

SMBSC Agricultural Staff Variety Strip Trial - Summary

Strip Trial Means Table

<u>Variety</u>	<u>Stand Count</u> 28 DAP			<u>Tons / Acre</u>	<u>Extractable</u>	<u>Percent of Mean</u>
	<u>Beets/100' row</u>	<u>Sugar %</u>	<u>Purity %</u>		<u>Sugar per Acre</u>	<u>Revenue per Acre</u>
Beta 9780	183	16.8	89.8	30.7	8734.8	100.7%
Beta 9810	194	16.7	89.4	30.4	8475.8	97.6%
Beta 9986	207	16.3	90.1	33.6	9264.7	103.9%
Crystal M821	188	16.8	89.5	28.5	8057.8	93.1%
Crystal M837	201	16.8	89.6	29.1	8242.8	94.4%
Hilleshog 2327	202	16.5	89.7	32.8	9104.2	103.6%
SV 883	204	16.8	89.8	31.5	8899.1	104.82%
SV 894	200	16.7	89.7	31.4	8813.1	101.97%
Mean	197	16.7	89.7	31.0	8699.0	100.0
%CV	6	1.8	0.6	5.4	6.3	8.4
PR>F	0.0023	0.0181	0.2626	<0.0001	0.0005	0.0428
LSD (0.05)	12	0.3	0.5	1.7	548.3	8.4
Reps	8	8	8	8	8	8

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

Locations: Renville, Hector, Redwood Falls, Willmar, Raymond, Maynard, Benson, and Bird Island.

Revenue is calculated using the 2019 crop payment calculator, utilizing values released Nov. 21, 2019

SMBSC Variety Strip Trial - Renville

Variety	28 DAP Stand				Extractable	Extractable	Percent Rev/Acre	Variety
	Beets/100' row	Sugar %	Purity %	Tons / Acre	Sugar per Ton	Sugar per Acre		
Beta 9780	195	17.7	90.9	27.9	300.5	8372	93.5%	Beta 9780
Beta 9810	183	17.6	90.7	29.5	298.8	8803	97.8%	Beta 9810
Beta 9986	208	17.3	91.3	33.7	295.9	9971	109.7%	Beta 9986
Crystal M821	198	18.2	91.2	25.2	311.5	7862	90.9%	Crystal M821
Crystal M837	183	17.9	91.0	26.1	303.9	7942	89.7%	Crystal M837
Hilleshog 2327	180	17.8	91.4	31.4	304.2	9557	108.0%	Hilleshog 2327
SV 883	196	18.1	91.2	27.7	309.0	8546	98.0%	SV 883
SV 894	216	18.2	91.5	31.0	312.3	9693	112.3%	SV 894
Crystal M579*	178	18.0	91.4	27.8	308.4	8561	98.1%	Crystal M579*
Average	195	17.8	91.2	29.1	304.5	8843.2	100.0%	Average

Planted: April 23, 2020

Harvested: September 30

Agriculturalist: Cody Bakker

*Denotes variety shown with final data, but not included with average/statistical analysis

SMBSC Variety Strip Trial - Hector

Variety	28 DAP Stand				Extractable	Extractable	Percent Rev/Acre	Variety
	Beets/100' row	Sugar %	Purity %	Tons / Acre	Sugar per Ton	Sugar per Acre		
Beta 9780	203.8	17.4	89.8	28.7	291.0	8345.9	96.7%	Beta 9780
Beta 9810	201.3	17.0	88.2	29.0	276.4	8002.3	87.6%	Beta 9810
Beta 9986	255.0	17.2	90.8	32.5	291.8	9488.0	110.2%	Beta 9986
Crystal M821	205.0	16.5	88.3	27.6	268.8	7410.5	78.4%	Crystal M821
Crystal M837	205.0	17.3	89.1	29.6	285.6	8461.3	96.1%	Crystal M837
Hilleshog 2327	218.8	17.5	89.5	35.1	291.4	10221.8	118.6%	Hilleshog 2327
SV 883	228.8	17.2	89.3	34.2	284.9	9751.3	110.4%	SV 883
SV 894	227.5	17.2	89.1	32.0	283.6	9061.8	102.1%	SV 894
SV 881*	218.8	16.8	89.1	33.1	277.6	9178.7	100.9%	SV 881*
Hilleshog 701*	216.3	17.1	90.0	30.2	286.4	8639.4	98.4%	Hilleshog 701*
Hilleshog 702*	220.0	16.3	88.3	31.3	265.2	8297.3	86.3%	Hilleshog 702*
Hilleshog 704*	221.3	17.3	88.9	33.1	285.3	9430.0	106.9%	Hilleshog 704*
Average	218.1	17.2	89.2	31.1	284.2	8842.9	100.0%	Average

Planted: April 21, 2020

Harvested: October 18, 2020

Agriculturalist - Pete Caspers

*Denotes variety shown with final data, but not included with average/statistical analysis

SMBSC Variety Strip Trial - Redwood Falls

Variety	28 DAP Stand				Extractable	Extractable	Percent Rev/Acre	Variety
	Beets/100' row	Sugar %	Purity %	Tons / Acre	Sugar per Ton	Sugar per Acre		
Beta 9780	171	15.7	88.7	33.2	256.3	8506.1	99.0%	Beta 9780
Beta 9810	175	16.1	87.8	31.5	259.9	8188.8	97.1%	Beta 9810
Beta 9986	193	15.5	88.4	36.0	252.6	9086.6	103.5%	Beta 9986
Crystal M821	158	16.1	87.6	31.7	258.1	8168.8	95.9%	Crystal M821
Crystal M837	186	16.1	88.1	30.4	260.3	7916.6	94.1%	Crystal M837
Hilleshog 2327	183	15.8	88.3	34.9	257.3	8976.6	105.0%	Hilleshog 2327
SV 883	179	15.9	87.7	34.6	255.4	8836.0	102.3%	SV 883
SV 894	168	15.8	88.4	34.5	256.3	8854.8	103.0%	SV 894
SV 863*	173	15.9	88.5	33.5	260.2	8727.9	103.6%	SV 863*
Average	176	15.9	88.1	33.3	257.0	8566.8	100.0%	Average

Planted: May 6, 2019

Harvested: October 15, 2019

Agriculturalist: Chris Dunsmore

*Denotes variety shown with final data, but not included with average/statistical analysis

SMBSC Variety Strip Trial - Belgrade**

Variety	28 DAP Stand				Extractable	Extractable	Percent Rev/Acre	Variety
	Beets/100' row	Sugar %	Purity %	Tons / Acre	Sugar per Ton	Sugar per Acre		
Beta 9780	189	18.4	91.8	40.9	317.0	12963.8	104.9%	Beta 9780
Beta 9810	169	17.9	90.1	37.8	301.1	11383.8	87.8%	Beta 9810
Crystal M821	186	17.8	90.4	38.8	299.8	11618.4	89.3%	Crystal M821
Crystal M837	211	18.1	91.5	42.4	311.1	13176.8	104.9%	Crystal M837
Hilleshog 2327	193	18.3	91.7	41.1	315.6	12978.5	104.6%	Hilleshog 2327
SV 881	198	18.0	92.1	42.5	312.4	13263.0	106.0%	SV 881
SV 883	213	17.8	91.2	41.7	303.6	12664.1	98.5%	SV 883
SV 894	195	18.3	90.7	42.2	310.4	13088.0	104.0%	SV 894
Average	194	18.1	91.2	40.9	308.9	12642.0	100.0%	Average

Planted: April 23, 2020

Harvested: October 16, 2020

Agriculturalist: Jared Kelm

**Denotes an irrigated strip trial, and data not used in combined "Variety Strip Trial Means Table"

SMBSC Variety Strip Trial - Willmar***

Variety	28 DAP Stand				Extractable	Extractable	Percent Rev/Acre	Variety
	Beets/100' row	Sugar %	Purity %	Tons / Acre	Sugar per Ton	Sugar per Acre		
Beta 9780	169	16.5	90.0	26.4	276.2	7282.7	106.0%	Beta 9780
Beta 9810	191	17.1	90.7	23.7	289.6	6848.4	105.0%	Beta 9810
Beta 9986	203	16.2	89.9	21.5	269.6	5794.6	81.9%	Beta 9986
Crystal M821	196	17.1	90.5	23.4	289.2	6780.0	103.8%	Crystal M821
Crystal M837	199	16.3	89.9	21.0	271.2	5702.2	81.2%	Crystal M837
Hilleshog 2327	184	16.2	90.4	28.7	272.5	7809.8	111.8%	Hilleshog 2327
SV 883	205	16.9	90.5	25.7	285.6	7346.6	111.0%	SV 883
SV 894	204	16.5	90.4	24.5	277.2	6790.7	99.2%	SV 894
Average	194	16.6	90.3	24.4	278.9	6794.4	100.0%	Average

Planted: May 1, 2020

Harvested: September 29, 2020

Agriculturalist: Jared Kelm

***Strip trial was irrigated, and the data was used in the combined "Variety Strip Trial Means Table"

SMBSC Variety Strip Trial - Raymond

Variety	28 DAP Stand				Extractable	Extractable	Percent Rev/Acre	Variety
	Beets/100' row	Sugar %	Purity %	Tons / Acre	Sugar per Ton	Sugar per Acre		
Beta 9780	180	17.0	89.6	36.3	282.9	10274.2	109.5%	Beta 9780
Beta 9810	205	16.6	88.5	35.8	271.6	9709.7	98.6%	Beta 9810
Beta 9986	211	15.7	88.3	40.5	254.9	10326.0	96.6%	Beta 9986
Crystal M821	205	17.0	89.4	33.9	281.7	9544.0	101.2%	Crystal M821
Crystal M837	233	16.7	89.0	35.7	274.7	9814.8	101.1%	Crystal M837
Hilleshog 2327	233	15.7	89.1	36.1	258.4	9335.3	89.0%	Hilleshog 2327
SV 883	229	16.7	89.0	35.4	275.5	9750.0	100.8%	SV 883
SV 894	186	16.7	89.8	35.7	277.5	9903.6	103.2%	SV 894
Average	210	16.5	89.1	36.2	272.1	9832.2	100.0%	Average

Planted: April 23, 2020

Harvested: September 18, 2020

Agriculturalist: Bill Luepke

SMBSC Variety Strip Trial - Maynard

Variety	28 DAP Stand				Extractable	Extractable	Percent Rev/Acre	Variety
	Beets/100' row	Sugar %	Purity %	Tons / Acre	Sugar per Ton	Sugar per Acre		
Beta 9780	204	18.0	90.6	40.1	305.7	12250.1	103.8%	Beta 9780
Beta 9810	211	18.1	90.7	37.4	307.7	11495.7	98.0%	Beta 9810
Beta 9986	213	17.6	90.6	43.6	298.1	13008.4	107.6%	Beta 9986
Crystal M821	209	18.3	91.0	36.5	311.7	11391.0	98.3%	Crystal M821
Crystal M837	216	18.4	91.1	39.5	313.8	12393.9	107.6%	Crystal M837
Hilleshog 2327	218	17.6	90.0	39.5	295.7	11667.5	95.7%	Hilleshog 2327
SV 883	201	18.1	90.8	37.4	307.5	11492.9	97.9%	SV 883
SV 894	210	17.5	89.5	38.5	292.1	11249.4	91.1%	SV 894
Crystal M977*	229	17.7	90.9	41.2	300.4	12381.9	103.2%	Crystal M977*
Crystal M579*	(-)	18.4	90.4	33.8	311.5	10525.6	90.8%	Crystal M579*
Average	210	18.0	90.5	39.1	304.0	11868.6	100.0%	Average

Planted: April 21, 2020

Harvested: September 29, 2020

Agriculturalist: Austin Neubauer

*Denotes variety shown with final data, but not included with average/statistical analysis

SMBSC Variety Strip Trial - Bird Island

Variety	28 DAP Stand				Extractable	Extractable	Percent Rev/Acre	Variety
	Beets/100' row	Sugar %	Purity %	Tons / Acre	Sugar per Ton	Sugar per Acre		
Beta 9780	171	14.4	87.6	17.1	230.4	3944.3	89.1%	Beta 9780
Beta 9810	205	14.1	87.5	20.9	225.4	4713.4	102.1%	Beta 9810
Beta 9986	199	14.0	90.0	20.8	231.4	4821.1	109.7%	Beta 9986
Crystal M821	179	14.3	87.7	17.4	228.8	3969.9	88.5%	Crystal M821
Crystal M837	200	14.3	88.0	17.7	230.0	4074.0	91.7%	Crystal M837
Hilleshog 2327	205	14.1	87.6	20.1	225.0	4513.7	97.5%	Hilleshog 2327
SV 883	211	14.7	88.7	20.5	239.1	4895.4	117.9%	SV 883
SV 894	199	14.5	88.3	19.0	234.5	4443.7	103.5%	SV 894
Beta 9475*	(-)	14.3	88.1	16.5	230.3	3794.1	85.6%	Beta 9475*
Crystal M977*	201	14.0	88.7	21.9	227.3	4970.1	109.4%	Crystal M977*
Average	196	14.3	88.2	19.2	230.6	4422.0	100.0%	Average

Planted: April 20, 2020

Harvested: August 19, 2020

Agriculturalist: Les Plumley

*Denotes variety shown with final data, but not included with average/statistical analysis

SMBSC Variety Strip Trial - Benson

Variety	28 DAP Stand				Extractable	Extractable	Percent Rev/Acre	Variety
	Beets/100' row	Sugar %	Purity %	Tons / Acre	Sugar per Ton	Sugar per Acre		
Beta 9780	173	17.6	91.4	36.1	301.7	10902.9	108.2%	Beta 9780
Beta 9810	179	16.9	90.9	35.2	285.7	10044.8	94.3%	Beta 9810
Beta 9986	176	17.1	91.5	39.8	292.2	11622.2	111.7%	Beta 9986
Crystal M821	155	16.9	90.5	32.7	285.5	9336.6	87.6%	Crystal M821
Crystal M837	190	17.5	90.7	32.6	296.1	9637.6	93.9%	Crystal M837
Hilleshog 2327	193	17.1	91.0	36.9	291.4	10751.8	103.0%	Hilleshog 2327
SV 883	185	16.9	91.2	36.7	288.2	10574.2	100.2%	SV 883
SV 894	189	17.3	90.8	35.9	292.9	10507.5	101.2%	SV 894
Average	180	17.2	91.0	35.7	291.7	10422.2	100.0%	Average

Planted: April 22, 2020

Harvested: October 4, 2020

Agriculturalist: Scott Thaden

SMBSC Variety Strip Trial - Clontarf**

Variety	28 DAP Stand				Extractable	Extractable	Percent Rev/Acre	Variety
	Beets/100' row	Sugar %	Purity %	Tons / Acre	Sugar per Ton	Sugar per Acre		
Beta 9780	175	15.3	89.1	31.2	250.7	7812.3	100.6%	Beta 9780
Beta 9810	174	16.0	88.3	28.7	259.6	7447.7	100.7%	Beta 9810
Crystal M821	140	15.8	88.7	27.5	259.0	7132.9	96.2%	Crystal M821
Crystal M837	203	15.3	88.7	30.6	249.3	7617.7	97.3%	Crystal M837
Hilleshog 2327	165	15.6	89.6	30.0	258.2	7732.3	103.8%	Hilleshog 2327
SV 811	183	15.9	89.9	28.5	264.4	7540.1	104.5%	SV 811
SV 883	141	15.8	89.7	28.2	262.4	7408.3	101.6%	SV 883
SV 894	150	15.8	89.5	26.8	261.2	6992.6	95.4%	SV 894
Average	166	15.7	89.2	28.9	258.1	7460.5	100.0%	Average

Planted: April 21, 2020

Harvested: September 9, 2020

Agriculturalist: Scott Thaden

**Denotes an irrigated strip trial, and data not used in combined "Variety Strip Trial Means Table"