

# SMBSC Agricultural Staff Variety Strip Trial - Summary

## Strip Trial Means Table

Variety*	Stand Count	Sugar %	Purity %	Tons / Acre	Extractable	Extractable	Percent of Mean Revenue per Acre**	Variety
	28 DAP				Sugar	Sugar		
	Beets/100' row				per Ton	per Acre		
Beta 9124	195	17.4	89.9	35.8	287.3	10326.7	101.6%	Beta 9124
Beta 9131	204	17.2	89.6	36.3	282.5	10460.4	100.3%	Beta 9131
Beta 9155	197	17.1	89.6	36.0	281.3	10202.0	97.8%	Beta 9155
Crystal M106	200	17.5	89.5	34.8	285.5	10049.4	97.8%	Crystal M106
Crystal M168	200	17.4	89.8	36.6	285.3	10703.1	104.2%	Crystal M168
Hilleshog 2395	196	17.0	89.7	37.3	277.9	10414.2	98.2%	Hilleshog 2395
Hilleshog 2398	191	17.5	89.5	35.4	286.8	10208.3	100.0%	Hilleshog 2398
Mean	197.6	17.3	89.7	36.0	283.8	10337.7	100.0	
%CV	6.3	1.5	0.4	7.0	1.3	6.3	6.2	
PR>F	0.6787	0.0089	0.2380	0.7098	0.0006	0.6939	0.5240	
LSD (0.05)	ns	0.3	ns	ns	4.2	ns	ns	
Reps***	6	6	6	6	6	6	6	

\* Varieties are organized in alphabetical order. The top and bottom performers measured by 'Percent of Mean Revenue per Acre' vary by location, indicating an environmental effect.

\*\* Revenue is calculated using the 2022 crop payment calculator, utilizing values released Oct. 23, 2023

\*\*\* Combined data from 6 locations with each location considered a replicate.

Locations: Renville, Redwood Falls, Raymond, Hector, Maynard, and Belgrade

**SMBSC Variety Strip Trial - Redwood Falls**

Variety	28 DAP Stand		Purity %	Tons / Acre	Extractable	Extractable	Percent Rev/Acre	Variety
	Beets/100' row	Sugar %			Sugar per	Sugar per		
					Ton	Acre		
Beta 9124	189	17.6	89.4	28.9	291.7	8435	107%	Beta 9124
Beta 9131	195	16.9	89.4	26.9	280.8	7559	92%	Beta 9131
Beta 9155	168	17.5	88.7	28.2	287.1	8103	101%	Beta 9155
Crystal M106	208	17.3	88.9	26.4	284.7	7519	93%	Crystal M106
Crystal M168	214	17.4	89.4	28.3	289.5	8193	103%	Crystal M168
Hilleshog 2395	216	17.6	89.2	27.6	291.1	8038	102%	Hilleshog 2395
Hilleshog 2398	176	17.4	88.9	28.0	287.2	8031	101%	Hilleshog 2398
<b>Average</b>	<b>195</b>	<b>17.4</b>	<b>89.1</b>	<b>27.8</b>	<b>287.4</b>	<b>7982</b>	<b>100.0%</b>	<b>Average</b>

Planted: April 27, 2023  
 Harvested: September 7, 2023  
 Agriculturalist: Chris Dunsmore  
 Previous Crop: Corn

**SMBSC Variety Strip Trial - Olivia**

Variety	28 DAP Stand		Purity %	Tons / Acre	Extractable	Extractable	Percent Rev/Acre	Variety
	Beets/100' row	Sugar %			Sugar per	Sugar per		
					Ton	Acre		
Beta 9124		18.8	90.6	31.5	319.1	10051	99%	Beta 9124
Beta 9131		18.9	90.3	34.0	318.5	10839	107%	Beta 9131
Beta 9155		18.2	90.6	35.5	309.4	10972	105%	Beta 9155
Crystal M106		19.1	90.6	31.9	323.5	10324	103%	Crystal M106
Hilleshog 2395		18.2	90.8	30.2	308.5	9321	89%	Hilleshog 2395
Hilleshog 2398		18.5	90.8	32.9	315.5	10381	101%	Hilleshog 2398
<b>Average</b>		<b>18.6</b>	<b>90.6</b>	<b>32.7</b>	<b>315.7</b>	<b>10315</b>	<b>100.0%</b>	<b>Average</b>

Planted: May 3, 2023  
 Harvested: September 18, 2023  
 Agriculturalist: Chris Dunsmore  
 Previous Crop: Sweet Corn

**SMBSC Variety Strip Trial - Belgrade\*\***

Variety	28 DAP Stand		Purity %	Tons / Acre	Extractable	Extractable	Percent Rev/Acre	Variety
	Beets/100' row	Sugar %			Sugar per	Sugar per		
					Ton	Acre		
Beta 9124	204	16.6	90.3	40.2	279.1	11215	103%	Beta 9124
Beta 9131	216	16.4	90.3	42.4	275.7	11696	106%	Beta 9131
Beta 9155	214	16.2	89.8	37.2	270.1	10036	88%	Beta 9155
Crystal M106	200	16.5	90.3	39.4	277.6	10950	100%	Crystal M106
Crystal M168	213	16.8	90.0	39.5	281.2	11119	103%	Crystal M168
Hilleshog 2395	213	15.9	90.3	43.6	267.0	11647	101%	Hilleshog 2395
Hilleshog 2398	214	16.5	90.0	40.4	275.2	11110	100%	Hilleshog 2398
Beta 9044*	197	16.7	90.4	41.1	280.9	11547	106%	Beta 9044
Crystal M028*	203	16.3	90.3	37.6	273.7	10299	92%	Crystal M028
<b>Average</b>	<b>211</b>	<b>16.4</b>	<b>90.1</b>	<b>40.4</b>	<b>275.1</b>	<b>11111</b>	<b>100.0%</b>	<b>Average</b>

Planted: May 2, 2023  
 Harvested: October 23, 2023  
 Agriculturalist: Jared Kelm  
 Previous Crop: Corn

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

\*\*Denotes an irrigated strip trial

**SMBSC Variety Strip Trial - Raymond**

Variety	28 DAP Stand		Purity %	Tons / Acre	Extractable	Extractable	Percent Rev/Acre	Variety
	Beets/100' row	Sugar %			Sugar per	Sugar per		
					Ton	Acre		
Beta 9124	196	18.2	90.4	38.0	286.7	11350	102%	Beta 9124
Beta 9131	204	18.1	90.7	38.1	284.4	12128	108%	Beta 9131
Beta 9155	189	17.9	90.9	38.0	279.4	11381	99%	Beta 9155
Crystal M106	190	18.9	90.7	36.3	284.0	11051	98%	Crystal M106
Crystal M168	195	18.8	90.4	35.3	283.3	11761	104%	Crystal M168
Hilleshog 2395	180	18.3	90.7	34.9	274.7	10450	89%	Hilleshog 2395
Hilleshog 2398	188	18.6	90.3	37.0	286.4	11085	99%	Hilleshog 2398
<b>Average</b>	<b>192</b>	<b>18.4</b>	<b>90.6</b>	<b>36.8</b>	<b>282.7</b>	<b>11315</b>	<b>100.0%</b>	<b>Average</b>

Planted: May 5, 2023  
Harvested: September 20, 2023  
Agriculturalist: Jared Kelm  
Previous Crop: Corn

**SMBSC Variety Strip Trial - Hector**

Variety	28 DAP Stand		Purity %	Tons / Acre	Extractable	Extractable	Percent Rev/Acre	Variety
	Beets/100' row	Sugar %			Sugar per	Sugar per		
					Ton	Acre		
Beta 9124	189	17.2	89.8	39.6	286.7	11350	102%	Beta 9124
Beta 9131	208	17.3	88.9	42.6	284.4	12128	108%	Beta 9131
Beta 9155	198	16.9	89.4	40.7	279.4	11381	99%	Beta 9155
Crystal M106	194	17.2	88.9	38.9	284.0	11051	98%	Crystal M106
Crystal M168	196	17.1	89.5	41.5	283.3	11761	104%	Crystal M168
Hilleshog 2395	204	16.7	89.0	38.0	274.7	10450	89%	Hilleshog 2395
Hilleshog 2398	186	17.3	89.4	38.7	286.4	11085	99%	Hilleshog 2398
<b>Average</b>	<b>196</b>	<b>17.1</b>	<b>89.2</b>	<b>40.0</b>	<b>282.7</b>	<b>11315</b>	<b>100.0%</b>	<b>Average</b>

Planted: May 5, 2023  
Harvested: October 20, 2023  
Agriculturalist: Ryan Kuester  
Previous Crop: Sweet Corn

**SMBSC Variety Strip Trial - Renville**

Variety	28 DAP Stand		Purity %	Tons / Acre	Extractable	Extractable	Percent Rev/Acre	Variety
	Beets/100' row	Sugar %			Sugar per	Sugar per		
					Ton	Acre		
Beta 9124	183	16.6	89.3	35.6	274.4	9772	97%	Beta 9124
Beta 9131	188	16.3	89.0	34.3	267.4	9183	89%	Beta 9131
Beta 9155	207	16.2	88.5	40.3	265.0	10674	102%	Beta 9155
Crystal M106	192	16.6	88.3	33.7	271.1	9125	90%	Crystal M106
Crystal M168	166	16.4	89.0	41.9	270.6	11329	111%	Crystal M168
Hilleshog 2395	153	15.5	89.4	47.7	255.9	12195	111%	Hilleshog 2395
Hilleshog 2398	166	16.8	88.5	36.5	275.3	10036	100%	Hilleshog 2398
<b>Average</b>	<b>179</b>	<b>16.4</b>	<b>88.9</b>	<b>38.6</b>	<b>268.5</b>	<b>10331</b>	<b>100.0%</b>	<b>Average</b>

Planted: May 4, 2023  
Harvested: October 20, 2023  
Agriculturalist: Griffin Schaub  
Previous Crop: Soybean

**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 9124	166	16.4	89.4	29.5	272.2	8018	93%	Beta 9124
Beta 9131	165	16.3	89.4	33.0	269.6	8891	102%	Beta 9131
Beta 9155	205	16.0	89.2	33.5	263.8	8824	98%	Beta 9155
Crystal M106	194	16.8	89.6	32.8	279.3	9148	109%	Crystal M106
Crystal M168	166	16.3	89.0	32.2	268.7	8640	99%	Crystal M168
Hilleshog 2395	173	15.6	89.3	33.8	257.4	8698	94%	Hilleshog 2395
Hilleshog 2398	188	16.2	89.4	34.4	268.8	9247	105%	Hilleshog 2398
Beta 9044*	150	16.7	89.4	33.0	276.1	9108	107%	Beta 9044
Crystal M028*	179	16.8	89.6	30.0	279.7	8391	100%	Crystal M028
<b>Average</b>	<b>179</b>	<b>16.2</b>	<b>89.3</b>	<b>32.7</b>	<b>268.5</b>	<b>8781</b>	<b>100.0%</b>	<b>Average</b>

Planted: May 2, 2023

Harvested: September 12, 2023

Agriculturalist: Scott Thaden

Previous Crop: Corn

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

\*\*Denotes an irrigated strip trial

**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 9124	208	18.1	90.4	32.2	305.3	9838	98%	Beta 9124
Beta 9131	214	18.1	89.7	33.3	302.2	10068	100%	Beta 9131
Beta 9155	205	18.1	90.7	31.4	307.0	9637	97%	Beta 9155
Crystal M106	214	18.6	89.7	34.0	311.5	10600	108%	Crystal M106
Crystal M168	219	18.0	90.4	33.1	303.6	10055	100%	Crystal M168
Hilleshog 2395	213	18.2	89.6	31.9	303.7	9704	97%	Hilleshog 2395
Hilleshog 2398	218	18.5	89.9	31.9	310.4	9903	101%	Hilleshog 2398
Crystal M089		17.8	90.2	38.8	299.5	11636	114%	Crystal M089
<b>Average</b>	<b>213</b>	<b>18.2</b>	<b>90.0</b>	<b>32.6</b>	<b>306.2</b>	<b>9972</b>	<b>100.0%</b>	<b>Average</b>

Planted: May 4, 2023

Harvested: September 28, 2023

Agriculturalist: Charles Tvedt

Previous Crop: Corn

**SMBSC Variety Strip Trial - Lake Lillian**

Variety	28 DAP Stand				Extractable	Extractable	Percent Rev/Acre	Variety
	Beets/100' row	Sugar %	Purity %	Tons / Acre	Sugar per Ton	Sugar per Acre		
Beta 9131	201	17.0	89.8	48.3	283.1	13675	101%	Beta 9131
Beta 9155	209	16.4	89.9	52.0	274.3	14274	101%	Beta 9155
Crystal M106	206	17.3	89.6	44.7	288.5	12902	97%	Crystal M106
Crystal M168	208	16.8	90.2	48.0	281.2	13490	99%	Crystal M168
Hilleshog 2395	198	16.9	89.7	49.6	281.5	13969	102%	Hilleshog 2395
Hilleshog 2398	193	16.8	90.1	49.0	281.1	13784	101%	Hilleshog 2398
<b>Average</b>	<b>205</b>	<b>16.9</b>	<b>89.9</b>	<b>48.6</b>	<b>281.6</b>	<b>13682</b>	<b>100.0%</b>	<b>Average</b>

Planted: May 5, 2023

Harvested: October 24, 2023

Agriculturalist: Dylan Swanson

Previous Crop: Sweet Corn