

## SMBSC Agricultural Staff Variety Strip Trial - Summary Analysis

<u>Variety</u>	<b>Stand Count</b>			<b>Extractable</b>		<b>Percent of Mean</b>
	<b>28 DAP</b>				<b>Sugar</b>	
	<u>Beets/100' row</u>	<u>Sugar %</u>	<u>Purity %</u>	<u>Tons / Acre</u>	<u>per Acre</u>	<u>Revenue per Acre</u>
Beta 92RR30	189.5	16.9	92.0	31.6	9121.2	97.8%
Beta 9475	206.8	16.6	92.1	32.7	9378.6	100.2%
Beta 9505	195.9	16.1	91.9	34.3	9404.6	95.6%
Crystal M509 Kabina	206.0	16.0	91.9	38.2	10417.6	105.5%
Crystal M509 Systiva	200.4	15.9	91.7	35.4	9578.8	96.3%
Crystal M579	200.0	17.3	92.2	32.5	9729.5	108.4%
Hilleshog 9739	166.5	16.1	91.8	32.1	8860.6	91.3%
SV 863	167.8	16.3	92.3	36.0	10065.9	105.0%
Mean	191.6	16.4	92.0	34.1	9569.6	100.0
%CV	5.4	1.7	0.4	7.7	6.8	6.6
PR>F	<0.0001	<0.0001	0.1168	<0.0001	0.0004	<0.0001
LSD (0.05)	10.4	0.3	0.4	2.7	649.7	6.4
Reps	8	8	8	8	8	8

Combined data from 8 locations with each location considered a replicate.

Locations: Renville, Hector, Redwood, Danube, Belgrade, Murdock, Cosmos, Montevideo.

Revenue is calculated using the 2016 crop payment calculator, utilizing values released Oct. 17, 2017 for the 2016 crop final payment.

**SMBSC Variety Strip Trial - Renville**

<u>Variety</u>	<u>Stand Count</u> <u>28 DAP</u>			<u>Tons / Acre</u>	<u>Extractable</u>	<u>Extractable</u>	<u>Percent of Mean</u> <u>Revenue per Acre</u>
	<u>Beets/100' row</u>	<u>Sugar %</u>	<u>Purity %</u>		<u>Sugar</u> <u>per Ton</u>	<u>Sugar</u> <u>per Acre</u>	
Beta 92RR30	188.8	17.1	92.3	29.3	295.8	8671.6	99.4%
Beta 9475	222.5	16.7	91.9	30.8	287.2	8849.7	98.5%
Beta 9505	187.5	16.4	91.6	30.8	280.8	8636.0	93.8%
Crystal M509 Kabina	218.8	16.1	91.9	34.9	275.7	9631.1	102.6%
Crystal M509 Systiva	202.5	15.9	91.7	34.1	270.7	9236.4	96.4%
Crystal M579	235.0	17.5	92.4	32.2	303.9	9770.5	114.8%
Hilleshog 9739	205.0	16.0	92.3	31.5	276.4	8705.9	93.0%
SV RR863	163.8	16.5	92.3	32.3	284.7	9201.7	101.5%
Average	203.0	16.5	92.0	32.0	284.4	9087.9	100.0%

Planted: May 14

Harvested: Sept 29

Agriculturalist: Cody Bakker

**SMBSC Variety Strip Trial - Hector**

<u>Variety</u>	<u>Stand Count</u> <u>28 DAP</u>			<u>Tons / Acre</u>	<u>Extractable</u>	<u>Extractable</u>	<u>Percent of Mean</u> <u>Revenue per Acre</u>
	<u>Beets/100' row</u>	<u>Sugar %</u>	<u>Purity %</u>		<u>Sugar</u> <u>per Ton</u>	<u>Sugar</u> <u>per Acre</u>	
Beta 92RR30	190.0	17.4	92.4	27.9	301.5	8408.6	103.3%
Beta 9475	195.0	16.8	92.4	30.1	290.2	8730.2	103.4%
Beta 9505	191.7	15.5	91.8	27.6	265.4	7328.7	78.7%
Crystal M509 Kabina	197.5	16.6	92.6	33.7	287.9	9704.1	114.0%
Crystal M509 Systiva	183.8	15.5	91.9	30.4	265.1	8068.1	86.5%
Crystal M579	183.3	17.6	92.5	31.1	306.6	9544.0	119.1%
Hilleshog 9739	146.7	16.3	92.1	28.6	280.8	8034.5	92.0%
SV RR863	158.3	16.6	92.5	30.5	287.6	8784.3	103.1%
Average	180.8	16.5	92.3	30.0	285.6	8575.3	100.0%
Crystal M380*	195.0	16.4	91.7	25.4	279.9	7117.8	81.2%
SV 958*	198.3	16.2	92.2	29.3	279.4	8173.4	93.1%

Planted: April 25

Harvested: Oct. 26

Agriculturalist: Pete Caspers

\*Variety not included in this strip trial average calculation, percent of mean is against the trial mean/average. Variety was not included in summary analysis of combined trials.

### SMBSC Variety Strip Trial - Redwood

<u>Variety</u>	<u>Stand Count</u> 28 DAP			<u>Tons / Acre</u>	<u>Extractable</u>	<u>Extractable</u>	<u>Percent of Mean</u> <u>Revenue per Acre</u>
	<u>Beets/100' row</u>	<u>Sugar %</u>	<u>Purity %</u>		<u>Sugar</u> <u>per Ton</u>	<u>Sugar</u> <u>per Acre</u>	
Beta 92RR30	156.3	16.0	91.2	45.7	272.0	12441.8	99.0%
Beta 9475	166.3	16.7	92.0	39.9	287.7	11488.0	97.1%
Beta 9505	163.8	15.4	91.2	53.1	260.9	13860.9	105.0%
Crystal M509 Kabina	166.3	15.3	91.6	54.8	261.0	14299.7	108.3%
Crystal M509 Systiva	158.8	15.5	91.3	47.8	262.4	12545.7	95.7%
Crystal M579	156.3	17.0	91.8	45.7	291.9	13325.0	114.3%
Hilleshog 9739	118.8	16.3	92.0	34.9	280.6	9781.2	80.6%
SV RR863	146.3	15.4	91.0	51.0	260.1	13249.7	99.9%
Average	154.1	16.0	91.5	46.6	272.1	12624.0	100.0%
SV 958*	152.5	16.2	90.7	45.2	273.5	12366.2	99.0%

Planted: April 11

Harvested: Sept 29

Agriculturalist: Chris Dunsmore

\*Variety not included in this strip trial average calculation, percent of mean is against the trial mean/average. Variety was not included in summary analysis of combined trials.

### SMBSC Variety Strip Trial - Danube

<u>Variety</u>	<u>Stand Count</u> 28 DAP			<u>Tons / Acre</u>	<u>Extractable</u>	<u>Extractable</u>	<u>Percent of Mean</u> <u>Revenue per Acre</u>
	<u>Beets/100' row</u>	<u>Sugar %</u>	<u>Purity %</u>		<u>Sugar</u> <u>per Ton</u>	<u>Sugar</u> <u>per Acre</u>	
Beta 92RR30	176.0	15.8	92.0	33.5	271.1	9073.3	95.9%
Beta 9475	188.0	15.7	92.1	36.5	270.0	9848.3	103.6%
Beta 9505	178.0	15.4	92.5	34.9	264.8	9255.1	95.1%
Crystal M509 Kabina	186.3	15.3	92.6	40.8	263.2	10742.7	109.6%
Crystal M509 Systiva	174.4	15.3	92.1	38.4	262.3	10080.3	102.4%
Crystal M579	184.0	16.2	91.7	32.8	277.8	9097.8	98.8%
Hilleshog 9739	144.0	15.4	91.5	34.0	261.6	8889.8	90.0%
SV RR863	155.0	15.8	92.4	36.2	272.1	9849.6	104.5%
Average	173.2	15.6	92.1	35.9	267.9	9604.6	100.0%

Planted: April 17

Harvested: Sept 14

Agriculturalist: Chris Dunsmore

**SMBSC Variety Strip Trial - Belgrade**

<u>Variety</u>	<u>Stand Count</u> <u>28 DAP</u>			<u>Tons / Acre</u>	<u>Extractable</u>	<u>Extractable</u>	<u>Percent of Mean</u> <u>Revenue per Acre</u>
	<u>Beets/100' row</u>	<u>Sugar %</u>	<u>Purity %</u>		<u>Sugar</u> <u>per Ton</u>	<u>Sugar</u> <u>per Acre</u>	
Beta 92RR30	223.8	18.0	91.7	26.1	309.8	8082.1	93.3%
Beta 9475	242.5	17.4	92.0	30.8	299.2	9217.2	103.1%
Beta 9505	243.8	17.3	91.7	29.5	297.5	8773.6	97.6%
Crystal M509 Kabina	248.8	16.9	91.1	35.8	286.4	10250.8	109.9%
Crystal M509 Systiva	256.3	17.1	91.7	30.6	293.3	8981.0	98.5%
Crystal M579	227.5	18.2	92.3	29.4	315.7	9293.1	109.0%
Hilleshog 9739	223.8	17.0	90.7	27.3	288.5	7870.2	85.0%
SV RR863	198.8	17.3	92.4	30.8	300.1	9235.8	103.6%
Average	233.1	17.4	91.7	30.0	298.8	8963.0	100.0%
SV 958*	237.5	17.1	92.1	34.9	295.3	10313.7	113.9%

Planted: April 23

Harvested: Oct 27

Agriculturalist: Jared Kelm

\*Variety not included in this strip trial average calculation, percent of mean is against the trial mean/average. Variety was not included in summary analysis of combined trials.

**SMBSC Variety Strip Trial - Murdock**

<u>Variety</u>	<u>Stand Count</u> <u>28 DAP</u>			<u>Tons / Acre</u>	<u>Extractable</u>	<u>Extractable</u>	<u>Percent of Mean</u> <u>Revenue per Acre</u>
	<u>Beets/100' row</u>	<u>Sugar %</u>	<u>Purity %</u>		<u>Sugar</u> <u>per Ton</u>	<u>Sugar</u> <u>per Acre</u>	
Beta 92RR30	221.3	17.1	92.6	21.8	296.0	6455.1	95.8%
Beta 9475	227.5	16.3	91.8	24.4	279.4	6827.5	95.6%
Beta 9505	212.5	16.4	91.7	26.9	280.6	8564.3	106.2%
Crystal M509 Kabina	223.8	15.9	92.2	26.5	273.8	7254.3	99.3%
Crystal M509 Systiva	218.8	16.1	91.8	25.6	274.9	7045.0	96.9%
Crystal M579	212.5	17.2	92.2	23.0	297.4	6831.5	101.9%
Hilleshog 9739	167.5	15.8	91.4	27.4	268.9	7377.2	98.9%
SV RR863	185.0	16.2	92.3	27.0	279.3	7534.3	105.4%
Average	208.6	16.4	92.0	25.3	281.3	7236.1	100.0%

Planted: April 24

Harvested: Sept 21

Agriculturalist: Bill Luepke

### SMBSC Variety Strip Trial - Maynard

<u>Variety</u>	<u>Stand Count</u> <u>28 DAP</u>			<u>Tons / Acre</u>	<u>Extractable</u>	<u>Extractable</u>	<u>Percent of Mean</u> <u>Revenue per Acre</u>
	<u>Beets/100' row</u>	<u>Sugar %</u>	<u>Purity %</u>		<u>Sugar</u> <u>per Ton</u>	<u>Sugar</u> <u>per Acre</u>	
Beta 9505	206.3	17.5	90.9	30.5	297.6	9085.0	95.8%
Crystal M509 Kabina	207.5	16.9	91.8	33.6	290.4	9752.3	100.4%
Crystal M509 Systiva	213.8	17.0	91.6	32.6	290.3	9453.5	97.3%
Crystal M579	211.3	18.5	92.0	29.2	319.4	9329.6	104.7%
Hilleshog 9739	183.8	17.2	92.5	31.0	297.7	9223.6	97.3%
SV RR863	203.8	17.3	92.4	32.7	300.6	9827.5	104.6%
Average	205.4	17.4	91.9	31.6	299.3	9445.3	100.0%
Crystal 018*	211.3	18.3	92.1	32.7	317.7	10380.3	116.0%

Planted: May 9

Harvested: Oct 17

Agriculturalist: Austin Neubauer

\*Trial was not included in the summary analysis because it lacked the full eight required entries to be treated as a replicate.

\*Variety not included in this strip trial average calculation, percent of mean is against the trial mean/average. Variety was not included in summary analysis of combined trials.

### SMBSC Variety Strip Trial - Cosmos

<u>Variety</u>	<u>Stand Count</u> <u>28 DAP</u>			<u>Tons / Acre</u>	<u>Extractable</u>	<u>Extractable</u>	<u>Percent of Mean</u> <u>Revenue per Acre</u>
	<u>Beets/100' row</u>	<u>Sugar %</u>	<u>Purity %</u>		<u>Sugar</u> <u>per Ton</u>	<u>Sugar</u> <u>per Acre</u>	
Beta 92RR30	152.5	16.4	91.4	28.7	280.5	8063.6	90.9%
Beta 9475	175.0	16.3	92.0	32.3	280.0	9053.5	101.9%
Beta 9505	170.0	15.8	92.3	30.7	272.7	8364.2	91.4%
Crystal M509 Kabina	175.0	15.7	91.7	35.6	267.9	9541.4	102.2%
Crystal M509 Systiva	190.0	15.5	91.1	36.0	262.7	9464.8	99.0%
Crystal M579	178.8	17.1	91.8	32.0	294.4	9431.3	111.7%
Hilleshog 9739	147.5	15.6	92.2	31.3	267.9	8371.3	89.6%
SV RR863	147.5	16.3	93.0	35.0	283.4	9930.4	113.2%
Average	167.0	16.1	91.9	32.7	276.2	9027.6	100.0%

Planted: May 7

Harvested: Sept 29

Agriculturalist: Les Plumley

**SMBSC Variety Strip Trial - Montevideo**

<u>Variety</u>	<u>Stand Count</u> <u>28 DAP</u>			<u>Tons / Acre</u>	<u>Extractable</u>	<u>Extractable</u>	<u>Percent of Mean</u> <u>Revenue per Acre</u>
	<u>Beets/100' row</u>	<u>Sugar %</u>	<u>Purity %</u>		<u>Sugar</u> <u>per Ton</u>	<u>Sugar</u> <u>per Acre</u>	
Beta 92RR30	207.5	17.2	92.2	39.6	297.0	11773.8	105.0%
Beta 9475	237.5	17.1	92.8	37.1	297.0	11014.2	98.2%
Beta 9505	220.0	16.2	92.7	40.7	281.7	11469.5	97.0%
Crystal M509 Kabina	231.3	16.1	91.5	43.2	275.5	11916.5	98.4%
Crystal M509 Systiva	218.8	16.3	92.3	39.8	281.6	11209.1	94.7%
Crystal M579	222.5	17.6	92.9	34.2	308.0	10542.6	97.2%
Hilleshog 9739	178.8	16.5	91.9	41.8	283.9	11854.6	101.0%
SV RR863	187.5	16.4	92.4	44.9	283.6	12741.7	108.5%
Average	213.0	16.7	92.3	40.2	288.5	11565.3	100.0%

Planted: April 24

Harvested: Oct. 23

Agriculturalist: Scott Thaden

**SMBSC Variety Strip Trial - Benson**

<u>Variety</u>	<u>Stand Count</u> <u>28 DAP</u>			<u>Tons / Acre</u>	<u>Extractable</u>	<u>Extractable</u>	<u>Percent of Mean</u> <u>Revenue per Acre</u>
	<u>Beets/100' row</u>	<u>Sugar %</u>	<u>Purity %</u>		<u>Sugar</u> <u>per Ton</u>	<u>Sugar</u> <u>per Acre</u>	
Beta 92RR30	216.3	16.5	92.6	26.9	285.9	7692.0	101.9%
Beta 9475	208.8	16.6	92.2	28.7	286.0	8212.6	108.8%
Beta 9505	206.3	15.4	92.2	27.2	264.9	7211.1	87.7%
Crystal M509 Kabina	211.3	15.6	92.4	31.1	268.8	8371.2	103.6%
Crystal M509 Systiva	218.8	14.8	92.4	29.6	253.5	7492.1	86.2%
Crystal M579	238.8	16.8	92.2	27.4	290.7	7959.1	107.2%
Hilleshog 9739	175.0	15.3	91.5	28.2	260.7	7341.7	87.6%
SV RR863	183.8	15.9	92.6	33.3	275.8	9183.1	117.0%
Average	207.3	15.9	92.3	29.0	273.3	7932.9	100.0%

Planted: April 25

Harvested: Oct 23

Agriculturalist: Scott Thaden

\*Strip Trial was not machine harvested. Ten foot of row was harvested from 10 points across the strip trial for each variety and yields calculated. This trial was not included in summary analysis, due to harvest method.