

**SURVEY OF FUNGICIDE USE IN SUGARBEET IN  
WESTERN NORTH DAKOTA AND  
EASTERN MONTANA - 2005**

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Sugarbeet growers were asked to report fungicide usage and to indicate number of applications per acre as a part of the annual survey of sugarbeet growers. Other portions of the survey are reported in the Weed Control and Entomology Sections.

Foiliar fungicide was applied to only 1% of sugarbeet acreage in 2005 (Table 1). In 1993, 40% of the acreage was treated, 91% in 1995, 101% in 1997, 228% in 1999, 191% in 2001 and 180% in 2003. The use of fungicide was extremely low in 2005. Perhaps the seeding of *Cercospora* resistant varieties plus the extensive use of humidity and temperature sensors in the factory district along with the *Cercospora* prediction model allowed the remarkable reduction in fungicide use in 2005.

Only one respondent reported fungicide use in 2005 (Table 2). The average number of applications was 1.5 times per acre in 2003 compared to 2.1 times per acre in 2001 and 2.3 times per acre in 1999.

Rhizomania was reported in two of the seven counties on the survey (Table 4). Rhizomania probably is more widespread than indicated on the survey but has not been identified yet. Only 2% of the reported acres on the survey were reported as infected.

Only 5% of the reported acres on the survey were seeded with a Rhizomania resistant variety (Table 4). Dawson, McKenzie and Richland counties reported some acres seeded with Rhizomania resistant varieties.

**TABLE 1. Fungicide use by survey respondents, 2005.**

County	Acres planted	Fungicide Applied						TOTAL
		Topsin/ Benlate	Super/Agri Tin	Headline	Eminent	GEM	Mancozebs	
-----% of acres planted-----								
Custer	140	0	0	0	0	0	0	0
Dawson	1188	0	0	0	0	0	0	0
McKenzie	1500	0	0	5	0	0	0	5
Prairie	520	0	0	0	0	0	0	0
Richland	1885	0	0	0	0	0	0	0
Roosevelt	905	0	0	0	0	0	0	0
Williams	1595	0	0	0	0	0	0	0
Total	7,733	0	0	1	0	0	0	1

**TABLE 2. Number of fungicide applications, 2005.**

County	Respondents	Number of applications			
		0	1	2	3
-----% of respondents-----					
Custer	2	100	0	0	0
Dawson	5	100	0	0	0
McKenzie	5	80	20	0	0
Prairie	2	100	0	0	0
Richland	5	100	0	0	0
Roosevelt	2	100	0	0	0
Williams	3	0	0	0	0
Total	24	96	4	0	0

**TABLE 3. Rating of Cercospora control, 2005.**

Fungicide	Responses	Cercospora control rating			
		Excellent	Good	Fair	Poor
-----% of respondents-----					
Topsin/Benlate	0	0	0	0	0
Super Tin/Agri Tin	0	0	0	0	0
Headline	1	0	100	0	0
Eminent	0	0	0	0	0
GEM	0	0	0	0	0
Mancozebs	0	0	0	0	0
Total	1	0	100	0	0

**Table 4. Acres affected by Rhizomania and acres treated with Quadris for Rhizoctonia control, 2005.**

County	Respondent acres planted	Acres reported as affected by Rhizomania	Acres seeded to Rhizomania resistant variety
Custer	140	0	0
Dawson	1188	79	116
McKenzie	1500	70	40
Prairie	520	0	0
Richland	1885	0	200
Roosevelt	905	0	0
Williams	1595	0	0
Total	7,733	149	356

