Table 9. Field performance of **COMMERCIAL** sugarbeet varieties[1] in **MODERATE RHIZOMANIA** conditions in the Amalgamated Sugar Co. LLC Variety Trial at the **DEAN BINGHAM FARM, JEROME,** Idaho, 2003.

VARIETY	Root[2] Yield (T/A)	Sugar Content (%)	Gross Sugar (lbs/A)	Conduc-tivity (mmhos)	Extrac-tion (%)	Estimated Recoverable Sugar (lbs/T)	Estimated Recoverable Sugar (lbs/A)		Tare (%)	Curly Top Ratings[3] 1999	2001	2002	2003
ACH Seeds													
ACH Mustang	24.60	15.38	7562	1.124	79.57	244.8	6021	hij[Z]	5.82	4.5	5.1	3.7	4.9
Crystal 217R[4]	30.43	18.08	10991	0.878	83.48	301.9	9175	cd	6.89	-	-	3.6	5.4
Crystal 9906R[4,5]	30.12	17.68	10656	0.836	83.98	297.0	8951	d	6.24	-	5.1	-	5.5
Betaseed													
Beta 4035R[4]	33.96	17.63	11973	0.861	83.63	294.9	10015	ab	5.96	5.4	5.0	4.2	5.5
Beta 4199R[4]	33.55	18.55	12437	0.772	84.97	315.3	10569	a	6.12	-	5.3	3.8	5.3
Beta 4490R[4]	31.40	18.03	11310	0.844	83.93	302.7	9493	bcd	5.34	4.6	4.8	3.8	4.8
Beta 4773R[4]	30.41	17.86	10847	0.829	84.08	300.4	9117	cd	5.90	-	4.8	4.1	5.8
Beta 8220B	25.73	15.06	7735	1.247	77.73	234.5	6033	hij	6.29	4.6	4.8	3.5	4.9
Beta 8348	27.99	15.95	8946	1.038	80.83	258.4	7249	ef	6.49	5.2	6.2	4.6	6.2
Beta 8600	26.96	15.15	8166	1.156	79.08	239.7	6460	fgh	6.18	-	-	3.7	4.9
Beta 8859	23.37	16.81	7861	0.852	83.60	281.0	6580	fgh	7.78	-	5.1	4.2	5.4
Hilleshog/Syngenta													
HM 1642	23.57	16.33	7723	0.965	81.97	267.9	6341	ghi	5.97	4.9	5.0	4.1	5.9
HM 2980RZ[4]	34.58	17.80	12317	0.868	83.57	297.6	10302	ab	5.10	4.9	4.7	4.6	4.9
HM 2984RZ[4]	29.73	17.71	10523	0.751	85.11	301.4	8957	d	7.53	-	4.8	3.1	3.9
HM 2986RZ[4]	29.23	17.57	10270	0.738	85.25	299.6	8758	d	5.97	-	-	3.4	4.2
HM Oasis	25.04	15.27	7646	0.984	81.48	248.9	6234	g-j	5.68	4.2	4.7	2.9	3.9
HM Owyhee	23.27	14.87	6949	1.114	79.55	236.9	5555	ij	6.64	4.2	4.3	3.3	3.5
HM PM21	23.79	16.31	7760	0.893	82.94	270.6	6439	fgh	6.48	4.6	4.4	3.1	3.7
Holly Hybrids-Spreckels													
AcclaimRZ[4]	33.98	17.91	12167	0.915	82.95	297.2	10094	ab	4.93	-	-	3.9	4.5
EagleRZ[4]	33.13	17.72	11739	0.887	83.30	295.2	9782	abc	5.04	-	6.2	4.4	5.1
HH 120	25.51	16.20	8260	1.091	80.19	260.0	6640	fgh	5.22	5.9	5.6	4.0	5.9
HH 125[5]	27.30	16.98	9286	0.874	83.34	283.1	7745	e	6.21	5.9	5.8	4.6	6.8
PhoenixRZ[4]	34.05	17.45	11878	0.933	82.64	288.4	9818	abc	4.40	-	5.3	4.9	5.0
Seedex													
SX Cascade	20.87	15.69	6576	0.904	82.64	259.5	5456	j	7.02	4.1	5.2	3.2	3.9
SX Orbit	24.77	16.73	8298	0.919	82.65	276.6	6864	fg	7.19	-	4.8	4.1	5.1
SX Puma	24.10	15.89	7692	0.964	81.89	260.4	6315	ghi	7.28	4.3	4.7	3.6	4.3
SX RaptorRZ[4]	35.13	17.28	12144	0.911	82.89	286.5	10070	ab	5.34	-	4.7	4.1	5.7
Curly Top Susceptible Check										6.4	6.9	5.6	6.8
Curly Top Resistant Check (US 41)										4.7	5.3	3.5	5.1
LSD (0.05)	2.62	0.63	936	0.098	1.43	13.2	820		1.77				
LSD (0.10)	2.20	0.52	784	0.082	1.20	11.0	687		1.48				
CV (%)	9.6	3.9	10.1	10.9	1.8	4.9	10.7		30.0				
Pr>F	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001		0.0172				

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.
[Z]Means followed by the same letter are not significantly different at P ≤ 0.05.

Planted April 21, 2003; Harvested October 15-16, 2003.

[1] All entries are commercial seed obtained locally.

[2] Root yields have been individually tared.

[3] 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. The Beet Sugar Development Foundation's 2000 Curly Top test results are omitted due to inconsistent ratings; a result of severe stand loss at cultivation.

[4] Entered as a rhizomania resistant variety.

[5] Entered as a rhizoctonia resistant variety.