SNAP BEAN RESEARCH REPORT—2012 Robin Bellinder, Department of Horticulture, Cornell University

Several herbicides evaluated in 2011 were trialed again in 2012 along with several new ones. These included Grasp, Zidua, Gulliver, Xonerate, Chateau, and Raft. However, this season we used the variety 'Huntington' whereas 'Hystyle' was used in 2011. Crop injury responses were significantly different, with 'Huntington' being much more sensitive than 'Hystyle'. Significant crop stunting occurred with both rates of Grasp and Gulliver, the high rate of Zidua, and Chateau and yields were reduced with all treatments. Yields with Xonerate and Raft were reduced due to weed competition. Yields in Dual Magnum + Reflex, Sandea, Pursuit and the low rate of Zidua were equivalent to the handweeded check.

Weeds were a mixture of hairy galinsoga, redroot pigweed, common lambsquarters, and common purslane. Control was overall very good probably enhanced by the very hot and dry growing conditions this season. Raft, Xonerate, and the low rate of Gulliver performed least well, followed by Sandea and Pursuit.

The active ingredient in the herbicide Zidua is now being marketed by three different companies. The original company was not interested in developing registrations for snap and dry beans. It is possible that one of the new marketers may be interested in doing this.

Preemergence Herbicides for Snap Beans, 2012 Horticulture Department; Cornell University

Location: Freeville, N-2

Investigator: Dr. Robin Bellinder

Crop Name			Snap Bean	Snap Bean	Weeds	Snap Bean	
Crop Variety			Huntington	Huntington	General	Huntington	
Rating Date			6/19/2012	6/22/2012	7/2/2012	7/19/2012	
Rating Type			Stunting	Emergence	Control	Yield	
Rating Unit			%	#/Plot	%	kg/40ft row	
Trt	Treatment		Rate				
No.	Name	Rate	Unit				
1	Untreated Check			0	54	0	5.6
2	Handweeded Check			0	54	99	10.9
3	Dual Magnum	16.1	fl oz/a	17	52	98	10.3
	Reflex	16.0	fl oz/a				
4	Grasp	1.9	fl oz/a	87	54	78	0.3
5	Grasp	3.8	fl oz/a	92	52	93	0.1
6	Zidua	0.6	oz wt/a	30	56	85	9.1
7	Zidua	1.1	oz wt/a	40	58	92	7.5
8	Gulliver	1.3	oz wt/a	82	56	35	0.4
9	Gulliver	2.6	oz wt/a	83	54	75	0.2
10	Xonerate	1.4	oz wt/a	18	57	33	8.0
11	Chateau	1.9	oz wt/a	78	41	96	3.4
12	Raft	3.4	fl oz/a	17	57	20	7.0
13	Sandea	0.7	oz wt/a	35	53	77	10.1
14	Pursuit	0.6	oz wt/a	23	58	62	9.1
LSD (P=.05)			13.4	5.9	25.8	2.3	
Standard Deviation			8.0	3.5	15.4	1.4	
CV				18.6	6.5	22.8	23.6