5.13	6.25
17	SX 1234	4.82	2.94	3.55	4.44	5.03	3.88	4.94	5.35	6.06	5.13	6.90
38	Crystal RR836	5.05	3.00	4.05	4.50	5.20	3.75	5.00	5.88	6.75	5.25	7.08
33	BTS 17RR42	5.29	3.13	4.08	4.69	4.95	3.88	5.38	6.63	7.00	5.50	7.68
18	SX 1235	6.23	3.50	4.13	6.13	6.83	5.00	7.25	7.50	7.50	6.63	7.88
LSD (P=.05)		0.54	0.40	0.67	0.70	0.55	0.45	0.61	0.71	1.02	0.76	0.76
CV		10.8	11.4	17.0	15.7	11.1	11.5	11.3	13.3	15.7	14.2	12.0
Grand Mean		3.55	2.51	2.8	3.2	3.53	2.82	3.86	3.78	4.61	3.81	4.55

Lower Number indicates more leafspot tolerance using 0-9 rating scale.

# Michigan Sugar Company Cercorpora Variety Trial B&B Farm, MI - 2007

Trial Quality: Fair-Good

No.	Variety	Avg.	30-Aug	3-Sep	10-Sep	12-Sep	12-Sep	14-Sep	17-Sep	21-Sep	25-Sep
		of 10 0-9	0-9	0-9	0-9	0-9	0-9	0-9	0-9	0-9	0-9
5	Crystal 355	1.40	0.90	0.84	1.34	1.40	1.65	1.95	1.36	1.60	1.58
14	Beta 5451	2.12	1.45	1.30	2.08	2.20	2.65	2.60	2.38	2.20	2.24
24	HM 9042RR	2.27	1.55	1.46	2.08	2.10	3.10	2.75	2.22	2.50	2.66
6	Crystal 963	2.36	1.80	1.44	2.52	2.30	2.95	2.70	2.34	2.50	2.70
30	HM 9050RR	2.40	1.85	1.64	2.28	2.10	3.15	2.80	2.48	2.50	2.78
9	Crystal R442	2.42	1.95	1.66	2.56	2.20	3.00	2.80	2.06	2.60	2.94
11	Beta 5833R	2.50	1.65	1.56	2.64	2.20	2.80	2.80	2.92	2.80	3.10
13	Beta 5200R	2.53	2.00	1.90	2.56	2.20	2.95	3.05	2.62	2.60	2.90
20	HM 2771RZ	2.55	1.85	1.72	2.70	2.30	3.35	2.85	2.64	2.60	2.90
10	Crystal R509	2.55	1.80	1.52	2.64	2.40	3.15	2.90	2.80	2.70	3.06
25	HM 9051RR	2.57	1.85	1.84	2.72	2.40	3.10	3.00	2.74	2.60	2.86
12	Beta 5930R	2.59	1.65	1.76	2.68	2.40	3.30	2.80	2.86	3.00	2.88
7	Crystal 271	2.61	2.00	1.92	2.80	2.20	3.20	2.75	2.90	2.70	3.06
4	HM 80RZ	2.65	1.80	1.94	2.88	2.30	3.40	3.00	2.80	2.80	2.96
19	SX 1233	2.73	2.00	2.16	2.68	2.60	3.35	3.05	2.78	3.00	2.98
1	HM 81RZ(2781RZ)	2.80	2.05	2.02	3.00	2.50	3.35	3.20	2.98	3.00	3.10
8	Crystal R757	2.85	2.05	2.26	2.96	2.50	3.55	3.15	3.04	3.00	3.16
3	HM 7172RZ	2.89	2.25	2.28	2.88	2.50	3.50	3.30	2.90	3.20	3.22
36	Crystal RR818	2.93	2.15	2.40	3.04	2.40	3.60	3.10	2.90	3.40	3.34
31	HM 9055RR	2.98	2.05	2.16	3.00	2.60	3.80	3.30	3.16	3.40	3.38
15	Beta 5411R	3.01	2.25	2.30	3.02	2.70	3.50	3.40	3.24	3.30	3.34
2	HM 79RZ	3.05	2.15	2.36	3.04	2.70	3.70	3.20	3.16	3.70	3.44
21	HM 27RR(9027RR)	3.06	2.23	2.48	3.07	2.76	3.61	3.35	3.33	3.39	3.39
35	BTS 17RR62	3.07	2.30	2.34	3.16	2.80	3.75	3.55	3.10	3.50	3.36
23	HM 9038RR	3.19	2.25	2.34	3.10	2.70	4.15	3.50	3.22	4.00	3.42
26	HM 9056RR	3.21	2.35	2.42	3.10	3.10	3.95	3.50	3.28	3.70	3.46
29	HM 9039RR	3.21	2.25	2.74	3.20	2.80	3.95	3.65	3.24	3.80	3.30
39	HM 90707RR	3.25	2.15	2.80	3.16	2.80	4.15	3.45	3.44	3.80	3.52
27	HM 28RR(9028RR)	3.29	2.30	2.66	3.14	2.70	4.10	3.55	3.34	4.10	3.76
34	BTS 17RR52	3.43	2.25	2.86	3.32	3.00	4.30	3.60	3.58	4.00	3.96
28	HM 9032RR	3.52	2.25	2.86	3.34	2.90	4.75	3.95	3.50	4.30	3.82
22	HM 29RR(9029RR)	3.53	2.40	2.72	3.38	3.40	4.40	3.65	3.62	4.20	4.00
16	Beta 1643N	3.72	2.60	3.04	3.40	3.10	4.70	3.80	3.76	4.60	4.50
32	BTS 17RR32	3.75	2.60	2.80	3.58	3.10	4.75	4.05	3.76	4.60	4.50
38	Crystal RR836	4.16	2.67	2.95	3.72	3.26	5.23	4.37	4.68	4.89	5.66
33	BTS 17RR42	4.37	2.65	3.04	3.76	3.30	5.30	4.70	4.84	5.60	6.10
37	Crystal RR827	4.46	2.60	3.10	4.30	3.90	5.40	5.20	4.98	5.10	5.56
17	SX 1234	5.26	2.95	3.42	4.90	4.80	6.70	6.15	6.40	5.80	6.24
18	SX 1235	5.36	2.85	3.26	5.10	4.90	6.50	6.20	7.20	6.00	6.20
LSD (P=.05)		0.45	0.36	0.49	0.47	0.46	0.72	0.71	0.66	0.70	0.61
CV		11.6	13.6	17.4	12.4	13.4	15.0	16.4	15.9	15.9	13.7
Grand Mean		3.09	2.12	2.26	3.05	2.73	3.84	3.45	3.3	3.51	3.57

Lower Number indicates more leafspot tolerance using 0-9 rating scale.

# Michigan Sugar Company Cercorpora Variety Trial Richville, MI - 2007

Trial Quality: Fair-Good

No.	Variety	Avg. of 10 0-9	2-Sep 0-9	4-Sep 0-9	10-Sep 0-9	10-Sep 0-9	13-Sep 0-9	16-Sep 0-9	17-Sep 0-9	20-Sep 0-9	24-Sep 0-9
5	Crystal 355	1.97	1.05	1.06	2.02	1.60	2.25	2.04	2.80	2.50	2.44
14	Beta 5451	2.32	1.80	1.32	2.46	2.20	2.45	2.56	2.85	2.60	2.62
9	Crystal R442	2.38	1.60	1.32	2.52	2.30	2.80	2.40	3.15	2.60	2.70
6	Crystal 963	2.48	1.50	1.84	2.94	2.10	2.70	2.84	3.05	2.70	2.64
12	Beta 5930R	2.50	1.75	1.70	2.56	2.30	2.80	2.54	3.25	2.70	2.92
15	Beta 5411R	2.67	2.05	1.93	2.89	2.30	2.90	2.98	3.40	2.70	3.03
8	Crystal R757	2.73	1.88	2.26	3.10	2.40	3.05	3.14	3.55	2.90	3.20
3	HM 7172RZ	2.74	2.10	2.08	2.94	2.40	2.95	3.08	3.35	2.60	3.18
7	Crystal 271	2.75	2.30	2.12	2.88	2.10	3.10	2.88	3.35	3.00	2.98
24	HM 9042RR	2.78	2.10	2.20	3.00	2.40	3.20	3.02	3.30	2.80	3.02
23	HM 9038RR	2.80	1.95	1.49	2.84	2.77	3.15	3.09	3.50	2.78	3.07
20	HM 2771RZ	2.80	2.20	2.00	2.80	2.40	3.25	3.04	3.45	2.90	3.16
10	Crystal R509	2.87	2.50	2.10	3.00	2.40	2.95	3.14	3.55	2.90	3.28
30	HM 9050RR	2.89	2.05	2.28	2.98	2.40	3.50	3.12	3.55	2.90	3.24
22	HM 29RR(9029RR)	2.93	2.05	2.36	3.04	2.60	3.40	3.06	3.60	3.00	3.26
19	SX 1233	2.94	2.36	2.41	2.74	2.48	3.36	3.01	3.71	3.20	3.13
4	HM 80RZ	2.95	2.40	2.46	2.96	2.40	3.05	2.90	3.70	3.50	3.22
1	HM 81RZ(2781RZ)	2.96	2.05	2.46	3.04	2.40	3.35	3.18	3.70	3.20	3.28
25	HM 9051RR	2.96	2.53	2.54	2.82	2.60	3.30	3.06	3.70	3.00	3.22
28	HM 9032RR	3.00	2.15	2.14	3.14	2.40	3.30	3.16	3.85	3.40	3.50
21	HM 27RR(9027RR)	3.01	2.40	2.28	3.00	2.60	3.65	3.24	3.70	3.00	3.26
29	HM 9039RR	3.03	2.15	2.72	3.16	2.60	3.45	3.20	3.75	3.00	3.20
2	HM 79RZ	3.03	2.15	2.80	3.10	2.40	3.25	3.22	3.55	3.40	3.42
36	Crystal RR818	3.06	2.10	2.32	3.16	2.60	3.25	3.38	3.85	3.40	3.50
34	BTS 17RR52	3.07	2.65	2.12	3.16	2.60	3.25	3.28	3.70	3.40	3.46
11	Beta 5833R	3.09	2.10	2.50	3.14	2.50	3.40	3.20	3.85	3.50	3.58
13	Beta 5200R	3.10	2.15	2.38	3.28	2.50	3.60	3.32	4.00	3.30	3.34
39	HM 90707RR	3.12	2.20	2.70	3.20	2.60	3.40	3.30	4.00	3.30	3.42
26	HM 9056RR	3.15	2.20	2.86	3.10	2.80	3.55	3.22	3.95	3.20	3.44
27	HM 28RR(9028RR)	3.18	2.25	2.62	3.12	2.70	3.65	3.20	4.05	3.30	3.74
31	HM 9055RR	3.19	2.55	2.58	3.32	2.73	3.47	3.35	3.81	3.47	3.39
32	BTS 17RR32	3.42	2.40	3.04	3.56	2.90	3.85	3.88	4.75	4.00	4.24
35	BTS 17RR62	3.54	2.45	3.04	3.50	2.90	3.90	3.86	4.45	3.70	4.04
37	Crystal RR827	3.65	2.40	3.10	3.54	2.90	4.50	3.92	4.70	3.60	4.18
16	Beta 1643N	3.78	2.85	3.20	3.54	2.80	4.25	4.04	4.80	4.00	4.58
38	Crystal RR836	4.15	2.75	3.36	3.92	3.20	4.60	4.60	5.30	4.30	5.36
17	SX 1234	4.81	2.90	3.73	4.32	3.23	5.47	6.30	5.75	5.10	6.49
33	BTS 17RR42	5.01	3.20	3.92	5.20	3.80	5.20	6.20	6.35	4.80	6.40
18	SX 1235	5.43	3.63	4.41	6.02	4.28	5.77	6.59	6.45	5.20	6.35
LSD (P=.05)		0.54	0.53	0.78	0.58	0.52	0.79	0.71	0.71	0.65	0.69
CV		13.8	18.6	25.5	14.4	16.1	18.1	16.5	14.5	15.8	15.4
Grand Mean		3.13	2.25	2.46	3.21	2.6	3.49	3.42	3.93	3.3	3.6

Lower Number indicates more leafspot tolerance using 0-9 rating scale.



# Michigan Sugar Company

## Rhizoctonia Nursery - Richville, MI - 2007

No	Variety	Rhizoc Root Rot Rating <sup>1</sup> 0-7 Scale	Rhizoc Canopy Rating <sup>2</sup> % Damaged, Visual Rating	Dead Beet Count <sup>3</sup> Number per Plot
10	Crystal R509	2.61	4.17	0.50
11	Beta 5833R	2.71	7.50	0.67
13	Beta 5200R	3.30	11.67	2.17
3	HM 7172RZ	3.41	11.67	1.33
34	BTS 17RR52	3.61	20.00	6.33
21	HM 27RR(9027RR)	3.71	22.50	4.50
5	Crystal 355	3.74	11.67	2.50
8	Crystal R757	3.82	24.17	6.00
29	HM 9039RR	3.88	31.67	12.00
9	Crystal R442	4.11	20.83	6.83
2	HM 79RZ	4.18	26.67	11.50
26	HM 9056RR	4.28	29.17	11.33
24	HM 9042RR	4.32	24.17	8.50
35	BTS 17RR62	4.38	30.83	10.83
36	Crystal RR818	4.40	26.67	4.83
27	HM 28RR(9028RR)	4.42	32.50	13.83
30	HM 9050RR	4.45	25.83	6.83
32	BTS 17RR32	4.48	25.83	7.17
15	Beta 5411R	4.51	35.00	14.83
33	BTS 17RR42	4.57	26.67	7.00
6	Crystal 963	4.62	27.50	6.00
39	HM 90707RR	4.62	27.50	11.17
7	Crystal 271	4.62	23.33	7.67
22	HM 29RR(9029RR)	4.68	33.33	11.50
38	Crystal RR836	4.71	30.83	10.83
12	Beta 5930R	4.80	24.17	7.17
18	SX 1235	4.82	38.33	12.50
28	HM 9032RR	4.84	21.67	5.67
19	SX 1233	4.88	35.83	13.67
	HM E-17	4.90	35.00	13.50
25	HM 9051RR	5.03	29.17	13.83
16	Beta 1643N	5.09	29.17	9.17
23	HM 9038RR	5.11	37.50	20.33
1	HM 81RZ(2781RZ)	5.13	24.17	11.17
17	SX 1234	5.14	31.67	15.50
14	Beta 5451	5.15	41.67	24.17
4	HM 80RZ	5.16	38.33	17.83
37	Crystal RR827	5.16	28.33	10.83
31	HM 9055RR	5.17	28.33	14.33
LSD (P=.05)		0.79	7.56	5.95
CV		15.5	24.9	53.9
Grand Mean		4.42	26.54	9.65

<sup>1</sup> Root Rot Rating (Rhizoctonia) Sep 28, 2007

0 = No Disease

1 = Superficial, Minor

2 = Shallow lesion, 2-5% rot

3 = Deep dry rot (5-25%)

4 = Up to 50% rot

5 = Up to 75% rot

6 = Beet rotted with a few green leaves 7 = Completely rotted or missing beet

<sup>2</sup> Visual rating (Sept 10) of Rhizoc symptoms before harvest. 0 = no symptoms, 100 = all beets dead

<sup>3</sup> Dead beet counts taken before harvest (Sept 17)  
Plots had approx 45 beets before the inoculation

Trial Quality: Good

Root Rot Ratings conducted by Michigan Sugar Agronomists, USDA and Michigan State Scientists

# RHIZOCTONIA NURSERY RESULTS

2007

Average of Years

Summary of Michigan Coded Entries in the USDA Rhizoctonia Nursery - Ft.  
Collins, CO (1997 - 2007)

No.	Years Tested	Variety	*% E-17 Check	**Rating
		Highly Resistant Check	54.2	Excellent
		Resistant Check	58.7	Excellent
10	1	Crystal R509	61.5	Excellent
13	1	Beta 5200R	66.7	Excellent
21	2	HM 27RR(9027RR)	68.9	Excellent
3	5	HM 7172RZ	73.3	Good
27	2	HM 28RR(9028RR)	73.5	Good
2	2	HM 79RZ	75.8	Good
22	2	HM 29RR(9029RR)	76.4	Good
34	1	BTS 17RR52	79.5	Good
24	1	HM 9042RR	82.1	Fair
39	1	HM 90707RR	82.1	Fair
6	5	Crystal 963	84.0	Fair
5	5	Crystal 355	84.3	Fair
11	3	Beta 5833R	86.1	Fair
29	1	HM 9039RR	87.2	Fair
26	1	HM 9056RR	87.2	Fair
9	3	Crystal R442	92.2	Poor
23	1	HM 9038RR	92.3	Poor
		Suseptible Check	93.0	Poor
32	1	BTS 17RR32	94.9	Poor
36	1	Crystal RR818	94.9	Poor
38	1	Crystal RR836	94.9	Poor
14	4	Beta 5451	95.6	Poor
33	1	BTS 17RR42	97.4	Poor
28	1	HM 9032RR	97.4	Poor
4	2	HM 80RZ	97.7	Poor
12	2	Beta 5930R	99.1	Poor
25	1	HM 9051RR	100.0	Poor
	11	HM E-17	100.0	Poor
19	1	SX 1233	100.0	Poor
15	2	Beta 5411R	102.4	Poor
35	1	BTS 17RR62	102.6	Poor
7	3	Crystal 271	103.7	Poor
30	1	HM 9050RR	105.1	Poor
31	1	HM 9055RR	105.1	Poor
18	1	SX 1235	110.3	Poor
17	1	SX 1234	112.8	Poor
16	1	Beta 1643N	115.4	Poor
1	1	HM 81RZ(2781RZ)	115.4	Poor
8	1	Crystal R757	115.4	Poor
37	1	Crystal RR827	120.5	Poor

\*Hilleleshog E17 rating was 1997=6.7; 1998=5.7; 1999=6.4; 2000=4.9  
2001=5.3, 2002=5.7, 2003=5.7, 2004=4.9, 2005=4.2 and 2006=4.3.

\*\* Ratings: STD HM E17 check; Excellent <71; Good 71 to 80;  
Fair 81 to 90; Poor >90

Root Aphid Nursery  
2007  
Average of 2 Years

Summary of Michigan Coded Entries at  
Betaseed, Shakopee, MN

No.	Variety	Average Rating*
	Tol Check	1.62
11	Beta 5833R	1.78
16	Beta 1643N	1.99
1	HM 81RZ(2781RZ)	2.05
4	HM 80RZ	2.14
10	Crystal R509	2.18
9	Crystal R442	2.30
15	Beta 5411R	2.33
5	Crystal 355	2.37
22	HM 29RR(9029RR)	2.45
6	Crystal 963	2.59
2	HM 79RZ	2.61
14	Beta 5451	2.70
7	Crystal 271	2.75
12	Beta 5930R	2.83
27	HM 28RR(9028RR)	2.88
21	HM 27RR(9027RR)	2.91
19	SX 1233	3.01
3	HM 7172RZ	3.12
	Susc Check	3.41

\* RATING SCALE

1=NO APHIDS

2=A FEW YOUNG APHIDS

3=A FEW ADULT AND YOUNG APHIDS

4=MANY ADULT AND YOUNG APHIDS

# Root Aphid Nursery 2007

## Summary of Michigan Coded Entries at Betaseed, Shakopee, MN

No.	Variety	Average Rating*
13	Beta 5200R	1.11
34	BTS 17RR52	1.41
	Tol Check	1.53
32	BTS 17RR32	1.54
37	Crystal RR827	1.55
35	BTS 17RR62	1.57
11	Beta 5833R	1.70
38	Crystal RR836	1.74
16	Beta 1643N	1.79
8	Crystal R757	1.81
33	BTS 17RR42	1.85
36	Crystal RR818	1.86
1	HM 81RZ(2781RZ)	1.89
10	Crystal R509	1.90
4	HM 80RZ	2.00
22	HM 29RR(9029RR)	2.11
6	Crystal 963	2.14
30	HM 9050RR	2.14
5	Crystal 355	2.18
9	Crystal R442	2.32
2	HM 79RZ	2.34
25	HM 9051RR	2.41
21	HM 27RR(9027RR)	2.41
12	Beta 5930R	2.43
25	HM 9042RR	2.43
14	Beta 5451	2.43
15	Beta 5411R	2.44
27	HM 28RR(9028RR)	2.46
17	SX 1234	2.48
23	HM 9038RR	2.48
7	Crystal 271	2.57
19	SX 1233	2.65
28	HM 9032RR	2.66
39	HM 90707RR	2.93
3	HM 7172RZ	3.00
	HM E-17	3.00
31	HM 9055RR	3.03
18	SX 1235	3.03
26	HM 9056RR	3.10
29	HM 9039RR	3.14
	Susc Check	3.35

\* RATING SCALE

1=NO APHIDS

2=A FEW YOUNG APHIDS

3=A FEW ADULT AND YOUNG APHIDS

4=MANY ADULT AND YOUNG APHIDS

# Root Aphid Nursery 2006

## Summary of Michigan Coded Entries at Betaseed, Shakopee, MN

No.	Variety	Average Rating*
	Tolerant Check	1.72
11	Beta 5833R	1.86
16	Beta BK1643N	2.20
1	HM 81RZ(2781RZ)	2.21
15	Beta 5411R	2.21
3	HM 80RZ	2.28
9	Crystal R442	2.28
10	Crystal R509(Z589)	2.47
5	Crystal 355	2.57
20	HM 2771Rz	2.60
22	HM 29RR(9029RR)	2.79
2	HM 79RZ	2.87
7	Crystal 271	2.93
14	Beta 5451	2.96
6	Crystal 963	3.03
3	HM 7172Rz	3.24
19	Beta 5903R	3.24
27	HM 28RR(9028RR)	3.30
19	SX 1233	3.37
21	HM 27RR(9027RR)	3.41
	Susc Check	3.48

\* RATING SCALE

1=NO APHIDS

2=A FEW YOUNG APHIDS

3=A FEW ADULT AND YOUNG APHIDS

4=MANY ADULT AND YOUNG APHIDS

RHIZOMANIA NURSERY RESULTS  
Conducted by USDA in Salinas, CA

2007

AVERAGE OF 3 YEARS

Variety	RWSA	% SUGAR	TON/A	Disease Index*	% Rating 0-4**
Beta 5833R	11089	17.99	30.89	3.5	85.7
HM 7172RZ	11015	18.60	29.70	3.4	84.8
HM 80RZ	10895	18.34	29.69	3.6	78.7
Crystal R509	10729	18.13	29.59	3.6	79.6
HM 79RZ	10586	18.03	29.31	3.3	83.4
Crystal R442	9351	18.43	25.31	4.3	57.6
Beta 5411R	9100	18.50	24.61	4.2	62.4
Beta 5930R	9079	18.82	24.12	4.1	63.3
HM E-17	6391	16.89	18.79	5.6	30.0
GM	9803.8	18.19	26.89	4.0	69.5

\* A lower number indicates more resistance. Visual observation of the roots. 0-4 considered resistant, and 5-9 considered susceptible.

\*\* Percent of roots rating 0-4.

**RHIZOMANIA NURSERY RESULTS**  
 Conducted by USDA in Salinas, CA

2007

**AVERAGE OF 2 YEARS**

Variety	RWSA	% SUGAR	TON/A	Disease Index*	% Rating 0-4**
HM 7172RZ	11944	18.28	32.60	84.0	3.4
Beta 5833R	11780	17.71	33.25	82.5	3.5
HM 80RZ	11758	18.22	32.19	82.2	3.4
HM 28RR(9028RR)	11692	17.90	32.54	86.9	3.1
HM 27RR(9027RR)	11631	18.31	31.76	85.4	3.4
Crystal R509	11530	17.97	32.00	80.6	3.6
HM 79RZ	11493	17.95	31.90	84.5	3.2
HM 29RR(9029RR)	11358	17.95	31.64	85.5	3.2
SX 1233	11011	18.30	30.02	83.7	3.2
HM 81RZ(2781RZ)	10996	18.16	30.18	84.0	3.4
Beta 5930R	10082	18.75	26.87	68.3	3.9
Crystal R442	10080	18.41	27.28	59.6	4.1
Beta 5411R	9856	18.29	26.88	67.4	4.0
HM E-17	7512	16.94	22.07	37.1	5.1
GM	10908.4	18.08	30.08	76.5	3.6

\* A lower number indicates more resistance. Visual observation of the roots. 0-4 considered resistant, and 5-9 considered susceptible.

\*\* Percent of roots rating 0-4.

# Rhizomania Nursery Results

## Conducted by USDA in Salinas, CA

### 2007

No	Varieties	RWSA	% Suc	Tons/ Acre	Raw Juice Purity %	DI %*	%** (0-4)
13	Beta 5200R	12155	16.38	37.21	83.90	3.1	89.1
36	Crystal RR818	11990	17.91	33.44	85.60	3.8	71.9
32	BTS 17RR32	11911	17.72	33.63	85.00	3.6	75.3
8	Crystal R757	11720	18.26	32.09	84.70	3.6	73.1
38	Crystal RR836	11588	18.20	31.85	84.60	3.9	74.6
16	Beta 1643N	11555	18.64	31.03	83.50	4.0	62.8
35	BTS 17RR62	11520	18.20	31.61	84.80	3.5	76.4
	Check-Angelina	11507	17.84	32.27	83.40	3.5	79.7
33	BTS 17RR42	11381	18.44	30.87	85.10	3.9	66.4
34	BTS 17RR52	11294	18.10	31.27	84.90	4.0	61.5
26	HM 9056RR	10695	17.40	30.76	83.90	3.6	77.2
	Check-Beta 4430R	10689	16.94	31.61	84.90	3.0	85.6
21	HM 27RR(9027RR)	10681	18.04	29.62	84.90	3.6	76.8
22	HM 29RR(9029RR)	10627	17.24	30.84	82.80	3.3	78.9
11	Beta 5833R	10609	16.93	31.40	83.30	3.8	69.4
29	HM 9039RR	10499	17.90	29.33	83.60	3.5	79.6
17	SX 1234	10409	17.31	30.07	84.70	3.6	74.7
4	HM 80RZ	10305	17.79	28.98	83.60	3.9	67.2
10	Crystal R509	10291	17.28	29.78	83.20	4.0	63.8
30	HM 9050RR	10240	18.34	27.92	83.10	4.3	52.4
37	Crystal RR827	10233	17.99	28.45	83.30	4.1	60.1
23	HM 9038RR	10123	18.01	28.14	83.80	4.0	66.0
18	SX 1235	10114	16.74	30.26	85.40	3.7	69.9
31	HM 9055RR	10069	17.67	28.48	83.40	4.0	66.6
28	HM 9032RR	9941	17.01	29.25	83.40	4.0	62.0
24	HM 9042RR	9830	18.47	26.62	82.40	4.2	59.5
39	HM 90707RR	9828	17.61	27.92	83.80	3.5	76.4
27	HM 28RR(9028RR)	9746	17.30	28.16	82.90	3.6	74.2
25	HM 9051RR	9673	18.53	26.12	82.90	4.1	61.1
2	HM 79RZ	9593	17.46	27.50	82.40	3.6	71.0
19	SX 1233	9496	17.76	26.76	82.00	3.7	69.2
3	HM 7172RZ	9425	17.95	26.31	82.70	3.9	67.9
	Check-Beta G017R	9332	16.51	28.24	82.20	4.0	63.2
1	HM 81RZ(2781RZ)	8960	17.61	25.46	83.10	3.9	69.8
12	Beta 5930R	8610	18.46	23.39	83.40	4.5	47.6
15	Beta 5411R	8512	17.94	23.71	84.00	4.4	54.5
9	Crystal R442	8435	17.78	23.76	83.60	4.7	40.2
	Check-Roberta	7075	14.48	24.16	84.80	4.5	56.2
7	Check-Crystal 271	6484	15.91	20.37	84.60	4.5	50.4
	HM E-17	5907	16.42	18.01	84.00	5.6	31.4
	Mean	10050.7	17.6	28.52	83.85	3.9	67.5
	LSD (.05)	851.6	0.53	2.47	1.84	0.4	11.5
	C.V. (%)	8.6	3.03	8.79	2.23	10.1	17.3

\* Scale of 0-9, where 0 = no disease and 9= dead.

\*\* Roots rating in classes 0-4, considered resistant.



# APHANOMYCES NURSERY RESULTS

2007

Summary of Michigan Coded Entries in the Betaseed Aphanomyces  
Nursery - Shakopee, MN (1998,99,00,01,03,04,06,07)

No.	Years Tested	VARIETY	*% of HM E-17	**Ratings
		Resistant source check	80.5	Excellent
		Tolerant Hybrid(ACH 555)	84.5	Excellent
18	1	SX 1235	84.7	Excellent
17	1	SX 1234	86.6	Excellent
7	3	Crystal 271	86.8	Excellent
16	1	Beta 1643N	86.8	Excellent
6	5	Crystal 963	87.4	Excellent
14	5	Beta 5451	89.0	Excellent
1	2	HM 81RZ(2781RZ)	90.8	Excellent
23	1	HM 9038RR	91.9	Excellent
5	2	Crystal 355	94.3	Excellent
28	1	HM 9032RR	95.4	Excellent
33	1	BTS 17RR42	98.9	Excellent
9	2	Crystal R442	99.4	Excellent
	8	HM E-17	100.0	Good
15	2	Beta 5411R	101.6	Good
13	1	Beta 5200R	103.0	Good
19	2	SX 1233	103.3	Good
32	1	BTS 17RR32	104.0	Good
27	2	HM 28RR(9028RR)	104.1	Good
11	1	Beta 5833R	104.8	Good
8	1	Crystal R757	104.8	Good
37	1	Crystal RR827	104.8	Good
30	1	HM 9050RR	105.4	Good
31	1	HM 9055RR	105.4	Good
12	2	Beta 5930R	106.5	Good
4	1	HM 80RZ	108.3	Good
36	1	Crystal RR818	109.7	Good
25	1	HM 9051RR	109.7	Good
10	1	Crystal R509	110.2	Good
39	1	HM 90707RR	110.2	Good
38	1	Crystal RR836	110.8	Good
34	1	BTS 17RR52	111.0	Good
24	1	HM 9042RR	115.6	Fair
2	1	HM 79RZ	117.5	Fair
26	1	HM 9056RR	117.5	Fair
29	1	HM 9039RR	120.2	Fair
22	2	HM 29RR(9029RR)	121.9	Fair
		Moderately susceptible check	122.4	Fair
21	2	HM 27RR(9027RR)	125.9	Fair
3	3	HM 7172RZ	130.6	Poor
35	1	BTS 17RR62	159.4	Poor
		Susceptible Check	211.1	Poor

\* E17 Check 1998=2.3; 1999=2.8; 2000=1.5; 2001=1.67,  
2003=2.67; 2004=5.83; 2006=3.38; 2007=3.72

\*\* Ratings: STD HM E17 check; Excellent <100; Good 100 to 115;  
Fair 116 to 130; Poor >130.