

SURVEY OF FUNGICIDE USE AND DISEASE MANAGEMENT IN SUGARBEET IN MINNESOTA AND EASTERN NORTH DAKOTA IN 2025

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The eleventh annual fungicide practices and disease management live polling survey was conducted using Point Solutions (Turning Point Technology) during the Sugarbeet Growers' Seminars held during February of 2026. The survey primarily focused on the responses from the growers attending the Fargo, Grand Forks, Wahpeton, ND and Willmar, MN seminars based on production practices from the 2025 growing season. Respondents at each seminar indicated the county in which the majority of their sugarbeets were produced (Table 1-4). The average sugarbeet acreage per respondent grown in 2025 was calculated to be 793 acres (Table 5). Agronomic practices such as crop rotation and tillage system were also assessed. Respondents indicated that wheat and field corn were the most frequent crops preceding sugarbeet in rotation (47% and 38%, respectively, Table 6). Growers at Fargo and Grand Forks were asked about cover crops, 31% of those surveyed used barley as cover crop, and 17% planted winter rye (Table 7). Most growers region-wide (97%) followed conventional tillage rather than strip tillage or no-till methods (Table 8).

Based on the survey done on the four seminar locations, 60% of total responses indicated that plant diseases were the most serious production problem. Multiple responses were accepted for this question. In particular, 55% indicated *Cercospora* Leaf Spot (CLS) was the most serious disease problem. 2%, 3% and 1% of the growers indicated *Aphanomyces*, *Rhizoctonia* and *Rhizomania* was the most serious production problem. The remaining 40% of the survey responses reported that weeds, poor emergence/stand, or insects were the major production challenges following diseases (Table 9).

When growers were asked about soil-borne diseases, 60% of the responses indicated *Rhizoctonia* as the main soil-borne disease problem. 15% indicated *Aphanomyces* as the biggest issue, 5% reported problem of *Fusarium* and 5% showed *Rhizomania* as a plant disease affecting the production. However, 15% of the responses did not report any issues caused by soil-borne diseases (Table 10).

Use of tolerant sugarbeet varieties and preventative fungicides are two popular and effective methods of managing *Rhizoctonia* diseases. Overall, 72% of the growers used a specialty variety for *Rhizoctonia* in 2025, with attendees of the Willmar and Wahpeton seminars being more likely to use specialty *Rhizoctonia* varieties (Table 11). Use of seed treatments, in-furrow, and post-emergent fungicides to control *Rhizoctonia* was assessed among the sugarbeet growers at each location. 40% of the participants responded that they use seed treatments alone as a way to manage *Rhizoctonia*. 20% used a seed treatment plus in-furrow application, and 24% used a post-emergent application with seed treatments. 15% of the participants used seed treatments, in-furrow and post emergent application and only 1% of the surveyed growers added a second post-emergent application (Table 12). Among the post-emergent fungicides used by the growers to control *Rhizoctonia*, the most frequently utilized product was Excalia followed by Quadris, Azteroid, Proline and then Azterknot (Table 13). Notably, this was the first year that Excalia was most used by sugarbeet growers. However, 33% of growers used one of several azoxystrobin-based products (Quadris, Azteroid, or Azterknot, Table 13). Of the 53% of respondents who used post-emergent fungicides, 11% made a banded application and 42% made a broadcast application (Table 14).

75% of the participants did not apply precipitated calcium carbonate i.e., waste lime in 2025 growing season while, 11% applied less than 5 tons per acre and 14% applied between 5 and 10 tons per acre to control *Aphanomyces* (Table 15).

Proactive and preventative fungicide applications continue to be the major management strategy for CLS. Questions related to the use of fungicide for CLS were asked to the growers across all the four seminar locations. 30% of

growers surveyed made 6 fungicide applications to control CLS. 26% and 20% of growers surveyed made 5 and 7 applications, respectively (Table 16). Due to high prevalence of CLS in 2025, 14% of growers surveyed at the Willmar seminar made 8 or more applications for CLS (Table 16). 60% of the growers made their first application of fungicide for CLS control between June 25-July 1 while, 19% and 20% of the growers started before June 25 and between July 2- 10 respectively (Table 17). For the last CLS fungicide application, 40% of those surveyed made the final CLS application between September 1-10, and 38% made a final CLS application between 11-20 (Table 18).

Spray practices were addressed with two questions. First, 34% of the growers responded that they did not have any CLS fungicides application made by aerial applicator, while 30% reported that up to 20% of their total fungicide application were made by an aerial applicator (Table 19). Next, 16% of the growers in the survey reported using 11-15 gallons of water per acre to apply CLS fungicides, 18% reported 16-19 gallons per acre and more than half (60%) of growers at the seminars used 20 gallons of water per acre (Table 20).

Table 1. 2026 Fargo Grower Seminar – Number of survey respondents by county growing sugarbeet in 2025

County	Percent of responses	Number of responses
Barnes	5%	1
Becker	9%	2
Cass	9%	2
Clay	41%	9
Norman/Mahnomen	27%	6
Ransom	0%	0
Richland	0%	0
Steele	0%	0
Trails	9%	2
Wilkin/Otter Tail	0%	0
Total	100%	22

Table 2. 2026 Grand Forks Grower Seminar – Number of survey respondents by county growing sugarbeet in 2025

Location	Percent of responses	Number of responses
Grand Forks	17%	6
Mahnomen	0%	0
Marshall	3%	1
Nelson	0%	0
Pennington/Red Lake	3%	1
Polk	57%	20
Steele	0%	0
Trails	6%	2
Walsh	11%	4
Other	3%	1
Total	100%	35

Table 3. 2026 Wahpeton Grower Seminar – Number of survey respondents by county growing sugarbeet in 2025

County	Percent of responses	Number of responses
Cass	4%	2
Clay	15%	8
Grant	13%	7
Otter Tail	0%	0
Ransom	0%	0
Richland	20%	11
Roberts	2%	1
Stevens	2%	1
Traverse	4%	2
Wilkin	41%	22
Total	100%	54

Table 4. 2026 Willmar Grower Seminar – Number of survey respondents by county growing sugarbeet in 2025

County	Percent of responses	Number of responses
Chippewa	38%	30
Kandiyohi	8%	6
Pope	1%	1
Redwood	3%	2
Renville	29%	23
Yellow Medicine	1%	1
Stevens	5%	4
Swift	10%	8
Other	5%	4
Total	100%	79

Table 5. Total sugarbeet acreage operated by respondents in 2025.

Location	Responses	Acres of sugarbeet									
		<99	100-199	200-299	300-399	400-599	600-799	800-999	1000-1499	1500-1999	2000+
-----% of responses-----											
Fargo	20	0	5	0	5	20	25	10	20	10	5
Grand Forks	34	0	9	6	3	21	24	6	18	12	3
Wahpeton	51	4	8	6	8	25	16	14	16	4	0
Willmar	74	5	4	8	15	19	12	8	16	5	7
Total	179	3	6	6	9	21	17	9	17	7	4

Table 6. Crop (grown in 2024) preceding sugarbeet (grown in 2025).

Location	Responses	Previous crop					
		Corn (field)	Corn (sweet)	Dry Beans	Peas	Soybean	Wheat
-----% of responses-----							
Fargo	20	0	0	0	0	15	85
Grand Forks	35	0	0	0	0	0	100
Wahpeton	52	21	0	0	0	17	62
Willmar	72	81	11	0	0	8	0
Total	179	38	5	0	0	10	47

Table 7. Fall or Spring seeded cover crop used by sugarbeet growers in 2025.

Location	Responses	Barley	Oat	Winter Rye	Spring Wheat	Winter Wheat	Other	None
-----% of responses-----								
Fargo	18	22	0	6	0	0	0	72
Grand Forks	36	36	8	22	14	0	3	17
Total	54	31	6	17	9	0	2	35

Table 8. Primary method of tillage used by sugarbeet growers in 2025.

Location	Responses	Conventional Tillage	No-Till	Strip Tillage
-----% of responses-----				
Fargo	21	95	0	5
Grand Forks	35	94	6	0
Wahpeton	52	96	0	4
Willmar	74	99	0	1
Total	182	97	1	2

Table 9. Sugarbeet growers' most serious production problem in 2025.

Location	Responses	Aph ¹	CLS ²	Emergence/ Stand	Herbicide Injury	Rhizoctonia	Rhizomania	Weeds	Root maggot
-----% of response-----									
Fargo	27	0	59	15	0	0	0	22	4
Grand Forks	64	2	34	34	0	2	0	28	0
Wahpeton	55	2	76	5	2	4	0	11	0
Willmar	83	2	55	6	0	4	1	31	0
Total	229	2	55	15	1	3	1	22	1

¹Aphanomyces

²Cercospora Leaf
Spot

Table 10. Soilborne diseases affecting sugarbeet production in 2025.

Location	Response	Rhizoctonia	Aphanomyces	Fusarium	Rhizomania	None
-----% of responses-----						
Fargo	25	52	12	16	4	16
Grand Forks	49	53	22	2	8	14
Wahpeton	55	65	12	6	2	16
Willmar	82	65	15	2	4	15
Total	211	60	15	5	5	15

Table 11. Use of specialty varieties to control Rhizoctonia diseases in sugarbeet in 2025.

Location	Responses	Yes	No
-----% of responses-----			
Fargo	20	70	30
Grand Forks	36	50	50
Wahpeton	50	74	26
Willmar	70	83	17
Total	176	72	28

Table 12. Methods used to control Rhizoctonia diseases in sugarbeet in 2025.

Location	Responses	Seed treatment ONLY	Seed treatment + In-furrow	Seed treatment + POST	Seed treatment + In-furrow + POST	Seed Treatment + In-Furrow + 2x POST
-----% of responses-----						
Fargo	20	40	25	15	15	5
Grand Forks	37	27	35	30	8	0
Wahpeton	50	76	12	8	4	0
Willmar	70	21	16	34	27	1
Total	177	40	20	24	15	1

Table 13. Post-emergent fungicides used to control Rhizoctonia diseases in 2025.

Location	Responses	Azteroid	Azterknot	Excalia	Quadris or generic	Proline	Elatus	Other	None
-----% of responses-----									
Fargo	20	5	0	45	20	5	0	0	25
Grand Forks	40	35	2	8	22	8	0	0	25
Wahpeton	51	4	0	2	10	4	0	2	78
Willmar	70	10	3	39	20	3	0	3	23
Total	181	13	2	22	18	4	0	1	40

Table 14. Application methods of post-emergent fungicides used to control Rhizoctonia diseases in 2025.

Location	Responses	Band	Broadcast	None Applied
-----% of responses-----				
Fargo	20	25	50	25
Grand Forks	39	8	51	41
Wahpeton	51	4	14	82
Willmar	70	14	56	30
Total	180	11	42	47

Table 15. Application rates of precipitated calcium carbonate (waste lime) applied in 2025

Location	Responses	None	<5 Tons/Acre	5-10 Tons/Acre
-----% of responses-----				
Fargo	20	70	0	30
Grand Forks	39	90	0	10
Wahpeton	51	69	6	25
Willmar	70	73	23	4
Total	180	75	11	14

Table 16. Total number of fungicide applications made to control Cercospora Leaf Spot in 2025

Location	Responses	0	1	2	3	4	5	6	7	8	>8
-----% of responses-----											
Fargo	20	0	5	0	0	25	40	20	10	0	0
Grand Forks	40	0	0	0	18	32	30	20	0	0	0
Wahpeton	51	0	0	0	2	6	35	45	10	0	2
Willmar	72	0	0	1	1	3	12	28	40	8	6
Total	183	0	1	1	5	12	26	30	20	3	2

Table 17. First application date of fungicides to control Cercospora Leaf Spot in 2025.

Location	Responses	Before June 25	June 25-July 1	July 2-10	After July 10
-----% of responses-----					
Fargo	21	0	81	14	5
Grand Forks	42	7	48	45	0
Wahpeton	50	6	76	16	2
Willmar	69	42	49	9	0
Total	182	19	60	20	1

Table 18. Last application date of fungicides to control Cercospora Leaf Spot in 2025

Location	Responses	Before Aug 21	Aug 21-31	Sept 1-10	Sept 11-20	After Sept 20
-----% of responses-----						
Fargo	21	5	0	43	43	10
Grand Forks	42	0	10	50	33	7
Wahpeton	49	2	22	35	35	6
Willmar	70	0	17	37	41	4
Total	182	1	15	40	38	6

Table 19. Percentage of total fungicide applications for CLS made by an aerial applicator in 2025.

Location	Responses	0%	1%-20%	21%-40%	41%-60%	61%-80%	81%-99%	100%
-----% of responses-----								
Fargo	21	29	38	5	10	5	0	14
Grand Forks	42	45	29	12	2	0	2	10
Wahpeton	52	38	35	17	6	4	0	0
Willmar	68	25	25	25	15	4	1	4
Total	183	34	30	18	9	3	1	5

Table 20. Gallons of water per acre used to apply CLS fungicides (ground application) in 2025.

Location	Responses	11-15	16-19	20	20+
-----% of responses-----					
Fargo	21	48	24	24	5
Grand Forks	39	33	28	31	8
Wahpeton	52	13	15	69	2
Willmar	71	0	13	79	8
Total	183	16	18	60	6