

Table 6. Field performance of **EXPERIMENTAL** sugarbeet varieties in the Amalgamated Sugar Co. LLC Variety Trial at the **PAUL DUNCAN FARM, MINIDOKA, Idaho, 2003**

VARIETY	Root ¹ Yield (T/A)	Sugar Content (%)	Gross Sugar (lbs/A)	Conduc- tivity (mmhos)	Extrac- tion (%)	Estimated Recoverable Sugar		Curly Top Rating 2003
						(lbs/T)	(lbs/A)	
ACH Seeds								
Crystal 217R ²	50.75	15.40	15616	0.907	82.55	254.4	12894 ab ^z	5.4
Crystal 103	47.95	15.09	14473	0.844	83.32	251.6	12065 b-f	4.3
Crystal 316R ³	47.76	15.47	14784	0.810	83.87	259.5	12406 a-d	5.4
Crystal 317R ³	49.87	15.18	15141	0.817	83.70	254.2	12682 abc	5.3
Crystal 318R ³	42.99	16.16	13882	0.641	86.24	278.7	11972 c-g	5.8
Crystal 319R ³	46.95	14.60	13709	0.976	81.42	237.9	11175 ghi	5.4
Betaseed								
Beta 4490R ²	47.97	15.18	14563	0.837	83.44	253.6	12157 b-f	4.8
Beta 2YK0014 ^{3,4}	44.27	14.66	12976	0.943	81.90	240.2	10631 ijk	6.1
Beta 2YK0016 ³	44.48	15.33	13650	0.804	83.92	257.4	11460 f-i	4.8
Beta 3YK0018 ³	44.65	15.08	13472	0.905	82.51	249.0	11122 g-j	5.6
Beta 3YK0019 ³	49.16	15.74	15460	0.792	84.17	264.9	13010 a	5.1
Beta 3YK0020 ³	46.36	14.79	13701	0.972	81.51	241.5	11179 ghi	4.9
Beta 3YK0021 ³	49.83	15.12	15060	0.843	83.35	252.1	12561 abc	5.2
Beta 3YK0022 ³	43.73	15.03	13144	0.877	82.87	249.2	10894 hij	4.8
Hilleshog/Syngenta								
HM 2986RZ ²	45.53	15.49	14094	0.754	84.61	262.1	11927 c-g	4.2
HM 2987	45.50	15.48	14074	0.721	85.05	263.4	11970 c-g	4.4
HM 2988RZ ³	43.06	16.03	13798	0.775	84.45	270.8	11653 d-h	5.5
HM 2989RZ ³	43.86	15.75	13814	0.844	83.48	263.1	11534 e-h	5.3
HM 2990	43.75	15.96	13902	0.693	85.51	273.0	11888 c-g	3.9
Holly Hybrids-Spreckels								
00HX011RZ ³	45.88	15.56	14272	0.762	84.52	263.1	12063 b-f	6.2
01HX047RZ ³	46.75	15.80	14763	0.727	85.04	268.8	12555 abc	6.4
02HX226RZ ³	42.90	15.20	13034	0.873	82.96	252.2	10820 h-k	4.9
03HX351RZ ³	48.76	14.63	14226	0.817	83.53	244.6	11876 c-g	5.0
03HX353RZ ³	43.82	16.03	14031	0.760	84.65	271.5	11877 c-g	5.0
03HX355RZ ³	40.04	15.13	12084	0.901	82.58	249.9	9979 klm	5.2
03HX356	46.34	15.85	14679	0.817	83.87	265.8	12313 a-e	5.3
03HX359RZ ³	43.63	14.62	12728	1.019	80.84	236.6	10287 jkl	5.5
Seedex								
SX RaptorRZ ²	47.98	15.56	14925	0.853	83.32	259.4	12441 a-d	5.7
SX1518	36.88	14.97	11041	0.888	82.70	247.8	9134 m	5.3
SX1519 ³	39.51	14.84	11722	0.846	83.24	247.2	9761 lm	4.5
SX1520	42.22	15.91	13426	0.704	85.36	271.6	11461 f-i	5.2
SX1521 ³	42.59	16.66	14182	0.731	85.17	283.8	12084 b-f	4.9
Curly Top Susceptible Check								6.8
Curly Top Resistant Check (US 41)								5.1
LSD (0.05)	3.11	0.50	943	0.089	1.27	11.5	851	
LSD (0.10)	2.61	0.42	790	0.075	1.06	9.6	714	
CV (%)	7.2	3.4	7.1	11.3	1.6	4.7	7.7	
Pr>F	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	

When comparing yields or sugars of two varieties, the values must differ by a value equal to or greater than the LSD (0.05) given at the bottom of each column to be considered statistically different in this test.

^zMeans followed by the same letter are not significantly different at $P \leq 0.05$.

Planted April 1, 2003; Harvested October 9-10, 2003.

¹ Root yields have been tared 5%.

² Commercial check varieties.

³ Entered as a rhizomania resistant variety.

⁴ Entered as a rhizoctonia resistant variety.