

Table 14. Field performance of **RHIZOMANIA** and **ROUNDUP** resistant sugarbeet varieties under mild disease conditions in the University of Idaho Variety trial at the College of Southern Idaho Breckenridge Farm, Twin Falls, Idaho, 2003.

VARIETY	Root Yield (T/A)	Sugar Content (%)	Gross Sugar (lbs/A)	Extraction (%)	Estimated Recoverable Sugar (lbs/T) (lbs/A)		Tare (%)	2003 Curly Top Rating ¹	Rhizomania Resistance DI
Betaseed									
Beta 4490 R Check ³	32.23	15.42	9888	89.67	276.6	8852	15.47	4.8	1.88
Beta G9236RR	27.94	17.59	9844	92.89	327.0	9150	11.14	6.3	3.10
Hillebrand/Syngenta									
HM 115RZRR	31.86	15.53	9906	89.74	278.9	8890	14.10	5.3	2.62
HM 125RZRR	30.98	16.36	10130	92.06	301.3	9328	13.97	5.6	2.43
HM Owyhee Check ⁴	24.11	14.05	6749	89.99	253.1	6065	17.29	3.5	4.06
Curly Top Susceptible Check								6.8	
Curly Top Resistant Check (US41)								5.1	
LSD (0.05)	4.06	0.50	1267	1.00	11.7	1162	NS		
LSD (0.10)	3.37	0.42	1051	0.83	9.7	963	NS		
CV (%)	12.95	2.97	12.77	1.02	3.79	12.87	53.74		
Pr>F	0.0022	0.0001	0.0001	0.0001	0.0001	0.0001	0.6174		

When comparing yields 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 May 7, Harvested September 30, 2003

¹ Curly Top Ratings: 0 = no curly top symptoms; 9 = plants killed.

² Rhizomania resistance: Four of the eight replications were scored for reaction to rhizomania. Roots were mechanically lifted and each scored on a rating scale where 0 = immunity and 9 = highly susceptible. DI (disease index) is the mean rating for all roots. %R (percentage of roots with 0-3 ratings).

³ Commercial rhizomania resistant check variety

⁴ Commercial rhizomania susceptible check variety

November 19, 2003

ns

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%R (0-3)

87.70

67.20

74.30

79.20

41.80

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(ent resistant)