

# SMBSC Agricultural Staff Variety Strip Trial - Summary

## Strip Trial Means Table

<u>Variety</u>	<u>Stand Count</u>			<u>Extractable</u>		
	<u>28 DAP</u>					
	<u>Beets/100' row</u>	<u>Sugar %</u>	<u>Purity %</u>	<u>Tons / Acre</u>	<u>Sugar per Acre</u>	<u>Percent of Mean Revenue per Acre</u>
Beta 9044	158	17.5	89.8	27.3	7946.1	102.3%
Beta 9124	155	16.9	89.0	29.2	8147.1	101.0%
Beta 9155	167	16.2	89.1	31.5	8481.1	102.3%
Crystal M028	161	17.2	89.5	26.4	7578.1	94.9%
Crystal M168	161	16.8	88.7	29.9	8259.4	101.9%
Hilleshog 2379	159	16.8	89.5	28.1	7767.6	96.7%
Mean	160.2	16.9	89.3	28.7	8029.9	100.0
%CV	8.3	3.2	1.0	5.8	6.6	7.9
PR>F	0.5511	0.0006	0.1192	<.0001	0.0094	0.2053
LSD (0.05)	12.7	0.5	0.9	1.6	502.8	7.5
Reps	9	9	9	9	9	9

Combined data from 9 locations with each location considered a replicate.

Locations: Renville, Redwood, Olivia, Murdock, Raymond, Hector, Bird Island, Benson, and Maynard.

Revenue is calculated using the 2021 crop payment calculator, utilizing values released Oct. 21, 2022

**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 9044	171	18.3	89.4	31.2	305.3	9530	105.1%	Beta 9044
Beta 9124	164	17.4	88.7	31.9	286.6	9154	97.3%	Beta 9124
Beta 9155	195	16.7	88.4	34.2	272.0	9293	95.4%	Beta 9155
Crystal M028	181	18.6	88.4	31.9	305.3	9746	107.5%	Crystal M028
Crystal M168	160	17.0	89.3	32.4	282.3	9153	96.3%	Crystal M168
Hilleshog 2379	164	17.2	88.3	33.4	280.5	9376	98.3%	Hilleshog 2379
Beta 9986*	186	16.4	87.6	34.6	263.1	9106	91.4%	Beta 9986*
<b>Average</b>	<b>173</b>	<b>17.5</b>	<b>88.7</b>	<b>32.5</b>	<b>288.6</b>	<b>9375</b>	<b>100.0%</b>	<b>Average</b>

Planted: May 22, 2022

Harvested: October 11, 2022

Agriculturalist: Cody Bakker

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

**SMBSC Variety Strip Trial - Redwood**

Variety	28 DAP Stand				Extractable	Extractable	Percent Rev/Acre	Variety
	Beets/100' row	Sugar %	Purity %	Tons / Acre	Sugar per Ton	Sugar per Acre		
Beta 9044	174	18.0	89.7	31.7	301.6	9553	98.8%	Beta 9044
Beta 9124	153	17.2	89.2	36.2	285.3	10336	103.4%	Beta 9124
Beta 9155	160	16.7	89.5	37.8	277.6	10492	103.1%	Beta 9155
Crystal M028	172	17.9	90.4	32.5	302.3	9811	101.6%	Crystal M028
Crystal M168	145	17.5	89.1	33.6	290.0	9758	98.6%	Crystal M168
Hilleshog 2379	153	16.9	89.4	33.9	281.1	9531	94.4%	Hilleshog 2379
<b>Average</b>	<b>159</b>	<b>17.4</b>	<b>89.6</b>	<b>34.3</b>	<b>289.6</b>	<b>9914</b>	<b>100.0%</b>	<b>Average</b>

Planted: May 7, 2022

Harvested: September 29, 2022

Agriculturalist: Chris Dunsmore

**SMBSC Variety Strip Trial - Olivia**

Variety	28 DAP Stand				Extractable	Extractable	Percent Rev/Acre	Variety
	Beets/100' row	Sugar %	Purity %	Tons / Acre	Sugar per Ton	Sugar per Acre		
Beta 9044	173	17.2	89.6	31.0	287.0	8895	99.5%	Beta 9044
Beta 9124	182	16.6	89.5	34.3	275.6	9439	102.9%	Beta 9124
Beta 9155	203	16.0	89.3	37.5	265.2	9937	105.5%	Beta 9155
Crystal M028	181	16.9	89.4	31.5	280.5	8850	97.6%	Crystal M028
Crystal M168	206	16.5	89.8	33.2	274.6	9129	99.3%	Crystal M168
Hilleshog 2379	188	16.1	89.2	33.7	265.5	8961	95.2%	Hilleshog 2379
<b>Average</b>	<b>189</b>	<b>16.6</b>	<b>89.5</b>	<b>33.5</b>	<b>274.7</b>	<b>9202</b>	<b>100.0%</b>	<b>Average</b>

Planted: May 21, 2022

Harvested: September 27, 2022

Agriculturalist: Chris Dunsmore

**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 9044	186	17.9	89.0	32.3	296.0	9573	102.5%	Beta 9044
Beta 9124	186	17.7	88.9	30.6	292.8	8955	95.2%	Beta 9124
Beta 9155	188	16.7	88.5	35.8	273.2	9791	99.7%	Beta 9155
Crystal M028	196	17.4	89.0	32.8	287.5	9419	99.1%	Crystal M028
Crystal M168	200	18.1	89.5	38.4	301.3	11564	125.1%	Crystal M168
Hilleshog 2379	182	16.8	87.7	30.8	270.8	8334	84.3%	Hilleshog 2379
Crystal M002	184	17.1	88.4	33.5	278.8	9349	96.4%	Crystal M002
Hilleshog 2327	158	16.8	88.0	35.4	272.0	9633	97.7%	Hilleshog 2327
<b>Average</b>	<b>185</b>	<b>17.3</b>	<b>88.6</b>	<b>33.7</b>	<b>284.1</b>	<b>9577</b>	<b>100.0%</b>	<b>Average</b>

Planted: April 29, 2022

Harvested: October 17, 2022

Agriculturalist: Jared Kelm

\*\*Denotes an irrigated strip trial and data not used in combined "Variety Strip Trial Mean 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 9044	140	18.0	90.3	26.6	302.5	8061	103.7%	Beta 9044
Beta 9124	134	16.9	88.7	28.6	277.0	7925	96.6%	Beta 9124
Beta 9155	136	16.3	89.2	31.5	269.4	8489	101.6%	Beta 9155
Crystal M028	142	17.2	90.1	26.3	288.8	7588	95.0%	Crystal M028
Crystal M168	132	17.5	88.9	29.3	288.8	8468	106.0%	Crystal M168
Hilleshog 2379	116	16.7	89.1	28.9	275.7	7982	97.0%	Hilleshog 2379
<b>Average</b>	<b>133</b>	<b>17.1</b>	<b>89.4</b>	<b>28.6</b>	<b>283.7</b>	<b>8086</b>	<b>100.0%</b>	<b>Average</b>

Planted: May 26, 2022

Harvested: October 12, 2022

Agriculturalist: Jared Kelm

**SMBSC Variety Strip Trial - Murdock**

Variety	28 DAP Stand				Extractable	Extractable	Percent Rev/Acre	Variety
	Beets/100' row	Sugar %	Purity %	Tons / Acre	Sugar per Ton	Sugar per Acre		
Beta 9044	170	15.7	90.6	27.8	264.0	7343	100.1%	Beta 9044
Beta 9124	175	16.0	90.4	28.7	269.1	7726	106.7%	Beta 9124
Beta 9155	179	14.8	90.2	31.9	246.6	7856	101.7%	Beta 9155
Crystal M028	175	16.1	90.1	23.6	268.5	6344	87.5%	Crystal M028
Crystal M168	160	15.4	90.1	30.4	256.1	7781	103.7%	Crystal M168
Hilleshog 2379	223	15.0	90.3	30.5	250.8	7648	100.3%	Hilleshog 2379
<b>Average</b>	<b>180</b>	<b>15.5</b>	<b>90.3</b>	<b>28.8</b>	<b>259.2</b>	<b>7450</b>	<b>100.0%</b>	<b>Average</b>

Planted: May 23, 2022

Harvested: September 22, 2022

Agriculturalist: Bill Luepke

**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 9044	190	18.2	90.2	20.7	306.0	6331	104.5%	Beta 9044
Beta 9124	188	17.5	88.5	20.4	287.5	5870	93.4%	Beta 9124
Beta 9155	196	16.5	88.2	22.0	268.1	5886	89.5%	Beta 9155
Crystal M028	182	18.8	92.3	18.9	326.7	6186	105.7%	Crystal M028
Crystal M168	196	16.8	87.1	22.4	268.5	6027	91.7%	Crystal M168
Hilleshog 2379	204	17.8	91.1	23.2	303.1	7018	115.2%	Hilleshog 2379
Hilleshog 2327*	200	16.6	88.0	22.5	268.4	6034	91.8%	Hilleshog 2327*
Hilleshog Exp A*	206	16.3	87.3	20.7	260.4	5390	80.2%	Hilleshog Exp A*
Hilleshog Exp B*	202	17.2	89.5	21.3	286.4	6101	96.8%	Hilleshog Exp B*
<b>Average</b>	<b>193</b>	<b>17.6</b>	<b>89.6</b>	<b>21.3</b>	<b>293.3</b>	<b>6220</b>	<b>100.0%</b>	<b>Average</b>

Planted: May 24, 2022

Harvested: October 17, 2022

Agriculturalist: Griffin Schaub

\*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 9044	118	17.3	87.6	19.1	279.4	5326	105.0%	Beta 9044
Beta 9124	130	16.2	86.4	21.6	254.9	5510	101.8%	Beta 9124
Beta 9155	121	15.2	86.9	24.6	241.1	5928	104.8%	Beta 9155
Crystal M028	125	15.3	87.0	19.6	243.8	4791	85.5%	Crystal M028
Crystal M168	141	15.8	85.8	23.8	246.5	5870	105.7%	Crystal M168
Hilleshog 2379	118	16.8	87.6	18.7	270.2	5050	97.3%	Hilleshog 2379
<b>Average</b>	<b>126</b>	<b>16.1</b>	<b>86.9</b>	<b>21.2</b>	<b>256.0</b>	<b>5412</b>	<b>100.0%</b>	<b>Average</b>

Planted: May 28, 2022

Harvested: October 16, 2022

Agriculturalist: Dylan Swanson

**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 9044	75	19.5	92.6	25.2	341.6	8607	106.2%	Beta 9044
Beta 9124	84	17.6	89.9	30.6	294.9	9036	103.1%	Beta 9124
Beta 9155	94	17.6	91.5	33.6	301.6	10124	117.0%	Beta 9155
Crystal M028	100	18.2	89.6	26.0	303.3	7891	91.5%	Crystal M028
Crystal M168	96	18.2	89.5	30.1	303.7	9146	106.1%	Crystal M168
Hilleshog 2379	80	17.4	91.0	22.4	296.7	6642	76.1%	Hilleshog 2379
<b>Average</b>	<b>88</b>	<b>18.1</b>	<b>90.7</b>	<b>28.0</b>	<b>307.0</b>	<b>8574</b>	<b>100.0%</b>	<b>Average</b>

Planted: May 27, 2022

Harvested: October 15, 2022

Agriculturalist: Scott Thaden

**SMBSC Variety Strip Trial - Appleton\*\***

Variety	28 DAP Stand				Extractable	Extractable	Percent Rev/Acre	Variety
	Beets/100' row	Sugar %	Purity %	Tons / Acre	Sugar per Ton	Sugar per Acre		
Beta 9044	158	19.1	90.4	25.5	322.8	8245	103.4%	Beta 9044
Beta 9124	170	19.2	90.5	24.5	325.3	7959	100.2%	Beta 9124
Beta 9155	191	18.4	90.2	25.5	310.6	7933	97.5%	Beta 9155
Crystal M028	148	18.7	90.2	25.3	314.8	7958	98.5%	Crystal M028
Crystal M168	191	18.6	90.1	23.9	313.7	7493	92.5%	Crystal M168
Hilleshog 2379	206	18.9	90.4	26.7	320.6	8554	106.9%	Hilleshog 2379
Crystal M002	168	18.4	90.0	25.3	309.8	7832	96.1%	Crystal M002
Hilleshog 2327	171	18.6	90.1	27.2	313.0	8508	105.0%	Hilleshog 2327
<b>Average</b>	<b>175</b>	<b>18.7</b>	<b>90.2</b>	<b>25.5</b>	<b>316.3</b>	<b>8060</b>	<b>100.0%</b>	<b>Average</b>

Planted: May 4, 2022

Harvested: September 30, 2022

Agriculturalist: Scott Thaden

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

**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 9044	200	16.8	90.6	29.3	283.9	8318	105.5%	Beta 9044
Beta 9124	182	16.8	89.2	30.0	277.4	8328	104.1%	Beta 9124
Beta 9155	216	16.4	88.9	31.0	268.8	8324	101.8%	Beta 9155
Crystal M028	194	15.7	88.4	27.5	254.7	6997	82.3%	Crystal M028
Crystal M168	214	16.3	88.8	33.6	268.0	9003	109.9%	Crystal M168
Hilleshog 2379	188	16.8	89.0	27.7	277.7	7700	96.3%	Hilleshog 2379
<b>Average</b>	<b>199</b>	<b>16.5</b>	<b>89.2</b>	<b>29.8</b>	<b>271.7</b>	<b>8112</b>	<b>100.0%</b>	<b>Average</b>

Planted: May 23, 2022

Harvested: September 26, 2022

Agriculturalist: Charles Tvedt