

## SURVEY OF INSECTICIDE USE IN SUGARBEET IN WESTERN NORTH DAKOTA AND EASTERN MONTANA IN 2015

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

This 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 81% of planted acres in 2015 (Table 1). Mustang was applied to 27% of reported acres and Asana to 16% of reported acres. Overall, insecticides were applied to 124% of the reported 6,132 acres.

Sugarbeet root maggot control was rated as excellent or good by 88% of the respondents in 2015 (Table 2), as compared to 79% in 2014, 78% in 2011, 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 79% of respondents in 2015, compared to 78% in 2014. Twenty-two survey respondents reported 39 insecticide applications, which was an average of 1.8 applications per respondent. The last reported applications of granular insecticides from this production area were made during the 2007 growing season. One grower in 2015 reported using no granular, liquid, or seed treatment insecticide on 650 acres. Springtails, grasshoppers, flea beetles, and cutworms were the 'other insects' mentioned by respondents.

**Table 1. A summary of insecticide use in sugarbeet reported by respondents from 1989 to 2015.**

Year	Acres Planted	Counter 15G	Counter 20CR	Lorsban spray <sup>1</sup>	Lorsban 15G	% of acres planted					Total
						Mustang	Asana	Poncho Beta	Temik	Other <sup>2</sup>	
2015	6,132	-	-	-	-	27	16	81	-	-	124
2014	7,556	-	-	3	-	38	6	85	-	6	138
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

<sup>1</sup>Includes Lorsban 4E, Lorsban Advanced, and generic liquid formulations of chlorpyrifos

<sup>2</sup>Other 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; 2014: NipsIt

**Table 2. Number of insecticide applications and insect control rating reported by survey respondents in 2015.**

Insecticide	Insecticide applications reported	Root Maggot					Other Insects				
		Number of responses	Exc <sup>1</sup>	Good	Fair	Poor	Number of responses	Exc	Good	Fair	Poor
		-----% of responses-----					-----% of responses-----				
Poncho Beta	21	17	53	41	6	-	10	50	40	10	-
Mustang	14	7	42	29	29	-	5	40	-	60	-
Asana	4	0	-	-	-	-	4	50	50	-	-
<b>Total</b>	<b>39</b>	<b>24</b>	<b>50</b>	<b>38</b>	<b>12</b>	<b>0</b>	<b>19</b>	<b>47</b>	<b>32</b>	<b>21</b>	<b>0</b>

<sup>1</sup>Exc = Excellent