

SMBSC Agricultural Staff Variety Strip Trial - Summary

Strip Trial Means Table

<u>Variety*</u>	<u>Stand Count</u>		<u>Purity %</u>	<u>Tons / Acre</u>	<u>Extractable</u>	<u>Extractable</u>	<u>Percent of Mean Revenue per Acre**</u>
	<u>28 DAP</u>	<u>Sugar %</u>			<u>Sugar</u>	<u>Sugar</u>	
	<u>Beets/100' row</u>				<u>per Ton</u>	<u>per Acre</u>	
Beta 9155	208	16.6	90.1	32.2	278.2	8942.2	100.6%
Beta 9284	196	17.1	90.0	30.8	286.7	8811.0	102.2%
Crystal M089	213	16.7	90.5	33.0	280.9	9256.8	105.4%
Crystal M168	196	17.0	90.1	31.4	285.0	8949.6	103.6%
Hilleshog 2395	188	16.5	90.1	32.2	276.3	8886.1	100.3%
Hilleshog 2449	175	16.5	89.7	28.6	274.7	7861.0	88.0%
Mean	195.9	16.7	90.1	31.4	280.3	8784.5	100.0
%CV	7.5	1.5	0.5	5.1	1.9	5.7	7.0
PR>F	<0.0001	<0.0001	0.0082	<0.0001	<0.0001	<0.0001	<0.0001
LSD (0.05)	13.1	0.2	0.4	1.4	4.8	452.7	6.3
Reps***	10	10	10	10	10	10	10

* 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 2023 crop payment calculator, utilizing values released Oct. 23, 2024

*** Combined data from 10 locations with each location considered a replicate.

Locations: Redwood Falls, Olivia, Raymond, Hector, Murdock, Appleton, De Graff, Lake Lillian, Maynard, and Belgrade

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		
Crystal M168	206	17.9	90.5	38.8	303.5	11792	102%	Crystal M168
Beta 9284	214	17.6	90.1	38.0	296.1	11237	96%	Beta 9284
Beta 9155	216	17.6	90.8	40.7	298.9	12169	104%	Beta 9155
Hilleshog 2395	206	17.7	90.7	39.7	299.7	11895	102%	Hilleshog 2395
Crystal M089	218	17.7	91.0	40.8	301.0	12279	106%	Crystal M089
Hilleshog 2449	206	17.7	89.8	35.7	295.6	10544	90%	Hilleshog 2449
Average	211	17.7	90.5	38.9	299.2	11653	100.0%	Average

Planted: April 15, 2024
 Harvested: October 13, 2024
 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		
Crystal M168	204	16.8	89.4	33.4	278.1	9299	106%	Crystal M168
Beta 9284	194	16.9	89.1	34.6	279.8	9673	111%	Beta 9284
Beta 9155	239	15.9	89.2	32.9	261.6	8604	93%	Beta 9155
Hilleshog 2395	179	16.1	89.3	35.4	266.4	9430	104%	Hilleshog 2395
Crystal M089	238	16.2	89.3	36.5	268.3	9801	108%	Crystal M089
Hilleshog 2449	198	16.0	88.7	27.7	261.4	7232	78%	Hilleshog 2449
Beta 9131*	214	16.6	89.4	37.1	274.5	10192	115%	Beta 9131*
Crystal M339*	205	16.8	89.1	34.8	276.8	9635	110%	Crystal M339*
Average	208	16.3	89.1	33.4	269.3	9006	100.0%	Average

Planted: April 14, 2024
 Harvested: September 30, 2024
 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		
Crystal M168	187	18.1	89.4	42.2	300.7	12674	104%	Crystal M168
Beta 9284	185	18.2	89.9	42.2	306.0	12896	107%	Beta 9284
Beta 9155	205	17.7	89.9	43.7	297.1	12987	105%	Beta 9155
Hilleshog 2395	175	17.1	89.8	40.5	285.4	11567	91%	Hilleshog 2395
Crystal M089	208	17.4	89.5	45.5	288.9	13149	104%	Crystal M089
Hilleshog 2449	162	17.6	89.7	37.5	293.2	10998	88%	Hilleshog 2449
Beta 9131*	200	17.6	90.3	39.3	297.0	12872	104%	Beta 9131*
Beta 9124*	205	18.2	89.7	39.2	304.7	12986	107%	Beta 9124*
Average	187	17.7	89.7	37.5	295.2	11066	100.0%	Average

Planted: April 25, 2024
 Harvested: October 19, 2024
 Agriculturalist: Jared Kelm

* 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				Extractable	Extractable	Percent Rev/Acre	Variety
	Beets/100' row	Sugar %	Purity %	Tons / Acre	Sugar per Ton	Sugar per Acre		
Crystal M168	193	16.9	90.2	23.6	284.1	6703	96%	Crystal M168
Beta 9284	213	17.2	89.9	25.7	287.3	7387	107%	Beta 9284
Beta 9155	195	16.6	90.1	27.7	278.5	7704	108%	Beta 9155
Hilleshog 2395	188	16.1	89.3	24.9	265.4	6603	89%	Hilleshog 2395
Crystal M089	210	16.9	91.0	28.2	287.3	8088	117%	Crystal M089
Hilleshog 2449	178	16.5	90.1	21.5	276.1	5922	83%	Hilleshog 2449
Average	196	16.7	90.1	25.2	279.8	7068	100.0%	Average

Planted: April 22, 2024
 Harvested: October 1, 2024
 Agriculturalist: Jared Kelm

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		
Crystal M168	199	17.8	91.8	19.6	307.1	6023	116%	Crystal M168
Beta 9284	183	17.7	90.8	16.7	300.2	5017	95%	Beta 9284
Beta 9155	192	17.9	91.1	16.1	306.1	4938	95%	Beta 9155
Hilleshog 2395	184	17.6	90.7	18.4	299.1	5501	104%	Hilleshog 2395
Crystal M089	194	17.4	91.4	18.3	297.5	5442	102%	Crystal M089
Hilleshog 2449	162	16.9	90.1	17.0	283.9	4823	87%	Hilleshog 2449
SV 863*		18.1	90.6	15.8	307.4	4856	94%	SV 863*
Average	186	17.6	91.0	17.7	299.0	5291	100.0%	Average

Planted: April 14, 2024
 Harvested: October 13, 2024
 Agriculturalist: Ryan Kuester

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

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		
Crystal M168	218	14.9	88.8	36.5	242.4	8852	94%	Crystal M168
Beta 9284	220	15.7	90.1	35.6	261.8	9315	107%	Beta 9284
Beta 9155	223	15.0	88.8	39.6	244.4	9685	104%	Beta 9155
Hilleshog 2395	203	15.1	90.0	38.3	250.7	9599	106%	Hilleshog 2395
Crystal M089	220	15.1	90.5	37.9	252.8	9577	107%	Crystal M089
Hilleshog 2449	198	14.5	88.1	34.6	233.5	8078	82%	Hilleshog 2449
Average	213	15.0	89.4	37.1	247.6	9184	100.0%	Average

Planted: April 23, 2024
 Harvested: September 17, 2024
 Agriculturalist: William Luepke

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		
Crystal M168	161	15.2	91.2	27.1	256.8	6954	102%	Crystal M168
Beta 9284	163	15.2	91.1	28.4	256.9	7289	106%	Beta 9284
Beta 9155	179	15.0	91.2	27.0	253.9	6846	99%	Beta 9155
Hilleshog 2395	164	14.8	91.1	30.0	250.5	7517	107%	Hilleshog 2395
Crystal M089	170	14.9	91.0	25.3	250.7	6350	90%	Crystal M089
Hilleshog 2449	158	14.9	90.8	26.7	251.1	6716	96%	Hilleshog 2449
Beta 9131*	169	15.2	91.2	28.4	256.6	7283	106%	Beta 9131*
Beta 9124*	108	15.2	91.0	29.8	255.7	7628	111%	Beta 9124*
Average	166	15.0	91.1	27.4	253.3	6945	100.0%	Average

Planted: April 13, 2024

Harvested: September 9, 2024

Agriculturalist: Scott Thaden

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

**Denotes an irrigated strip trial

SMBSC Variety Strip Trial - De Graff

Variety	28 DAP Stand				Extractable	Extractable	Percent Rev/Acre	Variety
	Beets/100' row	Sugar %	Purity %	Tons / Acre	Sugar per Ton	Sugar per Acre		
Crystal M168	174	17.4	89.5	28.8	290.2	8364	109%	Crystal M168
Beta 9284	180	17.4	90.0	23.1	292.5	6743	89%	Beta 9284
Beta 9155	195	17.1	89.7	27.9	284.5	7947	102%	Beta 9155
Hilleshog 2395	144	16.8	89.8	27.1	280.2	7583	96%	Hilleshog 2395
Crystal M089	199	17.3	90.0	27.6	290.6	8034	105%	Crystal M089
Hilleshog 2449	159	17.3	89.9	25.9	289.3	7492	98%	Hilleshog 2449
Crystal M106*	193	17.5	90.1	30.5	293.9	8969	119%	Crystal M106*
Average	175	17.2	89.8	26.7	287.9	7694	100.0%	Average

Planted: April 24, 2024

Harvested: October 8, 2024

Agriculturalist: Scott Thaden

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

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		
Crystal M168	239	17.5	89.3	32.7	289.7	9486	106%	Crystal M168
Beta 9284	226	17.6	89.3	32.8	292.7	9605	108%	Beta 9284
Beta 9155	244	16.4	89.7	32.9	272.3	8973	95%	Beta 9155
Hilleshog 2395	250	16.6	89.3	33.2	275.1	9137	98%	Hilleshog 2395
Crystal M089	254	16.8	90.2	33.8	282.1	9524	104%	Crystal M089
Hilleshog 2449	143	16.7	89.1	29.9	275.9	8256	89%	Hilleshog 2449
Beta 9124*		17.2	89.4	32.1	286.4	9203	102%	Beta 9124*
Average	226	16.9	89.5	32.6	281.3	9163	100.0%	Average

Planted: April 24, 2024

Harvested: October 8, 2024

Agriculturalist: Charles Tvedt

SMBSC Variety Strip Trial - Lake Lillian

Variety	28 DAP Stand		Purity %	Tons / Acre	Extractable	Extractable	Percent Rev/Acre	Variety
	Beets/100' row	Sugar %			Sugar per	Sugar per		
					Ton	Acre		
Crystal M168	180	17.5	90.8	31.4	297.4	9349	101%	Crystal M168
Beta 9284	184	17.5	90.1	30.4	294.0	8948	96%	Beta 9284
Beta 9155	194	16.9	90.4	33.7	284.3	9570	99%	Beta 9155
Hilleshog 2395	182	17.2	90.6	34.6	290.1	10029	106%	Hilleshog 2395
Crystal M089	214	17.1	90.8	35.6	290.1	10324	109%	Crystal M089
Hilleshog 2449	182	17.0	90.6	29.8	286.7	8549	89%	Hilleshog 2449
Average	189	17.2	90.6	32.6	290.4	9461	100.0%	Average

Planted: April 25, 2024

Harvested: October 14, 2024

Agriculturalist: Dylan Swanson