



American Crystal
Sugar Company

November 2020

Dear ACSC Sugarbeet Grower:

The 2020 official coded variety performance trials and disease nurseries were planted at 18 sites by American Crystal Sugar Company (ACSC) including 13 yield trial sites and five disease nurseries. Seven additional disease nurseries were planted by third party cooperators. Thanks are extended to the dedicated Technical Services staff involved in the official trial plot care, harvest, and data analysis.

Results

Results from the Official Variety Trials sites were good to excellent. Stands in the trials were generally very good this year. Seven sites were used for variety approval calculations. Two sites were abandoned due to erratic emergence (St. Thomas and Hillsboro) and one due to water damage (Stephen). Three sites were used for performance of Aphanomyces Specialty varieties under Aphanomyces conditions (Climax , Grandin and Perley). Rhizoctonia presence was minimal in 2020. AZteroid (in-furrow), seed treatments and one application of Quadris (POST) were utilized for Rhizoctonia management. Based upon susceptible plot observations, root aphids were present in low levels at one site. Revenue calculations in 2020 are based on a hypothetical \$45.12 payment (5-year rolling average) at 17.5% sugar and 1.5% SLM not considering hauling or production costs.

Fusarium ratings are from two Moorhead sites. The Rhizoctonia ratings are from two RRV nurseries. The Aphanomyces ratings are from Shakopee, MN and two RRV nurseries. The Cercospora data is from Foxhome, MN; Randolph, MN; and Michigan USDA.

2020 harvest conditions were excellent. Soil moisture levels remained average to dry throughout the months of August and September, creating good harvest conditions in all five Factory Districts for all involved. With a slightly earlier OVT harvest start date and the benefit of our new harvester, the harvest completion date was earlier than previous years.

The 2020 data has been combined with the previous years' data, and results are enclosed. Bolter data is presented in plants per acre based upon 60,000 seeds per acre. Results for the yield trials from individual sites are available on the internet.

Conventional trials were not planted in the 2020 OVT trials. Conventional varieties that were approved for 2020 sales are permitted to continue with sales in 2021.

These results and additional information for individual growing sites are available on the World Wide Web at www.crystalsugar.com. More detailed information will be available later in the Sugarbeet Research and Extension Reports (www.sbreb.org). Additional data including individual yield trial results and agronomic procedures are also on the ACSC web site.

Attached are the following pages of information:

1. List of varieties approved for sale to ACSC growers
2. Multi-year performance of RR varieties from all sites
3. Performance of RR varieties under Aphanomyces conditions
4. Performance of conventional varieties from three sites (2017-2019)
5. Disease ratings for all nurseries (varieties tested in 2020)
6. Root Aphid rating/evaluation
7. Trial sites, disease observations and agronomic information from all trial locations
8. Seed treatments applied to seed used in the official coded variety trials

Plot Procedures

Yield trials were planted to stand at 4.5 inches. Plots were planted crosswise (90°) to the cooperators' normal farming operations, where possible. Plot row lengths for all official trials were maintained at 46 feet with about 39 feet harvested. Planting was performed with a 12-row SRES vacuum planter. The GPS controlled planter gave good single seed spacing which facilitated emergence counting. Seed companies had the option of treating seed with Tachigaren, insecticide and a Rhizoctonia seed treatment fungicide. Emergence counts were taken on 24 feet from each plot. Multiple seedlings were counted as a single plant if they emerged less than one inch apart. The stands in all yield trials were refined by removing doubles (multiple seedlings less than 1.5 inch apart) by hand but were not further reduced.

Roundup PowerMAX with Event (water conditioning agent + surfactant) and full rates of fungicides were applied using a pickup sprayer driven down the alleys. Hand weeding was utilized where necessary. All yield trials were treated with Quadris in a band during the 6-10 leaf stage (14 oz/acre) for Rhizoctonia management. Treatments used for Cercospora management in 2020 included Inspire XT/Manzate, Agri Tin/Incognito, Proline/Manzate, and Priaxor/Agri Tin. Ground spraying was conducted by ACSC technical staff.

RR varieties with commercial seed were planted in four-row, six replication trials. The RR experimental entries were planted in smaller two-row, four replication trials. Two applications of Roundup PowerMAX were made in the 4-6 (32 oz/acre) and 8 – 12 (22 oz/acre) leaf stages.

All plot rows were measured for total length after approximately 3.5 feet at each end were removed at the end of August, with skips greater than 60 inches being measured for adjustment purposes. Harvest was performed with one customized six-row harvester (Big Red) with increased cleaning capacity. All harvested beets of each plot were used for yield determination while one sample (approx. 25 lbs each) for sugar, and impurity analysis was obtained from each plot. Quality analysis was performed at the ACSC Technical Services Quality Lab in Moorhead, MN.

Varieties were planted in disease nurseries in North Dakota, Minnesota and Michigan to evaluate varieties for disease tolerance. ACSC adjusts the Cercospora, Aphanomyces, Rhizoctonia and Fusarium nursery data each year to provide a consistent target for variety approval criteria.

Root Aphid evaluations are included from Shakopee's greenhouse and a Ft. Collins, CO field location.

*Before purchasing seed, please check to make sure the varieties you are buying are on the **current approved list**. In accordance with the grower contract, the cooperative has the option to refuse beets of a non-approved variety. If you have questions, please contact the ACSC Technical Services Center or your ACSC Agriculture Department.*

Sincerely,



Deborah L Moomjian
Beet Seed Analyst



William S. Niehaus
Official Trial Manager

Attachments

Table 1.
Varieties Meeting ACSC Approval Criteria for the 2021 Sugarbeet Crop ++

Roundup Ready®	<u>Full Market</u>	<u>Aph Spec</u>	<u>Rhc Spec</u>	<u>High Rzm</u>	2019 Conventional	<u>Full Market</u>	<u>High Rzm</u>
BTS 8337	Yes	Yes		Hi Rzm	Crystal R761	Yes	Hi Rzm
BTS 8500	Yes	Yes		Hi Rzm	Crystal 620	Yes	Hi Rzm
BTS 8524	Yes	Yes		Hi Rzm	Crystal 840	Yes	Hi Rzm
BTS 8606	Yes			Hi Rzm	Crystal 950	Yes	Hi Rzm
BTS 8629	Yes	Yes		Hi Rzm	Hilleshög HM3035Rz	Yes	Rzm
BTS 8767	Yes	Yes		Hi Rzm	SX 8869 Cnv	Yes	Hi Rzm
BTS 8815	Yes			Hi Rzm	SV 48777	Yes	Hi Rzm
BTS 8882	Yes			Hi Rzm			
BTS 8927	New	New		Hi Rzm			
BTS 8938	New	New	New	Hi Rzm			
BTS 8961	New	New		Hi Rzm			
BTS 8976	New	New		Hi Rzm			
Crystal 572	Yes			Hi Rzm			
Crystal 574	Yes	Yes		Hi Rzm			
Crystal 684	Yes	Yes		Hi Rzm			
Crystal 793	Yes	Yes		Hi Rzm			
Crystal 796	Yes	Yes		Hi Rzm			
Crystal 803	Yes	Yes		Hi Rzm			
Crystal 804	Yes	Yes	New	Hi Rzm			
Crystal 808	Yes	Yes		Hi Rzm			
Crystal 912	New	New	New	Hi Rzm			
Crystal 913	New	New		Hi Rzm			
Crystal 916	New	New		Hi Rzm			
Hilleshög HM4448RR +	Yes			Rzm			
Hilleshög HM9528RR	Yes	Yes		Hi Rzm			
Hilleshög HIL9708	Yes	New	Yes	Rzm			
Hilleshög HIL9920	Yes	New		Hi Rzm			
Hilleshög HIL2317	New	New		Hi Rzm			
Maribo MA504	Yes			Hi Rzm			
Maribo MA717	Yes	Yes		Hi Rzm			
Maribo MA902	New			Hi Rzm			
SX Marathon	Yes			Hi Rzm			
SX 1887	Yes	New		Hi Rzm			
SX 1888	Yes	Yes		Hi Rzm			
SX 1898	Yes	New		Hi Rzm			
SV 265	Yes			Hi Rzm			
SV 268	Yes	Yes		Hi Rzm			
SV 285	Yes	Yes		Hi Rzm			
SV 333	Yes	Yes		Hi Rzm			
SV 375	Yes			Hi Rzm			

Aph Spec = variety meets Aphanomyces specialty requirements
Rhc Spec = variety meets Rhizoctonia specialty requirements
Hi Rzm = may perform better under severe Rhizomania
New = newly approved

+ Previously approved varieties not meeting current approval standards. According to Approval Policy, may be sold in 2021

++ Roundup Ready sugarbeets are subject to the ACSC RRSB Bolter Destruction Policy
Roundup Ready® is a registered trademark of Monsanto Company.

Created 10/30/2020

Table 2. Performance Data of RR Varieties During 2019 and 2020 Growing Seasons (All Locations Combined) Approved for Sale to ACSC Growers in 2021 +++

Variety	Yrs Com	Rev/Ton ++			Rev/Acre ++			Rec/Ton		Rec/Acre		Sugar		Yield		Molasses		Emerg		Bolter / Ac		CR +		Aph Root+		Rhizoc.+		Fusarium+		Rzm+
		20	2 Yr	2Y%	20	2 Yr	2Y%	20	2 Yr	20	2 Yr	20	2 Yr	20	2 Yr	20	2 Yr	20	2 Yr	20	2 Yr	20	2 Yr	20	2 Yr	20	2 Yr	20	2 Yr	
Previous Approved # locations		7	14		7	14		7	14	7	14	7	14	7	14	7	14	7	14	7	14	3	6	3	5	2	5	2	4	
BTS 8337	6	51.24	48.74	104	1300	1371	103	341	334	8662	9433	18.14	17.74	25.3	28.3	1.07	1.04	64	67	4	2	4.46	4.43	3.5	3.5	4.4	4.0	3.6	3.6	Hi
BTS 8500	4	43.48	42.67	91	1307	1363	102	314	313	9476	10032	16.81	16.73	30.2	32.2	1.10	1.10	67	66	0	0	4.38	4.19	4.2	4.2	4.6	4.5	2.4	2.3	Hi
BTS 8524	4	44.39	42.16	90	1279	1344	101	317	311	9150	9946	16.97	16.63	28.8	32.1	1.10	1.09	74	72	0	0	4.38	4.45	4.2	4.4	4.1	4.1	3.0	3.1	Hi
BTS 8606	3	45.91	44.58	95	1284	1344	101	323	319	9022	9649	17.17	17.00	28.0	30.3	1.03	1.03	71	67	0	0	4.79	4.74	4.6	4.8	4.8	4.7	2.9	2.8	Hi
BTS 8629	3	44.38	42.86	91	1406	1426	107	317	313	10066	10440	16.89	16.71	31.8	33.4	1.02	1.05	68	67	0	0	4.55	4.60	3.9	4.6	4.3	4.1	3.8	3.7	Hi
BTS 8767	2	45.48	44.57	95	1317	1382	104	321	319	9299	9923	17.08	16.99	29.0	31.1	1.02	1.03	71	70	0	0	4.38	4.32	4.5	4.4	4.7	4.4	2.5	2.5	Hi
BTS 8815	1	47.60	46.78	100	1307	1383	104	329	327	9013	9676	17.45	17.36	27.4	29.6	1.02	1.00	66	66	0	0	4.86	4.73	4.2	4.7	3.9	4.0	2.6	2.6	Hi
BTS 8882	1	43.65	43.44	92	1381	1413	106	315	315	9981	10265	16.80	16.84	31.8	32.6	1.05	1.06	72	65	0	0	4.71	4.44	4.3	4.8	4.3	4.3	2.1	2.5	Hi
Crystal 572	4	51.00	49.32	105	1405	1441	108	341	336	9387	9837	18.02	17.79	27.6	29.3	0.99	0.98	73	71	0	0	4.46	4.57	4.3	4.6	4.2	4.2	2.4	2.4	Hi
Crystal 574	4	44.14	43.32	92	1396	1416	106	317	315	10010	10317	16.91	16.82	31.6	32.8	1.08	1.07	68	70	0	0	4.64	4.46	4.1	4.1	4.2	4.3	2.3	2.1	Hi
Crystal 684	2	44.19	42.94	91	1432	1431	107	317	314	10283	10479	16.90	16.74	32.6	33.5	1.06	1.07	74	69	0	0	4.44	4.28	4.0	4.1	4.2	4.1	2.3	2.2	Hi
Crystal 793	2	49.48	47.70	102	1514	1535	115	335	330	10253	10650	17.70	17.46	30.6	32.3	0.93	0.93	71	68	0	0	4.31	4.18	3.9	3.8	4.8	4.5	2.6	2.7	Hi
Crystal 796	1	45.63	44.28	94	1372	1451	109	322	318	9674	10442	17.14	16.95	30.1	32.8	1.05	1.03	74	76	0	0	4.95	4.85	3.9	3.9	4.5	4.2	2.2	2.3	Hi
Crystal 803	NC	49.01	48.05	102	1444	1469	110	334	332	9811	10142	17.62	17.54	29.3	30.6	0.95	0.96	78	77	0	0	3.93	3.90	4.0	4.2	5.0	4.8	2.5	2.6	Hi
Crystal 804	NC	42.95	43.55	93	1383	1427	107	313	316	10068	10376	16.72	16.86	32.2	32.9	1.10	1.06	66	64	0	0	4.77	4.61	3.6	4.0	3.9	3.8	2.3	2.3	Hi
Crystal 808	NC	46.00	44.52	95	1417	1437	108	323	319	9955	10333	17.19	17.01	30.8	32.4	1.04	1.04	76	75	0	0	5.07	4.92	4.0	3.8	3.9	4.0	2.3	2.4	Hi
Hilleshög HIL9708	3	47.99	45.68	97	1369	1401	105	330	323	9420	9940	17.48	17.14	28.5	30.8	0.98	0.98	72	72	0	0	4.97	4.96	4.0	4.3	3.8	3.8	3.6	3.8	Rzm
Hilleshög HIL9920	2	48.97	47.40	101	1398	1414	106	333	329	9533	9853	17.64	17.44	28.6	30.0	0.97	0.97	70	70	0	0	4.82	4.88	3.6	4.3	5.1	4.9	6.3	5.8	Hi
Hilleshög HM4448RR	7	44.42	43.78	93	1358	1407	106	318	317	9725	10192	16.89	16.82	30.7	32.3	1.01	1.00	75	72	0	2	5.61	5.54	4.1	4.5	4.8	4.4	4.6	4.7	Rzm
Hilleshög HM9528RR	5	46.14	44.94	96	1362	1409	106	324	321	9576	10082	17.21	17.03	29.6	31.5	1.03	1.00	69	67	0	0	4.84	4.88	3.7	4.1	4.6	4.3	4.7	4.4	Hi
Maribo MA504	4	44.42	42.61	91	1368	1394	105	318	312	9787	10241	16.87	16.61	30.9	32.8	1.00	1.00	72	71	0	0	5.35	5.34	5.1	5.6	4.8	4.8	4.3	4.4	Hi
Maribo MA717	2	47.70	46.02	98	1454	1465	110	329	324	10054	10368	17.47	17.23	30.6	32.1	1.03	1.01	75	72	0	0	5.11	5.11	3.8	4.1	4.6	4.4	4.6	4.7	Hi
SV 265	3	48.67	46.49	99	1396	1409	106	332	326	9523	9902	17.58	17.26	28.7	30.4	0.96	0.96	67	65	0	0	4.55	4.41	4.0	4.7	4.2	4.2	5.7	5.7	Hi
SV 268	3	47.51	45.92	98	1317	1363	102	328	324	9093	9630	17.42	17.19	27.6	29.8	1.01	0.99	67	65	0	0	4.78	4.80	4.5	4.8	5.2	4.7	4.0	4.5	Hi
SV 285	NC	49.60	47.59	101	1373	1398	105	336	330	9262	9694	17.74	17.46	27.5	29.4	0.97	0.97	65	62	0	0	4.50	4.67	4.3	4.4	4.0	4.2	5.4	5.1	Hi
SV 333	5	47.34	46.27	98	1391	1400	105	328	325	9635	9861	17.36	17.23	29.4	30.4	0.97	0.97	66	68	0	0	4.69	4.59	4.1	4.4	4.6	4.3	5.6	5.2	Hi
SV 375	1	47.28	46.34	99	1352	1391	104	328	326	9393	9794	17.37	17.25	28.8	30.1	0.99	0.97	63	63	4	2	4.78	4.44	4.0	4.5	4.5	4.3	5.2	5.1	Hi
SX 1887	1	47.02	46.64	99	1334	1378	103	327	327	9270	9658	17.34	17.32	28.3	29.5	1.02	1.00	67	64	0	0	5.09	4.99	3.9	4.3	4.8	4.5	4.3	4.5	Hi
SX 1888	1	47.38	46.34	99	1345	1410	106	328	326	9325	9934	17.40	17.27	28.5	30.6	1.00	0.98	63	62	4	2	4.67	4.78	4.0	4.3	4.2	4.2	5.5	5.5	Hi
SX Marathon	4	47.30	45.59	97	1396	1388	104	328	323	9669	9849	17.37	17.14	29.5	30.6	0.99	0.99	66	61	0	0	4.85	4.82	4.1	4.6	4.3	4.3	5.4	5.5	Hi
Newly Approved																														
BTS 8927	NC	53.07	51.25	109	1482	1533	115	348	343	9720	10284	18.28	18.00	28.0	30.1	0.90	0.87	77	76	0	3	4.42	4.39	3.9	4.0	4.4	4.2	2.6	2.7	Hi
BTS 8938	NC	47.75	47.38	101	1409	1448	109	329	329	9700	10067	17.44	17.39	29.4	30.6	0.98	0.93	67	68	0	0	4.66	4.51	3.9	3.8	3.9	3.7	3.7	3.4	Hi
BTS 8961	NC	45.49	44.32	94	1415	1445	108	321	319	9990	10393	17.12	16.97	31.1	32.6	1.05	1.04	73	73	0	0	4.69	4.48	4.0	4.0	4.1	3.9	2.2	2.4	Hi
BTS 8976	NC	49.57	48.74	104	1351	1438	108	336	334	9116	9845	17.72	17.63	27.1	29.4	0.95	0.94	69	68	0	0	4.15	3.99	3.5	3.6	4.5	4.3	2.9	3.3	Hi
Crystal 912	NC	45.87	44.56	95	1520	1558	117	323	319	10726	11202	17.12	16.96	33.3	35.1	0.99	0.99	75	74	0	0	4.75	4.69	3.7	3.8	3.5	3.6	3.6	3.5	Hi
Crystal 913	NC	48.81	48.37	103	1490	1555	117	333	333	10150	10701	17.61	17.56	30.5	32.2	0.97	0.93	74	73	0	0	4.13	4.12	3.7	3.7	4.6	4.4	2.6	2.6	Hi
Crystal 916	NC	45.26	44.57	95	1410	1493	112	321	319	9967	10704	17.09	17.01	31.0	33.5	1.06	1.04	79	78	0	0	4.49	4.38	3.9	4.0	4.6	4.4	2.4	2.5	Hi
Hilleshög HIL2317	NC	49.24	48.54	103	1385	1443	108	334	333	9428	9940	17.67	17.60	28.2	29.9	0.97	0.94	72	70	0	0	5.05	4.97	3.9	3.9	4.9	4.6	6.0	5.6	Hi
Maribo MA902	NC	48.77	46.45	99	1393	1409	106	333	326	9508	9909	17.60	17.2																	

Table 3. Performance Data of RR Aphanomyces Specialty Varieties - Under Aphanomyces Conditions (Relative to Susceptible Checks) approved for

2021 Growing Season +++

Description	Years Comm	Rev/Ton			Rev/Acre			Rec/Ton		Rec/Acre		Sugar		Yield		CR Rating +		Aph Root +		Fusarium +		Rhizoctonia +	
		2020	2019#	%Sus	2020	2019#	%Sus	2020	2019#	2020	2019#	2020	2019#	2020	2019#	20	2Yr	20	2Yr	20	2Yr	20	2Yr
# of locations		3	0	3	3	0	3	3	0	3	0	3	0	3	0	3	6	3	4	2	4	2	5
Previously Approved																							
BTS 8337	6	40.89	--	133	852	--	144	305.1	--	6280	--	16.38	--	20.4	--	4.46	4.43	3.5	3.5	3.6	3.6	4.4	4.0
BTS 8500	4	32.19	--	105	721	--	122	274.7	--	5986	--	15.00	--	21.4	--	4.38	4.19	4.2	4.2	2.4	2.3	4.6	4.5
BTS 8524	4	32.86	--	107	722	--	122	277.0	--	5914	--	15.09	--	20.9	--	4.38	4.45	4.2	4.4	3.0	3.1	4.1	4.1
BTS 8629	3	32.72	--	106	789	--	134	276.5	--	6493	--	15.03	--	23.1	--	4.55	4.60	3.9	4.6	3.8	3.7	4.3	4.1
BTS 8767	2	32.70	--	106	659	--	112	276.4	--	5410	--	14.95	--	19.1	--	4.38	4.32	4.5	4.4	2.5	2.5	4.7	4.4
Crystal 574	4	33.16	--	108	777	--	132	278.1	--	6328	--	15.06	--	22.3	--	4.64	4.46	4.1	4.1	2.3	2.1	4.2	4.3
Crystal 684	2	32.62	--	106	799	--	136	276.2	--	6622	--	14.93	--	23.6	--	4.44	4.28	4.0	4.1	2.3	2.2	4.2	4.1
Crystal 793	2	37.97	--	123	886	--	150	294.9	--	6732	--	15.80	--	22.4	--	4.31	4.18	3.9	3.8	2.6	2.7	4.8	4.5
Crystal 796	1	36.17	--	117	795	--	135	288.6	--	6223	--	15.55	--	21.2	--	4.95	4.85	3.9	3.9	2.2	2.3	4.5	4.2
Crystal 803	NC	39.43	--	128	908	--	154	299.9	--	6793	--	16.03	--	22.3	--	3.93	3.90	4.0	4.2	2.5	2.6	5.0	4.8
Crystal 804	NC	33.22	--	108	864	--	147	278.7	--	7144	--	15.14	--	25.4	--	4.77	4.61	3.6	4.0	2.3	2.3	3.9	3.8
Crystal 808	NC	35.29	--	115	833	--	141	285.7	--	6702	--	15.44	--	23.4	--	5.07	4.92	4.0	3.8	2.3	2.4	3.9	4.0
Maribo MA717	2	34.86	--	113	731	--	124	284.0	--	5834	--	15.24	--	20.2	--	5.11	5.11	3.8	4.1	4.6	4.7	4.6	4.4
SV 268	3	38.06	--	124	829	--	141	295.2	--	6339	--	15.89	--	21.3	--	4.78	4.80	4.5	4.8	4.0	4.5	5.2	4.7
SV 285	NC	38.37	--	125	822	--	139	296.3	--	6301	--	15.89	--	21.1	--	4.50	4.67	4.3	4.4	5.4	5.1	4.0	4.2
SV 333	5	37.62	--	122	813	--	138	293.7	--	6231	--	15.76	--	20.9	--	4.69	4.59	4.1	4.4	5.6	5.2	4.6	4.3
SX 1888	1	37.03	--	120	787	--	133	291.6	--	6038	--	15.67	--	20.3	--	4.67	4.78	4.0	4.3	5.5	5.5	4.2	4.2
Newly Approved																							
BTS 8927	NC	43.12	--	140	985	--	167	312.6	--	7070	--	16.58	--	22.4	--	4.42	4.39	3.9	4.0	2.6	2.7	4.4	4.2
BTS 8938	NC	37.24	--	121	848	--	144	292.4	--	6467	--	15.70	--	21.6	--	4.66	4.51	3.9	3.8	3.7	3.4	3.9	3.7
BTS 8961	NC	36.54	--	119	835	--	142	290.0	--	6478	--	15.64	--	22.0	--	4.69	4.48	4.0	4.0	2.2	2.4	4.1	3.9
BTS 8976	NC	38.45	--	125	822	--	139	296.6	--	6167	--	15.82	--	20.4	--	4.15	3.99	3.5	3.6	2.9	3.3	4.5	4.3
Crystal 912	NC	35.21	--	114	886	--	150	285.5	--	7041	--	15.44	--	24.4	--	4.75	4.69	3.7	3.8	3.6	3.5	3.5	3.6
Crystal 913	NC	39.55	--	128	951	--	161	300.2	--	7129	--	16.06	--	23.5	--	4.13	4.12	3.7	3.7	2.6	2.6	4.6	4.4
Crystal 916	NC	35.60	--	116	887	--	150	286.8	--	7014	--	15.54	--	24.2	--	4.49	4.38	3.9	4.0	2.4	2.5	4.6	4.4
Hilleshög HIL2317	NC	36.66	--	119	741	--	126	290.5	--	5836	--	15.50	--	20.0	--	5.05	4.97	3.9	3.9	6.0	5.6	4.9	4.6
Hilleshög HM9528RRR	5	36.06	--	117	720	--	122	288.2	--	5703	--	15.42	--	19.6	--	4.84	4.88	3.7	4.1	4.7	4.4	4.6	4.3
Hilleshög HIL9708	3	34.56	--	112	644	--	109	283.0	--	5192	--	15.19	--	18.1	--	4.97	4.96	4.0	4.3	3.6	3.8	3.8	3.8
Hilleshög HIL9920	2	35.57	--	115	706	--	120	286.5	--	5606	--	15.37	--	19.3	--	4.82	4.88	3.6	4.3	6.3	5.8	5.1	4.9
SX 1887	1	37.29	--	121	790	--	134	292.5	--	6033	--	15.71	--	20.2	--	5.09	4.99	3.9	4.3	4.3	4.5	4.8	4.5
SX 1898	NC	37.53	--	122	855	--	145	293.4	--	6643	--	15.74	--	22.6	--	4.73	4.70	3.8	4.3	5.4	5.3	4.2	4.2
Aph Susc Checks		30.80	--		590	--		269.8	--	4984	--	14.75	--	18.0	--								
Mean of Aph Specialty Varieties		36.28	--		809	--		289.0	--	6325	--	15.55	--	21.6	--								

Created 11/2/2020

%Susc = % of susceptible varieties.

+ Aphanomyces ratings from Shakopee, Glyndon and Grandin (res.<4.4, susc>5.0). Cercospora from Randolph MN, Foxhome MN & Michigan (res.<4.4, susc>5.0). Fusarium from RRV (res.<3.0, susc>5.0). Rhizoctonia from Mhd (res.<3.8, susc>5).

++ 2020 Revenue estimates based on a \$45.12 beet payment at 17.5% sugar and 1.5% loss to molasses. 2019 Revenue estimates based on a \$44.38 beet payment. Revenue does not consider hauling or production costs.

+++ 2020 Data from Climax, Perley, and Grandin.

Lack of Aphanomyces pressure at any of the OVT sites prevented collection of Aphanomyces Yield Data for 2019.

Table 4. ACSC Official Trial Disease Nurseries 2018-2020 (Varieties tested in 2020)
Cercospora, Aphanomyces, Rhizoctonia & Fusarium

Code	Description	< 4.5 CR > 5.0					< 4.4 Aph > 5.0					< 3.82 Rhizoctonia > 5.0					< 3.0 Fusarium > 5.0					High Rzm
		20	19	18	2 Yr	3 Yr	20	19	18	2 Yr	3 Yr	20	19	18	2 Yr	3 Yr	20	19	18	2 Yr	3 Yr	
Previously Approved																						
510	BTS 8337	4.46	4.40	4.64	4.43	4.50	3.48	3.45	3.74	3.46	3.56	4.43	3.62	4.07	4.02	4.04	3.63	3.57	4.18	3.60	3.79	Hi Rzm
573	BTS 8500	4.38	4.00	4.40	4.19	4.26	4.16	4.30	4.43	4.23	4.30	4.64	4.28	4.36	4.46	4.43	2.38	2.27	2.46	2.32	2.37	Hi Rzm
552	BTS 8524	4.38	4.52	4.50	4.45	4.47	4.21	4.51	4.08	4.36	4.27	4.14	4.00	4.23	4.07	4.12	3.01	3.14	3.93	3.08	3.36	Hi Rzm
564	BTS 8606	4.79	4.69	4.80	4.74	4.76	4.56	5.11	4.43	4.84	4.70	4.75	4.60	4.24	4.67	4.53	2.87	2.68	3.66	2.78	3.07	Hi Rzm
524	BTS 8629	4.55	4.66	4.52	4.60	4.57	3.92	5.32	3.89	4.62	4.38	4.30	3.89	4.02	4.10	4.07	3.78	3.71	4.40	3.75	3.96	Hi Rzm
536	BTS 8767	4.38	4.26	4.32	4.32	4.32	4.46	4.32	4.28	4.39	4.35	4.68	4.14	4.10	4.41	4.30	2.45	2.45	3.41	2.45	2.77	Hi Rzm
575	BTS 8815	4.86	4.61	4.65	4.73	4.71	4.17	5.24	3.97	4.71	4.46	3.92	4.03	3.88	3.98	3.94	2.58	2.69	3.64	2.63	2.97	Hi Rzm
543	BTS 8882	4.71	4.18	4.53	4.44	4.47	4.33	5.17	4.98	4.75	4.83	4.26	4.27	4.37	4.26	4.30	2.11	2.91	3.39	2.51	2.80	Hi Rzm
547	Crystal 572	4.46	4.68	4.45	4.57	4.53	4.28	4.98	--	4.63	--	4.21	4.14	4.54	4.17	4.30	2.36	2.39	3.70	2.37	2.81	Hi Rzm
514	Crystal 574	4.64	4.28	4.42	4.46	4.44	4.11	3.99	--	4.05	--	4.18	4.45	4.36	4.32	4.33	2.26	2.03	2.87	2.15	2.39	Hi Rzm
509	Crystal 684	4.44	4.12	4.41	4.28	4.33	3.97	4.33	--	4.15	--	4.15	4.01	4.39	4.08	4.18	2.32	2.10	2.96	2.21	2.46	Hi Rzm
565	Crystal 793	4.31	4.04	4.26	4.18	4.20	3.87	3.72	--	3.79	--	4.84	4.18	4.11	4.51	4.38	2.61	2.71	3.59	2.66	2.97	Hi Rzm
516	Crystal 796	4.95	4.74	4.74	4.85	4.81	3.85	3.97	--	3.91	--	4.45	3.85	3.97	4.15	4.09	2.20	2.45	3.36	2.33	2.67	Hi Rzm
533	Crystal 803	3.93	3.88	4.01	3.90	3.94	3.96	4.45	--	4.20	--	5.00	4.54	4.67	4.77	4.73	2.52	2.70	4.11	2.61	3.11	Hi Rzm
503	Crystal 804	4.77	4.46	4.42	4.61	4.55	3.61	4.30	--	3.95	--	3.90	3.72	4.02	3.81	3.88	2.29	2.28	3.05	2.28	2.54	Hi Rzm
560	Crystal 808	5.07	4.78	4.86	4.92	4.90	4.02	3.57	--	3.79	--	3.88	4.09	3.83	3.98	3.93	2.35	2.39	3.12	2.37	2.62	Hi Rzm
574	Hilleshög HIL9708	4.97	4.96	4.71	4.96	4.88	3.96	4.61	4.25	4.28	4.27	3.83	3.87	3.71	3.85	3.80	3.64	3.89	4.61	3.76	4.05	Rzm
559	Hilleshög HIL9920	4.82	4.95	4.79	4.88	4.85	3.65	5.05	4.09	4.35	4.26	5.12	4.68	4.65	4.90	4.82	6.28	5.42	5.51	5.85	5.74	Hi Rzm
508	Hilleshög HM4448RR	5.61	5.48	5.26	5.54	5.45	4.09	4.86	4.53	4.47	4.49	4.76	4.04	4.38	4.40	4.39	4.58	4.80	5.23	4.69	4.87	Rzm
526	Hilleshög HM9528RR	4.84	4.93	4.79	4.88	4.85	3.72	4.56	4.22	4.14	4.17	4.57	4.10	4.04	4.33	4.24	4.68	4.16	4.95	4.42	4.60	Hi Rzm
535	Maribo MA504	5.35	5.34	4.98	5.34	5.22	5.06	6.17	5.30	5.61	5.51	4.83	4.69	4.25	4.76	4.59	4.25	4.61	4.80	4.43	4.55	Hi Rzm
561	Maribo MA717	5.11	5.11	4.78	5.11	5.00	3.77	4.42	4.15	4.10	4.12	4.61	4.15	4.35	4.38	4.37	4.62	4.81	4.86	4.72	4.77	Hi Rzm
548	SV 265	4.55	4.28	4.48	4.41	4.44	3.98	5.47	4.16	4.73	4.54	4.21	4.25	4.32	4.23	4.26	5.70	5.64	5.44	5.67	5.59	Hi Rzm
551	SV 268	4.78	4.82	4.70	4.80	4.77	4.49	5.08	4.21	4.78	4.59	5.24	4.21	4.21	4.73	4.55	4.04	4.92	5.12	4.48	4.69	Hi Rzm
539	SV 285	4.50	4.84	4.52	4.67	4.62	4.28	4.47	3.98	4.38	4.25	4.03	4.38	4.35	4.21	4.26	5.40	4.76	5.42	5.08	5.19	Hi Rzm
504	SV 333	4.69	4.49	4.78	4.59	4.66	4.09	4.70	4.06	4.40	4.29	4.61	4.08	4.23	4.34	4.31	5.64	4.74	5.14	5.19	5.17	Hi Rzm
576	SV 375	4.78	4.11	4.96	4.44	4.62	4.04	5.03	3.83	4.54	4.30	4.54	4.05	4.13	4.30	4.24	5.25	4.97	5.51	5.11	5.24	Hi Rzm
566	SX 1887	5.09	4.89	4.89	4.99	4.95	3.92	4.67	4.49	4.30	4.36	4.80	4.18	4.16	4.49	4.38	4.30	4.68	5.35	4.49	4.77	Hi Rzm
512	SX 1888	4.67	4.89	4.92	4.78	4.83	3.99	4.65	4.03	4.32	4.22	4.17	4.19	4.57	4.18	4.31	5.54	5.51	5.47	5.52	5.51	Hi Rzm
525	SX Marathon	4.85	4.79	5.27	4.82	4.97	4.12	5.15	4.72	4.64	4.66	4.26	4.36	4.19	4.31	4.27	5.37	5.70	5.51	5.53	5.53	Hi Rzm
Newly Approved																						
532	BTS 8927	4.42	4.35	--	4.39	--	3.87	4.06	--	3.96	--	4.37	3.93	--	4.15	--	2.59	2.77	--	2.68	--	Hi Rzm
563	BTS 8938	4.66	4.35	--	4.51	--	3.86	3.75	--	3.80	--	3.90	3.47	--	3.69	--	3.66	3.06	--	3.36	--	Hi Rzm
531	BTS 8961	4.69	4.27	--	4.48	--	4.04	3.89	--	3.97	--	4.11	3.79	--	3.95	--	2.19	2.55	--	2.37	--	Hi Rzm
555	BTS 8976	4.15	3.83	--	3.99	--	3.55	3.55	--	3.55	--	4.52	4.02	--	4.27	--	2.92	3.68	--	3.30	--	Hi Rzm
569	Crystal 912	4.75	4.62	--	4.69	--	3.67	3.91	--	3.79	--	3.54	3.58	--	3.56	--	3.61	3.37	--	3.49	--	Hi Rzm
511	Crystal 913	4.13	4.11	--	4.12	--	3.75	3.58	--	3.66	--	4.58	4.31	--	4.44	--	2.59	2.56	--	2.57	--	Hi Rzm
558	Crystal 916	4.49	4.26	--	4.38	--	3.85	4.17	--	4.01	--	4.56	4.26	--	4.41	--	2.44	2.49	--	2.46	--	Hi Rzm
557	Hilleshög HIL2317	5.05	4.90	--	4.97	--	3.86	3.96	--	3.91	--	4.95	4.19	--	4.57	--	5.97	5.30	--	5.63	--	Hi Rzm
538	Maribo MA902	4.96	4.91	--	4.94	--	4.01	5.31	--	4.66	--	3.93	3.97	--	3.95	--	4.01	3.71	--	3.86	--	Hi Rzm
522	SX 1898	4.73	4.68	--	4.70	--	3.76	4.74	--	4.25	--	4.16	4.21	--	4.19	--	5.41	5.14	--	5.28	--	Hi Rzm

Created 11/2/2020

Green highlighted ratings indicate specialty or good resistance.
Red highlighted ratings indicate level of concern for some fields.
-- indicates data not available

Table 5. Root Aphid Ratings
2020 Growing Season

Intentionally Left Blank

Table 6. Planting & Harvest Dates, Previous Crop and Disease Levels for 2020 ACSC Official Trial Sites *

Location	District / Trial Type	Cooperator	Planting Date	Harvest Date	Preceding Crop	Soil Type	Diseases Present @						Comments
							Aph	Rhc	Rzm	Fus	Maggot	Rt Aphid	
Casselton ND	Mhd/Hlb	Todd Weber Farms	5/4	9/30	Wheat	Medium/Light	L-M	L	N	N	N	N	A few Rhc spots. Heavier Aph in NE and SW corners.
Glyndon MN	Mhd/Hlb	Menholt Farms	5/3	9/9	Wheat	Medium/Light	L	L-M	N	N	N	N	Moderate Rhc in NE corner.
Perley MN	Mhd/Hlb	Hoff Farms	6/7	9/2	Soybeans	Medium	L-M	N	N	N	N	N	Some standing water in spots.
Ada MN	Mhd/Hlb	Corey Jacobson	5/15	9/10	Wheat	Medium	L	N	L	N	N	N	Uniform site.
Hillsboro ND	Mhd/Hlb	SK Farms	5/31	Abandon	Wheat	Medium	L-M	L	N	N	N	N	Non-uniform stunting in Official Trials.
Grandin ND	Mhd/Hlb	Paulsrud Farms	5/23	9/4	Wheat	Medium	L-V	L	N	N	N	N	Aph heavier on south side and nursery. Nursery rated.
Grand Forks ND	EGF/Crk	Drees Farming Association	5/22	9/22	Wheat	Medium/Light	N	L	N	N	N	N	Light Rzm on a few beets. Scattered damage from standing water.
Scandia MN	EGF/Crk	Deboer Farms	5/18	9/8	Wheat	Medium	N	N	L-M	N	N	N	Scattered Rzm symptoms. Some stunted areas.
Climax MN	EGF/Crk	Knutson Farms	5/23	9/28	Wheat	Medium/Light	L-M	N	N	N	N	N	Moderate Aph scattered throughout.
East Grand Forks MN	EGF/Crk	Mark Holy	5/15	9/15	Wheat	Medium	L	N	N	N	N	N	Weaker stands in W end of commercial trial.
St. Thomas ND	Dtn	Kennelly Farms	5/12	9/16 Exp	Wheat	Medium/Light	N	N	N	N	N	N	Commercial trial abandoned due to erratic stands.
Stephen MN	Dtn	Jensen Farms	5/3	Abandon	Wheat	Medium/Heavy	NA	NA	NA	NA	NA	NA	Heavy water damage.
Bathgate ND	Dtn	Shady Bend Farms	5/21	9/18	Wheat	Medium	N	N	N	N	N	L	A few root aphids.

Location	District / Trial Type	Cooperator	Planting Date	Rating Date	Preceding Crop	Soil Type	Diseases Present @						Comments
							Aph	Rhc	Rzm	Fus	Maggot	Rt Aphid	
Moorhead Fus-N MN	Fus Nurs	Nelson Farms	5/17	Multiple	Wheat	Medium/Heavy	NA	NA	NA	V	NA	NA	
Moorhead Fus-S MN	Fus Nurs	Oberg Farms	5/17	Multiple	Soybeans	Medium	NA	L	NA	V	NA	NA	
Mhd Rhc-E MN	Rhc Nurs	Jon Hickel	5/24	8/25	Soybeans	Heavy	NA	V	NA	L	NA	NA	
Mhd Rhc-W MN	Rhc Nurs	Jon Hickel	5/24	8/5	Soybeans	Heavy	NA	V	NA	L-M	NA	NA	
NWROC MN	Rhc Nurs	Albert Sims	5/16	Abandon	Soybeans	Medium	NA	NA	NA	NA	NA	NA	Standing water damaged the stie.
BSDF MI	Rhc Nurs	Mitch McGrath	5/26	8/11	NA	NA	NA	V	NA	NA	NA	NA	
Shakopee MN	Aphanomyces	Patrick O'Boyle	5/8	8/27	NA	NA	V	NA	NA	NA	NA	NA	
Glyndon MN	Aphanomyces	Dennis Simmons	5/30	8/25	Corn	Medium	V	NA	NA	NA	NA	NA	
Perley MN	Aphanomyces	Hoff Farms	6/7	Abandon	Soybeans	Medium	L-M	N	N	N	N	N	Water and deer damage
Grandin ND	Aphanomyces	Paulsrud Farms	5/23	8/24	Wheat	Medium	M-V	L	N	N	N	N	Symptoms more severe on S side.
Longmont CO	Root Aphids	Kara Guffey	5/8	10/9	NA	NA	NA	NA	NA	NA	NA	V	
Foxhome MN	Cercospora	NDSU/Kevin Etzler	5/8	Multiple	Wheat	Medium	NA	NA	NA	NA	NA	NA	
BSDF MI	Cercospora	Mitch McGrath	5/23	Multiple	NA	NA	NA	NA	NA	NA	NA	NA	Nursery was reinoculated due to rain following first inoculation.
Randolph MN	Cercospora	Patrick O'Boyle	5/3	Multiple	NA	NA	NA	NA	NA	NA	NA	NA	

Created 10-30-2020

* Fertilizer applied in accordance with cooperative recommendations.

@ Disease notes for Aphanomyces, Rhizoctonia, Rhizomania, Fusarium, Root Maggot and Root Aphids were based upon visual evaluations (N=none, L=light, M=moderate, V=severe, NA=not observed)

Table 7. Seed Treatments Used on Varieties in Official Variety Trials in 2020

Description	Years in Trial	Years ** Comm.	Fungicide (Rhizoctonia)	Insecticide (Spring Tails & Maggots)	Tachigaren Rate (Aphanomyces)	Priming (Emergence)	Fungicide (Damping Off)
ACSC Commercial							
BTS 8337	8	6	Systiva	Poncho Beta	35	Ultipro	Allegiance Thiram
BTS 8500	6	4	Systiva	Poncho Beta	35	Ultipro	Allegiance Thiram
BTS 8524	6	4	Systiva	Poncho Beta	35	Ultipro	Allegiance Thiram
BTS 8606	5	3	Systiva	Poncho Beta	35	Ultipro	Allegiance Thiram
BTS 8629	5	3	Systiva	Poncho Beta	35	Ultipro	Allegiance Thiram
BTS 8767	4	2	Systiva	Poncho Beta	35	Ultipro	Allegiance Thiram
BTS 8815	3	1	Systiva	Poncho Beta	35	Ultipro	Allegiance Thiram
BTS 8882	3	1	Systiva	Poncho Beta	35	Ultipro	Allegiance Thiram
Crystal 572	6	4	Kabina	Poncho Beta	45	XBEET	Allegiance Thiram
Crystal 574	6	4	Kabina	Poncho Beta	45	XBEET	Allegiance Thiram
Crystal 684	5	2	Kabina	Poncho Beta	45	XBEET	Allegiance Thiram
Crystal 793	4	2	Kabina	Poncho Beta	45	XBEET	Allegiance Thiram
Crystal 796	4	1	Kabina	Poncho Beta	45	XBEET	Allegiance Thiram
Hilleshög HIL9708	6	3	Vibrance	Cruiser Maxx	20	XBEET	Apron XL Maxim
Hilleshög HIL9920	4	2	Vibrance	Cruiser Maxx	20	XBEET	Apron XL Maxim
Hilleshög HM4448RR	8	7	Vibrance	Cruiser Maxx	20	XBEET	Apron XL Maxim
Hilleshög HM9528RR	7	5	Vibrance	Cruiser Maxx	20	XBEET	Apron XL Maxim
Maribo MA504	6	4	Vibrance	Cruiser Maxx	20	XBEET	Apron XL Maxim
Maribo MA717	4	2	Vibrance	Cruiser Maxx	20	XBEET	Apron XL Maxim
SV 265	5	3	Metlock/Rizolex/Vibrance	Nipsit	45	XBEET	Sebring Thiram
SV 268	5	3	Metlock/Rizolex/Vibrance	Nipsit	45	XBEET	Sebring Thiram
SV 333	8	5	Metlock/Rizolex/Vibrance	Nipsit	45	XBEET	Sebring Thiram
SV 375	4	1	Metlock/Rizolex/Vibrance	Nipsit	45	XBEET	Sebring Thiram
SX 1887	3	1	Metlock/Rizolex/Kabina	Nipsit	20	XBEET	Sebring Thiram
SX 1888	3	1	Metlock/Rizolex/Kabina	Nipsit	20	XBEET	Sebring Thiram
SX Marathon	6	4	Metlock/Rizolex/Kabina	Nipsit	20	XBEET	Sebring Thiram
Crystal 355RR(Check)	8	5	Kabina	Poncho Beta	45	XBEET	Allegiance Thiram
Crystal 578RR (Check)	6	3	Kabina	Poncho Beta	45	XBEET	Allegiance Thiram
BTS 8572 (Check)	6	4	Systiva	Poncho Beta	35	Ultipro	Allegiance Thiram
AP SUS RR#5	4	7	Systiva	Poncho Beta	35	Ultipro	Allegiance Thiram
AP CHK MOD RES RR#4	9	7	Kabina	Poncho Beta	45	XBEET	Allegiance Thiram
Root Aphid Susc Chk#3	7	5	Vibrance	Cruiser Maxx	45	XBEET	Apron XL Maxim
ACSC Experimental							
BTS 8007	1	NC	Kabina	Poncho Beta	35	Ultipro	Allegiance Thiram
BTS 8009	1	NC	Kabina	Poncho Beta	35	Ultipro	Allegiance Thiram
BTS 8013	1	NC	Kabina	Poncho Beta	35	Ultipro	Allegiance Thiram
BTS 8018	1	NC	Kabina	Poncho Beta	35	Ultipro	Allegiance Thiram
BTS 8034	1	NC	Kabina	Poncho Beta	35	Ultipro	Allegiance Thiram
BTS 8042	1	NC	Kabina	Poncho Beta	35	Ultipro	Allegiance Thiram
BTS 8055	1	NC	Kabina	Poncho Beta	35	Ultipro	Allegiance Thiram
BTS 8073	1	NC	Kabina	Poncho Beta	35	Ultipro	Allegiance Thiram
BTS 8090	1	NC	Kabina	Poncho Beta	35	Ultipro	Allegiance Thiram
BTS 8092	1	NC	Kabina	Poncho Beta	35	Ultipro	Allegiance Thiram
BTS 8927	2	NC	Kabina	Poncho Beta	35	Ultipro	Allegiance Thiram
BTS 8938	2	NC	Kabina	Poncho Beta	35	Ultipro	Allegiance Thiram
BTS 8961	2	NC	Kabina	Poncho Beta	35	Ultipro	Allegiance Thiram
BTS 8976	2	NC	Kabina	Poncho Beta	35	Ultipro	Allegiance Thiram
Crystal 021	1	NC	Kabina	Poncho Beta	45	XBEET	Allegiance Thiram
Crystal 022	1	NC	Kabina	Poncho Beta	45	XBEET	Allegiance Thiram
Crystal 024	1	NC	Kabina	Poncho Beta	45	XBEET	Allegiance Thiram
Crystal 025	1	NC	Kabina	Poncho Beta	45	XBEET	Allegiance Thiram
Crystal 026	1	NC	Kabina	Poncho Beta	45	XBEET	Allegiance Thiram
Crystal 027	1	NC	Kabina	Poncho Beta	45	XBEET	Allegiance Thiram
Crystal 029	1	NC	Kabina	Poncho Beta	45	XBEET	Allegiance Thiram
Crystal 803	3	NC	Kabina	Poncho Beta	45	XBEET	Allegiance Thiram
Crystal 804	3	NC	Kabina	Poncho Beta	45	XBEET	Allegiance Thiram
Crystal 808	3	NC	Kabina	Poncho Beta	45	XBEET	Allegiance Thiram
Crystal 912	2	NC	Kabina	Poncho Beta	45	XBEET	Allegiance Thiram
Crystal 913	2	NC	Kabina	Poncho Beta	45	XBEET	Allegiance Thiram
Crystal 916	2	NC	Kabina	Poncho Beta	45	XBEET	Allegiance Thiram
Hilleshög HIL2233	3	NC	Vibrance	Cruiser Maxx	45	HIL-Activate	Apron XL Maxim
Hilleshög HIL2317	2	NC	Vibrance	Cruiser Maxx	45	HIL-Activate	Apron XL Maxim
Hilleshög HIL2320	2	NC	Vibrance	Cruiser Maxx	45	HIL-Activate	Apron XL Maxim
Hilleshög HIL2366	1	NC	Vibrance	Cruiser Maxx	45	XBEET	Apron XL Maxim
Hilleshög HIL2367	1	NC	Vibrance	Cruiser Maxx	45	XBEET	Apron XL Maxim
Hilleshög HIL2368	1	NC	Vibrance	Cruiser Maxx	45	XBEET	Apron XL Maxim
Hilleshög HIL2369	1	NC	Vibrance	Cruiser Maxx	45	XBEET	Apron XL Maxim
Hilleshög HIL2370	1	NC	Vibrance	Cruiser Maxx	45	XBEET	Apron XL Maxim
Maribo MA902	2	NC	Vibrance	Cruiser Maxx	45	XBEET	Apron XL Maxim
Maribo MA903	2	NC	Vibrance	Cruiser Maxx	45	XBEET	Apron XL Maxim
Maribo MA922	1	NC	Vibrance	Cruiser Maxx	45	XBEET	Apron XL Maxim
Maribo MA923	1	NC	Vibrance	Cruiser Maxx	45	XBEET	Apron XL Maxim
SV 201	1	NC	Metlock/Rizolex/Vibrance	Nipsit	45	XBEET	Sebring Thiram
SV 202	1	NC	Metlock/Rizolex/Vibrance	Nipsit	45	XBEET	Sebring Thiram
SV 203	1	NC	Metlock/Rizolex/Vibrance	Nipsit	45	XBEET	Sebring Thiram
SV 204	1	NC	Metlock/Rizolex/Vibrance	Nipsit	45	XBEET	Sebring Thiram
SV 285	3	NC	Metlock/Rizolex/Vibrance	Nipsit	45	XBEET	Sebring Thiram
SV 393	2	NC	Metlock/Rizolex/Vibrance	Nipsit	45	XBEET	Sebring Thiram
SX 1801	1	NC	Metlock/Rizolex/Kabina	Nipsit	20	XBEET	Sebring Thiram
SX 1802	1	NC	Metlock/Rizolex/Kabina	Nipsit	20	XBEET	Sebring Thiram
SX 1803	1	NC	Metlock/Rizolex/Kabina	Nipsit	20	XBEET	Sebring Thiram
SX 1804	1	NC	Metlock/Rizolex/Kabina	Nipsit	20	XBEET	Sebring Thiram
SX 1898	2	NC	Metlock/Rizolex/Kabina	Nipsit	20	XBEET	Sebring Thiram
Crystal 355RR(Check)	8	5	Kabina	Poncho Beta	45	XBEET	Allegiance Thiram
BTS 8572 (Check)	6	4	Systiva	Poncho Beta	35	Ultipro	Allegiance Thiram
BTS 8337 (Check)	8	6	Systiva	Poncho Beta	35	Ultipro	Allegiance Thiram
Crystal 578RR (Check)	6	3	Kabina	Poncho Beta	45	XBEET	Allegiance Thiram

NA indicates no treatment applied in this category.

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