

SWEET CORN RESEARCH REPORT—2012
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The trial this year evaluated multiple herbicide combination products applied preemergence and early and mid-postemergence in a Roundup-Ready fresh market sweet corn variety. The focus was on the herbicide, acetochlor, which was heavily researched in the late 1980's but which was never approved for use in New York. Acetochlor is in the same chemical family as Dual Magnum, Outlook, and Lasso. Monsanto is removing all Lasso products from the market as it is due to go through a complete reassessment at the EPA. Monsanto and Dow have applied to the DEC to get acetochlor registered in New York. Following receiving numerous letters from the public it is expected that the DEC will be approving the request.

The currently registered herbicides in the trial were Lumax, Halex GT, Bicep II Magnum, Harness Extra, Degree Extra, Warrant, and Harness 7, some containing acetochlor. While there was some very slight chlorosis with several of the POST treatments, the degree of chlorosis with Halex GT [Roundup + Callisto + Dual II Magnum] was striking. Six days after treatment it was 40-50% and was visible from the road. Fourteen days later this decreased to 15-20% and by 21 days it was virtually gone. All plots were virtually weed free. The corn crop was in excellent condition and yields in all treatments were statistically similar.

A trial will be conducted next year to compare the potential weed control differences and crop response to numerous preemergence herbicides for use in processing sweet corn.

Evaluating Acetochlor in Round-Up Ready Sweet Corn, 2012
 Horticulture Department, Cornell University

Location: Freeville Farm, Field N6
 Investigator: Dr. Robin Bellinder

Trt No.	Treatment Name	Rate		Growth Stage	SWEET CORN Temptation II 7/3/2012	SWEET CORN Temptation II 7/3/2012	SWEET CORN Temptation II 7/30/2012	SWEET CORN Temptation II 7/30/2012	
		Rate	Unit		Stunting %	Weed Control %	Count # Ears/50 FT	Weight (kg) Ear Wt/50 FT	
1	Lumax	2	lb ai/a	PRE	1.3	100.0	72.8	20.52	
	Atrazine	0.5	lb ai/a	PRE					
	Glyphosate	0.8	lb ai/a	MPST					
	Amm. Sulfate	17	lb/100 gal	MPST					
2	Lumax	2	lb ai/a	EPST	6.3	100.0	74.3	20.64	
	Atrazine	0.5	lb ai/a	EPST					
	Glyphosate	0.8	lb ai/a	MPST					
	Amm. Sulfate	17	lb/100 gal	MPST					
3	Halex GT	2	lb ai/a	EPST	2.5	100.0	69.8	19.23	
	NIS	0.25	% v/v	EPST					
	Amm. Sulfate	17	lb/100 gal	EPST					
4	Bicep II	2.9	lb ai/a	PRE	0.0	100.0	77.3	21.78	
	Magnum		lb ai/a	PRE					
	Glyphosate		0.8	lb/a					MPST
	Amm. Sulfate		17	lb/100 gal					MPST
5	Harness Extra	3.2	lb ai/a	PRE	1.3	100.0	74.8	20.42	
	Glyphosate	0.8	lb ai/a	MPST					
	Amm. Sulfate	17	lb/100 gal	MPST					
6	Degree Xtra	2.9	lb ai/a	PRE	1.3	100.0	73.8	20.21	
	Glyphosate	0.8	lb ai/a	MPST					
	Amm. Sulfate	17	lb/100 gal	MPST					
7	Harness	2	lb ai/a	PRE	5.0	100.0	75.3	20.61	
	Impact	0.016	lb ai/a	MPST					
	Glyphosate	0.8	lb ai/a	MPST					
	Amm. Sulfate	17	lb/100 gal	MPST					
8	Harness Extra	3.2	lb ai/a	EPST	1.3	100.0	73.0	19.90	
	Impact	0.016	lb ai/a	EPST					
	Glyphosate	0.8	lb/a	EPST & MPST					
	Amm. Sulfate	17	lb/100 gal	EPST & MPST					
9	Harness Extra	3.2	lb ai/a	PRE	2.5	100.0	75.8	21.15	
	Impact	0.016	lb ai/a	MPST					
	Glyphosate	0.8	lb ai/a	MPST					
	Amm. Sulfate	17	lb/100 gal	MPST					
10	Warrant	1.125	lb ai/a	EPST	1.3	100.0	74.3	20.29	
	Impact	0.016	lb ai/a	EPST					
	Glyphosate	0.8	lb ai/a	EPST & MPST					
	Amm. Sulfate	17	lb/100 gal	EPST & MPST					

11	Harness Extra	3.2	lb ai/a	EPST	1.3	100.0	74.8	21.76
	Glyphosate	0.8	lb ai/a	EPST & MPST				
	Amm. Sulfate	17	lb/100 gal	EPST & MPST				
12	Degree Extra	2.9	lb ai/a	PRE	1.3	100.0	80.3	21.75
13	Harness Extra	3.2	lb ai/a	PRE	0.0	100.0	77.5	20.60
14	Degree Extra	2.9	lb ai/a	EPST	2.5	100.0	68.8	19.62
	Glyphosate	0.8	lb ai/a	EPST & MPST				
	Amm. Sulfate	17	lb/100 gal	EPST & MPST				
LSD (P=0.05)					4.73	0.00	6.69	2.16
Standard Deviation					3.31	0.00	4.68	1.51
CV					168.41	0.00	6.29	7.32