

Table 10. Field performance of experimental transgenic sugarbeet varieties resistant to Liberty or Roundup herbicides compared with standard commercial varieties at the Kimberly Research and Extension Center, Kimberly, Idaho, 2001. November 16,

VARIETY	Root ¹	Sugar	Gross			Amino	Recov.	Estimated		Curly Top ²
	Yield	Content	Sugar	K	Na	N	Sugar	Recov.	Sugar	Rating
	T/A	(%)	(lbs/A)	(keq/100g)	(keq/100g)	(meq/100g)	(%)	(lbs/T)	(lbs/A)	2000
ACH Mustang ^{3,4}	42.69	17.11	14603	51.52	6.54	24.14	16.03	320.6	13682	5.1
Beta 7CG9236RR	42.07	17.18	14433	56.06	11.11	32.45	15.88	317.6	13339	6.0
Beta 8757LL	44.18	17.72	15657	51.95	8.00	23.83	16.62	332.4	14688	4.8
Beta 8757RR	42.75	17.36	14835	53.33	10.89	32.79	16.09	321.8	13754	5.4
Beta 8757 ^{3,4}	42.49	17.18	14584	52.51	9.65	29.18	15.99	319.8	13568	5.2
Crystal 9931 RR	31.77	16.78	10668	62.06	10.97	33.88	15.39	307.7	9781	4.4
HM 108RR	46.30	16.94	15694	54.91	9.56	37.26	15.62	312.3	14464	4.5
HM 125RzRR	44.07	16.33	14415	52.82	12.50	26.09	15.15	302.9	13370	5.8
HM Oasis RR	40.91	17.79	14560	47.91	7.53	27.61	16.71	334.1	13673	4.8
HM Owyhee ^{3,4}	41.93	17.34	14536	45.98	5.99	24.26	16.34	326.9	13697	4.3
HM PM 21 ^{3,4}	41.93	17.40	14584	45.16	4.94	23.23	16.43	328.6	13775	4.4
Susceptible Check										6.9
US 41										4.7
LSD (0.05)	2.74	0.65	1051	3.08	2.84	4.75	0.74	14.8	1029	
LSD (0.10)	2.29	0.55	878	2.58	2.38	3.98	0.62	12.3	861	
CV (%)	6.5	3.8	7.3	5.9	31.0	16.6	7.7	4.6	4.6	
Pr>F	0.0001	0.0018	0.0001	0.0001	0.0001	0.0001	0.0001	0.0006	0.0006	

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.

Planted April 10, 2001; Harvested October 2, 2001.

¹ Root yields have been tared 5%.

² Curly Top Ratings: 0 = no curly top symptoms; 9 = plants killed. To calculate and compare the average curly top resistance of two or more varieties, use only those years data in which the compared varieties all have ratings.

³ Commercial check varieties.

⁴ Commercial seed obtained locally.