

SURVEY OF INSECTICIDE USE IN SUGARBEET IN WESTERN NORTH DAKOTA AND EASTERN MONTANA IN 2011

Aaron L. Carlson¹, Mark A. Boetel², Mohamed F.R. Khan¹, and
Jeff M. Stachler¹

¹Sugarbeet Research Technician, Extension Sugarbeet Specialist, and Extension Sugarbeet Specialist
North Dakota State University - University of Minnesota, Fargo, ND

and

²Associate Professor, Dept. of Entomology, North Dakota State University

Herbicide and fungicide use portions of this survey are presented in the Weed Control and Plant Pathology sections.

This biennial survey of sugarbeet growers was conducted to assess insecticide usage and to determine growers' opinions of insecticide performance at controlling key insect pests of sugarbeet in western North Dakota and eastern Montana. Results indicate that Poncho Beta insecticidal seed treatment was used on 58% of planted acres in 2011 (Table 1). Mustang was applied to 51% of reported acres and Asana to 11% of reported acres. No other insecticides were reported as being applied in 2011. Overall, insecticides were applied to 120% of reported acres. This is similar to the level of insecticide usage in 2009, 2005, 2003, and 2001, which ranged from 111 to 118%.

Table 1. A summary of insecticides applied by respondents in sugarbeet from 1989 to 2011.

Year	Acres Planted	Counter 15G	Counter 20CR	Lorsban 4E	Lorsban 15G	% of acres planted					Total
						Mustang	Asana	Poncho Beta	Temik	Other ¹	
2011	6,134	-	-	-	-	51	11	58	-	-	120
2009	3,441	-	-	-	-	30	2	86	-	-	118
2007	8,346	65	-	15	-	37	31	-	-	3	151
2005	7,733	59	1	-	-	52	2	-	-	-	114
2003	11,732	93	1	13	3	3	-	-	-	2	115
2001	22,125	61	13	<1	2	-	31	-	<1	3	111
1999	13,061	83	-	31	5	-	12	-	1	1	138
1997	11,059	84	-	11	5	-	-	-	6	3	113
1995	12,338	76	-	6	9	-	-	-	10	1	104
1993	9,242	85	-	8	-	-	-	-	5	2	100
1992	12,791	72	-	8	3	-	-	-	10	2	95
1991	15,784	80	-	-	-	-	-	-	10	-	90
1990	12,607	46	-	-	-	-	-	-	14	3	63
1989	15,857	55	-	-	-	-	-	-	20	10	85

¹Other includes 1989: Dyfonate, Malathion, and Furadan; 1990: Dyfonate and Furadan; 1992: Malathion and Furadan; 1993: Furadan; 1995: Furadan; 1997: Dyfonate and Thimet; 1999: unknown; 2001: Gaucho and Thimet; 2003: Gaucho; 2007: Poncho

Sugarbeet root maggot control was rated as excellent or good by 78% of the respondents in 2011 (Table 2), as compared to 69% in 2009, 79% in 2007, 90% in 2005, 81% in 2003, and 79% in 2001. Other insect control was rated as excellent or good by 80% of respondents in 2011. Twenty survey respondents reported 18 insecticide applications or 0.9 applications per respondent. Ten growers reported using no granular or seed treatment insecticide on 2,578 acres while 13 growers reported using no liquid insecticide on 3,446 acres in 2011. A total of five growers reported no insecticide use of either type on 815 acres in 2011.

Table 2. Number of insecticide applications and insect control rating by survey respondents in 2011.

Insecticide	Insecticide applications reported	Number of responses	Root Maggot				Number of responses	Other Insects			
			Exc ¹	Good	Fair	Poor		Exc	Good	Fair	Poor
			-----% of responses-----								
Poncho Beta	10	9	56	22	22	-	7	57	29	14	-
Mustang	6	0	-	-	-	-	6	33	50	17	-
Asana	2	0	-	-	-	-	2	50	-	50	-
Total	18	9	56	22	22	0	15	47	33	20	0

¹Exc = Excellent