

Michigan Sugar Company
Biotechnology Trials (Roundup Ready)
Overall Summary of 3 Locations - 2005

No.	Variety	RWSA	RWST	Tons/A	% Suc	% CJP	% Emerg*
5	Beta B5902 RR	6441 a	241.27 a	27.00 a	16.56 a	94.60 a	55.6 c
2	Beta B5903 RR	6391 a	240.42 a	26.96 a	16.46 a	94.74 a	54.7 c
8	Crystal 963	5997 a	241.57 a	25.22 a	16.29 a	95.53 a	66.8 b
1	HM 2761 Rz	5822 ab	239.11 a	24.55 ab	16.34 a	94.87 a	58.5 c
3	SX Prompt	5295 b	239.46 a	22.44 b	16.29 a	95.10 a	76.3 a
LSD (P=.05)		580.9	ns	2.39	ns	ns	5.19
CV		5.2	1.8	5.0	1.7	0.4	4.4
Grand Mean		5988.8	240.37	25.23	16.39	94.97	62.4

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

* Emergence percent includes one location not harvested.

Purpose: Varieties are submitted to be evaluated for possible approval for sale. Roundup resistant sugarbeet varieties have been developed and two were submitted for testing in 2005. We place these varieties in a separate test because biotech beets cannot be processed and must be destroyed. In the Biotech test we also plant our check varieties for comparison. One location of the biotech variety test was at the Beet and Bean Farm.

Results: The two varieties tested produced very good recoverable sugar per ton and recoverable sugar per acre. In a separate test the resistance to Cercospora leafspot is evaluated. These two varieties would not meet this resistance requirement.