



2026 Minn-Dak Seed Approval List

Fully Approved Varieties:

- ACH 166
- ACH 370 (CLS)
- Beta 7231 (CLS)
- HIL 2325

Test Market Varieties:

- ACH 417 (CLS, RHC, APH)
- ACH 472 (CLS, RHC, APH)
- ACH 489 (APH)
- Beta 7416 (RHC)
- Beta 7456 (CLS, RHC)

Specialty Varieties:

- ACH 290 (RHC)
- HIL 2547 (RHC)

Conditionally Approved Varieties:

- None

Varieties That Did Not Make Approval But Are Still Available For Sale:

- Beta 7068
- Beta 7170

Established Varieties	Percent Emergence									Years In Trials	Years Comm.	
	Trial Year			»	Average		»	% of Means *				
	2025	2024	2023		2-Yr	3-Yr		2025	2024			
ACH 166	67.6	88.8	59.6	»	78.2	72.0	»	102.4	±	98.4	5	3
Beta 7068	78.4	90.1	54.7	»	84.2	74.4	»	105.8	±	98.5	6	4
Beta 7231	75.2	83.3	58.8	»	79.3	72.4	»	103.0	±	96.7	4	2
Hilleshög 2325	61.6	81.1	52.4	»	71.4	65.0	»	92.5	±	91.2	7	5
1-Year Mean	70.7	85.8	56.4	* Trial Years			»	3 yr	3 yr			
2-Year Mean	»	78.3	71.1	Approval Mean				70.3				
3-Year Mean	»	»	71.0	2024 3-Yr Mean				67.2				

Candidate Varieties	Percent Emergence									Years In Trials	Years Comm.	
	Trial Year			»	Average		»	% of Means *				
	2025	2024	2023		2-Yr	3-Yr		2025	2024			
ACH 290	80.3	85.8	58.2	»	83.1	74.8	»	106.4	±	102.7	4	2
ACH 370	74.5	87.5	53.9	»	81.0	72.0	»	102.4	±	100.8	3	1
Beta 7170	75.6	90.1	52.8	»	82.8	72.8	»	103.6	±	101.9	5	3
1-Year Mean	76.8	87.8	55.0	* Trial Years			»	3 yr	2 yr			
2-Year Mean	»	82.3	71.4	Approval Mean				70.3				
3-Year Mean	»	»	73.2	2024 2-Yr Mean				70.1				

Test Market Varieties	Percent Emergence									Years In Trials	Years Comm.	
	Trial Year				Average			% of Means *				
	2025	2024	2023		2-Yr	3-Yr		2025	2024			
ACH 417	77.3	84.6	-	»	80.9	-	»	102.6	±	97.2	2	-
ACH 472	73.4	86.1	-	»	79.7	-	»	101.0	±	98.9	2	-
ACH 489	70.9	90.7	-	»	80.8	-	»	102.4	±	104.2	2	-
Beta 7416	81.2	83.6	-	»	82.4	-	»	104.4	±	96.1	2	-
Beta 7456	73.1	92.6	-	»	82.8	-	»	105.0	±	106.4	2	-
1-Year Mean	75.2	87.5			* Trial Years »			2 yr	1 yr			
2-Year Mean	»	81.3			Approval Mean			78.9				
					2024 1-Yr Mean				86.9			

% EMERGENCE

2025 Agronomic Performance 2 of 6

Established Varieties	Percent Sugar										Years In Trials	Years Comm.
	Trial Year			»	Average		»	% of Means *				
	2025	2024	2023		2-Yr	3-Yr		2025	2024			
ACH 166	16.82	17.35	19.90	»	17.09	18.02	»	101.6	±	102.5	5	3
Beta 7068	16.12	16.59	18.72	»	16.35	17.14	»	96.6	±	97.8	6	4
Beta 7231	16.83	17.35	19.92	»	17.09	18.03	»	101.6	±	103.8	4	2
Hilleshög 2325	16.40	17.05	19.31	»	16.73	17.59	»	99.1	±	100.0	7	5
1-Year Mean	16.54	17.09	19.46	* Trial Years »				3 yr		3 yr		
2-Year Mean	»	16.81	18.27	Approval Mean				17.74				
3-Year Mean	»	»	17.70	2024 3-Yr Mean						18.46		

% SUGAR

Candidate Varieties	Percent Sugar										Years In Trials	Years Comm.
	Trial Year			»	Average		»	% of Means *				
	2025	2024	2023		2-Yr	3-Yr		2025	2024			
ACH 290	15.96	16.62	18.97	»	16.29	17.18	»	96.8	±	97.4	4	2
ACH 370	17.20	17.92	20.27	»	17.56	18.46	»	104.1	±	104.5	3	1
Beta 7170	16.15	16.75	19.14	»	16.45	17.35	»	97.8	±	98.2	5	3
1-Year Mean	16.43	17.10	19.46	* Trial Years »				3 yr		2 yr		
2-Year Mean	»	16.76	18.28	Approval Mean				17.74				
3-Year Mean	»	»	17.66	2024 2-Yr Mean						18.27		

Test Market Varieties	Percent Sugar										Years In Trials	Years Comm.
	Trial Year				Average		% of Means *					
	2025	2024	2023		2-Yr	3-Yr		2025	2024			
ACH 417	17.21	17.93	-	»	17.57	-	»	105.0	±	105.9	2	-
ACH 472	17.09	17.90	-	»	17.49	-	»	104.6	±	105.8	2	-
ACH 489	16.60	17.31	-	»	16.95	-	»	101.3	±	102.3	2	-
Beta 7416	17.06	17.73	-	»	17.40	-	»	104.0	±	104.8	2	-
Beta 7456	16.99	17.74	-	»	17.36	-	»	103.8	±	104.8	2	-
1-Year Mean	16.99	17.72	* Trial Years »					2 yr	1 yr			
2-Year Mean	»	17.35	Approval Mean					16.73				
2024 1-Yr Mean										16.92		

2025 Agronomic Performance 3 of 6

Established Varieties	Percent Purity										Years In Trials	Years Comm.
	Trial Year			Average			% of Means *					
	2025	2024	2023	2-Yr		3-Yr	2025		2024			
ACH 166	91.21	91.54	90.14	»	91.37	90.96	»	100.4	±	100.5	5	3
Beta 7068	90.71	90.71	89.31	»	90.71	90.24	»	99.6	±	100.0	6	4
Beta 7231	91.23	91.31	89.81	»	91.27	90.78	»	100.2	±	100.1	4	2
Hilleshög 2325	91.19	91.53	89.96	»	91.36	90.89	»	100.3	±	100.5	7	5
1-Year Mean	91.08	91.27	89.81	* Trial Years »				3 yr	3 yr			
2-Year Mean	»	91.18	90.54	Approval Mean				90.64				
3-Year Mean	»	»	90.72	2024 3-Yr Mean				90.60				

Candidate Varieties	Percent Purity										Years In Trials	Years Comm.
	Trial Year			Average			% of Means *					
	2025	2024	2023	2-Yr	3-Yr		2025	2024				
ACH 290	90.58	91.07	89.19	»	90.82	90.28	»	99.6	±	99.7	4	2
ACH 370	90.79	91.36	90.04	»	91.07	90.73	»	100.1	±	100.3	3	1
Beta 7170	90.84	90.99	89.53	»	90.91	90.45	»	99.8	±	99.8	5	3
1-Year Mean	90.74	91.14	89.59	* Trial Years »				3 yr	2 yr			
2-Year Mean	»	90.94	90.36	Approval Mean				90.64				
3-Year Mean	»	»	90.49	2024 2-Yr Mean				90.43				

Test Market Varieties	Percent Purity										Years In Trials	Years Comm.
	Trial Year				Average			% of Means *				
	2025	2024	2023		2-Yr	3-Yr		2025	2024			
ACH 417	90.89	91.27	-	»	91.08	-	»	99.9	±	100.1	2	-
ACH 472	90.28	90.48	-	»	90.38	-	»	99.2	±	99.2	2	-
ACH 489	91.20	91.41	-	»	91.31	-	»	100.2	±	100.2	2	-
Beta 7416	91.20	91.24	-	»	91.22	-	»	100.1	±	100.1	2	-
Beta 7456	90.21	90.16	-	»	90.18	-	»	99.0	±	98.9	2	-
1-Year Mean	90.75	90.91	* Trial Years »					2 yr	1 yr			
2-Year Mean	»	90.83	Approval Mean					91.14				
2024 1-Yr Mean										91.19		

% PURITY

Established Varieties	Yield as Tons/Acre										Years In Trials	Years Comm.
	Trial Year				Average			% of Means *				
	2025	2024	2023		2-Yr	3-Yr		2025	2024			
ACH 166	30.6	35.5	25.7	»	33.1	30.6	»	102.3	±	98.8	5	3
Beta 7068	33.3	38.0	25.3	»	35.6	32.2	»	107.6	±	103.4	6	4
Beta 7231	30.7	36.4	25.5	»	33.5	30.9	»	103.2	±	99.4	4	2
Hilleshög 2325	27.6	33.4	24.1	»	30.5	28.4	»	94.9	±	95.1	7	5
1-Year Mean	30.5	35.8	25.2	* Trial Years »				3 yr		3 yr		
2-Year Mean	»	33.2	30.5	Approval Mean				29.9				
3-Year Mean	»	»	30.5	2024 3-Yr Mean						28.6		

YIELD

Candidate Varieties	Yield as Tons/Acre										Years In Trials	Years Comm.
	Trial Year				Average			% of Means *				
	2025	2024	2023		2-Yr	3-Yr		2025	2024			
ACH 290	34.5	39.3	28.0	»	36.9	33.9	»	113.5	±	113.6	4	2
ACH 370	30.1	35.0	24.2	»	32.6	29.8	»	99.6	±	99.9	3	1
Beta 7170	33.1	39.2	26.3	»	36.1	32.9	»	109.9	±	110.4	5	3
1-Year Mean	32.6	37.8	26.2	* Trial Years »				3 yr	2 yr			
2-Year Mean	»	35.2	32.0	Approval Mean				29.9				
3-Year Mean	»	»	32.2	2024 2-Yr Mean				29.7				

Test Market Varieties	Yield as Tons/Acre										Years In Trials	Years Comm.
	Trial Year				Average			% of Means *				
	2025	2024	2023		2-Yr	3-Yr		2025	2024			
ACH 417	30.5	36.9	-	»	33.7	-	»	101.5	±	103.1	2	-
ACH 472	31.8	36.6	-	»	34.2	-	»	103.0	±	102.2	2	-
ACH 489	32.3	36.8	-	»	34.5	-	»	104.0	±	102.7	2	-
Beta 7416	31.8	36.8	-	»	34.3	-	»	103.2	±	102.7	2	-
Beta 7456	32.7	37.1	-	»	34.9	-	»	105.0	±	103.5	2	-
1-Year Mean	31.8	36.8			* Trial Years »			2 yr	1 yr			
2-Year Mean	»	34.3			Approval Mean			33.2				
					2024 1-Yr Mean					35.8		

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Established Varieties	Recoverable Sugar/Ton (RST)									RST + RSA		
	Trial Year				Average			% of Means *		% of Means *		
	2025	2024	2023		2-Yr	3-Yr		2025	2024	2025	2024	
ACH 166	291.3	302.5	341.8	»	296.9	311.8	»	102.2	±	103.3	206.7	205.3
Beta 7068	276.6	285.3	316.7	»	280.9	292.9	»	96.0	±	97.6	199.1	198.5
Beta 7231	291.4	301.4	340.1	»	296.4	311.0	»	101.9	±	104.0	207.2	207.2
Hilleshög 2325	283.7	297.0	330.3	»	290.3	303.6	»	99.5	±	100.6	194.5	196.7
1-Year Mean	285.7	296.5	332.2	* Trial Years			»	3 yr	3 yr	3 yr	3 yr	
2-Year Mean	»	291.1	314.4	Approval Mean				305.2				
3-Year Mean	»	»	304.8	2024 3-Yr Mean				318.0				

RST

Candidate Varieties	Recoverable Sugar/Ton (RST)									RST + RSA		
	Trial Year				Average			% of Means *		% of Means *		
	2025	2024	2023		2-Yr	3-Yr		2025	2024	2025	2024	
ACH 290	273.2	287.3	320.5	»	280.3	293.7	»	96.2	±	96.8	205.4	206.9
ACH 370	296.2	312.0	347.8	»	304.1	318.7	»	104.4	±	105.1	208.5	210.3
Beta 7170	277.7	289.4	325.0	»	283.6	297.4	»	97.4	±	97.9	204.3	205.6
1-Year Mean	282.4	296.2	331.1		* Trial Years »			3 yr		2 yr	3 yr	2 yr
2-Year Mean	»	289.3	313.7		Approval Mean			305.2				
3-Year Mean	»	»	303.2		2024 2-Yr Mean					313.8		

Test Market Varieties	Recoverable Sugar/Ton (RST)									RST + RSA		
	Trial Year				Average			% of Means *		% of Means *		
	2025	2024	2023		2-Yr	3-Yr		2025	2024	2025	2024	
ACH 417	296.9	311.7	-	»	304.3	-	»	105.1	±	106.3	212.1	216.1
ACH 472	292.2	307.7	-	»	299.9	-	»	103.6	±	104.9	210.6	212.4
ACH 489	287.3	301.2	-	»	294.3	-	»	101.6	±	102.7	207.9	208.3
Beta 7416	295.4	308.1	-	»	301.8	-	»	104.2	±	105.1	212.1	213.3
Beta 7456	290.0	303.5	-	»	296.7	-	»	102.5	±	103.5	210.3	210.8
1-Year Mean	292.3	306.4	* Trial Years »					2 yr	1 yr	2 yr	1 yr	
2-Year Mean	»	299.4	Approval Mean				289.6					
2024 1-Yr Mean								293.3				

2025 Agronomic Performance 6 of 6

Established Varieties	Recoverable Sugar/Acre (RSA)									RST + RSA		
	Trial Year				Average			% of Means *		% of Means *		
	2025	2024	2023		2-Yr	3-Yr		2025	2024	2025	2024	
ACH 166	8,924	10,652	8,807	»	9,788	9,461	»	104.5	±	102.0	206.7	205.3
Beta 7068	9,213	10,741	8,071	»	9,977	9,342	»	103.2	±	100.9	199.1	198.5
Beta 7231	8,964	10,922	8,727	»	9,943	9,538	»	105.3	±	103.2	207.2	207.2
Hilleshög 2325	7,900	9,859	8,058	»	8,880	8,606	»	95.0	±	96.1	194.5	196.7
1-Year Mean	8,750	10,544	8,416	* Trial Years			»	3 yr	3 yr	3 yr	3 yr	
2-Year Mean	»	9,647	9,480	Approval Mean				9,054				
3-Year Mean	»	»	9,236	2024 3-Yr Mean				8,983				

RSA

Candidate Varieties	Recoverable Sugar/Acre (RSA)									RST + RSA		
	Trial Year				Average			% of Means *		% of Means *		
	2025	2024	2023		2-Yr	3-Yr		2025	2024	2025	2024	
ACH 290	9,421	11,237	8,996	»	10,329	9,884	»	109.2	±	110.1	205.4	206.9
ACH 370	8,956	10,857	8,467	»	9,906	9,426	»	104.1	±	105.1	208.5	210.3
Beta 7170	9,243	11,249	8,546	»	10,246	9,679	»	106.9	±	107.7	204.3	205.6
1-Year Mean	9,207	11,114	8,669		* Trial Years »			3 yr		2 yr	3 yr	2 yr
2-Year Mean	»	10,160	9,892		Approval Mean			9,054				
3-Year Mean	»	»	9,663		2024 2-Yr Mean				9,190			

Test Market Varieties	Recoverable Sugar/Acre (RSA)									RST + RSA	
	Trial Year			Average			% of Means *			% of Means *	
	2025	2024	2023	2-Yr	3-Yr		2025	2024		2025	2024
ACH 417	9,083	11,433	- »	10,258	- »		107.1	±	109.8	212.1	216.1
ACH 472	9,316	11,186	- »	10,251	- »		107.0	±	107.5	210.6	212.4
ACH 489	9,362	10,996	- »	10,179	- »		106.3	±	105.6	207.9	208.3
Beta 7416	9,404	11,271	- »	10,338	- »		107.9	±	108.3	212.1	213.3
Beta 7456	9,487	11,171	- »	10,329	- »		107.8	±	107.3	210.3	210.8
1-Year Mean	9,330	11,211	* Trial Years »				2 yr	1 yr		2 yr	1 yr
2-Year Mean	»	10,271	Approval Mean				9,580				
	2024 1-Yr Mean							10,410			

2025 1st-Year Agronomic Performance

Experimental Varieties	Percent Emergence		Percent Sugar		Percent Purity		Years In Trials
	2025	% of Est.	2025	% of Est.	2025	% of Est.	
ACH 535	76.6	108.3	16.54	100.0	91.46	100.4	1
ACH 559	79.2	112.0	17.23	104.2	90.85	99.7	1
ACH 592	81.1	114.7	16.97	102.6	90.80	99.7	1
Beta 7519	79.9	113.0	16.76	101.3	91.39	100.3	1
Beta 7524	81.6	115.4	16.98	102.6	90.57	99.4	1
Beta 7541	75.4	106.6	16.49	99.7	90.56	99.4	1
Beta 7590	75.2	106.4	16.22	98.1	90.03	98.8	1
Hilleshög 2547	66.8	94.5	16.17	97.8	91.17	100.1	1
1-Year Mean	77.0		16.67		90.85		
2025 Est. Variety Means	»	70.7	»	16.54	»	91.09	

Experimental Varieties	Yield as Tons/Acre		Recoverable Sugar/Ton		Recoverable Sugar/Acre		% RST + % RSA
	2025	% of Est.	2025	% of Est.	2025	% of Est.	
ACH 535	35.6	116.4	287.1	100.5	10,251	117.2	217.6
ACH 559	35.1	114.8	297.2	104.0	10,450	119.4	223.4
ACH 592	33.5	109.4	292.2	102.2	9,801	112.0	214.2
Beta 7519	33.3	108.7	291.0	101.8	9,703	110.9	212.7
Beta 7524	32.4	105.9	291.4	102.0	9,452	108.0	210.0
Beta 7541	33.0	107.8	282.7	98.9	9,358	106.9	205.9
Beta 7590	35.3	115.4	275.7	96.5	9,761	111.6	208.0
Hilleshög 2547	30.8	100.7	279.4	97.7	8,619	98.5	196.2
1-Year Mean	33.6		287.1		9,674		
2025 Est. Variety Means	»	30.6	»	285.8	»	8,750	

1st Year AGRONOMIC

Established Varieties	Cercospora Leaf Spot										Years In Trials	Years Comm.
	Trial Year			»	Average		»	% of Means *				
	2025	2024	2023		2-Yr	3-Yr		2025	2024			
ACH 166	2.32	2.53	2.26	»	2.43	2.37	»	107.5	±	115.9	5	3
Beta 7068	2.71	2.36	2.39	»	2.53	2.49	»	102.6	±	108.3	6	4
Beta 7231	2.02	1.96	2.10	»	1.99	2.03	»	125.8	±	133.5	4	2
Hilleshög 2325	3.00	3.30	3.64	»	3.15	3.31	»	77.0	±	67.6	7	5
1-Year Mean	2.51	2.54	2.60		* Trial Years		»	3 yr		3 yr		
2-Year Mean	»	2.52	2.57		Established 3-YR Mean			2.55				
3-Year Mean	»	»	2.55		2024 3-Yr Mean					2.49		

Candidate Varieties	Cercospora Leaf Spot										Years In Trials	Years Comm.
	Trial Year			»	Average		»	% of Means *				
	2025	2024	2023		2-Yr	3-Yr		2025	2024			
ACH 290	2.74	2.61	2.63	»	2.67	2.66	»	95.9	±	97.1	4	2
ACH 370	1.89	2.02	1.78	»	1.96	1.90	»	134.4	±	133.7	3	1
Beta 7170	2.86	2.72	2.67	»	2.79	2.75	»	92.7	±	94.2	5	3
1-Year Mean	2.50	2.45	2.36		* Trial Years		»	3 yr		2 yr		
2-Year Mean	»	2.47	2.40		Established 3-YR Mean			2.55				
3-Year Mean	»	»	2.44		2024 2-Yr Mean					2.54		

Test Market Varieties	Cercospora Leaf Spot										Years In Trials	Years Comm.	
	Trial Year				Average			% of Means *					
	2025	2024	2023		2-Yr	3-Yr		2025	2024				
ACH 417	1.77	1.55	-	»	1.66	-	»	151.9	±	159.8	2	-	
ACH 472	2.01	1.45	-	»	1.73	-	»	145.7	±	170.9	2	-	
ACH 489	2.98	3.47	-	»	3.23	-	»	78.1	±	71.4	2	-	
Beta 7416	2.32	2.25	-	»	2.28	-	»	110.3	±	110.3	2	-	
Beta 7456	2.16	1.75	-	»	1.96	-	»	128.8	±	141.4	2	-	
1-Year Mean	2.25	2.10	* Trial Years »					2 yr		1 yr			
2-Year Mean	»	2.17	Established 2-YR Mean					2.52					
			2024 1-Yr Mean								2.48		

CERCOSPORA

Established Varieties	Rhizoctonia Root Rot										Years In Trials	Years Comm.
	Trial Year			»	Average		»	% of Means *				
	2025	2024	2023		2-Yr	3-Yr		2025	2024			
ACH 166	3.56	3.53	3.66	»	3.55	3.58	»	103.5	±	107.0	5	3
Beta 7068	4.02	3.51	3.58	»	3.77	3.71	»	100.1	±	103.9	6	4
Beta 7231	3.37	3.72	3.66	»	3.55	3.58	»	103.5	±	101.7	4	2
Hilleshög 2325	3.95	3.89	4.09	»	3.92	3.98	»	93.2	±	97.5	7	5
1-Year Mean	3.73	3.66	3.75	* Trial Years »				3 yr		3 yr		
2-Year Mean	»	3.70	3.71	Established 3-YR Mean				3.71				
3-Year Mean	»	»	3.71	2024 3-Yr Mean						3.89		

Candidate Varieties	Rhizoctonia Root Rot										Years In Trials	Years Comm.
	Trial Year				Average			% of Means *				
	2025	2024	2023	»	2-Yr	3-Yr	»	2025	2024			
ACH 290	3.78	2.99	3.14	»	3.38	3.30	»	112.4	±	123.1	4	2
ACH 370	3.77	4.19	3.54	»	3.98	3.83	»	96.8	±	97.6	3	1
Beta 7170	3.81	3.46	3.50	»	3.64	3.59	»	103.4	±	108.3	5	3
1-Year Mean	3.78	3.55	3.39	* Trial Years »				3 yr		2 yr		
2-Year Mean	»	3.67	3.47	Established 3-YR Mean				3.71				
3-Year Mean	»	»	3.57	2024 2-Yr Mean						3.77		

Test Market Varieties	Rhizoctonia Root Rot										Years In Trials	Years Comm.
	Trial Year				Average			% of Means *				
	2025	2024	2023		2-Yr	3-Yr		2025	2024			
ACH 417	3.55	3.24	-	»	3.39	-	»	109.0	±	115.8	2	-
ACH 472	3.71	3.31	-	»	3.51	-	»	105.5	±	113.4	2	-
ACH 489	3.74	3.46	-	»	3.60	-	»	102.8	±	108.5	2	-
Beta 7416	3.42	3.27	-	»	3.34	-	»	110.7	±	114.7	2	-
Beta 7456	2.93	3.20	-	»	3.06	-	»	120.7	±	117.1	2	-
1-Year Mean	3.47	3.29	* Trial Years »					2 yr		1 yr		
2-Year Mean	»	3.38	Established 2-YR Mean					3.70				
			2024 1-Yr Mean							3.75		

RHIZOCTONIA

Established Varieties	Aphanomyces Root Rot										Years In Trials	Years Comm.
	Trial Year			Average			% of Means *					
	2025	2024	2023	2-Yr	3-Yr	2025	2024					
ACH 166	3.63	3.21	3.53	»	3.42	3.46	»	106.7	±	104.3	5	3
Beta 7068	3.26	3.94	3.99	»	3.60	3.73	»	98.9	±	97.2	6	4
Beta 7231	3.28	3.73	3.76	»	3.50	3.59	»	102.8	±	99.1	4	2
Hilleshög 2325	4.51	3.65	3.80	»	4.08	3.99	»	92.5	±	96.3	7	5
1-Year Mean	3.67	3.63	3.77	* Trial Years »				3 yr	3 yr			
2-Year Mean	»	3.65	3.70	Established 3-YR Mean				3.69				
3-Year Mean	»	»	3.69	2024 3-Yr Mean				3.56				
Candidate Varieties	Aphanomyces Root Rot										Years In Trials	Years Comm.
	Trial Year			Average			% of Means *					
	2025	2024	2023	2-Yr	3-Yr	2025	2024					
ACH 290	3.33	3.42	4.00	»	3.38	3.59	»	102.9	±	98.8	4	2
ACH 370	3.84	3.70	3.94	»	3.77	3.83	»	96.4	±	96.1	3	1
Beta 7170	3.68	3.85	3.62	»	3.77	3.72	»	99.3	±	98.3	5	3
1-Year Mean	3.62	3.66	3.85	* Trial Years »				3 yr	2 yr			
2-Year Mean	»	3.64	3.76	Established 3-YR Mean				3.69				
3-Year Mean	»	»	3.71	2024 2-Yr Mean				3.67				
Test Market Varieties	Aphanomyces Root Rot										Years In Trials	Years Comm.
	Trial Year			Average			% of Means *					
	2025	2024	2023	2-Yr	3-Yr	2025	2024					
ACH 417	3.25	3.10	-	»	3.18	-	»	114.8	±	117.9	2	-
ACH 472	3.17	3.43	-	»	3.30	-	»	110.6	±	106.8	2	-
ACH 489	3.14	3.01	-	»	3.08	-	»	118.7	±	121.8	2	-
Beta 7416	3.37	3.64	-	»	3.50	-	»	104.1	±	100.5	2	-
Beta 7456	3.67	3.53	-	»	3.60	-	»	101.4	±	103.6	2	-
1-Year Mean	3.32	3.34	* Trial Years »				2 yr	1 yr				
2-Year Mean	»	3.33	Established 2-YR Mean				3.65					
											2024 1-Yr Mean	3.66

APHANOMYCES

2025 Disease Performance 4 of 4

Established Varieties	Fusarium										Years In Trials	Years Comm.
	Trial Year			Average			% of Means *					
	2025	2024	2023	2-Yr	3-Yr		2025	2024				
ACH 166	1.91	1.51	3.43	»	1.71	2.28	»	121.8	±	114.9	5	3
Beta 7068	1.41	1.30	3.60	»	1.36	2.10	»	132.2	±	118.3	6	4
Beta 7231	1.60	1.50	3.43	»	1.55	2.18	»	127.8	±	121.5	4	2
Hilleshög 2325	4.29	3.09	6.32	»	3.69	4.57	»	60.9	±	68.1	7	5
1-Year Mean	2.30	1.85	4.19	* Trial Years			»	3 yr	3 yr			
2-Year Mean	»	2.08	3.02	Established 3-YR Mean				2.78				
3-Year Mean	»	»	2.78	2024 3-Yr Mean					3.23			

Candidate Varieties	Fusarium										Years In Trials	Years Comm.
	Trial Year			Average			% of Means *					
	2025	2024	2023		2-Yr	3-Yr		2025	2024			
ACH 290	2.14	1.53	3.54	»	1.84	2.40	»	115.7	±	116.0	4	2
ACH 370	1.93	1.26	4.08	»	1.59	2.42	»	114.9	±	110.2	3	1
Beta 7170	1.67	1.51	3.74	»	1.59	2.30	»	120.7	±	112.1	5	3
1-Year Mean	1.91	1.43	3.79	* Trial Years »				3 yr	2 yr			
2-Year Mean	»	1.67	2.61	Established 3-YR Mean				2.78				
3-Year Mean	»	»	2.38	2024 2-Yr Mean				2.94				

Test Market Varieties	Fusarium									Years In Trials	Years Comm.
	Trial Year			Average			% of Means *				
	2025	2024	2023	2-Yr	3-Yr	2025	2024				
ACH 417	1.71	1.36	- »	1.54	- »	135.5	±	134.6	2	-	
ACH 472	1.36	1.32	- »	1.34	- »	155.8	±	139.2	2	-	
ACH 489	1.28	1.31	- »	1.29	- »	161.2	±	140.2	2	-	
Beta 7416	1.69	1.57	- »	1.63	- »	127.8	±	116.9	2	-	
Beta 7456	1.49	1.29	- »	1.39	- »	149.9	±	142.4	2	-	
1-Year Mean	1.50	1.37	* Trial Years »			2 yr	1 yr				
2-Year Mean	»	1.44	Established 2-YR Mean			2.08					
						2024 1-Yr Mean	1.83				

2025, 2024, 2023 Un-Adjusted Field Data

FUSARIUM

2025 1st Year Disease Performance

Experimental Varieties	Cercospora		Rhizoctonia		Aphanomyces		Years In Trials
	2025	% of Est.	2025	% of Est.	2025	% of Est.	
ACH 535	3.01	83.3	4.74	78.7	3.50	104.8	1
ACH 559	1.80	139.1	3.68	101.3	3.07	119.4	1
ACH 592	2.80	89.6	3.46	107.9	3.68	99.7	1
Beta 7519	2.56	98.1	3.76	99.1	3.75	97.9	1
Beta 7524	1.53	164.0	4.37	85.4	3.20	114.8	1
Beta 7541	2.92	86.0	3.14	118.8	3.34	110.0	1
Beta 7590	2.02	124.1	3.95	94.5	3.39	108.2	1
Hilleshög 2547	2.98	84.3	3.35	111.3	4.52	81.2	1
1-Year Mean	2.45		3.81		3.56		
2025 Est. Variety Means	»	2.51	»	3.73	»	3.67	

Experimental Varieties	Fusarium	
	2025	% of Est.
ACH 535	1.44	159.7
ACH 559	1.59	144.7
ACH 592	1.22	188.5
Beta 7519	1.47	157.0
Beta 7524	1.60	144.2
Beta 7541	1.40	164.9
Beta 7590	1.72	133.7
Hilleshög 2547	3.30	69.8
1-Year Mean	1.72	
2025 Est. Variety Means	»	2.30

1st Year DISEASE

Established Variety for Full Approval

Variety	ACH 166												
Company	ACH Seeds												
Contact	Jake Boersma												

TRIAL		AGRONOMY						DISEASE							
Year	#	Yield	Rank	RST	Rank	RSA	Rank	CLS	Rank	RHC	Rank	APH	Rank		
2023	3	25.7	6	341.8	3	8,807	3 of 22	2.26	10	3.66	14	3.53	8		
2024	4	35.5	15	302.5	8	10,652	16 of 20	2.53	16	3.53	10	3.21	5		
2025	5	30.6	17	291.3	9	8,924	18 of 20	2.32	10	3.56	8	3.63	13		
2025 Avg. for Approval		30.6		311.8		9,461	RST + RSA	2.37		3.58		3.46			
ACH 166				102.2	✓	104.5	✓	206.7	✓	2.37	✓	3.58	✓	3.46	✓

If the 2026 Requirements are met, VOTE to Approve: YES ☒ NO ☐

2026 Approval Status: **FULL** TEST MARKET SPECIALTY FAILED

Specialty Credential [CLS, RHC, APH]:

✓ Denotes Fulfilled Req

Established Variety for Full Approval

Variety	Beta 7068												
Company	Betaseed												
Contact	Blake Buck												

TRIAL		AGRONOMY						DISEASE							
Year	#	Yield	Rank	RST	Rank	RSA	Rank	CLS	Rank	RHC	Rank	APH	Rank		
2023	4	25.3	9	316.7	21	8,071	14 of 22	2.39	12	3.58	11	3.99	17		
2024	5	38.0	3	285.3	20	10,741	11 of 20	2.36	14	3.51	9	3.94	18		
2025	6	33.3	6	276.6	18	9,213	14 of 20	2.71	12	4.02	18	3.26	6		
2025 Avg. for Approval		32.2		292.9		9,342	RST + RSA	2.49		3.71		3.73			
Beta 7068				96.0		103.2	✓	199.1	✓	2.49	✓	3.71	✓	3.73	✓

If the 2026 Requirements are met, VOTE to Approve: YES ☐ NO ☒

2026 Approval Status: FULL TEST MARKET SPECIALTY **FAILED**

Specialty Credential [CLS, RHC, APH]:

✓ Denotes Fulfilled Req

Established Variety for Full Approval

Variety	Beta 7231												
Company	Betaseed												
Contact	Blake Buck												

TRIAL		AGRONOMY						DISEASE							
Year	#	Yield	Rank	RST	Rank	RSA	Rank	CLS	Rank	RHC	Rank	APH	Rank		
2023	2	25.5	7	340.1	5	8,727	5 of 22	2.10	5	3.66	15	3.76	13		
2024	3	36.4	10	301.4	10	10,922	9 of 20	1.96	6	3.72	13	3.73	15		
2025	4	30.7	16	291.4	7	8,964	16 of 20	2.02	6	3.37	4	3.28	7		
2025 Avg. for Approval		30.9		311.0		9,538	RST + RSA	2.03		3.58		3.59			
Beta 7231				101.9	✓	105.3	✓	207.2	✓	2.03	✓	3.58	✓	3.59	✓

If the 2026 Requirements are met, VOTE to Approve: YES ☒ NO ☐

2026 Approval Status: **FULL** TEST MARKET SPECIALTY FAILED

Specialty Credential [CLS, RHC, APH]: **CLS**

✓ Denotes Fulfilled Req

Established Variety for Full Approval

Variety	Hilleshög 2325												
Company	Hilleshög												
Contact	Adam Hansen												

TRIAL		AGRONOMY						DISEASE							
Year	#	Yield	Rank	RST	Rank	RSA	Rank	CLS	Rank	RHC	Rank	APH	Rank		
2023	5	24.1	14	330.3	14	8,058	16 of 22	3.64	18	4.09	22	3.80	14		
2024	6	33.4	19	297.0	14	9,859	19 of 20	3.30	19	3.89	15	3.65	13		
2025	7	27.6	20	283.7	14	7,900	20 of 20	3.00	19	3.95	17	4.51	19		
2025 Avg. for Approval		28.4		303.6		8,606	RST + RSA	3.31		3.98		3.99			
Hilleshög 2325				99.5	✓	95.0	✓	194.5	✓	3.31	✓	3.98	✓	3.99	✓

If the 2026 Requirements are met, VOTE to Approve: YES ☒ NO ☐

2026 Approval Status: **FULL** TEST MARKET SPECIALTY FAILED

Specialty Credential [CLS, RHC, APH]:

✓ Denotes Fulfilled Req

Candidate Variety for Full Approval

Variety	ACH 290												
Company	ACH Seeds												
Contact	Jake Boersma												

TRIAL		AGRONOMY						DISEASE							
Year	#	Yield	Rank	RST	Rank	RSA	Rank	CLS	Rank	RHC	Rank	APH	Rank		
2023	2	28.0	1	320.5	20	8,996	1 of 22	2.63	15	3.14	1	4.00	18		
2024	3	39.3	1	287.3	19	11,237	4 of 20	2.61	17	2.99	1	3.42	6		
2025	4	34.5	4	273.2	20	9,421	8 of 20	2.74	13	3.78	14	3.33	8		
2025 Avg. for Approval		33.9		293.7		9,884	RST + RSA	2.66		3.30		3.59			
ACH 290				96.2		109.2	✓	205.4	✓	2.66	✓	3.30	✓	3.59	✓

If the 2026 Requirements are met, VOTE to Approve: YES ☒ NO ☐

2026 Approval Status: FULL TEST MARKET **SPECIALTY** FAILED

Specialty Credential [CLS, RHC, APH]: **RHC**

✓ Denotes Fulfilled Req

Candidate Variety for Full Approval

Variety	ACH 370												
Company	ACH Seeds												
Contact	Jake Boersma												

TRIAL		AGRONOMY						DISEASE							
Year	#	Yield	Rank	RST	Rank	RSA	Rank	CLS	Rank	RHC	Rank	APH	Rank		
2023	1	24.2	13	347.8	2	8,467	10 of 22	1.78	1	3.54	9	3.94	16		
2024	2	35.0	16	312.0	1	10,857	10 of 20	2.02	7	4.19	19	3.70	14		
2025	3	30.1	19	296.2	3	8,956	17 of 20	1.89	4	3.77	13	3.84	18		
2025 Avg. for Approval		29.8		318.7		9,426	RST + RSA	1.90		3.83		3.83			
ACH 370				104.4	✓	104.1	✓	208.5	✓	1.90	✓	3.83	✓	3.83	✓

If the 2026 Requirements are met, VOTE to Approve: YES ☒ NO ☐

2026 Approval Status: **FULL** TEST MARKET SPECIALTY FAILED

Specialty Credential [CLS, RHC, APH]: **CLS**

✓ Denotes Fulfilled Req

Candidate Variety for Full Approval

Variety **Beta 7170**
 Company *Betaseed*
 Contact *Blake Buck*

TRIAL		AGRONOMY						DISEASE					
Year	#	Yield	Rank	RST	Rank	RSA	Rank	CLS	Rank	RHC	Rank	APH	Rank
2023	3	26.3	4	325.0	19	8,546	7 of 22	2.67	16	3.50	6	3.62	11
2024	4	39.2	2	289.4	17	11,249	3 of 20	2.72	18	3.46	7	3.85	17
2025	5	33.1	8	277.7	17	9,243	13 of 20	2.86	15	3.81	15	3.68	15
2025 Avg. for Approval		32.9		297.4		9,679	RST + RSA	2.75		3.59		3.72	
Beta 7170				97.4		106.9	✓	204.3	✓	2.75	✓	3.59	✓
If the 2026 Requirements are met, VOTE to Approve:				YES		NO	X						
2026 Approval Status:				FULL		TEST MARKET		SPECIALTY		FAILED			
Specialty Credential [CLS, RHC, APH]:												✓ Denotes Fulfilled Req	

Candidate Variety for Test Market

Variety	ACH 417													
Company	ACH Seeds													
Contact	Jake Boersma													

TRIAL		AGRONOMY						DISEASE							
Year	#	Yield	Rank	RST	Rank	RSA	Rank	CLS	Rank	RHC	Rank	APH	Rank		
2023		#N/A	#N/A	#N/A	#N/A	#N/A	#N/A of 22	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		
2024	1	36.9	5	311.7	2	11,433	1 of 20	1.55	2	3.24	3	3.10	2		
2025	2	30.5	18	296.9	2	9,083	15 of 20	1.77	2	3.55	7	3.25	5		
2025 Avg. for Approval		33.7		304.3		10,258	RST + RSA	1.66		3.39		3.18			
ACH 417				105.1	✓	107.1	✓	212.1	✓	1.66	✓	3.39	✓	3.18	✓

If the 2026 Requirements are met, VOTE to Approve: YES ☒ NO ☐

2026 Approval Status: FULL **TEST MARKET** SPECIALTY FAILED

Specialty Credential [CLS, RHC, APH]: **CLS, RHC, APH** ✓ Denotes Fulfilled Req

Candidate Variety for Test Market

Variety	ACH 472													
Company	ACH Seeds													
Contact	Jake Boersma													

TRIAL		AGRONOMY						DISEASE							
Year	#	Yield	Rank	RST	Rank	RSA	Rank	CLS	Rank	RHC	Rank	APH	Rank		
2023		#N/A	#N/A	#N/A	#N/A	#N/A	#N/A of 22	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		
2024	1	36.6	9	307.7	5	11,186	5 of 20	1.45	1	3.31	5	3.43	7		
2025	2	31.8	13	292.2	5	9,316	12 of 20	2.01	5	3.71	10	3.17	3		
2025 Avg. for Approval		34.2		299.9		10,251	RST + RSA	1.73		3.51		3.30			
ACH 472				103.6	✓	107.0	✓	210.6	✓	1.73	✓	3.51	✓	3.30	✓

If the 2026 Requirements are met, VOTE to Approve: YES ☒ NO ☐

2026 Approval Status: FULL **TEST MARKET** SPECIALTY FAILED

Specialty Credential [CLS, RHC, APH]: **CLS, RHC, APH** ✓ Denotes Fulfilled Req

Candidate Variety for Test Market

Variety	ACH 489													
Company	ACH Seeds													
Contact	Jake Boersma													

TRIAL		AGRONOMY						DISEASE							
Year	#	Yield	Rank	RST	Rank	RSA	Rank	CLS	Rank	RHC	Rank	APH	Rank		
2023		#N/A	#N/A	#N/A	#N/A	#N/A	#N/A of 22	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		
2024	1	36.8	7	301.2	11	10,996	7 of 20	3.47	20	3.46	6	3.01	1		
2025	2	32.3	12	287.3	12	9,362	10 of 20	2.98	18	3.74	11	3.14	2		
2025 Avg. for Approval		34.5		294.3		10,179	RST + RSA	3.23		3.60		3.08			
ACH 489				101.6	✓	106.3	✓	207.9	✓	3.23	✓	3.60	✓	3.08	✓

If the 2026 Requirements are met, VOTE to Approve: YES ☒ NO ☐

2026 Approval Status: FULL **TEST MARKET** SPECIALTY FAILED

Specialty Credential [CLS, RHC, APH]: **APH** ✓ Denotes Fulfilled Req

Candidate Variety for Test Market

Variety	Beta 7416
Company	<i>Betaseed</i>
Contact	<i>Blake Buck</i>

TRIAL		AGRONOMY						DISEASE					
Year	#	Yield	Rank	RST	Rank	RSA	Rank	CLS	Rank	RHC	Rank	APH	Rank
2023		#N/A	#N/A	#N/A	#N/A	#N/A	#N/A of 22	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
2024	1	36.8	7	308.1	4	11,271	2 of 20	2.25	12	3.27	4	3.64	12
2025	2	31.8	14	295.4	4	9,404	9 of 20	2.32	9	3.42	5	3.37	10
2025 Avg. for Approval		34.3		301.8		10,338	RST + RSA	2.28		3.34		3.50	

Beta 7416	104.2	✓	107.9	✓	212.1	✓	2.28	✓	3.34	✓	3.50	✓
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If the 2026 Requirements are met, VOTE to Approve: YES ☒ NO ☐

2026 Approval Status: FULL TEST MARKET SPECIALTY FAILED

Specialty Credential [CLS, RHC, APH]: **RHC** ✓ Denotes Fulfilled Req

Candidate Variety for Test Market

Variety	Beta 7456
Company	<i>Betaseed</i>
Contact	<i>Blake Buck</i>

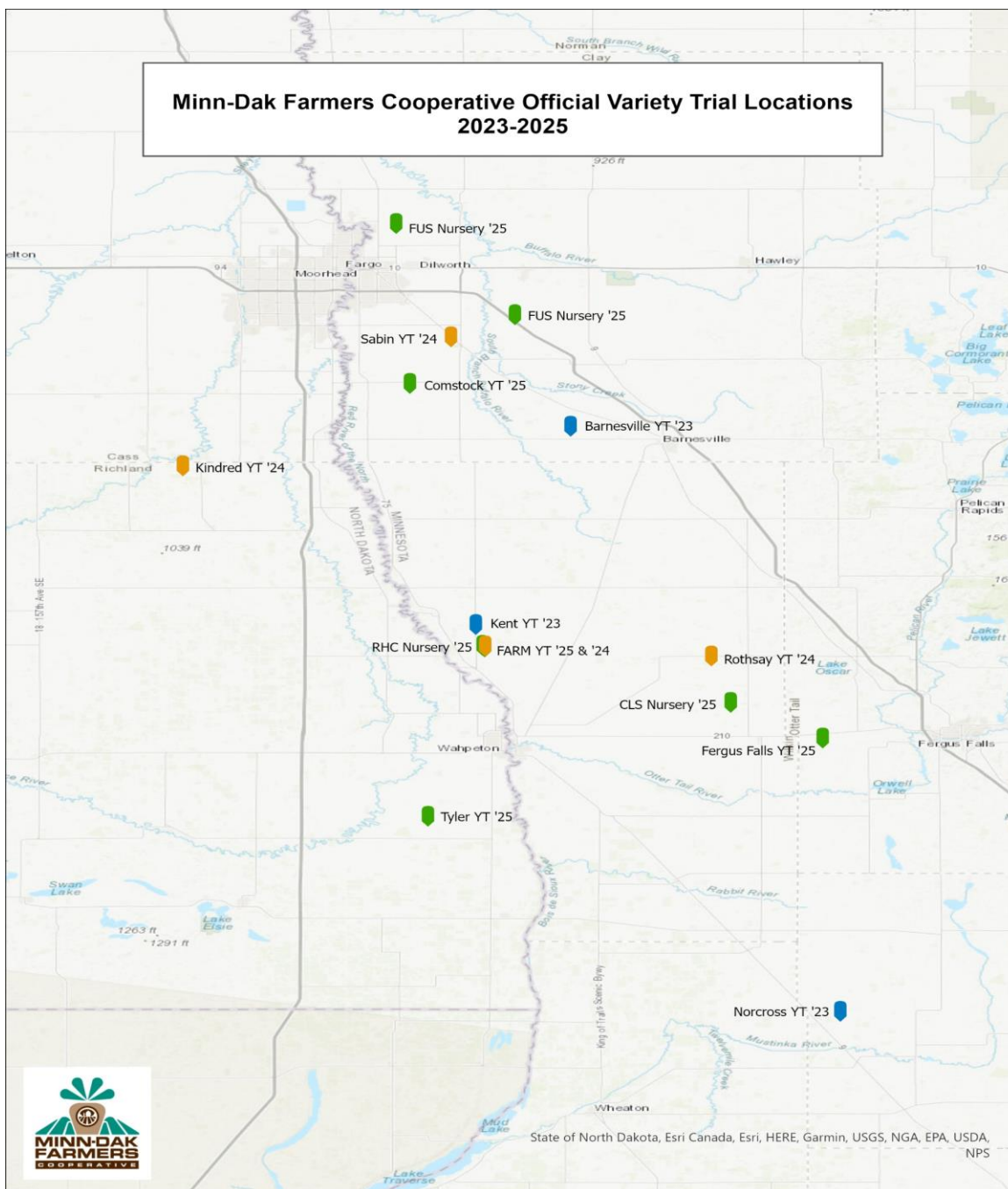
TRIAL		AGRONOMY						DISEASE					
Year	#	Yield	Rank	RST	Rank	RSA	Rank	CLS	Rank	RHC	Rank	APH	Rank
2023		#N/A	#N/A	#N/A	#N/A	#N/A	#N/A of 22	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
2024	1	37.1	4	303.5	6	11,171	6 of 20	1.75	5	3.20	2	3.53	10
2025	2	32.7	10	290.0	11	9,487	6 of 20	2.16	8	2.93	1	3.67	14
2025 Avg. for Approval		34.9		296.7		10,329	RST + RSA	1.96		3.06		3.60	

Beta 7456	102.5	✓	107.8	✓	210.3	✓	1.96	✓	3.06	✓	3.60	✓
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If the 2026 Requirements are met, VOTE to Approve: YES ☒ NO ☐

2026 Approval Status: FULL TEST MARKET SPECIALTY FAILED

Specialty Credential [CLS, RHC, APH]: **CLS, RHC** ✓ Denotes Fulfilled Req



Comstock - Yield Trial

2025 Final Update

46.71658, -96.71003

Cooperator: Brakke Farms LLC
Soil Type: Silty Clay

Planted: April 24th
Thinned: ---
Harvested: September 26th

Prev. Crop: Wheat
Plot Size: 3 Rows X 25'
Orientation: North/South

Date	Pest Control	Rate/Acre	Date	Cercospora Control	Rate/Acre	Disease	Incidence & Severity
At Plant	Counter 20G	7.5lb/ac	30 June *	Proline/ NIS + EBDC [Aerial]	5.7oz + 52oz	APH	Not Observed
26 April	PRE - Nortron + Dual Magnum	32oz + 8oz	13 July	Tin + EBDC	8oz + 52oz	CLS	Low/Low
28 May	PM3 + etho	30oz + 6oz	30 July	Headline + EBDC	9oz + 52oz	RHC	Low/Low
11 June	PM3 + etho + Outlook	30oz + 6oz + 21oz	12 August	Tin + EBDC	8oz + 52oz	FUS	Not Observed
			21 August	Inspire XT + EBDC	7oz + 52oz	RZM	Not Observed
			11 September	Tin + Copper	8oz + 32oz		
				* = REAPPLIED		B+	Overall Score

Comments: Lifting conditions were very good when we harvested this location. CLS was present but not a major concern and root disease was not a problem. Aside from the cover crop growing in the black areas this was our cleanest site all around. Yields were impressive with a raw average near 40 tons.



2025 Minn-Dak Official Variety Trial

Commercial & Semi-Commercial Entries

Comstock, MN

Entry Code	Commercial Entries	Emerg. %	Bolter #/A	Tare %	Sugar %	Purity %	Yield TPA	RST		RSA	
								lbs	% Mean	lbs	% Mean
4	* ACH 166	67.6	0	3.82	17.55	91.86	34.7	307.2	101.9	10,651	95.0
6	ACH 290	80.3	0	2.62	16.50	91.60	40.4	287.1	95.2	11,579	103.3
9	ACH 370	74.5	0	2.99	17.64	91.39	33.6	306.9	101.8	10,329	92.1
7	ACH 417	77.3	0	2.98	17.57	91.94	34.9	308.0	102.1	10,755	95.9
10	ACH 472	73.4	0	3.14	17.71	91.39	37.1	308.2	102.2	11,394	101.6
12	ACH 489	70.9	0	3.00	17.06	92.03	40.4	299.1	99.2	12,074	107.7
2	* Beta 7068	78.4	0	2.61	16.62	92.00	39.0	291.0	96.5	11,288	100.7
8	Beta 7170	75.6	0	3.12	16.75	91.63	39.7	291.9	96.8	11,601	103.5
5	* Beta 7231	75.2	0	2.90	17.28	91.99	36.0	302.9	100.4	10,884	97.1
11	Beta 7416	81.2	0	3.10	17.57	92.21	37.4	309.0	102.5	11,539	102.9
1	Beta 7456	73.1	0	3.06	17.47	90.78	39.6	301.1	99.8	11,918	106.3
3	* Hilleshög 2325	61.6	0	2.15	17.31	92.74	34.3	306.5	101.6	10,516	93.8
Experiment Mean		74.1	0.0	2.96	17.25	91.80	37.3	301.6		11,211	
Coeff. of Var. (%)		7.27		21.33	2.80	0.62	9.82	3.34		9.41	
LSD (0.10)		5.7		0.67	0.51	0.60	3.9	10.7		1,121	
LSD (0.05)		6.9		0.80	0.62	0.72	4.7	12.9		1,345	

2025 Minn-Dak Official Variety Trial

Experimental Entries (1st Year)

Comstock, MN

Entry Code	Experimental Entries	Emerg. %	Bolter #/A	Tare %	Sugar %	Purity %	Yield TPA	RST		RSA	
								lbs	% Mean	lbs	% Mean
19	ACH 535	76.6	0	2.18	17.24	92.15	41.8	302.9	100.2	12,646	105.9
18	ACH 559	79.2	0	2.84	17.74	91.91	40.4	311.0	102.9	12,543	105.1
14	ACH 592	81.1	0	3.54	17.59	91.82	38.1	307.7	101.8	11,728	98.2
13	Beta 7519	79.9	0	3.19	17.17	92.41	40.1	302.6	100.1	12,121	101.5
16	Beta 7524	81.6	0	2.51	17.53	91.21	36.4	304.1	100.6	11,081	92.8
17	Beta 7541	75.4	0	3.40	17.19	91.43	39.9	299.0	99.0	11,927	99.9
15	Beta 7590	75.2	0	4.39	16.95	90.75	41.5	291.9	96.6	12,121	101.5
20	Hilleshög 2547	66.8	0	2.48	16.90	92.48	38.1	298.0	98.6	11,341	95.0
Experiment Mean		77.0	0.0	3.07	17.29	91.77	39.5	302.2		11,939	
Coeff. of Var. (%)		7.73		24.69	1.66	0.62	4.34	2.15		4.38	
LSD (0.10)		5.8		0.74	0.28	0.56	1.7	6.4		510	
LSD (0.05)		7.0		0.89	0.34	0.67	2.0	7.6		612	

% Mean is percent of Experiment Mean

* Established Variety

FARM - Yield Trial

2025 Final Update

46.38215, -96.62423

Cooperator: MDFC
Soil Type: Silty Clay Loam

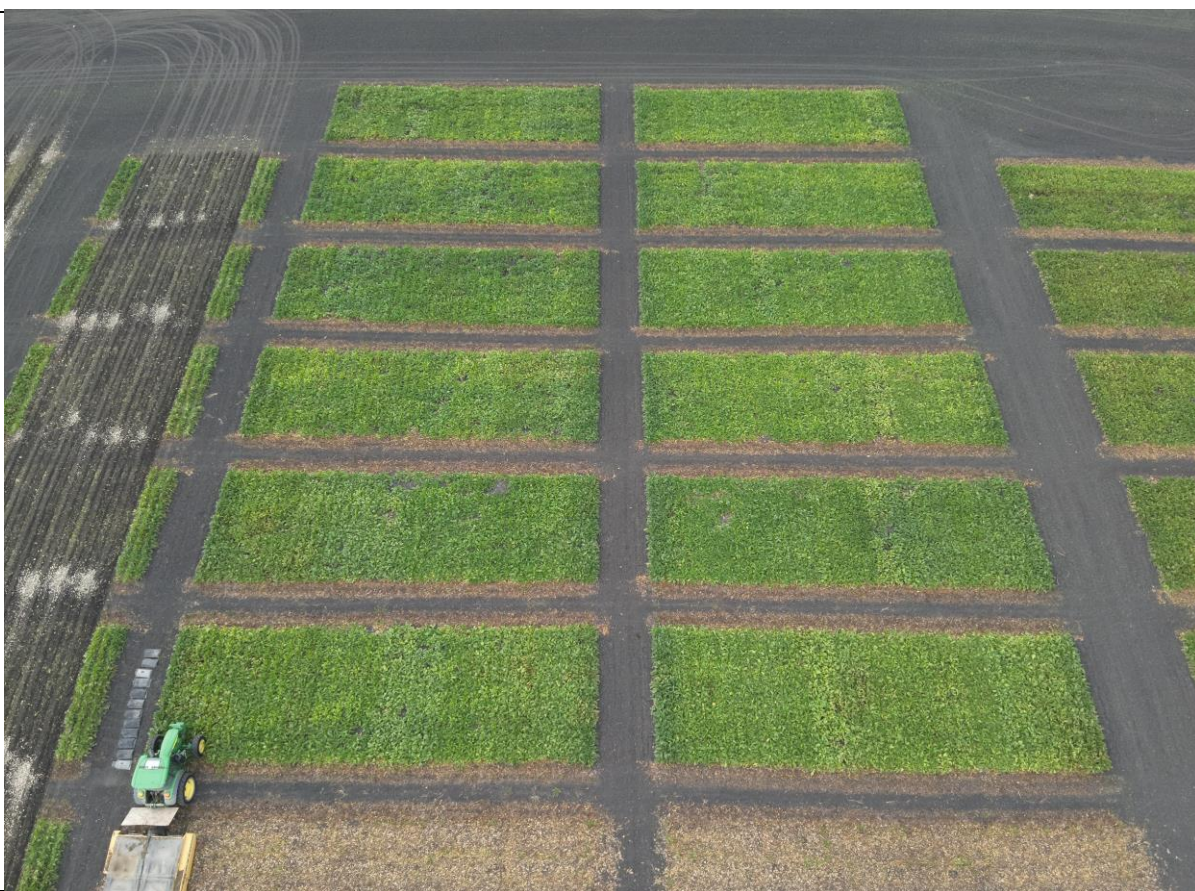
Planted: May 6th
Thinned: June 18th
Harvested: September 30th

Prev. Crop: Soybean
Plot Size: 3 Rows X 25'
Orientation: North/South

Date	Pest Control	Rate/Acre	Date	Cercospora Control	Rate/Acre	Disease	Incidence & Severity
At Plant	Counter 20G	7.5lb/ac	2 July	Proline/ NIS + EBDC	5.7oz + 52oz	APH	Mod/Mod
14 May	PRE - Nortron + Dual Magnum	32oz + 8oz	14 July	Tin + EBDC	8oz + 52oz	CLS	Mod/Low
6 June	PM3 + etho	30oz + 6oz	30 July	Headline + EBDC	9oz + 52oz	RHC	Mod/Low
12 June	Outlook	12oz	13 August	Tin + EBDC	8oz + 52oz	FUS	Not Observed
18 June	Outlook	12oz	25 August	Inspire XT + EBDC	7oz + 52oz	RZM	Not Observed
			10 September	Tin + Copper	8oz + 32oz		
						B-	Overall Score

Comments: Canopy heath was good to the very end at this location, less so with root health. During lifting, root scarring could be found throughout the experiments. Average raw yields are in the mid 20's.

Overall Site



2025 Minn-Dak Official Variety Trial

Commercial & Semi-Commercial Entries

Research Farm - Kent, MN

Entry Code	Commercial Entries	Emerg. %	Bolter #/A	Tare %	Sugar %	Purity %	Yield TPA	RST		RSA	
								lbs	% Mean	lbs	% Mean
4	* ACH 166		0	0.79	16.95	89.63	24.9	287.0	102.2	7,134	101.8
6	ACH 290		0	1.03	16.18	89.07	27.7	271.1	96.5	7,507	107.1
9	ACH 370		0	1.16	17.07	89.18	21.5	287.1	102.2	6,208	88.6
7	ACH 417		0	0.87	17.17	89.26	23.0	289.3	103.0	6,636	94.7
10	ACH 472		0	1.01	17.13	88.81	29.5	286.6	102.0	8,459	120.7
12	ACH 489		0	1.32	16.25	88.73	21.9	271.0	96.5	5,968	85.1
2	* Beta 7068		0	1.18	16.19	88.63	29.9	269.4	95.9	8,053	114.9
8	Beta 7170		0	1.06	16.46	89.19	27.8	276.6	98.5	7,703	109.9
5	* Beta 7231		0	0.92	16.82	89.59	20.5	284.5	101.3	5,842	83.3
11	Beta 7416		0	0.96	17.26	89.59	27.4	292.3	104.1	8,003	114.2
1	Beta 7456		0	1.03	17.21	88.82	28.8	287.9	102.5	8,274	118.0
3	* Hilleleshög 2325		0	0.83	16.07	88.70	16.1	267.7	95.3	4,332	61.8
Experiment Mean			0.0	1.01	16.73	89.10	24.9	280.9		7,010	
Coeff. of Var. (%)				30.16	1.82	0.77	11.89	2.45		12.42	
LSD (0.10)				0.30	0.30	0.66	2.9	6.7		841	
LSD (0.05)				0.35	0.35	0.79	3.4	8.0		1,007	

2025 Minn-Dak Official Variety Trial

Experimental Entries (1st Year)

Research Farm - Kent, MN

Entry Code	Experimental Entries	Emerg. %	Bolter #/A	Tare %	Sugar %	Purity %	Yield TPA	RST		RSA	
								lbs	% Mean	lbs	% Mean
19	ACH 535		0	1.02	16.75	89.93	23.7	284.7	99.8	6,762	98.0
18	ACH 559		0	1.04	17.46	89.30	28.8	294.5	103.2	8,491	123.0
14	ACH 592		0	1.30	17.19	88.99	25.6	288.4	101.1	7,379	106.9
13	Beta 7519		0	1.00	17.13	89.81	22.7	290.9	102.0	6,625	96.0
16	Beta 7524		0	0.98	17.12	88.97	24.3	287.1	100.6	6,961	100.8
17	Beta 7541		0	1.45	16.73	88.90	23.2	280.0	98.1	6,497	94.1
15	Beta 7590		0	1.13	16.56	89.15	29.5	278.1	97.5	8,200	118.8
20	Hilleleshög 2547		0	0.85	16.56	89.34	15.4	278.8	97.7	4,309	62.4
Experiment Mean			0.0	1.10	16.94	89.30	24.2	285.3		6,903	
Coeff. of Var. (%)				39.88	1.54	0.78	9.87	2.38		10.60	
LSD (0.10)				0.43	0.25	0.68	2.3	6.6		714	
LSD (0.05)				0.51	0.31	0.81	2.8	8.0		858	

% Mean is percent of Experiment Mean

* Established Variety

Fergus Falls - Yield Trial

2025 Final Update

46.26647, -96.23675

Cooperator: Bradow Farms
Soil Type: Fine Sandy Loam

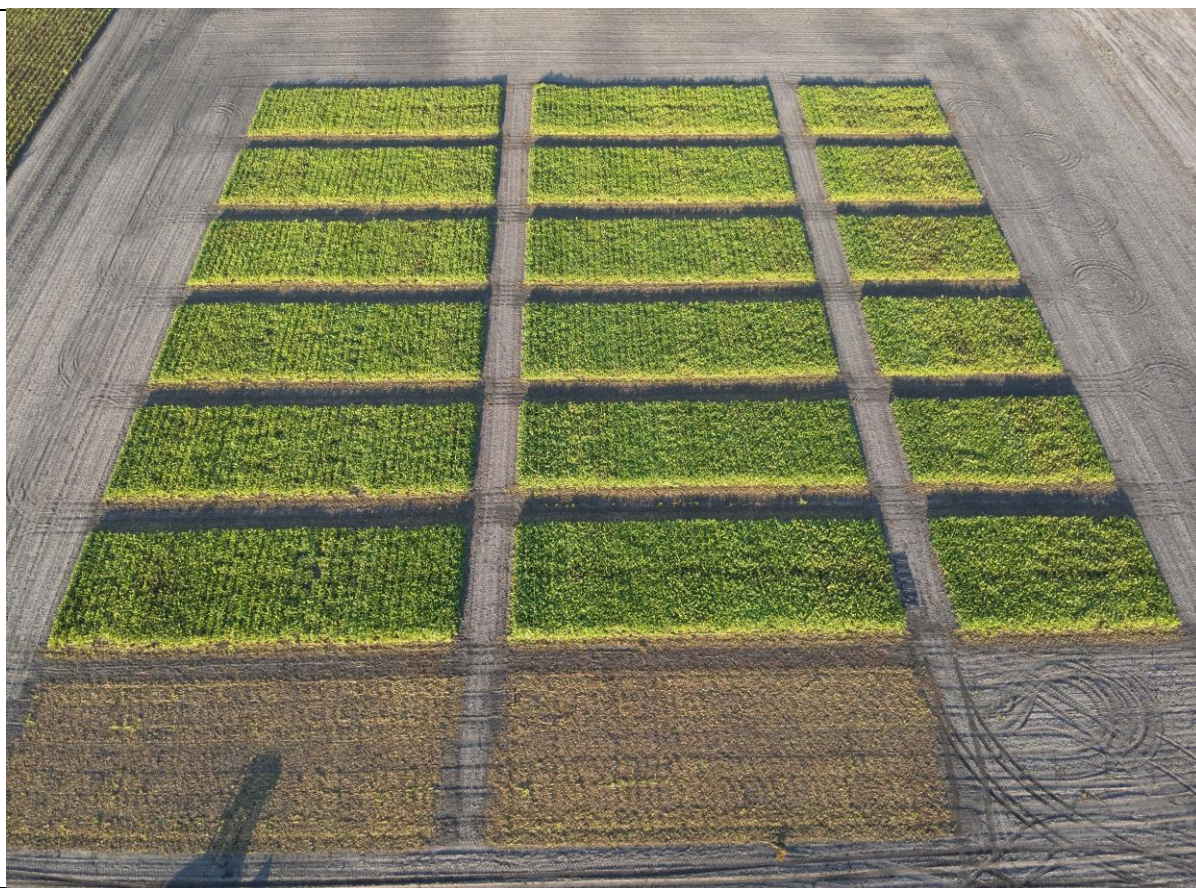
Planted: April 25th
Thinned: June 4th
Harvested: September 24th

Prev. Crop: Corn
Plot Size: 3 Rows X 25'
Orientation: East/West

Date	Pest Control	Rate/Acre	Date	Cercospora Control	Rate/Acre	Disease	Incidence & Severity
At Plant	Counter 20G	7.5lb/ac	1 July	Proline/ NIS + EBDC	5.7oz + 52oz	APH	Not Observed
26 April	PRE - Nortron + Dual Magnum	32oz + 8oz	14 July	Tin + EBDC	8oz + 52oz	CLS	High/Mod
27 May	PM3 + etho + StingerHL	30oz + 6oz + 2.4oz	30 July	Headline + EBDC	9oz + 52oz	RHC	Low/Low
14 June	PM3 + etho	30oz + 6oz	13 August	Tin + EBDC	8oz + 52oz	FUS	Not Observed
18 June	Outlook	21oz	21 August	Inspire XT + EBDC	7oz + 52oz	RZM	Not Observed
			10 September	Tin + Copper	8oz + 32oz		
						B+	Overall Score

Comments: Yields were good here with a raw average in the low 30's. CLS was present and had begun to become a concern. Roots were clean and soil conditions were very good for lifting. A very good site for us, looking forward to getting lab data organized.

Overall Site



2025 Minn-Dak Official Variety Trial
Commercial & Semi-Commercial Entries
Fergus Falls, MN

Entry Code	Commercial Entries	Emerg. %	Bolter #/A	Tare %	Sugar %	Purity %	Yield TPA	RST		RSA	
								lbs	% Mean	lbs	% Mean
4	* ACH 166		0	4.00	16.41	92.77	28.6	290.1	102.6	8,265	102.7
6	ACH 290		0	3.61	15.46	91.50	32.0	268.0	94.8	8,549	106.2
9	ACH 370		0	4.76	16.68	91.62	29.9	290.4	102.7	8,675	107.8
7	ACH 417		0	4.55	16.61	91.77	28.6	289.7	102.5	8,293	103.0
10	ACH 472		0	4.46	16.54	90.85	26.7	284.7	100.7	7,596	94.4
12	ACH 489		0	3.46	16.17	92.41	30.1	284.3	100.6	8,548	106.2
2	* Beta 7068		0	4.02	15.66	91.48	27.0	271.3	96.0	7,320	90.9
8	Beta 7170		0	3.63	15.54	91.68	27.9	270.0	95.5	7,539	93.7
5	* Beta 7231		0	3.78	16.28	92.41	30.2	286.3	101.3	8,648	107.4
11	Beta 7416		0	4.50	16.52	92.01	28.9	289.0	102.3	8,363	103.9
1	Beta 7456		0	4.68	16.59	91.61	27.0	288.7	102.2	7,780	96.7
3	* Hilleleshög 2325		0	3.32	15.99	91.97	25.1	279.3	98.8	7,007	87.1
Experiment Mean			0.0	4.06	16.20	91.84	28.5	282.6		8,049	
Coeff. of Var. (%)				18.75	1.73	0.92	11.39	2.51		10.79	
LSD (0.10)				0.74	0.27	0.82	3.1	6.9		839	
LSD (0.05)				0.88	0.33	0.98	3.8	8.2		1,005	

2025 Minn-Dak Official Variety Trial
Experimental Entries (1st Year)
Fergus Falls, MN

Entry Code	Experimental Entries	Emerg. %	Bolter #/A	Tare %	Sugar %	Purity %	Yield TPA	RST		RSA	
								lbs	% Mean	lbs	% Mean
19	ACH 535		0	3.70	15.80	92.46	35.6	277.7	99.4	9,894	108.9
18	ACH 559		0	4.60	16.79	91.86	33.5	293.4	105.1	9,824	108.2
14	ACH 592		0	4.49	16.27	91.50	32.3	282.5	101.2	9,118	100.4
13	Beta 7519		0	4.43	16.10	91.98	32.1	281.5	100.8	9,049	99.6
16	Beta 7524		0	4.05	16.50	91.85	31.4	288.1	103.2	9,037	99.5
17	Beta 7541		0	4.97	15.68	91.74	30.9	272.8	97.7	8,404	92.5
15	Beta 7590		0	5.59	15.33	91.07	31.9	263.8	94.5	8,407	92.6
20	Hilleleshög 2547		0	3.69	15.65	92.30	32.6	274.3	98.2	8,933	98.3
Experiment Mean			0.0	4.44	16.02	91.85	32.5	279.3		9,083	
Coeff. of Var. (%)				21.65	1.92	0.58	5.87	2.38		5.79	
LSD (0.10)				0.94	0.30	0.52	1.9	6.5		513	
LSD (0.05)				1.13	0.36	0.63	2.2	7.8		617	

% Mean is percent of Experiment Mean

* Established Variety

Tyler - Yield Trial

2025 Final Update

46.16698, -96.68856

Cooperator: Thimjon Farms

Soil Type: Clay Loam

Planted: April 23rd

Thinned: June 9th

Harvested: September 25th

Prev. Crop: Silage Corn

Plot Size: 3 Rows X 25'

Orientation: North/South

Date	Pest Control	Rate/Acre	Date	Cercospora Control	Rate/Acre	Disease	Incidence & Severity
At Plant	Counter 20G	7.5lb/ac	28 June *	Proline/ NIS + EBDC [Aerial]	5.7oz + 52oz	APH	Not Observed
26 April	PRE - Nortron + Dual Magnum	32oz + 8oz	14 July	Tin + EBDC	8oz + 52oz	CLS	High/Mod
23 May	PM3 + etho [aerial]	30oz + 6oz	30 July	Headline + EBDC	9oz + 52oz	RHC	Low/Low
11 June	PM3 + etho + Outlook	30oz + 6oz + 21oz	12 August *	Tin + EBDC	8oz + 52oz	FUS	Not Observed
			21 August *	Inspire XT + EBDC	7oz + 52oz	RZM	Not Observed
			10 September	Tin + Copper	8oz + 32oz		
				* = REAPPLIED		A-	Overall Score

Comments: Final conditions for this location are a testament to the hard fought battle with CLS. All told this site had 9 applications trying to hold back the tide of disease. Field conditions at the time of lifting were near perfect, a little moist but not sticky, beets flowed through harvester very well. Raw average for site is upper 30's TPA.

Overall Site



2025 Minn-Dak Official Variety Trial
Commercial & Semi-Commercial Entries
Tyler, ND

Entry Code	Commercial Entries	Emerg. %	Bolter #/A	Tare %	Sugar %	Purity %	Yield TPA	RST		RSA	
								lbs	% Mean	lbs	% Mean
4	* ACH 166		0	3.70	16.37	90.57	34.3	280.7	98.3	9,645	95.0
6	ACH 290		0	2.94	15.68	90.14	37.7	266.7	93.4	10,049	99.0
9	ACH 370		0	3.79	17.39	90.98	35.3	300.6	105.3	10,611	104.5
7	ACH 417		0	3.38	17.48	90.59	35.4	300.5	105.2	10,647	104.8
10	ACH 472		0	4.05	16.97	90.07	34.0	289.2	101.3	9,815	96.7
12	ACH 489		0	3.59	16.91	91.62	36.8	294.7	103.2	10,858	106.9
2	* Beta 7068		0	3.93	15.99	90.72	37.1	274.5	96.1	10,191	100.4
8	Beta 7170		0	3.70	15.85	90.85	37.1	272.5	95.4	10,129	99.7
5	* Beta 7231		0	3.65	16.93	90.92	35.9	292.1	102.3	10,480	103.2
11	Beta 7416		0	3.93	16.88	90.97	33.3	291.3	102.0	9,711	95.6
1	Beta 7456		0	3.62	16.67	89.63	35.4	282.1	98.8	9,977	98.2
3	* Hilleleshög 2325		0	3.56	16.23	91.33	34.7	281.2	98.5	9,745	96.0
Experiment Mean			0.0	3.65	16.61	90.70	35.6	285.5		10,155	
Coeff. of Var. (%)				16.49	1.91	0.79	3.65	2.66		4.61	
LSD (0.10)				0.58	0.31	0.70	1.3	7.3		452	
LSD (0.05)				0.70	0.37	0.83	1.5	8.8		541	

2025 Minn-Dak Official Variety Trial
Experimental Entries (1st Year)
Tyler, ND

Entry Code	Experimental Entries	Emerg. %	Bolter #/A	Tare %	Sugar %	Purity %	Yield TPA	RST		RSA	
								lbs	% Mean	lbs	% Mean
19	ACH 535		0	2.68	16.35	91.29	41.4	283.1	100.5	11,702	108.6
18	ACH 559		0	3.63	16.93	90.34	37.8	289.8	102.9	10,940	101.6
14	ACH 592		0	3.30	16.83	90.87	37.9	290.1	103.0	10,977	101.9
13	Beta 7519		0	3.78	16.65	91.34	38.1	288.9	102.6	11,016	102.3
16	Beta 7524		0	3.59	16.76	90.24	37.5	286.3	101.7	10,730	99.6
17	Beta 7541		0	3.60	16.37	90.18	38.0	279.1	99.1	10,603	98.4
15	Beta 7590		0	5.26	16.04	89.15	38.3	269.1	95.6	10,315	95.8
20	Hilleleshög 2547		0	3.17	15.57	90.57	37.1	266.4	94.6	9,891	91.8
Experiment Mean			0.0	3.63	16.44	90.50	38.3	281.6		10,772	
Coeff. of Var. (%)				22.23	2.33	1.01	4.12	3.41		5.33	
LSD (0.10)				0.79	0.37	0.89	1.5	9.4		560	
LSD (0.05)				0.95	0.45	1.07	1.9	11.2		673	

% Mean is percent of Experiment Mean

* Established Variety

Foxhome - CLS Nursery

2025 Final Update

46.31169, -96.34225

Cooperator: Etzler Farms

Soil Type: Clay loam

Planted: April 25th

Inoculated: July 9th by NDSU

Harvested: N/A

Prev. Crop: Wheat

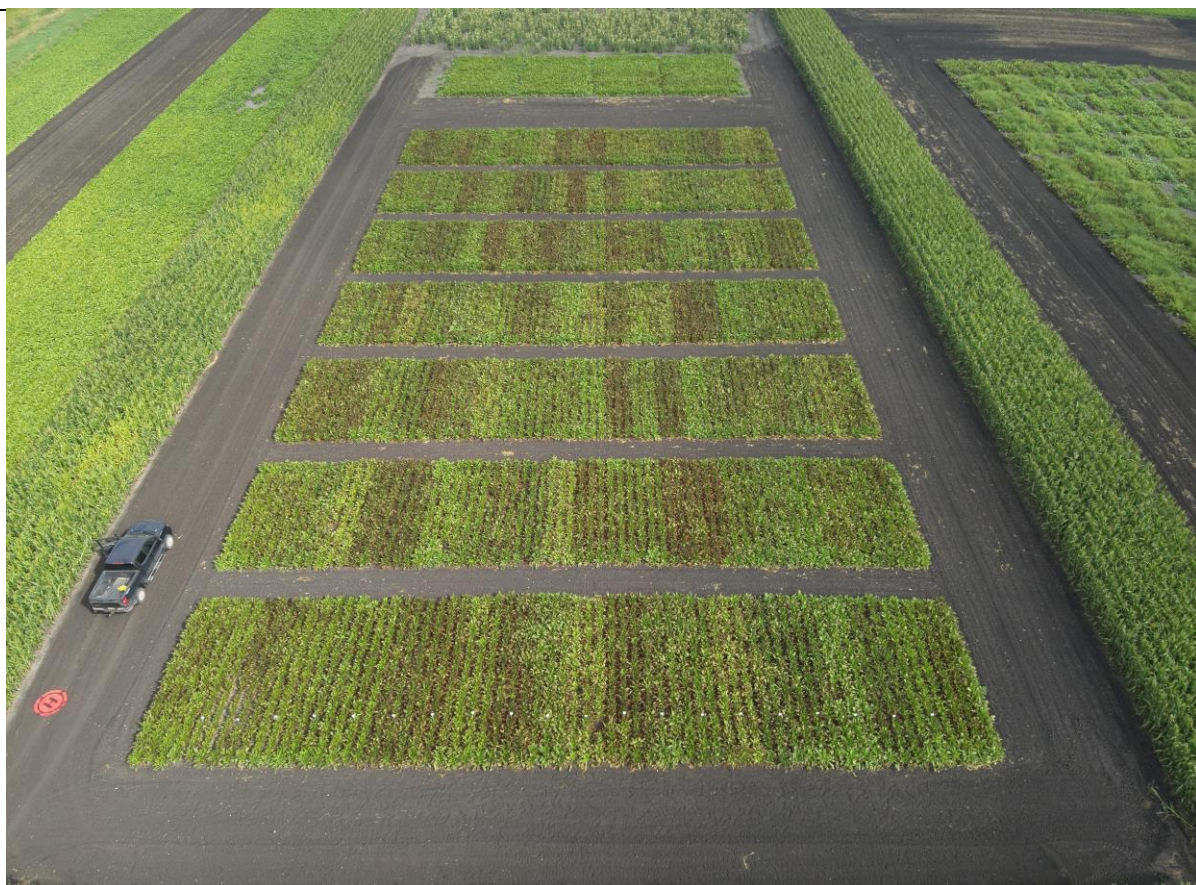
Plot Size: 3 Rows X 25'

Orientation: South/North

Date	Pest Control	Rate/Acre	Date	Cercospora Rating	Score Range	Disease	Incidence & Severity
At Plant	Counter 20G	7.5lb/ac	9 July	Inoculated	-	APH	Not Observed
26 April	PRE - Nortron + Dual Magnum	32oz + 8oz	1 August	1st Rating	1-4	CLS	High/High
27 May	PM3 + etho + StingerHL	30oz + 6oz + 2.4oz	7 August	2nd Rating	2-7	RHC	Low/Low
11 June	PM3 + etho + Outlook	30oz + 6oz + 21oz	11 August	3rd Rating	4-8	FUS	Not Observed
			14 August	4th Rating	4-9	RZM	Not Observed
			18 August	5th Rating	6-10		
			20 August	6th Rating	7-10		
						A	Overall Score

Comments: Final ratings were taken the week of August 18th. An excellent infection with very consistent severity made it a joy to rate. Differences between varieties were somewhat muted as compared to years past but certainly some varieties are better than others.

Overall Site



46.38408, -96.62668

Prev. Crop: Soybean
Plot Size: 2 Rows X 12.5'
Orientation: East/West

Date	Pest Control	Rate/Acre	September - 1961			Observations - Leaf Proctor	
At Plant	Counter 20G	7.5lb/ac	Date	Cercospora Control	Rate/Acre	Disease	Incidence & Severity
16 May	PRE - Nortron + Dual Magnum	32oz + 8oz	1 July	Proline/NIS + EBDC	5.7oz + 52oz	APH	Mod/Low
12 June	PM3 + etho + Outlook	30oz + 6oz + 21oz	14 July	Tin + EBDC	8oz + 52oz	CLS	Low/Low
			30 July	Headline + EBDC	9oz + 52oz	RHC	High/Mod
			13 August	Tin + EBDC	8oz + 52oz	FUS	Not Observed
			25 August	Inspire XT + EBDC	7oz + 52oz	RZM	Not Observed
						B+	Overall Score

Comments: We lifted and displayed this nursery on September 17th and were pleasantly surprised to find far more root disease than the canopy let on. Scores were based on both active RHC and the patterned scarring on the roots. Some APH deformed roots were also present but excluded from scoring criteria. Overall, we are very pleased with 'year 1' on this new site.



2025 Minn-Dak Official Variety Trial
Cercospora Ratings
KWS (Randolph, MN) & MDFC (Foxhome, MN)

Entry Code	Commercial & Experimental Entries	Unadjusted		Adjusted						
		Randolph 10 Dates	Foxhome 5 Dates	Randolph 10 Dates	Foxhome 5 Dates	2025 2 Loc.	2024 2 Loc.	2023 2 Loc.	2 Yr.	3 Yr.
4	* ACH 166	2.53	6.67	2.05	2.59	2.32	2.53	2.26	2.43	2.37
6	ACH 290	3.38	7.06	2.74	2.75	2.74	2.61	2.63	2.67	2.66
9	ACH 370	2.14	5.27	1.73	2.05	1.89	2.02	1.78	1.96	1.90
7	ACH 417	1.90	5.12	1.54	1.99	1.77	1.55	---	1.66	---
10	ACH 472	2.36	5.41	1.91	2.10	2.01	1.45	---	1.73	---
12	ACH 489	4.55	5.84	3.69	2.27	2.98	3.47	---	3.23	---
2	* Beta 7068	3.40	6.83	2.76	2.66	2.71	2.36	2.39	2.53	2.49
8	Beta 7170	3.56	7.28	2.88	2.83	2.86	2.72	2.67	2.79	2.75
5	* Beta 7231	2.06	6.07	1.67	2.36	2.02	1.96	2.10	1.99	2.03
11	Beta 7416	2.59	6.53	2.10	2.54	2.32	2.25	---	2.28	---
1	Beta 7456	2.51	5.88	2.03	2.29	2.16	1.75	---	1.96	---
3	* Hilleleshög 2325	4.41	6.26	3.57	2.44	3.00	3.30	3.64	3.15	3.31
19	ACH 535	4.34	6.46	3.52	2.51	3.01	---	---	---	---
18	ACH 559	1.78	5.57	1.44	2.17	1.80	---	---	---	---
14	ACH 592	4.16	5.74	3.37	2.23	2.80	---	---	---	---
13	Beta 7519	3.79	5.26	3.07	2.05	2.56	---	---	---	---
16	Beta 7524	1.54	4.66	1.25	1.81	1.53	---	---	---	---
17	Beta 7541	4.50	5.63	3.65	2.19	2.92	---	---	---	---
15	Beta 7590	2.06	6.11	1.67	2.38	2.02	---	---	---	---
20	Hilleleshög 2547	4.25	6.46	3.44	2.51	2.98	---	---	---	---
Established Mean		3.10	6.46	2.51	2.51	2.51	2.54	2.60	2.52	2.55
Exp/Trial Mean		3.09	6.01	2.50	2.34	2.42				
CV (%)		7.34	6.84							
LSD (P=0.05)		0.27	0.47							
Adjustment Factor				0.81035	0.38902					

* Established varieties used to calculate the adjustment factors

Lower disease values indicate better disease tolerance: (1)=No Disease >>>> (10)=Dead Canopy

Ratings adjusted for disease severity on the basis of the Established Varieties [4-year adjusted mean, 2021-2024]

Ratings x Adjustment Factor = Adjusted Rating

Average ratings based upon multiple rating dates and individuals

2025 Minn-Dak Official Variety Trial
Rhizoctonia Ratings
BSDF (Frankenmuth, MI) & MDFC (Kent, MN)

Entry Code	Commercial & Experimental Entries	Unadjusted		Adjusted		2025 2 Loc.	2024 2 Loc.	2023 2 Loc.	2 Yr.	3 Yr.
		BSDF	MDFC	BSDF	MDFC					
4	* ACH 166	4.47	3.42	3.62	3.50	3.56	3.53	3.66	3.55	3.58
6	ACH 290	4.16	4.08	3.37	4.18	3.78	2.99	3.14	3.38	3.30
9	ACH 370	4.61	3.71	3.74	3.80	3.77	4.19	3.54	3.98	3.83
7	ACH 417	4.29	3.54	3.48	3.63	3.55	3.24	---	3.39	---
10	ACH 472	4.78	3.46	3.87	3.55	3.71	3.31	---	3.51	---
12	ACH 489	4.65	3.63	3.77	3.72	3.74	3.46	---	3.60	---
2	* Beta 7068	4.61	4.21	3.74	4.31	4.02	3.51	3.58	3.77	3.71
8	Beta 7170	4.34	4.00	3.52	4.10	3.81	3.46	3.50	3.64	3.59
5	* Beta 7231	4.48	3.04	3.63	3.12	3.37	3.72	3.66	3.55	3.58
11	Beta 7416	4.54	3.08	3.68	3.16	3.42	3.27	---	3.34	---
1	Beta 7456	4.48	2.17	3.63	2.22	2.93	3.20	---	3.06	---
3	* Hilleleshög 2325	4.84	3.88	3.92	3.98	3.95	3.89	4.09	3.92	3.98
19	ACH 535	5.06	5.25	4.10	5.38	4.74	---	---	---	---
18	ACH 559	4.76	3.42	3.86	3.50	3.68	---	---	---	---
14	ACH 592	4.42	3.25	3.58	3.33	3.46	---	---	---	---
13	Beta 7519	5.23	3.21	4.24	3.29	3.76	---	---	---	---
16	Beta 7524	5.14	4.46	4.17	4.57	4.37	---	---	---	---
17	Beta 7541	3.59	3.29	2.91	3.37	3.14	---	---	---	---
15	Beta 7590	4.95	3.79	4.01	3.88	3.95	---	---	---	---
20	Hilleleshög 2547	4.53	2.96	3.67	3.03	3.35	---	---	---	---
Established Mean		4.60	3.64	3.73	3.73	3.73	3.66	3.75	3.70	3.71
Exp/Trial Mean		4.60	3.59	3.72	3.68	3.70				
CV (%)		14.14	17.96							
LSD (P=0.05)		0.82	0.91							
Adjustment Factor				0.81034	1.02476					

* Established varieties used to calculate the adjustment factors

Lower values indicate better disease tolerance: (0)=Excellent >>>> (9)=Dead Plant

Ratings adjusted for disease severity on the basis of the Established Varieties [4-year adjusted mean, 2021-2024]

Ratings x Adjustment Factor = Adjusted Rating

Average ratings based upon multiple individual ratings

2025 Minn-Dak Official Variety Trial
Aphanomyces Ratings
KWS (Shakopee, MN) & SMBSC (Renville, MN)

Entry Code	Commercial & Experimental Entries	Unadjusted		Adjusted					2 Yr.	3 Yr.
		Shakopee	Renville	Shakopee	Renville	2025 2 Loc.	2024 2 Loc.	2023 2 Loc.		
4	* ACH 166	3.99	3.00	3.91	3.36	3.63	3.21	3.53	3.42	3.46
6	ACH 290	3.23	3.13	3.16	3.50	3.33	3.42	4.00	3.38	3.59
9	ACH 370	3.92	3.44	3.84	3.85	3.84	3.70	3.94	3.77	3.83
7	ACH 417	3.48	2.77	3.41	3.10	3.25	3.10	---	3.18	---
10	ACH 472	3.43	2.67	3.36	2.99	3.17	3.43	---	3.30	---
12	ACH 489	3.19	2.83	3.12	3.17	3.14	3.01	---	3.08	---
2	* Beta 7068	3.19	3.04	3.12	3.40	3.26	3.94	3.99	3.60	3.73
8	Beta 7170	4.00	3.08	3.92	3.45	3.68	3.85	3.62	3.77	3.72
5	* Beta 7231	3.27	3.00	3.20	3.36	3.28	3.73	3.76	3.50	3.59
11	Beta 7416	3.38	3.06	3.31	3.42	3.37	3.64	---	3.50	---
1	Beta 7456	3.92	3.13	3.84	3.50	3.67	3.53	---	3.60	---
3	* Hilleleshög 2325	4.54	4.08	4.45	4.56	4.51	3.65	3.80	4.08	3.99
19	ACH 535	3.42	3.27	3.35	3.66	3.50	---	---	---	---
18	ACH 559	3.16	2.73	3.09	3.05	3.07	---	---	---	---
14	ACH 592	4.07	3.02	3.99	3.38	3.68	---	---	---	---
13	Beta 7519	3.85	3.33	3.77	3.73	3.75	---	---	---	---
16	Beta 7524	2.91	3.17	2.85	3.55	3.20	---	---	---	---
17	Beta 7541	3.65	2.77	3.57	3.10	3.34	---	---	---	---
15	Beta 7590	2.95	3.48	2.89	3.89	3.39	---	---	---	---
20	Hilleleshög 2547	4.85	3.83	4.75	4.28	4.52	---	---	---	---
Established Mean		3.75	3.28	3.67	3.67	3.67	3.63	3.77	3.65	3.69
Exp/Trial Mean		3.62	3.14	3.54	3.51	3.53				
CV (%)		15.67	8.17							
LSD (P=0.05)		0.66	0.37							
Adjustment Factor				0.97919	1.11875					

* Established varieties used to calculate the adjustment factors

Lower values indicate better disease tolerance: (0)=Excellent >>>> (9)=Dead Plant

Ratings adjusted for disease severity on the basis of the Established Varieties [4-year adjusted mean, 2021-2024]

Ratings x Adjustment Factor = Adjusted Rating

Average ratings based upon multiple individual ratings

2025 Minn-Dak Official Variety Trial
Fusarium Ratings
ACSC (Sabin, MN) & United Beet Seeds (Moorhead, MN)

Entry Code		Commercial & Experimental Entries	Unadjusted					
			Sabin	Moorhead	2025 2 Loc.	2024 2 Loc.	2023 2 Loc.	2 Yr. 3 Yr.
4	*	ACH 166	1.71	2.11	1.91	1.51	3.43	1.71 2.28
6		ACH 290	2.17	2.11	2.14	1.53	3.54	1.84 2.40
9		ACH 370	1.63	2.22	1.93	1.26	4.08	1.59 2.42
7		ACH 417	1.98	1.44	1.71	1.36	---	1.54 ---
10		ACH 472	1.15	1.56	1.36	1.32	---	1.34 ---
12		ACH 489	1.33	1.22	1.28	1.31	---	1.29 ---
2	*	Beta 7068	1.38	1.44	1.41	1.30	3.60	1.36 2.10
8		Beta 7170	1.44	1.89	1.67	1.51	3.74	1.59 2.30
5	*	Beta 7231	1.63	1.56	1.60	1.50	3.43	1.55 2.18
11		Beta 7416	1.38	2.00	1.69	1.57	---	1.63 ---
1		Beta 7456	1.42	1.56	1.49	1.29	---	1.39 ---
3	*	Hilleshög 2325	2.25	6.33	4.29	3.09	6.32	3.69 4.57
19		ACH 535	1.44	1.44	1.44	---	---	---
18		ACH 559	1.29	1.89	1.59	---	---	---
14		ACH 592	1.33	1.11	1.22	---	---	---
13		Beta 7519	1.71	1.22	1.47	---	---	---
16		Beta 7524	1.52	1.67	1.60	---	---	---
17		Beta 7541	1.46	1.33	1.40	---	---	---
15		Beta 7590	1.88	1.56	1.72	---	---	---
20		Hilleshög 2547	2.48	4.11	3.30	---	---	---
Established Mean			1.74	2.86	2.30	1.85	4.19	2.08 2.78
Trial Mean			1.63	1.99	1.81			
CV (%)			21.23	29.65				
LSD (P=0.05)			0.57	1.02				
Adjustment Factor								

Lower values indicate better disease tolerance: (0)=Excellent >>>> (9)=Dead Plant

Average ratings based upon multiple dates and individual ratings