

SWEET CORN RESEARCH REPORT—2013

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Postemergence registered herbicides were compared for potential weed control differences (Table 1). All treatments included a standard rate of Dual II Magnum applied preemergence. The POST treatments included 0.5 lb ai atrazine and the required adjuvants. Due to a mistake with decimals the Callisto application was ten times higher than registered and caused season long stunting and ultimately reduced yields. Impact, Laudis, Capreno, and Option all caused minor stunting but did not negatively affect yields. Weed control was excellent in all treatments and no differences of any magnitude were seen.

A second trial compared multiple, similar chemistry, preemergence herbicides registered for sweet and field corn. This was chosen as the New York DEC just registered acetochlor (multiple herbicides by Monsanto and Dow AgroSciences) for use in the state. The chosen herbicides were Surpass NXT, Outlook, Zidua, and Dual II Magnum (Table 2). Each product was applied at three rates and when weeds began to break through the preemergence treatments a combination of 0.5 lb ai atrazine and ¾ oz of Impact and NIS were applied postemergence. Treatments 5, 11, and 12 required the POST applications on 6/27, roughly 30 days after the PRE applications. The remaining POST treatments were applied on 7/9, 12 days later. Weed control was rather variable but differences within and between herbicides was not significant. Random high populations of common ragweed resulted in high ground cover ratings in the highest rate of Dual II Magnum (treatment 13). Numbers of harvested ears and weights were not different across the treatments.

Table 1: Comparing Current Postemergence Herbicides Registered in Sweet Corn, 2013

	Herbicide*	Rate	Stunting (%)	Weed control (%)	Yield/80'	
			(8/9)	(8/28)	#ears	lbs
1.	Untreated check		21	0	75	46
2.	Impact	3/4oz	14	98	104	73
	+Dual Magnum	3/4pt				
3.	Impact	3/4oz	0	97	112	77
4.	Impact	1oz	7	98	106	70
5.	Callisto ***	30 oz	19	95	76	48
6.	Laudis	3oz	0	90	104	71
7.	Capreno	3oz	8	95	105	71
8.	Option	1.5oz	15	97	102	69

*Dual II Magnum was applied preemergence (3/4pt/A) to treatment 3-8 and was applied postemergence in treatment 2. Atrazine was applied at 10oz 1A with all post treatments

**Adjuvants: Impact-MSO,UAN; Callisto-NIS; Laudis-MSO, UAN; Capreno-COC; OPTION-COC

*** Due to an error with decimals, Callisto was mistakenly applied at an excessively high rate

Table 2: Evaluating Preemergence Chloroacetamide-Type Herbicides in Sweet Corn-2013

	Herbicide*	Rate	Weed Control (%ground cover 8/1)	Yield/100ft	
				No. ears	Lb
1.	Untreated		99	41	30
2.	Surpass NXT	1/2pt	21	137	117
3.	Surpass NXT	3/4pt	21	135	120
4.	Surpass NXT	1pt	15	135	113
5.	Outlook	1/2pt	11	136	117
6.	Outlook	3/4pt	24	137	115
7.	Outlook	1pt	13	130	113
8.	Zidua	1.5oz	14	132	111
9.	Zidua	2.3oz	5	130	104
10.	Zidua	3.0oz	8	140	115
11.	Dual II Magnum	2/3pt	14	136	112
12.	Dual II Magnum	1pt	13	130	118
13.	Dual II Magnum	1.4pt	56 **	133	117
14.	Atrazine	1.1pt	9	138	118
	+Dual II Magnum	1pt			

*Following the preemergence applications, 0.5lb atrazine+ Impact 3/4oz and NIS were applied on an as-needed basis (treatments 5,11,12 on 6/27; 2-4, 6-10, 13, 14, on 7/9)

** Random, heavy populations of ragweed were not well controlled by treatment 13