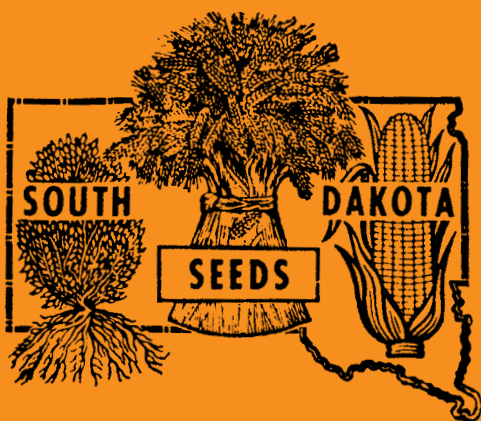


*South Dakota Certified Seed*

# **GROWER DIRECTORY**

## **FALL 2020 / SPRING 2021**



***CERTIFICATION SERVICE  
SOUTH DAKOTA  
CROP IMPROVEMENT  
ASSOCIATION***

**Member of . . .**

*Association of Official Seed  
Certifying Agencies*

**Cooperating with . . .**

*South Dakota State University*

**Operating under . . .**

*Authority of the South Dakota  
State Seed Certification Board*

## STATE SEED CERTIFICATION BOARD

Jack Ingemansen, Brookings  
President

Neal R. Foster, Brookings  
Secretary

Steve Kuecker, Webster  
Vice President

Steve Van Tassel, Midland  
SDCIA Member

Brenda Sievers, Pierre  
SD Dept. of Ag

## BOARD OF DIRECTORS SOUTH DAKOTA CROP IMPROVEMENT ASSOCIATION

Jess Sondgeroth, Platte, President

Chris Lynch, McLaughlin, Vice President

Neal R. Foster, Brookings, Executive Director

Bob Rankin, Draper

Bryan Jorgensen, Ideal

Drew Reuman, Presho

Steve Kuecker, Webster

Jim Chilson, Florence

Ryan Van Tassel, Midland

David Fauske, Wall

Fred Zenk, Webster

John Killifer, Dean, Agriculture, Food & Environmental Sciences, SDSU

## THE PURPOSE OF SEED CERTIFICATION

The purpose of Seed Certification is to maintain and make available to the public sources of high quality seeds and propagating materials of superior varieties so grown and distributed as to insure genetic identity.

Varieties eligible for certification have resulted either from natural selection or through systematic plant breeding techniques. In either case, without a planned method for maintaining genetic purity, there is grave danger of losing varietal identity.

Varietal purity is the first consideration in Seed Certification, but other factors such as weeds, diseases, viability, mechanical purity and grading are also important.

Seed Certification is designed to maintain not only the genetic purity of superior crop varieties but also reasonable standards of seed condition and quality.

### Classes of Certified Seed

**Foundation seed** is the progeny of Breeder or Foundation Seed Stocks produced under control of the originator or sponsoring plant breeding institution, or person, or designee thereof. As applied to certified seed, Foundation seed is a class of certified seed which is produced under procedures established by the certifying agency for the purpose of maintaining genetic purity and identity.

**Registered seed** is the progeny of Breeder or Foundation seed handled according to procedures prescribed by the certifying agency so as to maintain satisfactory genetic purity and identity.

**Certified seed** is the progeny of Breeder, Foundation, or Registered seed so handled as to maintain satisfactory genetic purity and identity and which has been approved by the certifying agency.

## Table of Contents

Approved Conditioners.....	54
Approved Bulk Retail Facilities.....	60
Barley .....	15
Field Peas .....	15
Flax .....	16
Grasses	
Big Bluestem.....	17
Crested Wheatgrass .....	19
Intermediate Wheatgrass.....	20
Meadow Brome.....	17
Orchardgrass .....	18
Pubescent Wheatgrass.....	20
Sideoats Grama .....	18
Switchgrass .....	18
Tall Wheatgrass.....	21
Lentils.....	16
Oats.....	21
Pre-Variety Germplasm Certification for Native Grasses and Forbs.....	2
PVP List .....	13
Quality Assurance Program .....	3
Royalty or Seed Sales Fees on Varieties.....	14
Rye.....	27
Safflower .....	17
Seed Growers .....	47
South Dakota Seed Trade Association Members .....	53
Soybeans .....	27
Tables on Variety Characteristics.....	4
Triticale.....	28
Wheat	
Durum .....	29
Hard Red Spring.....	29

### PLEASE NOTE

The following list of seed growers includes only those whose fields are planted with Foundation or Registered seed and who have made application for certification and have passed all inspections to date.

Certification can be completed only after the seed from these approved fields has passed all certification tests and standards. **FINAL CERTIFICATION** will depend on a satisfactory laboratory analysis of the conditioned (cleaned) seed lot.

The growers listed will, therefore, only accept tentative orders that will be filled if seed is finally certified, which in fact will be designated by the certification tag or bulk transfer certificate. Seed offered for sale without this documentation **CANNOT** be considered Certified Seed.

The South Dakota Crop Improvement Association and Seed Certification Service are not marketing organizations; hence, inquiries for seed should be made directly to the growers listed.

Neither the South Dakota Crop Improvement Association nor the Certification Service assumes any financial responsibility regarding seed listed, although every attempt has been made to insure high quality seed which conforms to the certification standards.

Please report any irregularities.

## Pre-Variety Germplasm Certification for Native Grasses and Forbs

This type of certification is available for seeds and other propagating materials of germplasm types that have not been released as varieties.

Protocols include: Site identification; field inspection; and seed sampling and testing.

Three different germplasm types or levels are possible based on the amount of genetic study on the germplasm ascension that has taken place; each type may be marketed as wildland collected seed (Generation 0) or as Generation 1 or later seed from field production:

**Source Identified (yellow tag):** only the species and original germplasm collection site is known.

**Selected (green tag):** shows promise of superior and/or identifiable traits as contrasted with other germplasm ascensions, ecotypes, or variety/cultivars of the same species when compared to a common site.

**Tested (blue tag):** requires progeny testing to prove that superior and/or identifiable traits of interest are heritable in succeeding generations.

### **SPECIES OF NATIVE GRASSES AND FORBS IN PROGRAM**

<b>Common Name/Scientific Name . . . . .</b>	<b>Producer</b>
Little Bluestem/ <i>Schiachyrium scoparium</i> . . . . .	Jerry Roitsch, Bristol 605-492-3330

## **CERTIFIED SEED**

Professionally grown **Certified Seed** typically produces higher yields than farmer-saved seed, which means higher net returns for the producer. Purchasing **New Certified Seed** each year will ensure that the producer is getting the highest quality seed available. In addition to being field inspected, conditioned by approved professionals, and laboratory tested, the **Certified Seed Label** is proof that the seed has met all of the standards set forth by the South Dakota Crop Improvement Association.

# Quality Assurance Program



South Dakota Crop Improvement Association's (SDCIA) Quality Assurance (QA) program provides a uniform, unbiased quality control system and marketing tool for crop seeds merchandised as varieties, hybrids, brands or blends. While it is designed as a complete quality control system for seed not eligible for certification, its guidelines are very similar to those of the certification program. It is easily customized to meet the needs of the individual seed producer. The QA Program provides significant value for companies and producers who need to adhere to sound quality control programs or meet license agreement protocols in today's era of high value technology and specific genetic traits associated with today's seed products.

The following companies/individuals have produced seed under the SDCIA Quality Assurance Program.

Ag Performance, Inc., Buffalo Center, IA . . . 641-562-2370  
Hansmeier & Son, Inc., Bristol, SD. . . . . 605-492-3611



## ORDER YOUR NEW CERTIFIED SEED TODAY!

**CROP VARIETY DESCRIPTIONS**  
**HRS Wheat Variety Characteristics**

Variety	Origin	Year Rel.	Height Classification	Plant Height (in.)	Rust Reaction*			Protein	Straw Strength	Relative Maturity (Days)**	Beards	PVP**	FHB
					Stripe	Leaf	Stem						
Advance	SD	'11	Semi-Dwarf	29"	MS	MS	MR	Medium	Good	4	Yes	PVP-94 Title V	MR
APMurdock	SYN	'19	Semi-Dwarf	29"	--	MR	--	Medium	Good	3	Yes	Yes*	MR
Bolles	MN	'15	Semi-Dwarf	31"	MS	R	--	High	Good	6	Yes	PVP-94 Title V	MR
Boost	SD	'16	Medium	31"	S	MR	--	Medium	Good	6	Yes	PVP-94 Title V	MR
Brick	SD	'08	Medium	32"	MS	R	R	Medium	Good-Medium	0	Yes	PVP-94 Title V	MR
Driver	SD	'19	Semi-Dwarf	30"	--	R	R	Medium	Good	3	Yes	Yes*	MR
Focus	SD	'15	Medium	34"	S	MR	--	Medium	Good	1	Yes	PVP-94 Title V	MR
Forefront	SD	'11	Medium	34"	MS	MS	MR	Medium	Good	2	Yes	PVP-94 Title V	MR
Lang-MN	MN	'17	Medium	32"	MS	MR	R	Medium	Good	4	Yes	PVP-94 Title V	MR

LCS Rebel	LCS	'17	Semi-Dwarf	30"	S	MR	--	Medium	Good-Medium	2	Yes	PVP-94	MR
LCS Trigger	LCS	'15	Semi-Dwarf	31"	MS	MR	R	Medium	Good	7	Yes	PVP-94	MR
Linkert	MN	'13	Semi-Dwarf	27"	MS	MR	--	Medium	Good	4	Yes	PVP-94 Title V	MS
Prevail	SD	'13	Semi-Dwarf	28"	MR	MR	MR	Medium	Good	2	Yes	PVP-94 Title V	MR
Prosper	ND	'11	Medium	32"	S	S	R	Medium	Good	3	Yes	PVP-94 Title V	MR
Shelly	MN	'16	Semi-Dwarf	30"	MR	MR	--	Medium	Good	7	Yes	PVP-94 Title V	MR
Surpass	SD	'16	Semi-Dwarf	31"	S	MR	--	Medium	Good	2	Yes	PVP-94 Title V	MR
SY Ingmar	SYN	'14	Semi-Dwarf	30"	S	MR	R	Medium-High	Good	3	Yes	PVP-94 Title V	MR
SY Rustler	SYN	'16	Semi-Dwarf	30"	MS	MR	MR	Medium	Good	4	Yes	PVP-94 Title V	MR
SY Valda	SYN	'15	Semi-Dwarf	27"	S	MR	R	Medium	Good	5	Yes	PVP-94 Title V	MR
WB9590	WB	'18	Semi-Dwarf	27"	S	MR	R	Medium	Good	2	Yes	Yes*	MS
WB9719	WB	'18	Semi-Dwarf	30"	S	MR	R	Medium	Good	6	Yes	Yes*	MR

\*S = Susceptible, MS = Moderately Susceptible, MR = Moderately Resistant, R = Resistant, M = Intermediate

PVP\*\*- PVP Title V- Certification Option - to be sold by variety name only as a class of Certified Seed. PVP-94 without Title V. Yes\*- application pending/ anticipated.

\*\*\*Relative Maturity. Brick is the check variety. Positive number indicates days later than Brick.

SYN: Syngenta Seeds/AgriPro LCS: Limagrain Cereal Seeds WB: WestBred, LLC

## HRW WHEAT VARIETY CHARACTERISTICS 2020

Variety	Origin	Year Rel.	Rust Reaction*		Wheat Streak Mosaic	Relative Heading (0-7)	Straw Strength	Relative Plant Height	Winter Hardness	End-Use Quality	Chaff Color	PVP**
			Leaf	Stem								
AP503 CL2	AP	'08	S	MR	MS	MS	Excellent	Short 28"	Good	Acceptable	White	PVP Title V
Draper	SD	'19	MR	MS	MR	--	Excellent	Short 28"	Good-Excellent	Good	White	Yes*
Expedition	SD	'02	MS	R	S	S	Fair	Short 29"	Good-Excellent	Good	White	PVP Title V
Ideal	SD	'11	MS	MR	S	S	Excellent	Short 29"	Good	Acceptable	White	PVP Title V
Keldin	WB	'13	MR	--	MR	--	Excellent	Short 29"	Excellent	Acceptable	White	PVP Title V
LCS Chrome	WB	'16	MR	S	R	S	Good	Short 29"	Excellent	Good	White	PVP-94
LCS Mint	LCS	'12	MR	MS	MS	MR	Good	Short 29"	Good	Excellent	White	PVP Title V
Lyman	SD	'08	MR	R	S	S	Fair	Medium 31"	Good	Acceptable	White	PVP Title V
Oahe	SD	'16	MS	MS	MR	MR	Good	Medium 31"	Good	Acceptable	White	PVP Title V
Overland	NE/SD	'07	MR	MR	S	MS	Good	Medium 30"	Excellent	Acceptable	White	PVP Title V
Redfield	SD	'13	MS	MR	MS	S	Excellent	Short 28"	Good-Excellent	Good	Brown	PVP Title V
SY517CL2	SYN/AP	'17	MR	R	MS	--	Good	Short 26"	Good	Acceptable	White	PVP Title V



SY Monument	SYN/AP	'14	MR	R	MR	MS	Early 2	Good	Short 27"	Good-Excellent	Acceptable	White	PVP Title V
SY Sunrise	SYN/AP	'15	MR	R	MR	MS	Early 2	Good	Short 26"	Good	Acceptable	White	PVP Title V
SY Wolf	SYN/AP	'11	R	MR	S	MR	Medium Early 3	Excellent	Short 28"	Good-Excellent	Acceptable	White	PVP Title V
Thompson	SD	'17	MR	MS	MS	MS	Medium 4	Fair	Medium 31"	Good	Acceptable	White	PVP Title V
WB4418	WB	'17	R	MR	MS	MR	Early 0	Good	Short 26"	Good	Good	White	PVP-94
WB4462	WB	'16	MR	--	S	S	Early 0	Good	Medium 30"	Good	Good	White	PVP-94
WB-Grainfield	WB	'12	MR	MR	MS	MR	Early 0	Good	Short 28"	Good	Good	White	PVP-94
Winner	SD	'19	MR	MR	MR	--	Early 2	Excellent	Short 29"	Good-Excellent	Good	White	Yes*

\*S = Susceptible MS = Moderately Susceptible MR = Moderately Resistant R = Resistant

PVP\*\*- PVP Title V- Certification Option - to be sold by variety name only as a class of Certified Seed. PVP-94 without Title V. Yes\* - application pending/ anticipated.

## OAT VARIETY CHARACTERISTICS

--Disease Reaction\*--

Variety	Origin	Year Rel.	Color Grain	Test Weight	Relative Maturity*** (Days)	Height	Straw Strength	Red Leaf	--Disease Reaction*--				Protein	PVP**
									Smut	Stem Rust	Crown Rust	Stem Rust		
Beach	ND	'04	White	Fair	7	Tall	Good	MS	R	S	MS	Low	No	
Buff (Hull-less)	SD	'02	Hull-less	Very Good	4	Medium	Good	MR	R	S	MS	Medium High	No	
Colt	SD	'09	White	Good	0	Medium	Fair	MS	R	MS	S	Medium High	PVP-94 Title V	
Deon	MN	'13	Yellow	Good	9	Tall	Good	MS	R	MR	R	Medium High	PVP-94 Title V	
Goliath	SD	'12	White	Good	9	Tall	Good	MR	MR	R	S	Medium High	PVP-94 Title V	
Hayden	SD	'14	White	Good	7	Tall	Good	MR	R	MS	S	Medium	PVP-94 Title V	
Horsepower	SD	'11	White	Good	4	Medium	V Good	MS	S	R	S	Medium	PVP-94 Title V	
Jerry	ND	'94	White	Good	4	Medium	Good	MR	S	MS	S	Medium High	No	
Natty	SD	'14	White	Good	2	Tall	V Good	MR	MR	MS	S	Medium-High	PVP-94 Title V	

Newburg	ND	'11	White	Fair	7	Tall	Good	MR	S	R	S	Medium	PVP-94
Paul (Hull-less)	ND	'94	Hull-less	Very Good	8	Medium	Good	S	MS	MR	MS	Medium	PVP-94
Rushmore	SD	'19	White	Good	6	Medium	V Good	MS	R	--	R	Medium	PVP*
Saddle	SD	'17	White	Good	1	Medium	V Good	MS	R	S	R	Medium	PVP*
Shelby 427	SD	'09	White	Good	2	Medium Tall	V Good	MR	R	MS	S	Medium High	PVP-94 Title V
Souris	ND	'06	White	Fair	8	Medium	Good	MS	MR	MS	S	Medium	PVP-94
Stallion	SD	'06	White	Very Good	7	Tall	Fair	MS	S	S	MR	Medium	PVP-94 Title V
Stark (Hull-less)	ND	'04	Hull-less	Good	6	Medium Tall	Good	--	--	MR	MS	Medium	PVP-94
Streaker (Hull-less)	SD	'09	Hull-less	Very Good	3	Medium Tall	Good	MR	R	MR	MS	Medium High	PVP-94 Title V
Warrior	SD	'19	White	Good	5	Medium	Good	MS	R	--	R	Medium	PVP*

\*S = Susceptible, MS = Moderately Susceptible, MR = Moderately Resistant, R = Resistant

PVP\*\*- PVP Title V - Certification Option - to be sold by variety name only as a class of Certified Seed. PVP-94 without Title V. Yes\* - application pending/ anticipated.

\*\*\*Relative Maturity. Colt is the check variety. Positive number indicates days later than Colt.

## SOYBEAN VARIETY CHARACTERISTICS

Variety	Origin	Year Rel.	Relative Maturity <sup>(1)</sup>	Flower Color	Pubescence	Pod Color	Hilum Color	Seed Coat Lustre	Emergence <sup>(2)</sup>	Shattering <sup>(3)</sup>	Iron Chlorosis <sup>(4)</sup>	Phytophthora Root Rot <sup>(5)</sup>	Lodging Resistance	PVP <sup>(6)</sup>
Brookings	SD	'12	1.7	Purple	Gray	Tan	Buff	D	--	2	--	R1K	Good	No
Codington	SD	'13	1.0	Purple	Tawny	Brown	Black	D	--	3	1.0	R1	Good	No
Davison	SD	'09	2.2	White	Lt. Tawny	Tan	Black	D	1	1	--	R1	Good	Yes
Deuel	SD	'09	1.1	Purple	Tawny	Brown	Black	D	1	1	--	R1K	Fair-Good	Yes
Hamlin	SD	'05	0.9	White	Tawny	Brown	Black	D	1	1	2.3	R1K	Good	Yes
MN1806CN	MN	'14	1.8	White	Tawny	Brown	Yellow	--	--	--	--	--	--	No
Roberts	SD	'13	0.6	Purple	Gray	Brown	Gray	D	--	1	3.0	R1K	Good	No
Spink	SD	'02	0.8	Purple	Gray	Brown	Buff	D	1	1	2.4	R1	Good	Yes
Stride	SD	'97	1.4	Purple	Gray	Brown	Imp. Black	S	1	1	3.7	R1	Excellent	Yes
Surge	SD	'97	0.7	Purple	Gray	Brown	Imp. Black	D	1	1	2.7	R1	Good	Yes
Turner	SD	'99	2.3	White	Gray	Brown	Buff	D	1	1	3.0	R1	Good	Yes

\* Plant Variety Protection applied for.

- (1) Relative Maturity: 95% ripe pods. First digit is the maturity group with the number following the decimal point is the maturity rating within that group. Group 0 maturities spanned 18 calendar days so each unit on the relative scale (0.1) represents 1.8 days. In contrast, Group 1 maturities spanned 13 days and Group II spanned 12 days. Therefore, each (0.1) unit on the relative maturity scale represents 1.3 days for Group I and 1.2 for Group II varieties listed above.
- (2) Emergence - indicates the percent of seeds that have emerged after 12 days from 4 1/2" depth (sand), maintained at 77° F. Scores indicate: 1 = more than 85% emerged, 2= 70-84%, 3=45-69%, 4=20-44%, and 5= 1-19%.
- (3) Shattering - indicates the percent pods that have opened two weeks after maturity. Scores indicate 1 = no shattering, 2 = 1-10%, 3 = 11-25%, 4 = 26-50%, and 5+ over 50% shattered.
- (4) Iron Chlorosis - susceptibility is evaluated on sites with high pH soils and range from 1 (little or no yellowing) to 3 (moderate yellowing) to 5 (severe yellowing).
- (5) Phytophthora Root Rot: S = Susceptible, R1, R3, and R4 = Genes for resistance to different races of Phytophthora.
- (6) PVP - Plant Variety Protection, Title V. Certification Option - To be sold by variety name only as a class of Certified Seed. Yes\*\* - application anticipated/pending.

## PLANT VARIETY PROTECTION (PVP)

This is not a complete list of varieties or crops, and the associated Plant Variety Protection Web Site at <https://www.ams.usda.gov/services/plant-variety-protection>. There are two levels of Plant Variety Protection (PVP) 1) PVP - the variety must be sold by variety name with the variety owner's permission (the variety in question does not need to be certified but the seller MUST have the owner's permission. 2) PVP Title V - this means that the variety in question can only be sold as a class of certified seed. In either case the purchaser may replant the seed from the variety that he has purchased for as many seasons as is wished. It is the responsibility of the buyer and seller to confirm the PVP status of the variety in question before the seed changes ownership. It is illegal for anyone to purchase grain of a protected variety and use it for any planting purposes.

### PLANT VARIETY PROTECTION (PVP)-PVP A 1994 TITLE V OPTION (PVP TITLE V)

#### Spring Wheat

Variety	PVP Level
Advance	PVP Title V
Ambush	None
AP Murdock	PVP Title V
Barlow	PVP Title V
Bolles	PVP Title V
Boost	PVP Title V
Breaker	PVP
Brennan	PVP Title V
Brick	PVP Title V
Briggs	PVP Title V
Cannon	PVP
Driver	PVP Title V
Eigin-ND	PVP Title V
Faller	PVP Title V
Focus	PVP Title V
Forefront	PVP Title V
Glenn	PVP Title V
Granger	PVP Title V
Kelby	PVP Title V
Lang-MN	PVP Title V
LCS Albany	PVP Title V
LCS Anchor	PVP
LCS Breakaway	PVP Title V
LCS Iguacu	PVP Title V

#### Winter Wheat

Variety	PVP Level
Alice	PVP Title V
AP18 AX	PVP Title V
Art	PVP Title V
AP503CL2	PVP Title V
Boomer	PVP
Brawl CL Plus	PVP Title V
CDC Falcon	PVP
Crescent AX	PVP Title V
Draper	PVP Title V
Expedition	PVP Title V
Harding	PVP Title V
Hawken	PVP Title V
Ideal	PVP Title V
Infinity CL	PVP Title V
Jagalene	PVP Title V
Keldin	PVP Title V
LCS Chrome	PVP
LCS Fusion AX	PVP Title V
LCS Mint	PVP Title V
LCS Photon AX	PVP Title V
Lyman	PVP Title V
Matlock	PVP
Millennium	PVP Title V
Oahe	PVP Title V

#### Oats

Variety	PVP Level
Colt	PVP Title V
Deon	PVP Title V
Everleaf 126	PVP
Goliath	PVP Title V
Hayden	PVP Title V
HiFi	PVP Title V
Horsepower	PVP Title V
Morton	PVP
Natty	PVP Title V
Newburg	PVP Title V
Reins	PVP Title V
Rockford	PVP
Rushmore	PVP Title V
Saddle	PVP Title V
Shelby 427	PVP Title V
Souris	PVP
Stallion	PVP Title V
Streaker	PVP Title V
Warrior	PVP Title V

LCS Powerplay	PVP Title V
LCS Rebel	PVP
LCS Trigger	PVP Title V
Linkert	PVP Title V
LNR 10200	PVP
MN-Torgy	PVP Title V
MS Camaro	PVP
MS Chevelle	PVP
MS Stingray	PVP
Prevail	PVP Title V
Prosper	PVP Title V
RB07	PVP Title V
Samson	PVP
Select	PVP Title V
Shelly	PVP Title V
Steele ND	PVP Title V
Surpass	PVP Title V
SY Ingmar	PVP Title V
SY Rowyn	PVP Title V
SY Rustler	PVP Title V
SY Soren	PVP Title V
SY Valda	PVP Title V
SY605CL	PVP Title V
Traverse	PVP Title V
Tom	PVP Title V
Vantage	PVP
Velva	PVP Title V
WB Mayville	PVP Title V
WB Patron	PVP
WB9479	PVP
WB9507	PVP
WB9590	PVP
WB9653	PVP
WB9719	PVP
WB9879CLP	PVP Title V
Overland	PVP Title V
Redfield	PVP Title V
Settler CL	PVP Title V
Smokey Hill	PVP Title V
Striker	PVP
SY517CL2	PVP Title V
SY Monument	PVP Title V
SY Sunrise	PVP Title V
SY Wolf	PVP Title V
SY Wolverine	PVP Title V
Thompson	PVP Title V
WB Grainfield	PVP
WB4059CLP	PVP
WB4309	PVP
WB4462	PVP
WB4614	PVP
WB4623CLP	PVP Title V
WB4721	PVP
Wendy	PVP Title V
Wesley	None
Winner	PVP Title V

## VARIETIES WITH RESEARCH FEES

Most Varieties have research or production fees on the sales of Registered and Certified classes of seed. These fees are assessed at the first point of sale as a class of certified seed for varieties grown in South Dakota. If the variety in question is not listed please contact the SDCIA Office. Phone # 605-688-4604.

### Spring Wheat Per Bu Charges

Advance	\$0.60	SY 517CL2	\$0.05
Ambush	\$0.05	SY Monument	\$0.05
AP Murdock	\$0.05	SY Sunrise	\$0.05
Bolles	\$0.30	SY Wolf	\$0.05
Boost	\$0.60	SY Wolverine	\$0.05
Brick	\$0.60	Thompson	\$0.60
Cannon	\$0.05	WB Grainfield	\$0.05
Driver	\$0.60	WB4309	\$0.05
Focus	\$0.60	WB4462	\$0.05
Forefront	\$0.60	Wesley	\$0.10
Lang-MN	\$0.30	Winner	\$0.60
LCS Rebel	\$0.05		
LCS Trigger	\$0.05		
Linkert	\$0.30		
MN-Torgy	\$0.30		
Prevail	\$0.60		
Prosper	\$0.30		
Shelly	\$0.30		
Surpass	\$0.60		
SY Ingmar	\$0.05		
SY Rowyn	\$0.05		
SY Rustler	\$0.05		
SY Valda	\$0.05		
TCG-Spittfire	\$0.05		
TCG-Wildfire	\$0.05		
WB Patron	\$0.05		
WB9479	\$0.05		
WB9590	\$0.05		
WB9719	\$0.05		

### Oats Per Bu Charges

Colt	\$0.30
Deon	\$0.25
Goliath	\$0.30
Hayden	\$0.30
Horsepower	\$0.30
Jerry	\$0.10
Natty	\$0.30
Newburg	\$0.35
Reins	\$0.30
Rockford	\$0.35
Rushmore	\$0.30
Saddle	\$0.30
Shelby 427	\$0.30
Warrior	\$0.30

Barley	Per Bu Charges
ND-Genesis	\$0.75
Rasmusson	\$0.25

### Winter Wheat Per Bu Charges

Allegiant 3063	\$0.05
AP18 AX	\$0.05
AP503CL2	\$0.05
CP7050 AX	\$0.05
Crescent AX	\$0.05
Draper	\$0.60
Expedition	\$0.10
Ideal	\$0.60
Keldin	\$0.05
LCS Chrome	\$0.05
LCS Fusion AX	\$0.05
LCS Mint	\$0.05
LCS Photon AX	\$0.05
Lyman	\$0.60
MTF-1435	\$0.05
Oahe	\$0.60
Overland	\$0.60
Ray	\$0.50
Redfield	\$0.60

### Peas/Lentils/

Chickpeas	Per Bu Charges
CDC Frontier	\$0.05
CDC Inca	\$0.05
CDC Orion	\$0.05
AAC Carver	\$0.05
Agassiz	\$0.05
CDC Amarillo	\$0.05
DS Admiral	\$0.05
Durwood	\$0.05
Early Star	\$0.05
Fergie	\$0.05
LG Amigo	\$0.05
Nette 2010	\$0.05
Salamanca	\$0.05
Spider	\$0.05
SW Midas	\$0.05
CDC Invincible	\$0.05
CDC Maxim CL	\$0.05



## BARLEY

**ND GENESIS**—ND Genesis barley was developed and released by North Dakota State University Research Foundation in 2015. ND Genesis, tested as 2ND25276, is a two-rowed barley. ND Genesis has semi-smooth awns. Kernels have a white aleurone with long hairs on the rachilla. Heading date of ND Genesis is the same as Pinnacle. ND Genesis is approximately 1 inch shorter than Pinnacle. ND Genesis is moderately resistant to spot blotch and net blotch. It accumulates less DON than Pinnacle. ND Genesis is undergoing tests for malting quality by the AMBA. ND Genesis is protected under the U.S. Plant Variety Protection Act with the Title V certification option.

County	Name, Address	Telephone	Class	Acres
Charles Mix	Dakota's Best Seed Co., Platte	605-337-3318 .....	R	296
Roberts	Koepe Seeds, Claire City	605-652-4529.....	R	40
<b>TOTAL</b>				<b>336</b>

**RASMUSSEN**—Rasmusson barley is a 6-row, semi-smooth, awned barley developed by the University of Minnesota Agricultural Experiment Station. The line was tested as M109 and has the pedigree M95/Lacey. The variety was released in 2008. Kernels of Rasmusson have a white aleurone with plumpness similar to Robust. Standability is rated very good. Maturity of Rasmusson is similar to Lacey while height is medium tall. Rasmusson is moderately resistant to spot blotch and susceptible to net blotch. Rasmusson is resistant to stem rust, loose smut, but is susceptible to Scab. Rasmusson is an approved malting barley. Rasmusson is protected under the Plant Variety Protection Act with the Title V certification option. Variety development fees will be charged on sales of certified classes of Rasmusson.

County	Name, Address	Telephone	Class	Acres
Charles Mix	Dakota's Best Seed Co., Platte	605-337-3318 .....	C	140
<b>TOTAL</b>				<b>140</b>

## FIELD PEAS

**AAC CARVER**—AAC Carver field pea was developed by Agriculture and Agri-Food Canada. The variety was released in 2015 and is distributed by Canterra Seeds. AAC Carver field pea is a medium maturing pea. The variety is semi-leafless and has white flowers. The seeds are yellow in color and are medium in size, similar to DS Admiral. Vine length is longer when compared to Agassiz.

County	Name, Address	Telephone	Class	Acres
Pennington	Tyrel Eisenbraun, Wall	(605)685-3686 .....	C	79
Pennington	Tyrel Eisenbraun, Wall	(605)685-3686 .....	R	27
<b>TOTAL</b>				<b>106</b>

**AAC PROFIT**—AAC Profit field pea was developed by Agriculture and Agri-Food Canada. The variety was released in 2018 and is distributed by Birdsall Grain. AAC Profit field pea is a medium-late maturing pea, similar in height to AAC Carver. The variety is semi-leafless and has white flowers. The seeds are yellow in color and are medium in size, similar to AAC Carver. AAC Profit is a good yielder with good protein. AAC Profit has good resistance to powdery mildew.

County	Name, Address	Telephone	Class	Acres
Lyman	Karlen Ranch Partnership, Reliance	(605)473-5605.....	C	753
<b>TOTAL</b>				<b>753</b>

**CDC INCA**—CDC Inca field pea is a semi-leafless variety developed and released in 2015 by the Crop Development Centre, University of Saskatchewan. It was tested as CDC 2847-21. CDC Inca is a yellow pea that is medium maturing with white flowers and yellow cotyledons. CDC Inca has similar seed weight to Agassiz. It has a vine length that is slightly longer than Agassiz. CDC Inca is resistant to powdery mildew and moderately resistant to Fusarium wilt. It has very good lodging resistance. Application has been made for Plant Variety Protection.

County	Name, Address	Telephone	Class	Acres
Edmunds	Malsam Farms, Inc., Roscoe	(605)380-7832.....	R	42
<b>TOTAL</b>				<b>42</b>

**SALAMANCA**—Salamanca field pea is licensed by Great Northern Ag Plaza, ND. Salamanca is a semi-leafless variety. The seeds are yellow in color, mottled, rounded and dimpled. The seeds have a dull luster. The variety is about four inches shorter than DS Admiral. Salamanca has white flowers and the plants stand well. The pods are green and are pointed on the distal end. Salamanca matures mid-season. Salamanca is protected under the Plant Variety Protection Act with the Title V certification option.

County	Name, Address	Telephone	Class	Acres
Perkins	Brandon Carey, Hettinger, ND	(701)928-0030.....	C	117
Perkins	Brandon Carey, Hettinger, ND	(701)928-0030.....	R	30
<b>TOTAL</b>				<b>147</b>

**SPIDER**—Spider field pea is a semi-leafless dwarf variety released in 2008 by Nickerson International Research SNC. Spider is late – very late in maturity. The variety has yellow cotyledons, white flowers and green foliage color. Stipules are well-developed without “rabbit ears”. Flecking is present, pods are green, blunt and medium to long. Green color of immature pod is medium intense. Spider is protected under the Plant Variety Protection Act (PVP-94) with the Title V certification option.

County	Name, Address	Telephone	Class	Acres
Lyman	Karlen Ranch Partnership, Reliance	(605)473-5605.....	C	647
<b>TOTAL</b>				<b>647</b>

## FLAX

**CDC NEELA**—CDC Neela flax was developed by the Crop Development Centre, University of Saskatchewan and released in 2013. CDC Neela is a brown-seeded, blue-flowered variety. CDC Neela is later in maturity compared to CDC Bethune and CDC Sorrel. The variety is taller than CDC Bethune, but is shorter than CDC Sorrel. It has good oil content and quality. CDC Neela has good resistance to lodging and capsule loss. Application for Plant Variety Protection has been made.

County	Name, Address	Telephone	Class	Acres
Corson	Howe Seeds, Inc., McLaughlin	(605)823-4892.....	F	257
<b>TOTAL</b>				<b>257</b>

## LENTILS

**CDC INVINCIBLE CL**—CDC Invincible CL is a yellow cotyledon lentil line suited to the small green market class. It was developed at the Crop Development Centre, University of Saskatchewan and was released in 2017. This product is offered by Pulse USA. Resistance to both Ascochyta and Anthracnose are good. It was developed with

the Clearfield herbicide resistance for control of annual grasses. CDC Invincible CL is a tall early maturity variety, maturing three days earlier than CDC Maxim CL. Application for Plant Variety Protection with the Title V certification option has been made.

County	Name, Address Telephone	Class	Acres
Lyman	Karlen Ranch Partnership, Reliance (605)473-5605.....	R	152
		<b>TOTAL</b>	<b>152</b>

## SAFFLOWER

**MONTOLA 2003**—Montola 2003 safflower was developed by the Montana Agricultural Experiment Station and released in 2000. Montola 2003 was derived from a single F4 plant selection from a multi-cross x Montola 2000. The flower is yellow in the bud and bloom stage and light orange to orange in the wilt stage depending on moisture conditions. The plants are spiny with spines on the tip and along margins of the leaves and individual bracts. Seeds of Montola 2003 have a predominantly white normal hull with white hulled seed with dark blotches (1/100) and white hulled seed with gray stripes (1/100). These variants are commercially acceptable. Montola 2003 is a high oleic safflower intended for use in the specialty vegetable and birdseed markets. Montola 2003 has improved resistance to *Alternaria* leaf spot and bud rot diseases, as well as *Pseudomonas* bacterial blight. Montola 2003 is protected under the Plant Variety Protection Act (PVP-94) with the Title V certification option

County	Name, Address Telephone	Class	Acres
Misc.	Safflower Technologies International, Laurel, MT (406)480-4797.....	C	71
		<b>TOTAL</b>	<b>71</b>

## BIG BLUESTEM

**BONILLA**—Bonilla big bluestem is a native perennial warm season grass capable of producing a sod from short rhizomes. Bonilla originated from native stands collected in 1961 north of Bonilla located in NW Beadle County, SD. The seed collected was used to establish an increase field at the USDA/NRCS Plant Materials Center at Bismarck, ND. The variety was released in 1988. Plants are tall, ranging from 31/2 to 61/2 feet in height. Big bluestem is best suited to subirrigated lowlands on level to gently undulating glacial till plains; overflow sites, level swales and depressions, and bottomlands along rivers and streams. Species of big bluestem have a very wide area of adaptation throughout the U.S. and Canada. Bonilla is 25 days later in maturity than northern source NDG-4 and is 23 days earlier than Sunnyview. 'Champ', 'Pawnee' and 'Kaw' do not consistently produce mature seed in northern latitudes. Varieties need to be selected for the latitude they are to be grown in.

County	Name, Address Telephone	Class	Acres
Brown	Pearlsgaard Farm, LLC, Houghton (605)690-8669.....	C	10
		<b>TOTAL</b>	<b>10</b>

## BROME, MEADOW

**CACHE**—Cache meadow brome was developed by the USDA-ARS, Forage and Range Research Laboratory at Utah State University, Logan, UT and was released in 2004 with Plant Variety Protection. Cache was derived from selections of Regar, Fleet and Paddock. It was selected

for improved seedling establishment and increased forage yields. Seed weight of Cache is significantly heavier than Regar. Meadow brome is an introduced, long-lived, cool season perennial with short rhizomes. Plants are 19-47' tall, with flat leaves 1/4" in width and 8-14" long. Leaves are pubescent on both sides. The upper surface is deeply grooved and the lower surface has a prominent mid-nerve giving the blade a somewhat folded appearance. Auricles are absent and the ligule is membranous. The inflorescence is an erect panicle, branching and whorled, drooping at maturity. Seeds are similar in appearance to smooth brome grass, but are twice the size and have much longer awns.

County	Name, Address	Telephone	Class	Acres
Charles Mix	Dakota's Best Seed Co., Platte	(605)337-3318....	C	50
			<b>TOTAL</b>	<b>50</b>

## ORCHARDGRASS

**PAIUTE**—Paiute is a low-growing heat resistant strain of Orchardgrass. Parent material of Paiute was introduced into the United States in 1934 from Ankara, Turkey. Detailed collection site information is not available. It was tested by the Natural Resources Conservation Service in Arizona and New Mexico and by the Intermountain Forest and Range Experiment Station, Utah Division of Wildlife Resources and Universities in Arizona, Utah and Idaho. Orchardgrass is a cool season, introduced, perennial, bunchgrass. Under arid conditions Paiute is persistent with numerous basal leaves and leafy culms. The leaves are narrow, v-shaped near the base tapering to a narrow tip with a prominent mid-nerve on the lower surface. Flowering stems grow to approximately 15 to 18 inches tall while leaves are usually less than 12 inches long. Under irrigation Paiute grows in close stands of more robust plants. The inflorescence is a panicle with spikelets laterally compressed, relatively small and 2-5 flowered in dense 1-sided clusters. Paiute has been found to establish and persist at high elevations for up to 20 years under arid conditions in Arizona, New Mexico, Utah and Idaho.

County	Name, Address	Telephone	Class	Acres
Charles Mix	Dakota's Best Seed Co., Platte	(605)337-3318.....	C	15
			<b>TOTAL</b>	<b>15</b>

## SIDEOATS GRAMA

**PIERRE**—Pierre sideoats grama was selected and released at the Soil Conservation Service (NRCS) Plant Materials Center, Bismarck, ND. A composite of seed was collected from several plants found in a native range west of Pierre, SD. These plants were selected for their outstanding vigor and leafiness. The line was tested as PM-SD-251 against many other field collections and was released as a variety in 1964. Pierre shows good disease resistance and seedling vigor. It is adapted to western South Dakota and adjoining areas of bordering states.

County	Name, Address	Telephone	Class	Acres
Day	Jerry & Nola Roitsch, Bristol	(605)492-3330.....	C	30
			<b>TOTAL</b>	<b>30</b>

## SWITCHGRASS

**FORESTBURG**—Forestburg switchgrass was selected at the Plant Materials Center, NRCS, Bismarck, N.D. from material collected in a native population located at Forestburg, S.D. The variety was developed from a composite of open-pollinated seed from four outstanding accessions grown individually in the nursery. The variety is a leafy, upland type of medium height. Under

irrigation at Bismarck, forage yield is about 5 tons per acre. Seed yields have been high as 450 lbs. of PLS per acre. The variety was tested as PM-SD\_149.

County	Name, Address	Telephone	Class	Acres
Day	Jerry & Nola Roitsch, Bristol	(605)492-3330.....	C	50
<b>TOTAL</b>				<b>50</b>

## CRESTED WHEATGRASS

**EPHRAIM**—Ephraim crested wheatgrass was selected for its ability to produce rhizomes as opposed to other wheatgrasses that are bunchgrass types. The variety was a cooperative release in 1982 by the USDA Forest Service Intermountain Forest and Range Experiment Station, Soil Conservation Service, Utah State Division of Wildlife Resources and the Agricultural Experiment Stations of Idaho, Utah and Arizona. Leaf height and forage production is comparable to ‘Fairway’ crested wheatgrass while culm length is slightly shorter. Ephraim is adapted to range sites where annual precipitation is between 10 and 14 inches. It is also adapted to a wide range of soils, including disturbed areas and mine spoils. Salt and alkali tolerance are moderately high. Rhizome formation improves under improved soil conditions, usually in the third year. Seeding rate for forage is 7-9 lbs. pls/acre at ½” depth in a firm seed bed. Seed increases should be planted in 28-40” rows at approximately 3 lbs. pls/acre.

County	Name, Address	Telephone	Class	Acres
Charles Mix	Dakota’s Best Seed Co., Platte	(605)337-3318.....	C	16
<b>TOTAL</b>				<b>16</b>

**HYCREST II**—HYCREST II – Hycrest II crested wheatgrass was developed by the USDA/ARS as a cooperative release with Utah Agricultural Experiment Station in 2008. Hycrest II is one of the original parents to the cultivar Hycrest and originated by intercrossing 10 induced tetraploid plants of ‘Fairway’ crested wheatgrass. Hycrest II flag leaves were oriented higher on the culm than CD-II but similar to Hycrest, Nordan, and Douglas. Hycrest II had narrower flag leaves than Douglas but similar to Hycrest, CD-II, and Nordan. Spikes of Hycrest II were shorter than Nordan and Douglas but similar to Hycrest and CD-II. Douglas had wider spikes than Hycrest II, Hycrest, CD-II, and Nordan. Hycrest II had shorter lemmas than Douglas but similar to Hycrest, CD-II, and Nordan. Lemma awn length was shorter in Hycrest II, Hycrest, CD-II, and Nordan than Douglas. In general, the spikes of Hycrest II were shorter and wider than Hycrest, CD-II, and Nordan. Heading and flowering dates at Blue Creek and Nephi, UT, were the third week in May and first week in June, respectively. Hycrest II is an autotetraploid (2n = 4x = 28; PPPP) and has the same ploidy level and genomic composition as Hycrest, CD-II, and Nordan. Breeder, Foundation, Registered, and Certified seed classes of Hycrest II will be recognized. Breeder and Foundation seed will be maintained by the USDA-ARS Forage and Range Research Laboratory at Logan, UT. Protection under the U.S. Plant Variety Protection Act of 1994 will be applied for, with the requirement that seed of Hycrest II can be marketed only as a class of Certified seed. No seed will be distributed without written permission for 20 yr from the date of release, 10 Apr. 2008, by the USDA-ARS, at which time seed will also be available from the National Plant Germplasm System. Foundation seed is be available through the Utah Crop Improvement Association.

County	Name, Address	Telephone	Class	Acres
Charles Mix	Dakota’s Best Seed Co., Platte	(605)337-3318.....	C	93
<b>TOTAL</b>				<b>93</b>

## INTER. WHEATGRASS

**MANIFEST**—Manifest intermediate wheatgrass was released as a cultivar in 2007. This was a cooperative release with the USDA, Agricultural Research Service, NRCS, and ND AES, NDSU. It was selected from an introduction from Russia made by Douglas R. Dewey. Manifest was selected for its forage yield, seed yield, spring vigor and resistance to leaf spot disease. Manifest is easily established when seeded into a well packed weed-free seedbed. The optimum seeding depth should place the seed not more than 1 inch from the soil surface. The seeding rate of Manifest is 8.5 lbs. pls/acre in the western Dakotas.

County	Name, Address	Telephone	Class	Acres
Charles Mix	Dakota's Best Seed Co., Platte	(605)337-3318....	C	1
<b>TOTAL</b>				<b>1</b>

**OAHE**—Oahe intermediate wheatgrass was developed by the South Dakota Agricultural Experiment Station. It was selected from an introduction from Russia which was released as Ree in 1945. It is a synthetic variety developed from four selected plants. Oahe was released to growers in 1961. Oahe is quite uniform in color and plant type. It is a blue-green variety that produces good yields of forage and/or seed. It is palatable and does well when planted alone or in a mixture with alfalfa.

County	Name, Address	Telephone	Class	Acres
Charles Mix	Dakota's Best Seed Co., Platte	(605)337-3318....	C	4
<b>TOTAL</b>				<b>4</b>

## PUB. WHEATGRASS

**LUNA**—Luna pubescent wheatgrass was developed and released in 1963 by the NRCS Los Lunas Plant Materials Center in cooperation with the New Mexico State University AES, Los Lunas, NM. Luna was selected from seed originating in Russia and Turkey in 1934 by the Westover-Enlow expedition. It was selected because it produces excellent forage and has vigorous seedling development. Luna is the most drought resistant of the taller growing wheat grasses and is long-lived. The leaves are wide, lax, and dark green. Plants stem height averages 48", and leaf height averages 30". Some seed heads appear glabrous, but all basal leaf blades are hairy. Pubescent wheatgrass is similar to intermediate wheatgrass in most respects, but is distinguishable by the pubescence on the seed heads and seeds. Luna is less pubescent than many other varieties. For seed production, this variety requires irrigation except in areas that receive at least 18" of precipitation with the majority coming in the winter months.

County	Name, Address	Telephone	Class	Acres
Charles Mix	Dakota's Best Seed Co., Platte	(605)337-3318....	C	18
<b>TOTAL</b>				<b>18</b>

**MANSKA**—MANSKA-Manska pubescent wheatgrass was developed by USDA/ARS at the Northern Plains Research Laboratory, Mandan, ND and was cooperatively released by NRCS, NDAES and UNL in April 1992. The variety tested as Mandan I2781 was selected from diverse seed lots of the experimental strain Mandan 759. Manska was selected for resistance to leaf spot disease, spring recovery, nutritional quality and forage and seed yields. The major advantage over other

cultivars of pubescent and intermediate wheatgrass is the improved nutritional value of Manska. Pubescent wheatgrass is a cool-season, sod-forming grass introduced from Eurasia. It is similar in appearance and use to intermediate wheatgrass. Pubescent wheatgrass, however, is a subspecies of intermediate wheatgrass that is distinguished by the presence of short, stiff hairs on the seed head. Approximately 70% of the plants from Manska are pubescent. Manska is moderately rhizomatous and heads 7 to 8 weeks after spring greenup. Nearly all (85-90%) of the tillers produce seed heads. Plant height is 2.4'- 4' and is intermediate between slender and tall wheatgrass. One generation each of Foundation and Certified beyond Breeder seed is authorized.

Manska is adopted over a large geographic area of the northern and central Great Plains including adjoining southern Canadian Provinces where annual precipitation is above 14 inches.

County	Name, Address	Telephone	Class	Acres
Charles Mix	Dakota's Best Seed Co., Platte	(605)337-3318.....	C	9
			<b>TOTAL</b>	<b>9</b>

## TALL WHEATGRASS

**ALKAR**—Alkar tall wheatgrass was developed by the SCS U.S. Department of Agriculture, released in 1951 and named in 1958 in cooperation with the Washington, Idaho and Oregon Ag Experiment Stations. It was isolated after several generations of selections from PI-98,526 introduced from the USSR in 1934. Alkar is a tall, very late maturing, stemmy, bunch-type wheatgrass with coarse, blue-green leaves. Seeds are large with good seedling vigor. It is used to reclaim non-productive saline and alkali lands. Used primarily for pature, but can be used for hay or silage.

County	Name, Address	Telephone	Class	Acres
Charles Mix	Dakota's Best Seed Co., Platte	(605)337-3318....	C	50
			<b>TOTAL</b>	<b>50</b>

## OATS

**BETAGENE**—BetaGene oat was developed at the University of Wisconsin - Madison and released in 2012. The line was tested as X8787-1 and resulted from the cross X7535-9/X7395-4. BetaGene has yellow kernels and is medium maturing. According to Wisconsin data, BetaGene averages 36.2" in height, similar to Colt and has good straw strength. The variety has very good crown rust and BYDV resistance. BetaGene is a U.S. Plant Protected variety (PVPA 1994) with the Title V certification option. Seed of BetaGene can legally be produced and labeled for sale only by growers who have been licensed by the Wisconsin Crop Improvement Association or its legal agent.

County	Name, Address	Telephone	Class	Acres
Charles Mix	Dakota's Best Seed Co., Platte	(605)337-3318....	R	37
			<b>TOTAL</b>	<b>37</b>

**COLT**—Colt oat is a white-hulled, spring oat developed by the South Dakota Agricultural Experiment Station (SDAES) and released in 2009. The line was tested as SD020883-29 and resulted from the cross SD97575/ND941119. Colt is an early maturing variety, one day earlier than Don and two days earlier than Reeves. In 2008 SDSU CPT trials,

Colt was 3 inches taller than Don and four inches shorter than Reeves. The variety is resistant to smut. Colt is moderately susceptible to red leaf and stem rust. Colt is susceptible to crown rust. Lodging resistance is equal to Jerry, but better than Stallion. Kernels are high in protein and the groat percentage is also high. Colt is protected under the Plant Variety Protection Act with the Title V certification option. A royalty fee will be collected on all sales of Registered and Certified classes for seed purposes.

County	Name, Address	Telephone	Class	Acres
Jones	Henry Glen Roghair, Okaton	(605)669-2819	C	130
			<b>TOTAL</b>	<b>130</b>

**DEON**—Deon oat was developed by the University of Minnesota Agricultural Experiment Station (AES) and released in 2013. The line was tested as MN07210 and resulted from the cross Sesqui\*2/ Bettong/MN02108. Deon is a tall, late maturing variety similar to Rockford. Deon has good straw strength. Deon has yellow hulls which are nonfluorescent under UV light. The variety has good test weight and high protein. Deon is moderately resistant to stem rust. Deon is moderately susceptible to barley yellow dwarf virus (BYDV), and is resistant to smut and crown rust. Deon is protected under the Plant Variety Protection Act with the Title V certification option. Collection of a variety development fee for sales of Registered and Certified classes as well as Registered class seed used for the production of a seed crop will be made.

County	Name, Address	Telephone	Class	Acres
Brookings	Sexauer Discount Farm Services, Brookings	(605)696-7924	R	47
Clark	David Spieker, Willow Lake	(605)625-3685	C	372
Kingsbury	Green Thumb Commodities, Oldham	(605)482-8295	R	105
			<b>TOTAL</b>	<b>524</b>

**GOLIATH**—Goliath oat is a white-hulled, spring oat developed by the South Dakota Agricultural Experiment Station (SDAES) and released in 2012. The line was tested as SD090552 and was developed from the two parent population IL99-1338/SD97575-38-154. Varieties in the pedigree include Rise, Settler and Troy. Goliath has late maturity, heading 1.7 days later than Stallion. Goliath is 4.3 inches taller than Stallion. Goliath has excellent grain yield and forage yield potential, as well as good test weight. Goliath has a very high groat percentage and average protein content. The variety has excellent resistance to BYDV, stem rust and smut, but is susceptible to crown rust. Goliath has excellent straw strength, but should not be planted on very high fertility soils unless it will be harvested for forage. Goliath is protected under the Plant Variety Protection Act with the Title V certification option. Goliath will not have a saleable registered class. A royalty fee will be collected on all sales of the Certified class for seed purposes.

County	Name, Address	Telephone	Class	Acres
Brookings	Foundation Seed Stocks, Brookings	(605)688-5418	F	88
Brookings	Millborn Seeds, Inc., Brookings	(605)697-6306	C	135
Brown	LW Sales, Inc., Groton	(605)397-8111	C	113
Campbell	Weisbeck & Sons, Herried	(605)437-2963	C	53
Charles Mix	Pharmco Industries, LLC, Platte	(605)337-3374	C	150
Codington	Allen Heuer, Summit	(605)868-0914	C	55



Codington	LaBolt Farmers Grain, Waverly	(605)882-4095	C	43
Corson	Howe Seeds, Inc., McLaughlin	(605)823-4892	C	160
Day	Warrington Seeds, Bristol	(605)492-3500	C	40
Gregory	Dean Norberg, Burke	(605)830-2062	C	167
Hand	Chis Howard Ranch, Miller	(605)204-0299	C	146
Hyde	Mac's Corner Ag Supply, Highmore	(605)870-1421	C	81
Jerauld	MPM Certified Seed, Wess Springs	(605)770-6537	C	1358
Jones	Skyler Dowling, Pierre	(605)222-9065	C	106
Kingsbury	Green Thumb Commodities, Oldham	(605)482-8295	C	580
Kingsbury	Halls Seed LLC, Arlington	(605)690-3594	C	130
Lake	Mustang Seeds, Inc., Madison	(605)256-6529	C	1289
Pennington	Yardley & Co., Inc., Quinn	(605)386-2375	C	25
Stanley	Sioux Nation, LLC, Ft. Pierre	(605)223-2427	C	237
Tripp	Jorgensen Land & Cattle, Ideal	(605)842-3217	C	192
Tripp	Trittle, Carper, Cahill Homestead LLC, Winner	(605)208-6116	C	340
			<b>TOTAL</b>	<b>5488</b>

**HAYDEN**—Hayden oat is a white-hulled, spring oat developed by the South Dakota Agricultural Experiment Station (SDAES) and released in 2015. The line was tested as SD111972 and was developed from the three parent population Buckskin//ND011054/SD020835. Hayden has medium-late maturity, heading about 4 days later than Shelby 427. Hayden is 2 inches taller than Shelby 427 and 4 inches shorter than Goliath. Hayden has excellent yield potential and high test weight. Hayden is resistant to smut and moderately resistant to BYDV. The variety is susceptible to crown rust and moderately susceptible to stem rust. Lodging resistance is better than Goliath and similar to Shelby 427. Hayden is protected under the Plant Variety Protection Act with the Title V certification option. A royalty fee will be collected on all sales of Certified seed. There will be no saleable registered class of seed.

County	Name, Address	Telephone	Class	Acres
Beadle	Jason Gruenhagen, DeSmet	(605)860-9959	C	102
Bon Homme	Sean Bauder, Tyndall	(605)670-9186	C	76
Bon Homme	Mark Misar, Scotland	(605)661-1094	C	22
Brown	LW Sales, Inc., Groton	(605)397-8111	C	130
Campbell	Mark & Paul Weisbeck, Herreid	(605)437-2963	C	63
Charles Mix	Kirsch Farms, Platte	(605)337-9658	C	80
Charles Mix	Pharmco Industries, LLC, Platte	(605)337-3374	C	380
Charles Mix	Alec Weber, Lake Andes	(605)660-3198	C	17
Corson	Howe Seeds, Inc., McLaughlin	(605)823-4892	C	154
Douglas	Larry Vander Ley, Corsica	(605)946-5409	C	47
Faulk	Carlson Farms, Seneca	(605)436-6203	C	86
Gregory	Dean Norberg, Burke	(605)830-2062	C	120
Hyde	Mac's Corner Ag Supply, Highmore	(605)870-1421	C	64
Jones	Skyler Dowling, Pierre	(605)222-9065	C	938
Jones	Rankin & Sons, Inc., Draper	(605)669-2511	C	380
Kingsbury	Green Thumb Commodities, Oldham	(605)482-8295	C	220
Kingsbury	Halls Seed LLC, Arlington	(605)690-3594	C	46
Kingsbury	Norman Koehlmoos, DeSmet	(605)854-3524	C	75
Lake	Mustang Seeds, Inc., Madison	(605)256-6529	C	335
McCook	Cordell S. Hofer, Salem	(605)660-1582	C	241
McCook	Kurt Stiefvater, Salem	(605)360-1618	C	90
Potter	Cronin Farms, Gettysburg	(605)765-9287	C	148
Spink	Stacey Frericks, Ashton	(605)460-0887	C	131

Spink	Rory Troske, Turton	(605)897-6656.....	C	225
Tripp	Jorgensen Land & Cattle, Ideal	(605)842-3217....	C	398
Tripp	Trittle, Carper, Cahill Homestead LLC, Winner	(605)208-6116.....	C	350
Walworth	Stiegelmeier Farms, Selby	(605)845-6034.....	C	60
<b>TOTAL</b>				<b>4978</b>

**HORSEPOWER**—Horsepower oat is a white-hulled, spring oat developed by the South Dakota Agricultural Experiment Station (SDAES) and released in 2011. The line was tested as SD081936 and was developed from the three parent population SD030888//SD030888/ND030349. Varieties in the pedigree include Settler and Troy. Horsepower has early-medium maturity, heading 2 days later than Shelby 427. Horsepower is 2 inches shorter than Colt. Horsepower has excellent yield potential and average test weight. The variety is resistant to stem rust. Horsepower is moderately resistant to smut and moderately susceptible to BYDV. Horsepower is susceptible to crown rust. Lodging resistance is better than Shelby 427 and Colt. Horsepower is protected under the Plant Variety Protection Act with the Title V certification option. Horsepower will not have a saleable registered class. A royalty fee will be collected on all sales of Registered and Certified classes for seed purposes.

County	Name, Address	Telephone	Class	Acres
Gregory	Lance Matucha, Burke	(605)830-7810.....	C	229
Hand	Bob Speck, St. Lawrence	(605)853-2643.....	C	12
<b>TOTAL</b>				<b>241</b>

**JERRY**—Jerry oats was developed by the North Dakota Agricultural Experiment Station and released in March of 1994. The line was tested as ND870952. The pedigree of Jerry is Valley/3/RL3038/Kelsey//M22/ Kelsey. Jerry is similar to Newdak in heading date and height and has good lodging resistance. Jerry has white hulls, which are fluorescent under UV light. Kernels have high test weight, groat percent and whole oat protein, but are not as high as Hytest in ND tests. Disease resistance ratings are moderately susceptible for barley yellow dwarf virus (BYDV), smut and stem rust. Jerry is susceptible to crown rust. The variety has medium high protein.

County	Name, Address	Telephone	Class	Acres
Charles Mix	Van Dusseldorp Ag, Platte	(605)337-3052.....	R	204
Jones	Wyatt Hespe, Okaton	(605)530-0274.....	C	111
Jones	Henry Glen Roghair, Okaton	(605)669-2819.....	C	68
Jones	Raymond Roghair, Okaton	(605)669-2248.....	C	211
Jones	Raymond Roghair, Okaton	(605)669-2248.....	R	39
Stanley	Sioux Nation, LLC, Ft. Pierre	(605)223-2427.....	C	538
<b>TOTAL</b>				<b>1171</b>

**NATTY**—NATTY – Natty oat is a white-hulled, spring oat developed by the South Dakota Agricultural Experiment Station (SDAES) and released in 2015. The line was tested as SD111779 and was developed with the pedigree SD020701//SD030888/ND030349. Natty is an early maturing variety, heading about 1 day later than Shelby 427. Natty is about 1 inch taller than Shelby 427 with similar lodging resistance. Natty has good yield potential and high test weight. Natty is resistant to smut. The variety is moderately susceptible to stem rust, crown rust and BYDV. Natty is protected under the Plant Variety Protection Act with the Title V certification option. A royalty fee will be collected on all sales of Certified seed. There will be no saleable registered class of seed.

County	Name, Address	Telephone	Class	Acres
Charles Mix	Pharmco Industries, LLC, Platte	(605)337-3374...	C	100
<b>TOTAL</b>				<b>100</b>

**REINS**—Reins oats was developed and tested as I106-5433 by the Illinois Agricultural Experiment Station and released in 2015 to state Foundation Seed organizations. The pedigree of Reins is IL00-4827/Buckskin. The variety has early maturity, similar to Shelby 427, and is short in height. Reins has good lodging resistance. Reins is moderately susceptible to crown rust and is resistant to loose smut. Reins has good tolerance to BYDV. The variety has good test weight and grain protein percentage. Kernels of Reins are tan in color. Reins is protected under the Plant Variety Protection Act with the Title V certification option. .

County	Name, Address	Telephone	Class	Acres
Brookings	Sexauer Discount Farm Services, Brookings (605)696-7924.....		R	38
Charles Mix	Dakota's Best Seed Co., Platte	(605)337-3318....	R	40
			<b>TOTAL</b>	<b>78</b>

**RUSHMORE**—Rushmore oat is a white-hulled, spring oat developed by the South Dakota Agricultural Experiment Station (SDAES) and released in 2019. The line was tested as SD140515 with the pedigree of SD080015//SD0070110/SD060130. Rushmore is a medium-late maturing line, heading about 1 day earlier than Hayden. Rushmore is similar in height to Hayden with better lodging resistance. Rushmore has high yield potential and good test weight. Rushmore is resistant to moderately resistant to crown rust. The variety is moderately resistant to BYDV and smut. Application for Plant Variety Protection with the Title V certification option is anticipated. A royalty fee will be collected on all sales of Certified seed. There will be no saleable registered class of seed.

County	Name, Address	Telephone	Class	Acres
Aurora	Joe Bosworth, White Lake	(605)680-2462.....	C	45
Brookings	Foundation Seed Stocks, Brookings (605)688-5418.....		F	57
Brookings	Cody Hall, Arlington	(605)983-3369.....	C	72
Brookings	Jon Hall, Arlington	(605)983-3369.....	C	59
Brookings	Nick Hall, Arlington	(605)203-1249.....	C	99
Brown	Sumption Farms, Frederick	(605)380-1016.....	C	54
Brule	Thiry Feedlot, Inc., White Lake	(605)249-2777....	C	12
Charles Mix	Pharmco Industries, LLC, Platte	(605)337-3374...	C	60
Codington	Jay Grinols, South Shore	(605)886-8174.....	C	24
Day	Hansmeier & Son, Inc., Bristol	(605)492-3611.....	C	80
Deuel	Cody Eastman, Brandt	(605)690-8891.....	C	35
Faulk	Carlson Farms, Seneca	(605)436-6203.....	C	100
Gregory	Dean Norberg, Burke	(605)830-2062.....	C	20
Jerauld	Eric Jackson, Wess Springs	(605)680-3713.....	C	80
Jones	Skyler Dowling, Pierre	(605)222-9065.....	C	45
Jones	Rankin & Sons, Inc., Draper	(605)669-2511.....	C	100
Kingsbury	Norman Koehlmoos, DeSmet	(605)854-3524.....	C	40
Tripp	Jorgensen Land & Cattle, Ideal	(605)842-3217....	C	29
			<b>TOTAL</b>	<b>1011</b>

**SADDLE**—Saddle oat is a white-hulled, spring oat developed by the South Dakota Agricultural Experiment Station (SDAES) and released in 2018. The line was tested as SD120296 with the pedigree of Saber/SD060130. Saddle is an early maturing line, heading about 1 day earlier than Natty. Saddle is 1 inch taller than Horsepower. Saddle has high yield potential and average test weight. Saddle is resistant to smut and moderately resistant to BYDV. The variety is resistant to crown rust, but is susceptible to stem rust. Lodging resistance is excellent.

Application for Plant Variety Protection with the Title V certification option is anticipated. A royalty fee will be collected on all sales of Certified seed. There will be no saleable registered class of seed.

County	Name, Address	Telephone	Class	Acres
Beadle	Jason Gruenhagen, DeSmet	(605)860-9959.....	C	25
Brookings	Millborn Seeds, Inc., Brookings	(605)697-6306....	C	150
Codington	LaBolt Farmers Grain, Waverly	(605)882-4095 ....	C	66
Day	Storley Farms, Roslyn	(605)881-5843 .....	C	45
Deuel	Joe Uckert, Clear Lake	(605)874-2529.....	C	65
Grant	Garry Dingsor, Ortley	(605)398-6297.....	C	77
Gregory	Bob Beck, Dallas	(605)830-9687 .....	C	50
McCook	Kurt Stiefvater, Salem	(605)360-1618.....	C	150
Tripp	Ken Beck, Dallas	(605)830-2066 .....	C	65
			<b>TOTAL</b>	<b>693</b>

**SHELBY 427**—Shelby 427 oat is a white-hulled, spring oat developed by the South Dakota Agricultural Experiment Station (SDAES) and released in 2010. The line was tested as SD031128-330 and resulted from the cross SD99674/ND960851. Shelby 427 is an early maturing variety, one-two days earlier than Colt. In 2009 SDSU CPT trials, Shelby 427 was 4 inches taller than Colt and equal in height to Jerry. When compared to other early varieties, Shelby 427 has superior grain yield and test weight. Shelby 427 is susceptible to crown rust. The variety is moderately resistant to smut, and is moderately susceptible to stem rust and BYDV. Lodging resistance is better than Jerry and Colt. Kernels have a high groat percentage. Shelby 427 has Plant Variety Protection with the Title V certification option. Shelby 427 will not have a saleable registered class. A royalty fee will be collected on all sales of Certified seed.

County	Name, Address	Telephone	Class	Acres
Brookings	Foundation Seed Stocks, Brookings	(605)688-5418.....	F	35
Deuel	Mark Buschenfeld, Toronto	(605)690-6773 .....	C	123
Kingsbury	Green Thumb Commodities, Oldham	(605)482-8295.....	C	35
Lake	Mustang Seeds, Inc., Madison	(605)256-6529 .....	C	400
Miner	Larry Lewis, Fedora	(605)527-2451.....	C	65
			<b>TOTAL</b>	<b>658</b>

**WARRIOR**—Warrior oat is a white-hulled, spring oat developed by the South Dakota Agricultural Experiment Station (SDAES) and released in 2018. The line was tested as SD120419 with the pedigree of SD041405/SD060130. Warrior is a medium maturing line, heading about 1 day later than Horsepower. Warrior is 2" taller than Horsepower. Warrior has high yield potential and average test weight. Warrior is moderately resistant to smut and moderately susceptible to BYDV. The variety is resistant to crown rust. Lodging resistance is excellent. Application for Plant Variety Protection with the Title V certification option is anticipated. A royalty fee will be collected on all sales of Certified seed. There will be no saleable registered class of seed.

County	Name, Address	Telephone	Class	Acres
Aurora	Joe Bosworth, White Lake	(605)680-2462.....	C	200
Beadle	Jason Gruenhagen, DeSmet	(605)860-9959.....	C	51
Brookings	Andy Berdan, Arlington	(605)203-3604.....	C	77
Brookings	Foundation Seed Stocks, Brookings	(605)688-5418.....	F	150
Brookings	Millborn Seeds, Inc., Brookings	(605)697-6306....	C	48
Brookings	Olsen Custom Farms, Hendicks, MN	(507)275-3176.....	C	184

Brookings	Sexauer Discount Farm Services, Brookings (605)696-7924.....	C	70
Brookings	Robert Thompson, Bruce (605)983-3984 .....	C	88
Brule	Thiry Feedlot, Inc., White Lake (605)249-2777 .....	C	35
Clay	SE Research Farm, Beresford (605)563-2989 .....	C	9
Day	J & J Horter Farm Partnership, Andover (605)216-4852.....	C	355
Day	Kuecker Seed Farm, Webster (605)345-3169 .....	C	175
Deuel	Agri Partners, Inc., Clear Lake (605)874-2550 .....	C	100
Gregory	Dean Norberg, Burke (605)830-2062.....	C	110
Gregory	Ray or Ted Stevicks, Burke (605)830-0270 .....	C	200
Hamlin	Paul Leiseth, Hazel (605)628-2099.....	C	89
Hand	Fulton Ranch, St. Lawrence (605)853-3757 .....	C	220
Jones	Skyler Dowling, Pierre (605)222-9065 .....	C	70
Kingsbury	Scott Carlson, Lake Preston (605)203-0837.....	C	57
Lake	Mustang Seeds, Inc., Madison (605)256-6529 .....	C	301
Roberts	Koeppel Seeds, Claire City (605)652-4529 .....	C	50
<b>TOTAL</b>			<b>2639</b>

## RYE

**ND DYLAN**—ND Dylan rye, tested as DR02, was developed by the North Dakota Agricultural Experiment Station and released in the fall 2016 by the NDSU Research Foundation. ND Dylan resulted from an open pollinated selection in a composite cross of several commercial winter rye varieties. The composite population originated from the commercial varieties: Musketeer, Prima, AC Rifle, Warko, Rymin, Hancock and Spooner. ND Dylan is very winter hardy. It is a tall variety, 2.5 inches taller than Rymin and 2 inches taller than Dacold. ND Dylan reaches heading one day later than Rymin and six days earlier than Dacold. It has good lodging resistance and good test weight. ND Dylan is susceptible to stem rust. ND Dylan is protected under the U.S. Plant Variety Protection Act with the Title V certification option.

County	Name, Address Telephone	Class	Acres
Beadle	Jason Gruenhagen, DeSmet (605)860-9959.....	C	103
Beadle	Jason Gruenhagen, DeSmet (605)860-9959.....	R	43
<b>TOTAL</b>			<b>146</b>

## SOYBEANS

**BROOKINGS**—Brookings soybean was developed by the South Dakota Agricultural Experiment Station (SDAES) and released in 2012. Brookings was tested as SD05-240 and resulted from the cross A00-71163/SD98-595. Brookings is a conventional variety having the Rps1-k gene for Phytophthora root rot resistance. Brookings is purple-flowered with gray pubescence and tan pods at maturity. Seed coat is yellow and the hila are buff. Relative maturity is rated at a 1.7. Brookings has good emergence and quality scores. It is similar in protein to Deuel and 0.3% lower in oil content. The shattering scores for Brookings are also excellent. Lodging resistance is good. Seed size is larger than average with a plant height equal to MN1410.

County	Name, Address Telephone	Class	Acres
Beadle	Jason Guenhagen, DeSmet (605)860-9959.....	C	50
Beadle	Jason Guenhagen, DeSmet (605)860-9959.....	R	16
Brookings	Foundation Seed Stocks, Brookings (605)688-5418.....	F	22
Brookings	Millborn Seeds, Inc., Brookings (605)697-6306....	R	155
Jerauld	Eric Jackson, Wess Springs (605)680-3713.....	R	230
<b>TOTAL</b>			<b>473</b>

**CODINGTON**—Codington soybean was developed by the South Dakota Agricultural Experiment Station (SDAES) and released in 2013. Codington was tested as SD04CV-611 and resulted from the cross Surge/A96-591033. Codington is a conventional variety. Codington is purple-flowered with tawny pubescence at maturity. Seed coat color is yellow and the hila are black. Relative maturity is rated at a 0.9, two days later than Surge. Codington has high protein content and average oil percentage. Lodging resistance is better than Surge. Seed size is larger than average with a plant height 1-2 inches taller than Surge. The variety may have up to 1.0% variants for hila color.

County	Name, Address Telephone	Class	Acres
Beadle	Jason Guenhagen, DeSmet (605)860-9959 .....	R	16
Day	Hansmeier & Son, Inc., Bristol (605)492-3611.....	R	120
<b>TOTAL</b>			<b>136</b>

**DAVISON**—Davison soybean was developed by the South Dakota Agricultural Experiment Station (SDAES) and released in 2009. Davison was tested as SD02-22 and resulted from the cross A2242 x IA2022. Davison is a conventional variety having the Rps1-a gene for Phytophthora root rot resistance. Davison is white-flowered with light tawny pubescence and tan pods at maturity. Seed coats have a dull luster and the hila are black. Relative maturity is rated at a 2.2. Davison has good emergence and quality scores. The shattering scores for Davison are also excellent. The variety has good lodging resistance. Davison is similar to Surge in plant height and the seed size is smaller. Davison is protected under the Plant Variety Protection Act with the Title V certification option. A royalty fee will be collected on all sales of Registered and Certified classes for seed purposes.

County	Name, Address Telephone	Class	Acres
Beadle	Jason Guenhagen, DeSmet (605)860-9959 .....	C	32
<b>TOTAL</b>			<b>32</b>

## TRITICALE

**841446398**—841446398 is a mid-tall, awnletted, winter triticale developed by Northern Agri-Brands LLC. The line was tested as RSI 204719. 841446398 was released in 2017. Plant color at boot stage is blue-green. The flag leaf is not twisted, erect and waxy. Spikelets are yellow in color when mature, dense with oblong shape. Seed is elliptical, slightly wrinkled, amber colored with mid-long brush length. The variety has excellent lodging resistance. Foundation, Registered and Certified classes are recognized beyond Breeder seed which is maintained by Northern Agri-Brands LLC. The variety is sold under the Brand Flex 719. The variety is protected under the Plant Variety Protection Act.

County	Name, Address Telephone	Class	Acres
Tripp	Tritile, Carper, Cahill Homestead LLC, Winner (605)208-6116.....	C	460
Tripp	Tritile, Carper, Cahill Homestead LLC, Winner (605)208-6116.....	R	23
<b>TOTAL</b>			<b>483</b>

## DURUM

**ND RIVELAND**—ND Riveland durum was developed by the North Dakota State University Agricultural Experiment Station and released in 2017. ND Riveland, tested as D09690, was selected from the cross DT764/DH01146 made in 2005. ND Riveland is taller than Joppa and Carpio. The variety has good straw strength. The maturity of ND Riveland is 1 day earlier than Carpio and similar to Joppa. The spikes are lax, awned, oblong and erect. ND Riveland is moderately resistant to stem rust and leaf rust and has the best scab tolerance of all the varieties tested in the trials. The variety is protected under the Plant Variety Protection Act with the Title V certification option.

County	Name, Address Telephone	Class	Acres
Perkins	Brandon Carey, Hettinger, ND (701)928-0030.....	R	40
<b>TOTAL</b>			<b>40</b>

## HARD RED SPRING WHEAT

**ADVANCE**—Advance hard red spring wheat was developed by the South Dakota Agricultural Experiment Station (SDAES) and released in 2011. The variety was tested as SD4023 and was developed from the population Granger/N98-0230. Advance is a semi-dwarf variety, approximately one inch shorter in height than Knudson. Advance is a later maturing variety, approximately a half day later than Steele-ND. The variety is moderately resistant to stem rust and scab. Advance is susceptible to leaf rust and moderately susceptible to stripe rust. Advance has adequate milling and baking characteristics, with good test weight and average protein. Advance is protected under the U.S. Plant Variety Protection Act with the Title V certification option. A royalty fee will be collected on all sales of Registered and Certified classes for seed purposes.

County	Name, Address Telephone	Class	Acres
Hand	Nelson's HB Seed, Miller (605)853-3025.....	C	135
<b>TOTAL</b>			<b>135</b>

**AMBUSH**—Ambush is a hard red spring wheat bred and developed by Syngenta Seeds, Inc. - AgriPro of Berthoud, Colorado and released in 2016. The variety was tested as 05S0157-4. It is a standard semi-dwarf variety, similar to SY Ingmar in height. Ambush is resistant to stem rust and moderately resistant to leaf rust. Ambush is moderately susceptible to Fusarium head blight. The variety has a juvenile growth habit that is erect. Plant color at boot stage is green. Flag leaf at boot stage is erect and twisted. Head shape is tapering and awned. Test weight and protein are above average, with acceptable baking qualities. Dyna Gro has been given exclusive marketing rights to this variety.

County	Name, Address Telephone	Class	Acres
Spink	Nutrien Ag Solutions, Northville (605)887-3422....	C	470
<b>TOTAL</b>			<b>470</b>

**AP MURDOCK**—AP Murdock is a hard red spring wheat bred and developed by Syngenta Seeds, Inc. - AgriPro of Berthoud, Colorado and released in 2020. The variety was tested as NP11100273-23. It is a standard semi-dwarf variety. AP Murdock has a juvenile growth habit that is semi-erect. Plant color at boot stage is green. Flag leaf at boot stage is recurved, twisted and wax absent. Head shape is taper-

ing, with mid-dense density and erect curvature. The certified classes of seed shall be Foundation, Registered and Certified. Application to the Plant Variety Protection office with the Title V certification option is anticipated for AP Murdock.

County	Name, Address Telephone	Class	Acres
Day	Kuecker Seed Farm, Inc., Webster (605)345-3169.....	R	
Pennington	Yardley & Co., Inc., Quinn (605)386-2375.....	R	
	Spink Nutrien Ag Solutions, Northville (605)887-3422.....	R	
Stanley	Sioux Nation, LLC, Ft. Pierre (605)223-2427.....	R	
Sully	Wittler Seed Farms, Agar (605)258-2431.....	R	
Walworth	Stiegelmeier Farms, Selby (605)845-6034.....	R	

**BOLLES**—Bolles hard red spring wheat was developed and released by the University of Minnesota in 2015. The variety, tested as MN08165-8, is an early, awned, semi-dwarf. The heading date of Bolles is a day later than Prosper. It is average height with moderately strong straw. It has average test weight and excellent protein. Bolles is moderately susceptible to scab and stripe rust. It is resistant to prevalent races of leaf rust. Bolles has high baking quality. Released by the Minnesota Agricultural Experiment Station, a research fee will be assessed on seed sold. Bolles is protected under the Plant Variety Protection Act with the Title V certification option.

County	Name, Address Telephone	Class	Acres
Charles Mix	Dakota's Best Seed Co., Platte (605)337-3318....	R	65
<b>TOTAL</b>			<b>65</b>

**BOOST**—Boost hard red spring wheat was developed by the South Dakota Agricultural Experiment Station (SDAES) and released in 2016. The variety was tested as SD4299 and was derived from the cross SD3900//FN1705-146/Brick. Boost is a semi-dwarf variety, slightly shorter than Prevail. Boost has similar straw strength when compared to Forefront. Boost is a late maturing variety, five days later than Prevail. The variety has resistance to Bacterial Leaf Streak. Boost is moderately resistant to leaf rust. The variety is moderately susceptible scab and susceptible to stripe rust. Boost has adequate milling and baking characteristics, with high protein. Test weight is average and height is an inch shorter than Prevail. Boost is protected under the Plant Variety Protection Act with the Title V certification option. A royalty fee will be collected on all sales of Registered and Certified classes for seed purposes.

County	Name, Address Telephone	Class	Acres
Marshall	Moeckly Elevator, Inc., Britton (605)448-2212.....	R	120
Roberts	Koeppel Seeds, Claire City (605)652-4529.....	C	210
<b>TOTAL</b>			<b>330</b>

**CANNON**—Cannon hard red spring wheat was developed by and released by Limagrain Cereal Seeds in 2018. The variety was tested as LNR14-1832. Cannon is an awned variety, with early maturity, similar to Brick. It is a short, semi-dwarf variety, similar to SY Valda. The flag leaf at boot stage is erect, twisted with waxy bloom. The lax, tapering head is erect and white in color at maturity. Cannon has good protein and excellent test weight. The variety has acceptable bread making quality. The certified classes of seed shall be Foundation, Registered



and Certified. Application for Plant Variety Protection (PVP-94) has been made for Cannon.

County	Name, Address Telephone	Class	Acres
Roberts	Nelson Grain Farms LLC, Summit (605)881-4258.....	C	
Walworth	Fiedler Farms, Inc., Selby (605)649-6280.....	R	

**DRIVER**—Driver hard red spring wheat was developed by the South Dakota Agricultural Experiment Station (SDAES) and released in 2019. The variety was tested as SD4625 and was developed from the cross of MN06075-4/SD4165. Driver is a semi-dwarf variety, approximately 1” taller than Prevail. Driver has medium-late maturity, two days later than Prevail. Driver is moderately resistant to Fusarium head blight and bacterial leaf streak. Driver has adequate milling and baking characteristics, with good test weight and protein. Application to the Plant Variety Protection office will be made with the Title V certification option. A royalty fee will be collected on all sales of Registered and Certified classes for seed purposes.

County	Name, Address Telephone	Class	Acres
Brookings	Foundation Seed Stocks, Brookings (605)688-5418.....	F	97
Day	Hansmeier & Son, Inc., Bristol (605)492-3611.....	R	696
Day	Kuecker Seed Farm, Inc., Webster (605)345-3169.....	R	105
Edmunds	Eisenbeisz Farms, Bowdle (605)285-6738.....	R	52
Faulk	Carlson Farms, Seneca (605)436-6203.....	R	120
Hand	Nelson’s HB Seed, Miller (605)853-3025.....	R	82
Pennington	Bielmaier Farms, Wall (605)279-2841.....	R	39
Potter	REH Farms, Inc., Gettysburg (605)765-9552.....	R	20
Roberts	Koeppel Seeds, Claire City (605)652-4529.....	R	50
Sully	Wittler Seed Farms, Agar (605)258-2431.....	R	46
Tripp	Jorgensen Land & Cattle, Ideal (605)842-3217....	R	20
Walworth	Jeff Frey, Mobridge (605)848-1486.....	R	80
<b>TOTAL</b>			<b>1407</b>

**LANG-MN**—Lang-MN hard red spring wheat was developed and released by the University of Minnesota in 2017. The variety, tested as MN10261-1, was derived from the cross of Glenn/Sabin. Lang-MN was named after Ben Lang, a long time (35 years) field inspector and past CEO of MCIA. The heading date of Lang-MN is equal to Boost and Faller. It is average height, equal to Faller and Prevail. Lang-MN is resistant to leaf rust and stem rust. It is moderately resistant to Fusarium Head Blight. Lang-MN is moderately susceptible to stripe rust. The head is tapering, mid-dense and inclined. Glume shoulders are oblique and are medium in width. The head is awned and white at maturity. The seed shape is ovate, with angular cheeks and medium brush length. It has above average test weight and is equal to Boost in protein content. Released by the Minnesota Agricultural Experiment Station, a research fee will be assessed on seed sold of Lang-MN. Lang-MN is protected under the Plant Variety Protection Act with the Title V certification option.

County	Name, Address Telephone	Class	Acres
Brookings	Olsen Custom Farms, Hendricks, MN (507)275-3176.....	C	135
Codington	LaBolt Farmers Grain, Waverly (605)882-4095....	C	364
Corson	Howe Seeds, Inc., McLaughlin (605)823-4892.....	C	462
Deuel	K & K Farms, Inc., Clear Lake (605)874-2322.....	C	128

Deuel	K & K Farms, Inc., Clear Lake	(605)874-2322.....	R	83
Edmunds	Eisenbeisz Farms, Bowdle	(605)285-6738.....	C	400
Hand	Nelson's HB Seed, Miller	(605)853-3025.....	C	275
Potter	REH Farms, Inc., Gettysburg	(605)765-9552.....	C	166
Potter	REH Farms, Inc., Gettysburg	(605)765-9552.....	R	20
Spink	Jim Klebsch, Redfield	(605)460-1133.....	C	140
Walworth	Fiedler Farms, Inc., Selby	(605)649-6280.....	C	245
Walworth	Jeff Frey, Mobridge	(605)848-1486.....	C	85
<b>TOTAL</b>				<b>2503</b>

**LCS REBEL**—LCS Rebel hard red spring wheat was developed by and released by Limagrain Cereal Seeds in 2017. The variety was tested as LNR13-0594. LCS Rebel is an awned variety, with late maturity. It is a medium height, semi-dwarf variety. The flag leaf at boot stage is erect, twisted with waxy bloom. The mid-dense, tapering head is inclined and white in color at maturity. LCS Rebel has good protein and excellent test weight. The variety has acceptable bread making quality. The certified classes of seed shall be Foundation, Registered and Certified. LCS Rebel is protected under the Plant Variety Protection Act.

County	Name, Address	Telephone	Class	Acres
Brown	Abeln Farm, Inc., Groton	(605)397-8113.....	C	
Sully	Ken Barber, Onida	(605)258-2708.....	C	

**LCS TRIGGER**—LCS Trigger is a hard red spring wheat developed by Limagrain Cereal Seeds. The variety was tested as LNR-10200 and released in 2016. It is an awned variety, with late maturity. It is a tall variety. The flag leaf at boot stage is erect, twisted, wax absent. The mid-dense, oblong head is erect and white/amber in color at maturity. LCS Trigger is resistant to stem and leaf rust. The variety is moderately susceptible to stripe rust and scab. The certified classes of seed shall be Foundation, Registered and Certified. LCS Trigger is protected under the Plant Variety Protection Act.

County	Name, Address	Telephone	Class	Acres
Brown	Abeln Farm, Inc., Groton	(605)397-8113.....	C	
Hand	Nelson's HB Seed, Miller	(605)853-3025.....	C	
Pennington	Tyrel Eisenbraun, Wall	(605)685-3686.....	C	
Roberts	Nelson Grain Farms LLC, Summit	(605)881-4258.....	C	
Sully	Ken Barber, Onida	(605)258-2708.....	C	
Walworth	Fiedler Farms, Inc., Selby	(605)649-6280.....	C	
Walworth	Fiedler Farms, Inc., Selby	(605)649-6280.....	R	

**MN-TORGY**—MN-Torgy hard red spring wheat was developed and released by the University of Minnesota in 2020. The variety, tested as MN14105-7, is a medium maturing, semi-dwarf. The heading date of MN-Torgy is similar to MN-Washburn and Prosper. It is about an inch shorter than Bolles with similar straw strength. The head is tapering, mid-dense and inclined. Glume shoulders are rounded and wide. The head is awned and white at maturity. The seed shape is ovate, with angular cheeks and medium brush length. MN-Torgy has good test weight and excellent protein. The variety is moderately resistant to scab and bacterial leaf streak. It is moderately resistant to prevalent races of leaf rust. MN-Torgy has good baking quality. Released by the Minnesota Agricultural Experiment Station, a research fee will be assessed on seed sold. Application for Plant Variety Protection with

the certification option for MN-Torgy is anticipated.

County	Name, Address Telephone	Class	Acres
Brookings	Foundation Seed Stocks, Brookings (605)688-5418.....	F	67
		<b>TOTAL</b>	<b>67</b>

**PREVAIL**—Prevail hard red spring wheat was developed by the South Dakota Agricultural Experiment Station (SDAES) and released in 2013. The variety was tested as SD4178 and was developed from the population SD3720/MN98389-A. Prevail is a semi-dwarf variety, similar in height to Advance. Prevail is an early maturing variety, similar to Advance, and two days earlier than Forefront. The variety is moderately resistant to stem rust, stripe rust and Fusarium head blight. Prevail is moderately susceptible to leaf rust. Prevail has adequate milling and baking characteristics, with good test weight and average protein. Prevail is protected under the Plant Variety Protection Act with the Title V certification option. A royalty fee will be collected on all sales of Registered and Certified classes for seed purposes.

County	Name, Address Telephone	Class	Acres
Brown	Locken Farms, Bath (605)380-2264 .....	C	176
Codington	Thyen Farms, Watertown (605)520-8159 .....	C	137
Codington	Thyen Farms, Watertown (605)520-8159 .....	R	27
Day	Bisgard Farms, Waubay (605)881-3385.....	C	244
Day	Kuecker Kountry Farms, Webster (605)345-4601.....	R	6
Day	Kuecker Seed Farm, Inc., Webster (605)345-3169.....	C	280
Day	Kuecker Seed Farm, Inc., Webster (605)345-3169.....	R	70
Dewey	Alan Biegler, Timber Lake (605)865-3231 .....	C	300
Lyman	Herman Agri, Inc., Presho (605)869-2304 .....	C	318
McCook	Larry Kappenman, Montrose (605)638-0464.....	R	45
Pennington	Bielmaier Farms, Wall (605)279-2841 .....	C	100
Potter	REH Farms, Inc., Gettysburg (605)765-9552 .....	C	347
Potter	REH Farms, Inc., Gettysburg (605)765-9552 .....	R	21
Roberts	Koeppel Seeds, Claire City (605)652-4529 .....	C	90
Spink	Jim Klebsch, Redfield (605)460-1133.....	C	350
Spink	Rahm Seed Cleaning (Curtis), Turton (605)897-6623.....	C	80
Sully	Wittler Seed Farms, Agar (605)258-2431 .....	C	565
Tripp	Jorgensen Land & Cattle, Ideal (605)842-3217 ....	C	190
Walworth	Jeff Frey, Mobridge (605)848-1486.....	C	416
		<b>TOTAL</b>	<b>3762</b>

**SHELLY**—Shelly hard red spring wheat was developed and released by the University of Minnesota in 2016. The variety, tested as MN11325-7, is a late maturing semi-dwarf. The heading date of Shelly is a day later than Bolles. The variety is 6 cm. shorter than Linkert. Shelly is moderately susceptible to Fusarium head blight. It is resistant to leaf rust and moderately resistant to stripe rust. Released by the Minnesota Agricultural Experiment Station, a research fee will be assessed on seed sold. Shelly is protected under the Plant Variety Protection Act with the Title V certification option.

County	Name, Address Telephone	Class	Acres
Corson	Howe Seeds, Inc., McLaughlin (605)823-4892.....	C	492
Perkins	Brandon Carey, Hettinger, ND (701)928-0030.....	R	30
		<b>TOTAL</b>	<b>522</b>

**SURPASS**—Surpass hard red spring wheat was developed by the South Dakota Agricultural Experiment Station (SDAES) and released in 2016. The variety was tested as SD4383 and was derived from the cross SD4011/3942. Surpass is a semi-dwarf variety, slightly shorter than Prevail. Surpass has similar straw strength when compared to Focus. Surpass is an early maturing variety, one day earlier than Prevail, and similar to Forefront. The variety is moderately resistant to Bacterial Leaf Streak. Surpass is moderately resistant to Fusarium head blight. It is moderately susceptible to leaf rust and susceptible to stripe rust. Surpass has adequate milling and baking characteristics, with average protein. Test weight is similar to Prevail. Surpass is protected under the Plant Variety Protection Act with the Title V certification option. A royalty fee will be collected on all sales of Registered and Certified classes for seed purposes.

County	Name, Address Telephone	Class	Acres
Brown	Jim Fischbach Farm, Inc., Warner (605)887-3269..	R	40
Campbell	Weisbeck & Sons, Herried (605)437-2963.....	C	180
Clark	Larson Seed Farm, Clark (605)532-5557.....	R	50
Codington	Thyen Farms, Watertown (605)520-8159.....	C	269
Codington	Thyen Farms, Watertown (605)520-8159.....	R	26
Corson	Howe Seeds, Inc., McLaughlin (605)823-4892 .....	C	1021
Day	Kuecker Kountry Farms, Webster (605)345-4601...	C	222
Day	Kuecker Kountry Farms, Webster (605)345-4601...	R	19
Deuel	Brandt Farms, Inc., Clear Lake (605)520-0442 .....	C	170
Dewey	Alan Biegler, Timber Lake (605)865-3231.....	C	260
Edmunds	Eisenbeisz Farms, Bowdle (605)285-6738.....	C	524
Edmunds	Eisenbeisz Farms, Bowdle (605)285-6738.....	R	50
Hand	Nelson's HB Seed, Miller (605)853-3025 .....	C	100
Hand	Nelson's HB Seed, Miller (605)853-3025 .....	R	30
Hand	Bob Speck, St. Lawrence (605)853-2643.....	R	56
Hughes	Bollweg Farms (Michael), Harrold (605)875-3440...	C	150
Hyde	Mac's Corner Ag Supply, Highmore (605)870-1421 .....	R	160
Jackson	David Fauske, Wall (605)279-2799 .....	R	47
Jerauld	MPM Certified Seed, Wess Springs (605)770-6537 .....	C	305
Jones	Rankin & Sons, Inc., Draper (605)669-2511 .....	C	521
Spink	Jim Klebsch, Redfield (605)460-1133.....	C	365
Spink	Rahm Seed Cleaning (Curtis), Turton (605)897-6623.....	C	100
Tripp	Jorgensen Land & Cattle, Ideal (605)842-3217.....	C	184
Tripp	Jorgensen Land & Cattle, Ideal (605)842-3217.....	R	23
Walworth	Fiedler Farms, Inc., Selby (605)649-6280 .....	C	405
Walworth	Jeff Frey, Mobridge (605)848-1486 .....	C	255
Walworth	Gery Giese, Selby (605)649-7832 .....	C	107
Walworth	Gery Giese, Selby (605)649-7832 .....	R	30
<b>TOTAL</b>			<b>5669</b>

**SY INGMAR**—SY Ingmar is a hard red spring wheat bred and developed by Syngenta Seeds, Inc. - AgriPro of Berthoud, Colorado and released in 2014. The variety was tested as 04S0258-12. It is a standard semi-dwarf variety. Straw strength is very good. SY Ingmar is resistant to stem rust and leaf rust. It is moderately resistant to scab and is susceptible to stripe rust.. The variety has a juvenile growth habit that is erect. Plant color at boot stage is green. Flag leaf at boot stage is recurved and twisted. Head shape is mid-dense, tapering and inclined. Overall

bread making characteristics are very good. SY Ingmar is protected under the Plant Variety Protection Act with the Title V certification option.

County	Name, Address Telephone	Class	Acres
Faulk	Carlson Farms, Seneca (605)436-6203.....	C	
Faulk	Carlson Farms, Seneca (605)436-6203.....	R	
Kingsbury	Midstate Agronomy, DeSmet (605)854-9282.....	C	
Sully	Wittler Farms, Agar (605)258-2431.....	C	

**SY McCLOUD**—SY McCloud is a hard red spring wheat bred and developed by Syngenta Participations AG and released in 2018. The variety was tested as 10S0059-28. It is a standard-dwarf variety, similar to AP Murdock in height. The variety has a juvenile growth habit that is erect. Plant color at boot stage is green. Flag leaf at boot stage is erect, not twisted with wax absent. Head shape is tapering and awned. SY McCloud is moderately susceptible to Fusarium Head Blight. The certified classes of seed shall be Foundation, Registered and Certified. SY McCloud is protected under the Plant Variety Protection Act (PVP-94) with the Title V certification option.

County	Name, Address Telephone	Class	Acres
Day	East River Ag Service LLC, Grenville (701)840-3742.....	R	
Roberts	Koeppel Seeds, Claire City (605)652-4529 .....	C	

**SY RUSTLER**—SY Rustler is a hard red spring wheat bred and developed by Syngenta Seeds, Inc. - AgriPro of Berthoud, Colorado and released in 2016. The variety was tested as 05S0242-6. It is a short semi-dwarf variety, similar to SY Rowyn in height. SY Rustler is moderately resistant to stem rust and Fusarium head blight. SY Rustler is resistant to leaf rust and moderately susceptible to stripe rust. The variety has a juvenile growth habit that is erect. Plant color at boot stage is green. Flag leaf at boot stage is recurved and twisted. Head shape is tapering and awned. Test weight and protein are average, with acceptable baking qualities. The certified classes of seed shall be Foundation, Registered and Certified. SY Rustler is protected under the Plant Variety Protection Act with the Title V certification option.

County	Name, Address Telephone	Class	Acres
Hand	Nelson’s HB Seed, Miller (605)853-3025.....	C	
Misc.	Syngenta Seeds, Inc. - AgriPro, Loveland, CO (907)532-3721.....	F	
Pennington	Yardley & Co., Inc., Quinn (605)386-2375.....	C	
Pennington	Yardley & Co., Inc., Quinn (605)386-2375.....	R	
Stanley	Sioux Nation, LLC, Ft. Pierre (605)223-2427.....	C	
Walworth	Stiegelmeier Farms, Selby (605)845-6034 .....	C	

**SY VALDA**—SY Valda is a hard red spring wheat bred and developed by Syngenta Seeds, Inc. - AgriPro of Berthoud, Colorado and released in 2015. The variety was tested as 06S0385-5. It is a standard semi-dwarf variety. SY Valda is moderately resistant to scab. It is resistant to leaf rust and stem rust. SY Valda is susceptible to stripe rust. The variety has a juvenile growth habit that is erect. Plant color at boot stage is green. Flag leaf at boot stage is recurved, twisted and wax absent. Head shape is tapering, with lax density and inclined curvature. The certified classes of seed shall be Foundation, Registered and Certified. SY Valda is protected under the Plant Variety Protection Act with the Title V certification option.

County	Name, Address Telephone	Class	Acres
Day	Kuecker Seed Farm, Inc., Webster (605)345-3169.....	C	
Day	Kuecker Seed Farm, Inc., Webster (605)345-3169.....	R	
Faulk	Carlson Farms, Seneca (605)436-6203.....	C	
Faulk	Carlson Farms, Seneca (605)436-6203.....	R	
Roberts	Koeppel Seeds, Claire City (605)652-4529 .....	C	
Roberts	Koeppel Seeds, Claire City (605)652-4529 .....	R	
Stanley	Sioux Nation, LLC, Ft. Pierre (605)223-2427.....	C	
Sully	Wittler Seed Farms, Agar (605)258-2431 .....	C	

**TCG-SPITFIRE**—TCG-Spitfire hard red spring wheat was developed and released by 21st Century Genetics Corp in 2015. TCG-Spitfire is a medium-tall variety. It is an awned variety, with medium-late maturity. Juvenile growth habit is erect. Leaf color at boot is green. The flag leaf is erect, twisted, and with waxy bloom. The mid-dense, oblong head is erect and light tan in color at maturity. TCG-Spitfire is protected under the Plant Variety Protection Act (PVP-94) with the Title V certification option.

County	Name, Address Telephone	Class	Acres
Day	East River Ag Service LLC, Grenville 701-840-3742.....	C	
Day	East River Ag Service LLC, Grenville 701-840-3742.....	R	

**TCG-WILDFIRE**—TCG-Wildfire hard red spring wheat was developed and released by 21st Century Genetics Corp in 2015. TCG-Wildfire is a medium-tall variety. It is an awned variety, with medium-early maturity. Juvenile growth habit is erect. Leaf color at boot is green. The flag leaf is erect, twisted, and with waxy bloom. The mid-dense, oblong head is nodding and tan in color at maturity. TCG-Wildfire is protected under the Plant Variety Protection Act (PVP-94) with the Title V certification option.

County	Name, Address Telephone	Class	Acres
Day	East River Ag Service LLC, Grenville 701-840-3742.....	C	

**WB9590**—WB9590 is a hard red spring wheat, bred and developed by Monsanto Technology, LLC in 2017. It will be marketed in the Northern Plains region of the U.S. as a WestBred branded variety. The variety was tested as F9N12-0151. WB9590 is an early maturing variety. WB9590 is an awned, semi-dwarf variety with lax, inclined, tapered shaped spikes. The glumes are white/amber in color at maturity. WB9590 is susceptible to stripe rust, moderately resistant to leaf rust and moderately susceptible to scab. The certified classes of seed shall be Foundation, Registered and Certified. WB9590 is protected under the Plant Variety Protection Act..

County	Name, Address Telephone	Class	Acres
Deuel	K & K Farms, Inc., Clear Lake (605)874-2322.....	C	
Walworth	Stiegelmeier Farms, Selby (605)845-6034 .....	C	

**WB9719**—WB9719 is a hard red spring wheat, bred and developed by Monsanto Technology, LLC in 2017. It will be marketed in the Northern Plains region of the U.S. as a WestBred branded variety. The variety was tested as F9N12-0153. WB9719 is a medium maturing variety. WB9719 is an awned, semi-dwarf variety with lax, inclined, tapered

shaped spikes. The glumes are white/amber in color at maturity. WB9719 is susceptible to stripe rust, moderately resistant to leaf rust and moderately susceptible to scab. The certified classes of seed shall be Foundation, Registered and Certified. WB9719 is protected under the Plant Variety Protection Act.

County	Name, Address Telephone	Class	Acres
Jones	Rankin & Sons, Inc., Draper (605)669-2511 .....	C	
Spink	Jim Klebsch, Redfield (605)460-1133 .....	C	
Walworth	Stiegelmeier Farms, Selby (605)845-6034 .....	C	

## HARD RED WINTER WHEAT

**ALLEGIANT 3063**—Allegiant 3063 is a white-chaffed hard red winter wheat bred and developed by Bayer Crop Science and released in 2019. The variety was tested as XB4710 and was later reviewed as 8441836. Allegiant 3063 is a tall variety, 7cm taller than LCS Chrome. The variety has a juvenile growth habit that is erect. Plant color at boot stage is blue green. Flag leaf at boot stage is erect and twisted with wax. Head shape is tapering and awned. CHS, Inc. has been given exclusive marketing rights to this variety.

County	Name, Address Telephone	Class	Acres
Misc.	CHS, Inc., Inver Grove Heights, MN (651)355-5379.....	R	

**AP18 AX**—AP18 AX is a hard red winter wheat bred and developed by Colorado State University and released in 2019. AP18 AX was tested as CO14A136. The variety resulted from the cross AF10/2\*Byrd//AF26/Byrd made in 2012. Ownership of AP18 AX has been transferred from CSU to the Colorado Wheat Research Foundation. AP18 AX has tolerance to the herbicide quizalofop, allowing for control of winter annual grasses including feral rye. AP18 AX is a semi dwarf variety that has white chaff at maturity. AP18 AX has early maturity and excellent straw strength. Juvenile growth habit is semi-erect. Leaf color at boot stage is green. Flag leaf at boot stage is waxy, erect and not twisted. Anther color is yellow. Head shape is tapering, mid-dense and awned. Glume pubescence is absent. Shoulders are rounded and the beak shape is acuminate. Seed shape is ovate. Seed cheeks are rounded. AP18 AX is moderately resistant to leaf rust, and is susceptible to stripe rust. Certified classes observed are Foundation, Registered and Certified. Application for Plant Variety Protection has been made with the Certification option.

County	Name, Address Telephone	Class	Acres
Stanley	Sioux Nation, LLC, Ft. Pierre (605)223-2427.....	R	

**AP503 CL2**—AP503 CL2 is a hard red winter wheat bred and developed by AgriPro Wheat. It contains Als-1(653) and Als-3(653) genes conferring tolerance to the BASF herbicides ‘Beyond’ or ‘ClearMax’. It is most similar to the variety ‘Jagalene’, which is one of the parents in the cross. Juvenile growth habit is semi-erect. Plant color at boot stage is blue green. Auricle anthocyanin and auricle hairs are present. Flag leaf at boot stage is erect and twisted. Waxy bloom is present on the head, stem and flag leaf sheath. Anther color is yellow. Head shape

is strap and awned. Glumes are glabrous, narrow in width and long in length with oblique shoulders and acuminate beaks. Seed shape is ovate. Brush hairs are medium in size. Seed crease depth is shallow and width is narrow. Seed cheeks are rounded. AP503 CL2 has medium maturity with white chaff color. It is a semi-dwarf with excellent straw strength. It is moderately resistant to stem rust and moderately susceptible to stripe rust. AP503 CL is susceptible to leaf rust. Its winterhardiness levels have been intermediate, similar to Jagalene. In the more northern areas, it is recommended for stubble planting only. Agripro Wheat maintains seed stock and certified classes of foundation, registered and certified. AP503 CL2 is protected under the U.S. Plant Variety Protection Act with the Title V certification option.

County	Name, Address	Telephone	Class	Acres
Stanley	Sioux Nation, LLC, Ft. Pierre	(605)223-2427.....	C	
Stanley	Sioux Nation, LLC, Ft. Pierre	(605)223-2427.....	R	

**CP7050 AX**—CP7050 AX is a hard red winter wheat bred and developed by Croplan by Winfield United. The variety was released to seed producers in 2020. CP7050 AX has tolerance to the herbicide quizalofop, allowing for control of winter annual grasses including feral rye. CP7050 AX has early maturity, similar to Brawl CL Plus. with white chaff color. It is medium height, similar to SY Monument, with good straw strength. CP7050 AX has good test weight and average milling and bread making quality. The variety has good resistance to stripe rust and soilborne mosaic virus.

County	Name, Address	Telephone	Class	Acres
Sully	Ken Barber, Onida	(605)258-2708.....	F	

**CRESCENT AX**—Crescent AX is a hard red winter wheat developed by Colorado AES and released to seed producers in 2019. The variety was tested as CO14A050. Crescent AX has tolerance to the herbicide quizalofop, allowing for control of winter annual grasses including feral rye. Crescent AX has medium early maturity with white chaff color. It is a medium height semidwarf. Juvenile growth habit is semi-erect. Leaf color at boot stage is green. Flag leaf at boot stage is erect, not twisted and has wax present. Anther color is yellow. Head shape is tapering, mid dense and inclined. Glume pubescence is absent. Shoulders are rounded and the beak shape is acuminate. Seed shape is ovate. Seed cheeks are rounded. Crescent AX has good test weight and acceptable milling and bread making quality. Application for Plant Variety Protection has been made with the Title V certification option for Crescent AX.

County	Name, Address	Telephone	Class	Acres
Spink	Jim Klebsch, Redfield	(605)460-1133.....	C	

**DRAPER**—Draper hard red winter wheat was developed by the South Dakota Agricultural Experiment Station (SD AES) and released in 2019 to seed producers by the developing institution. The line was tested as SD14113-3 and was developed from the cross T154/SD06069. Draper is white chaffed, awned, semi-dwarf wheat, similar in height compared to Lyman. Draper is a medium maturing type, similar to Overland. The variety has good winter hardiness and straw strength. Draper is moderately resistant to leaf and stripe rust, moderately resistant to Fusarium head blight, and is susceptible to stem rust. Draper is resistant to soilborne mosaic virus. Draper has average protein and test weight.



The variety has good to very good milling and baking quality. Application for Plant Variety Protection with the Title V certification option is anticipated. A royalty fee will be collected on all sales of Registered and Certified classes for seed purposes.

County	Name, Address Telephone	Class	Acres
Brule	Christensen Grain Farm Part., Pukwana (605)730-2269.....	R	18
Haakon	Hand Brothers Partnership, Midland (605)567-3397.....	R	31
Jones	Paul Patterson, Draper (605)669-2647.....	R	30
Jones	Rankin & Sons, Inc., Draper (605)669-2511.....	R	82
Pennington	Bielmaier Farms, Wall (605)279-2841.....	R	70
Sully	Wittler Seed Farms, Agar (605)258-2431.....	R	98
Tripp	Jorgensen Land & Cattle, Ideal (605)842-3217....	R	24
<b>TOTAL</b>			<b>353</b>

**IDEAL**—Ideal hard red winter wheat was developed by the South Dakota Agricultural Experiment Station (SD AES) and released in 2011 to seed producers by the developing institution. The line was tested as SD05118-1 and has the pedigree Wesley/NE93613. Ideal is white chaffed, awned, semi-dwarf wheat about 2 to 3 inches taller than Wesley. Ideal is a mid-maturity type, with maturity being about 2 days later than Wesley. Winter hardiness and resistance to lodging are also similar to Wesley. Ideal is moderately resistant to stem rust, leaf rust and tan spot. The variety is susceptible to stripe rust, BYDV and WSMV. Ideal exhibits excellent tolerance to acid soils and partial resistance to Hessian fly. Ideal has acceptable milling and good baking properties. Ideal is protected under the U.S. Plant Variety Protection Act with Title V certification option. A royalty fee will be collected on all sales of Registered and Certified classes for seed purposes.

County	Name, Address Telephone	Class	Acres
Haakon	Golden Willow Seeds, Inc., Midland (605)843-2187.....	C	178
Haakon	Golden Willow Seeds, Inc., Midland (605)843-2187.....	R	36
Tripp	Elevate Agronomics, Inc., Winner (605)840-0373.....	C	52
Tripp	Elevate Agronomics, Inc., Winner (605)840-0373.....	R	21
Tripp	Jorgensen Land & Cattle, Ideal (605)842-3217....	C	445
Tripp	Jorgensen Land & Cattle, Ideal (605)842-3217....	R	21
<b>TOTAL</b>			<b>753</b>

**LCS CHROME**—LCS Chrome hard red winter wheat was developed by Limagrain Cereal Seeds and released in 2016. The experimental line was tested as LCH13DH-20-87. LCS Chrome is a tan chaffed, awned, semi-dwarf wheat. The variety is short in height with early maturity. LCS Chrome has good lodging resistance. LCS Chrome is moderately resistant to stripe rust and leaf rust. It is susceptible to stem rust and WSMV. LCS Chrome has acceptable baking qualities and average test weight. The certified classes of seed shall be Foundation, Registered and Certified. LCS Chrome is protected under the Plant Variety Protection Act without the Title V certification option.

County	Name, Address Telephone	Class	Acres
Sully	Ken Barber, Onida (605)258-2708.....	C	

**LCS FUSION AX**—LCS Fusion AX is a hard red winter wheat bred and developed by Colorado State University. Ownership of LCS Fusion AX was transferred to the Colorado Wheat Research Foundation and sub-licensed to Limagrain Cereal Seeds. The variety was released to seed producers in 2018. The variety was tested as CO14A058. LCS Fusion AX has tolerance to the herbicide quizalofop, allowing for control of winter annual grasses including feral rye. LCS Fusion AX has medium maturity with white chaff color. It is medium-tall with good straw strength. LCS Fusion AX has good test weight and average milling and bread making quality. Application for Plant Variety Protection with the Title V Certification option has been made for LCS Fusion AX.

County	Name, Address	Telephone	Class	Acres
Spink	Jim Klebsch, Redfield	(605)460-1133	C	

**LCS PHOTON AX**—LCS Photon AX is a hard red winter wheat bred and developed by Limagrain Cereal Seeds. The variety was released to seed producers in 2020. The variety was tested as LCH15ACC-13-4. LCS Photon AX has tolerance to the herbicide quizalofop, allowing for control of winter annual grasses including feral rye. LCS Photon AX has medium maturity. It is medium-tall with average straw strength. LCS Photon AX has good test weight and average milling and bread making quality. Application for Plant Variety Protection with the Title V Certification option has been made for LCS Photon AX.

County	Name, Address	Telephone	Class	Acres
Jerauld	MPM Certified Seed, Wess Springs	(605)770-6537	C	
Sully	Ken Barber, Onida	(605)258-2708	C	
Sully	Ken Barber, Onida	(605)258-2708	R	

**LYMAN**—Lyman hard red winter wheat was developed by the South Dakota Agricultural Experiment Station (SD AES) and released in 2008 to seed producers by the developing institution. The line was tested as SD00111-9 and resulted from the cross KS93U134/Arapahoe. Lyman is white chaffed, awned, semi-dwarf wheat. The variety is similar to Arapahoe in maturity (medium), height (medium) and winter hardiness, but has slightly less straw strength. Lyman is resistant to stem rust, and has the best scab resistance of any variety tested in the North Central Region. It is moderately resistant to leaf rust. Lyman is susceptible to stripe rust and wheat streak mosaic virus. In 2007 CPT trials, Lyman was first in grain yield and test weight. Lyman has excellent milling and acceptable baking properties. Lyman is protected under the Plant Variety Protection Act with the Title V certification option. A royalty fee will be collected on all sales of Registered and Certified classes for seed purposes.

County	Name, Address	Telephone	Class	Acres
Tripp	Elevate Agronomics, Inc., Winner	(605)840-0373	C	135
			<b>TOTAL</b>	<b>135</b>

**MTF-1435**—MTF 1435 is a tall, medium-late maturing hard red winter wheat cultivar developed for forage and grain production by Montana State University in 2018. MTF 1435 is awnless and is targeted as a replacement for Willow Creek. The variety matures 5 days earlier than Willow Creek and has equal or better forage yield and quality. MTF 1435 is 4-5" shorter than Willow Creek and has better stripe rust

resistance. Winter hardiness is good for MTF 1435, and has good standability scores when compared to Willow Creek. The grain had good overall end-use qualities. MTF is proposed for licensed release outside Montana based on improved seed yield in comparison to Willow Creek, at similar forage yield potential.

County	Name, Address Telephone	Class	Acres
Stanley	Sioux Nation, LLC, Ft. Pierre (605)223-2427.....	C	481
<b>TOTAL</b>			<b>481</b>

**OAHE**—Oahe hard red winter wheat was developed by the South Dakota Agricultural Experiment Station (SD AES) and released in 2016 to seed producers by the developing institution. The line was tested as SD10257-2 and has the pedigree Ransom/SD96240-3-1. Oahe is white chaffed, awned, semi-dwarf wheat about 1 inch taller than Overland. Oahe is a mid-maturity type, with maturity being about 2 days later than Expedition. Winter hardiness and resistance to lodging are similar to Ideal. Oahe is moderately resistant to leaf rust, WSMV and Fusarium head blight. The variety is moderately susceptible to moderately resistant to stripe rust. Oahe has good test weight, average protein and baking properties. Oahe is protected under the Plant Variety Protection Act with the Title V Certification option. A royalty fee will be collected on all sales of Registered and Certified classes for seed purposes.

County	Name, Address Telephone	Class	Acres
Bon Homme	Keith & Justin Rothschadl, Scotland (605)661-0481.....	R	64
Davison	Nick Lorang, Mt. Vernon (605)770-5794.....	C	81
Davison	Wade Strand, Mitchell (605)996-7533.....	C	45
Haakon	Golden Willow Seeds, Inc., Midland (605)843-2187.....	C	231
Hughes	Bollweg Farms (Michael), Harrold (605)875-3440.....	C	65
Tripp	Jorgensen Land & Cattle, Ideal (605)842-3217....	C	155
<b>TOTAL</b>			<b>641</b>

**OVERLAND**—Overland hard red winter wheat was developed cooperatively by the Nebraska Agricultural Experiment Station and the USDA-ARS and released in 2007 by the developing institutions and the South Dakota Agricultural Experiment Station. The line tested as NE01643 was selected from the cross Millennium sib//Seward/Archer. Overland is white chaffed, awned, tall semi-dwarf wheat. Overland matures about three days later than Wesley. Overland has good straw strength, similar to Wesley, and is shorter than Millennium by about a 1 cm. It is moderately resistant to leaf rust, stem rust, Fusarium head blight and Hessian fly. Overland is moderately susceptible to wheat streak mosaic virus and is susceptible to stripe rust. Overland has a medium coleoptile similar to Nekota. Winter hardiness for Overland is good, similar to Nekota. Test weight of Overland is good, similar to Expedition. Overland has adequate milling and baking properties. Overland is protected under the Plant Variety Protection Act with the Title V certification option. There is no saleable registered class.

County	Name, Address Telephone	Class	Acres
Charles Mix	Pharmco Industries, LLC, Platte (605)337-3374...	C	300
Gregory	Lance Matucha, Burke (605)830-7810.....	C	118
Lyman	Herman Agri, Inc., Presho (605)869-2304.....	C	198
<b>TOTAL</b>			<b>616</b>

**RAY**—Ray is a tall, medium-late maturing hard red winter wheat cultivar developed for forage and grain production by Montana State University and released in 2018. The variety was tested as MTF-1432. Ray is awnleted and is targeted as a replacement for Willow Creek. The variety matures 5 days earlier than Willow Creek and has equal or better forage yield and quality. Ray is 4-5" shorter than Willow Creek and has better stripe rust resistance. Winter hardiness is good for Ray and has good standability scores when compared to Willow Creek. The grain had good overall end-use qualities. Application to the Plant Variety Protection office has been made with the Title V certification option for Ray.

County	Name, Address Telephone	Class	Acres
Butte	Jeff Vetter, Belle Fourche (605)415-3375.....	R	62
<b>TOTAL</b>			<b>62</b>

**REDFIELD**—Redfield hard red winter wheat was developed by the South Dakota Agricultural Experiment Station (SD AES) and released in 2013 to seed producers by the developing institution. The line was tested as SD06158 and has the pedigree Wesley/CDC Falcon. Redfield is red chaffed, awned, semi-dwarf wheat about 1 inch taller than Wesley. Redfield is a mid-maturity type, with maturity being about 3 days later than Wesley. Winter hardiness and resistance to lodging are also similar to Wesley. The variety is moderately resistant to stem rust and moderately susceptible to leaf rust. Redfield has higher test weight and better resistance to Fusarium head blight than Wesley. Redfield is susceptible to WSMV and stripe rust. The variety has good milling and good baking properties. Redfield is protected under the Plant Variety Protection Act with the Title V certification option. A royalty fee will be collected on all sales of Registered and Certified classes for seed purposes.

County	Name, Address Telephone	Class	Acres
Beadle	Jason Gruenhagen, DeSmet (605)860-9959.....	C	142
Brule	Christensen Grain Farm Part., Pukwana (605)730-2269.....	C	100
Charles Mix	Hansum Brothers (Larry), Platte (605)680-1023.....	C	132
Charles Mix	Pharmco Industries, LLC, Platte (605)337-3374...	C	470
Jerauld	Broken Heart Ranch, Wess Springs (605)999-1196.....	R	40
Lyman	Drew Reuman, Presho (605)280-5330.....	C	265
Potter	REH Farms, Inc., Gettysburg (605)765-9552.....	C	225
Potter	REH Farms, Inc., Gettysburg (605)765-9552.....	R	28
Tripp	Elevate Agronomics, Inc., Winner (605)840-0373.....	C	141
<b>TOTAL</b>			<b>1543</b>

**SY 517 CL2**—SY 517 CL2 is a hard red winter wheat bred and developed by Syngenta Participations AG. It contains two genes conferring tolerance to the BASF herbicides 'Beyond' or 'ClearMax'. It was tested as 07CL039-7. SY 517 CL2 is best adapted to Kansas, Nebraska and South Dakota. Juvenile growth habit is erect. Leaf color at boot stage is green. Auricle color is white and anthocyanin is absent. Flag leaf at boot stage is recurved, twisted and wax is present. Anther color is yellow. Head shape is tapering and awned. Glumes are narrow in width and medium in length with oblique shoulders and acuminate beaks. Seed shape is ovate. Brush hairs are short in size. Seed cheeks are rounded.

Chaff color is white when mature. SY 517 CL2 is a semi-dwarf variety, with early maturity and excellent straw strength. It is resistant to leaf rust and stem rust. SY 517 CL2 is moderately susceptible to stripe rust. The variety shows tolerance to SBMV. Syngenta Seeds, Inc. maintains seed stock and certified classes of Foundation, Registered and Certified. Certified seed stocks of SY 517 CL2 will likely be available in the fall of 2017. Plant Variety Protection is anticipated and SY 517 CL2 may only be sold as a class of certified seed.

County	Name, Address Telephone	Class	Acres
Lyman	Herman Agri, Inc., Presho (605)869-2304 .....	R	

**SY MONUMENT**—SY Monument is a hard red winter wheat bred and developed by Syngenta Seeds, Inc.– AgriPro and released in 2014. SY Monument was tested as 04BC574-2. The variety resulted from a cross made in 2003 by Syngenta Seeds, Inc. SY Monument is a semi dwarf variety that has white chaff at maturity. SY Monument is best adapted to the winter wheat growing areas of the High Plains. SY Monument has early maturity and average straw strength. Juvenile growth habit is erect. Leaf color at boot stage is green. Flag leaf at boot stage is waxy, non-twisted and erect. Anther color is yellow. Head shape is tapering, mid-dense and awned. Glume pubescence is absent. Shoulders are oblique and the beak shape is acuminate. Seed shape is ovate. Seed cheeks are rounded. SY Monument is moderately resistant to leaf rust and stripe rust. The variety is resistant to stem rust and WSMV. Syngenta-AgriPro maintains Breeders seed stock and certified classes of Foundation, Registered and Certified. SY Monument is protected under the Plant Variety Protection Act with the Title V Certification option.

County	Name, Address Telephone	Class	Acres
Lyman	Herman Agri, Inc., Presho (605)869-2304 .....	R	
Lyman	Karlen Ranch Partnership, Reliance (605)473-5605.....	C	
Pennington	Yardley & Co., Inc., Quinn (605)386-2375 .....	C	
Stanley	Sioux Nation, LLC, Ft. Pierre (605)223-2427 .....	C	
Sully	Wittler Seed Farms, Agar (605)258-2431 .....	R	

**SY SUNRISE**—SY Sunrise is a hard red winter wheat bred and developed by Syngenta Seeds, Inc. – AgriPro and released in 2015. SY Sunrise was tested as 06BC796-68. SY Sunrise is a standard height semi dwarf variety that has white chaff at maturity. SY Sunrise is best adapted to the winter wheat growing areas of the Central Plains. SY Sunrise has early maturity, similar to SY Monument. Juvenile growth habit is erect. Leaf color at boot stage is green. Flag leaf at boot stage is non-waxy, twisted and erect. Anther color is yellow. Head shape is tapering, lax and awned. Glume pubescence is absent. Shoulders are oblique and the beak shape is acuminate. Seed shape is ovate. Seed cheeks are rounded. SY Sunrise is resistant to stem rust and is moderately susceptible to WSMV. It is moderately resistant to leaf rust and stripe rust. Syngenta-AgriPro maintains Breeders seed stock and certified classes of Foundation, Registered and Certified. SY Sunrise is protected under the Plant Variety Protection Act with the Title V Certification option..

County	Name, Address Telephone	Class	Acres
Lyman	Karlen Ranch Partnership, Reliance (605)473-5605.....	C	

**SY WOLF**—SY Wolf is a hard red winter wheat bred and developed by Syngenta Seeds, Inc. – AgriPro and released in 2011. SY Wolf was tested as BC01007-7. The variety resulted from the cross W99-331/97x0906-8 made in the spring of 2001 by Syngenta Seeds, Inc. SY Wolf is a semi dwarf variety that has white chaff at maturity. SY Wolf is best adapted to North and South Dakota and Western Nebraska. SY Wolf has early maturity and excellent straw strength. The variety is moderately resistant to leaf rust, tan spot, stem rust and WSMV. SY Wolf is also moderately resistant to powdery mildew and septoria. The variety is susceptible to stripe rust. Syngenta-AgriPro maintains Breeders seed stock and certified classes of Foundation, Registered and Certified. SY Wolf is protected under the Plant Variety Protection Act with the Title V certification option.

County	Name, Address Telephone	Class	Acres
Lyman	Herman Agri, Inc., Presho (605)869-2304 .....	C	
Pennington	Yardley & Co., Inc., Quinn (605)386-2375 .....	C	
Stanley	Sioux Nation, LLC, Ft. Pierre (605)223-2427 .....	C	
Stanley	Sioux Nation, LLC, Ft. Pierre (605)223-2427 .....	R	
Sully	Wittler Seed Farms, Agar (605)258-2431 .....	C	

**SY WOLVERINE**—SY Wolverine is a hard red winter wheat developed by Syngenta Participations AG and released in 2019. SY Wolverine was tested as 08BC379-40-1. SY Wolverine is a standard height semi dwarf variety that has white chaff at maturity. SY Wolverine is broadly adapted across the winter wheat growing areas of the Western, Northern and Central Plains. SY Wolverine has medium maturity, similar to SY Sunrise. Juvenile growth habit is erect. Leaf color at boot stage is green. Flag leaf at boot stage is non-waxy, twisted and erect. Anther color is yellow. Head shape is tapering, mid dense and awned. Glume pubescence is absent. Shoulders are oblique and the beak shape is acuminate. Seed shape is ovate. Seed cheeks are rounded. SY Wolverine has shown above average leaf rust tolerance according to company data. Syngenta Seeds, LLC maintains seed stock and certified classes of Foundation, Registered and Certified. Application to the Plant Variety Protection office has been made with the Certification option.

County	Name, Address Telephone	Class	Acres
Day	Kuecker Seed Farm, Inc., Webster (605)345-3169.....	C	
Gregory	Lubbers Farms, Inc., Gregory (605)830-8782.....	C	
Kingsbury	Midstate Agronomy, DeSmet (605)854-9282.....	R	
Lyman	Herman Agri, Inc., Presho (605)869-2304 .....	R	
Lyman	Karlen Ranch Partnership, Reliance (605)473-5605.....	R	
Pennington	Yardley & Co., Inc., Quinn (605)386-2375 .....	R	
Spink	Nutrien Ag Solutions, Northville (605)887-3422....	C	
Stanley	Sioux Nation, LLC, Ft. Pierre (605)223-2427.....	C	
Stanley	Sioux Nation, LLC, Ft. Pierre (605)223-2427.....	R	
Sully	Wittler Seed Farms, Agar (605)258-2431 .....	R	
Walworth	Stiegelmeier Farms, Selby (605)845-6034 .....	C	

**THOMPSON**—Thompson hard red winter wheat was developed by the South Dakota Agricultural Experiment Station (SD AES) and released in 2017 to seed producers by the developing institution. The line was tested as SD09227 and has the pedigree SD97088/KS920709-B-5-2//

Jagalene. Thompson is white chaffed, awned, semi-dwarf wheat, similar in height compared to Lyman and Overland. Thompson is a medium to later maturing type, typically flowering similar to Redfield and Ideal. Winter hardiness is good. Resistance to lodging is better than Ideal and Overland. Thompson is resistant to leaf rust and moderately resistant to Fusarium head blight. The variety is moderately susceptible stem rust, stripe rust and WSMV. Thompson is susceptible to stripe rust and Tan spot. Thompson has similar test weight to Redfield and Ideal. The variety has average protein and acceptable baking properties. Thompson is protected under the Plant Variety Protection Act with the Title V certification option. A royalty fee will be collected on all sales of Registered and Certified classes for seed purposes.

County	Name, Address Telephone	Class	Acres
Bon Homme	Sean Bauder, Tyndall (605)670-9186.....	C	48
Charles Mix	Hansum Brothers (Larry), Platte (605)680-1023...	C	187
Charles Mix	Alec Weber, Lake Andes (605)660-3198.....	C	80
Davison	Nick Lorang, Mt. Vernon (605)770-5794.....	C	218
Pennington	Bielmaier Farms, Wall (605)279-2841 .....	C	169
Sully	Wittler Seed Farms, Agar (605)258-2431 .....	C	871
Tripp	Jorgensen Land & Cattle, Ideal (605)842-3217 ....	C	250
<b>TOTAL</b>			<b>1823</b>

**WB4309**—WB4309 is a hard red winter wheat, bred and developed by Monsanto Technology, LLC in 2019. It will be marketed in the Northern Plains region of the U.S. as a WestBred branded variety. WB4309 is a medium-early maturing variety. WB4309 is an awned, semi-dwarf variety. The variety has good test weight and standability. WB4309 has good protein and acceptably baking and milling characteristics. It is moderately resistant to stripe rust and leaf rust, and moderately susceptible to Fusarium Head Blight. WB4309 has excellent winter hardiness. The certified classes of seed shall be Foundation, Registered and Certified. Application to the Plant Variety Protection Office is being contemplated for WB4309.

County	Name, Address Telephone	Class	Acres
Gregory	Lubbers Farms, Inc., Gregory (605)830-8782.....	C	
Spink	Jim Klebsch, Redfield (605)460-1133.....	C	
Walworth	Stiegelmeier Farms, Selby (605)845-6034 .....	C	

**WB4462**—WB4462 is a hard red winter wheat, bred and developed by Monsanto Technology, LLC in 2016. It will be marketed in the Northern Plains region of the U.S. as a WestBred branded variety. The variety was tested as HV9W10-0091. WB4462 is an early-medium maturing variety. WB4462 is an awned, semi-dwarf variety with lax, nodding, tapered shaped spikes. The glumes are white in color at maturity. WB4462 is moderately resistant to leaf rust. It is susceptible to stripe rust and WSMV. The certified classes of seed shall be Foundation, Registered and Certified. WB4462 is protected under the Plant Variety Protection Act (PVP-94).

County	Name, Address Telephone	Class	Acres
Jones	Rankin & Sons, Inc., Draper (605)669-2511.....	C	

**WB-GRAINFIELD**—WB-Grainfield is a hard red winter wheat, bred and developed by Monsanto Technology, LLC and released in 2012. The variety was tested as HV9W06-509. WB-Grainfield is awned and white-chaffed at maturity. The spike is tapering, mid-dense, and inclined

at maturity. WB-Grainfield has medium-tall height, and is medium-late in maturity. The variety has a medium-long coleoptile, and has very good winter hardiness in the central plains. WB-Grainfield has very good straw strength. Test weight and milling and baking characteristics are very good. WB-Grainfield is resistant to soil borne mosaic virus. The variety is moderately resistant to leaf rust, stem rust, stripe rust and WSMV. It is moderately susceptible to powdery mildew. WB-Grainfield is protected under the Plant Variety Protection Act.

County	Name, Address Telephone	Class	Acres
Gregory	Lubbers Farms, Inc., Gregory (605)830-8782.....	C	

**WINNER**—Winner hard red winter wheat was developed by the South Dakota Agricultural Experiment Station (SD AES) and released in 2019 to seed producers by the developing institution. The line was tested as SD14115-5 and was developed from the cross T154/SD07165. Winner is best adapted to central and eastern South Dakota. Winner is a white chaffed, awned, semi-dwarf wheat. The variety has medium height and medium maturity, similar to Lyman. The variety has good winter hardiness and straw strength. Winner is moderately resistant to stem rust and has average tolerance to Fusarium head blight. It shows an intermediate response to stripe and leaf rust. Winner is susceptible to tan spot. The variety has average protein and test weight. The variety has good milling and baking quality. Application for Plant Variety Protection with the Title V certification option is anticipated. A royalty fee will be collected on all sales of Registered and Certified classes for seed purposes..

County	Name, Address Telephone	Class	Acres
Brookings	Foundation Seed Stocks, Brookings (605)688-5418.....	F	81
Brule	Christensen Grain Farm Part., Pukwana (605)730-2269.....	R	18
Charles Mix	Clearfield Colony, Delmont (605)770-1193.....	R	72
Charles Mix	Lakeview Hutterian Brethren, Inc., Lake Andes (605)487-7992.....	R	120
Codington	Thyen Farms, Watertown (605)520-8159.....	R	35
Day	Hansmeier & Son, Inc., Bristol (605)492-3611.....	R	354
Douglas	Wayne Gronseth, Mitchell (605)996-0805.....	R	22
Gregory	TDK Partnership, Fairfax (605)654-2812.....	R	149
Haakon	Hand Brothers Partnership, Midland (605)567-3397.....	R	25
Jerauld	Broken Heart Ranch, Wess Springs (605)999-1196.....	R	40
Jones	Paul Patterson, Draper (605)669-2647.....	R	30
Lyman	Drew Reuman, Presho (605)280-5330.....	R	24
Potter	REH Farms, Inc., Gettysburg (605)765-9552.....	R	24
Stanley	Sioux Nation, LLC, Ft. Pierre (605)223-2427.....	R	77
Sully	Wittler Seed Farms, Agar (605)258-2431.....	R	98
Tripp	Elevate Agronomics, Inc., Winner (605)840-0373.....	R	21
Tripp	Jorgensen Land & Cattle, Ideal (605)842-3217....	R	20
<b>TOTAL</b>			<b>1210</b>



# SEED GROWERS

Listed alphabetically by NAME

<b>Abeln Farm, Inc.</b> , 40344 134th Street Groton, SD 57445.....	605-397-8113
<b>Agri Partners Inc.</b> , 47453 SD Hwy 22 Clear Lake, SD 57226.....	605-874-2550
<b>Barber, Ken</b> , 30385 187th St PO Box 905 Onida, SD 57564 .....	605-258-2708
<b>Bauder, Sean</b> , 41814 298th Street Tyndall, SD 57066 .....	605-670-9186
<b>Beck, Bob</b> , 32776 299th St Dallas, SD 57529.....	605-830-9687
<b>Beck, Ken</b> , 33061 298th Street Dallas, SD 57529.....	605-830-2066
<b>Berdan, Andy</b> , 19616 Hwy 81 Arlington, SD 57212.....	605-203-3604
<b>Biegler, Alan</b> , PO Box 188 Timber Lake, SD 57656-0188.....	605-865-3231
<b>Bielmaier Farms</b> , PO Box 430 Wall, SD 57790-0430.....	605-279-2841
<b>Bisgard Farms</b> , 14920 444th Avenue Waubay, SD 57273.....	605-881-3385
<b>Bollweg Farms</b> , 20210 322nd Avenue Harrold, SD 57536 .....	605-875-3440
<b>Bosworth, Joe</b> , 37644 252nd Street White Lake, SD 57383.....	605-680-2462
<b>Brandt Farms Inc.</b> , 18013 470th Avenue Clear Lake, SD 57226.....	605-520-0442
<b>Broken Heart Ranch</b> , 23268 383rd Avenue Wess Springs, SD 57382.....	605-999-1196
<b>Buschenfeld, Mark</b> , 19379 472nd Avenue Toronto, SD 57268.....	605-690-6773
<b>Carey, Brandon</b> , 10383 156th Avenue Hettinger, ND 58639 .....	701-928-0030
<b>Carlson Farms</b> , 16573 334th Avenue Seneca, SD 57473.....	605-436-6203
<b>Carlson, Scott</b> , 19893 446th Avenue Lake Preston, SD 57249-5417.....	605-203-0837
<b>Chris Howard Ranch</b> , 19245 355th Avenue Miller, SD 57362 .....	605-204-0299
<b>Christensen Grain Farm Part.</b> , 34517 252nd Street Pukwana, SD 57370 .....	605-730-2269
<b>CHS, Inc</b> , 5500 Cenex Dr Inver Grove Heights, MN 55077 .....	651-355-5379
<b>Clearfield Colony</b> , 40248 293rd Street Delmont, SD 57330-6908 .....	605-770-1193
<b>Cronin Farms</b> , 30431 167th Street Gettysburg, SD 57442 .....	605-765-9287
<b>Dakota's Best Seed Co.</b> , 36656 Hwy 44 Platte, SD 57369-6337.....	605-337-3318

<b>Dingsor, Garry</b> , 45256 149th Street Ortley, SD 57256 .....	605-398-6297
<b>Dowling, Skyler</b> , 20493 Pheasant Pl Pierre, SD 57501 .....	605-222-9065
<b>East River Ag Service LLC</b> , 1998 Tahahe Point Ln Grenville, SD 57239.....	701-269-1751
<b>Eastman, Cody</b> , 405 Washington Street Brandt, SD 57218-0188 .....	605-690-8891
<b>Eisenbeisz Farms</b> , 32512 127th Street Bowdle, SD 57428-5005 .....	605-285-6738
<b>Eisenbraun, Tyrel</b> , 23245 Jensen Rd Wall, SD 57790 .....	605-685-3686
<b>Elevate Agronomics, Inc</b> , 27763-317th Avenue, E Hwy 44 Winner, SD 57580.....	605-840-0373
<b>Fauske, David</b> , 23604 Wheatland Drive Wall, SD 57790-6800.....	605-279-2799
<b>Fiedler Farms Inc.</b> , 13073 309th Avenue Selby, SD 57472-5809.....	605-649-6280
<b>Foundation Seed Stocks</b> , 1211 N Campus Dr. SDSU Box 2125 Brookings, SD 57007-1096.....	605-688-5418
<b>Frericks, Stacey</b> , 38803 165th Street Ashton, SD 57424.....	605-460-0887
<b>Frey, Jeff</b> , 12532 290th Avenue Mobridge, SD 57601 .....	605-848-1486
<b>Fulton Ranch</b> , 20402 363rd Avenue St. Lawrence, SD 57373 .....	605-853-3757
<b>Giese, Gerhard</b> , 30051 137th Street Selby, SD 57472 .....	605-649-7832
<b>Golden Willow Seeds Inc.</b> , 21304 238th Avenue Midland, SD 57552-3122 .....	605-843-2187
<b>Green Thumb Commodities</b> , 21718 445th Avenue, PO Box J Oldham, SD 57051-0018 .....	605-482-8295
<b>Grinols, Jay</b> , 15473 451st Avenue South Shore, SD 57263-5202.....	605-886-8174
<b>Gronseth, Wayne</b> , 1428 Sawgrass Avenue Mitchell, SD 57301.....	605-996-0805
<b>Gruenhagen, Jason</b> , PO Box 472 DeSmet, SD 57231 .....	605-854-9021
<b>Hall, Cody</b> , 19953 457th Avenue Arlington, SD 57212.....	605-983-3369
<b>Hall, Jon</b> , 19953 457th Avenue Arlington, SD 57212.....	605-983-3369
<b>Hall, Nick</b> , 20207 457th Avenue Arlington, SD 57212.....	605-203-1249
<b>Halls Seed LLC</b> , 20466 451st Ave Arlington, SD 57212.....	605-690-3594
<b>Hand Brothers Partnership</b> , 24704 204th Street Midland, SD 57552 .....	605-567-3397
<b>Hansmeier &amp; Son</b> , 77 South Main PO Box 136 Bristol, SD 57219.....	605-492-3611
<b>Hansum Brothers</b> , 37315 275th Street Platte, SD 57369.....	605-680-1023

<b>Herman Agri Inc.</b> , 31120 252nd Street Presho, SD 57568.....	605-869-2305
<b>Hespe, Wyatt</b> , 25752 SD Hwy 248 Okaton, SD 57562 .....	605-530-0274
<b>Heuer, Allen</b> , 15262 457th Avenue Summit, SD 57266.....	605-868-0914
<b>Hofer, Cordell S.</b> , 43665 257th Street Salem, SD 57058.....	605-660-1582
<b>Howe Seeds Inc.</b> , 11198 272nd Avenue PO Box 496 McLaughlin, SD 57642.....	605-823-4892
<b>J &amp; J Horter Farm Partnership</b> , 13808 SD Hwy 27 Andover, SD 57422.....	605-216-4852
<b>Jackson, Eric</b> , 705 Dakota Avenue N Wess Springs, SD 57382-2058.....	605-680-3713
<b>Jim Fischbach Farm Inc.</b> , 38989 147th Street Warner, SD 57479-7014 .....	605-887-3269
<b>Joe Uckert</b> , 18005 475th Avenue Clear Lake, SD 57226.....	605-874-2529
<b>Jorgensen Land &amp; Cattle</b> , 31250 265th Street Ideal, SD 57541 .....	605-842-3217
<b>K &amp; K Farms Inc.</b> , 47244 181st Street Clear Lake, SD 57226-5439 .....	605-874-2322
<b>Kappenman, Larry</b> , 45133 Hawk Drive Montrose, SD 57048 .....	605-638-0464
<b>Karlen Ranch Partnership</b> , 33055 235th St PO Box 1343 Reliance, SD 57569 .....	605-473-5605
<b>Kirsch Farms</b> , 27143 369th Avenue Platte, SD 57369.....	605-337-9658
<b>Klebsch, Jim</b> , 38701 170th Street Redfield, SD 57469.....	605-460-1133
<b>Koehlmoos, Norman</b> , 43480 205th Street DeSmet, SD 57231-5816.....	605-854-3524
<b>Koeppe Seeds</b> , PO Box 64 Claire City, SD 57224-0064 .....	605-652-4529
<b>Kuecker Kountry Farms</b> , 43846 147th Street Webster, SD 57274-6025 .....	605-345-4601
<b>Kuecker Seed Farm</b> , 14762 438th Avenue Webster, SD 57274-6027 .....	605-345-3169
<b>KWS CEREALS USA, LLC</b> , 4101 Colleen Drive Champaign, IL 61822.....	952-836-8469
<b>LaBolt Farmers Grain</b> , Box 75 Central Avenue Waverly, SD 57263 .....	605-882-4095
<b>Lakeview Hutterian Brethren, Inc.</b> , 28748 386th Avenue Lake Andes, SD 57356 .....	605-487-7992
<b>Larson Seed Farm</b> , 43445 171st Street Clark, SD 57225-5200 .....	605-532-5557
<b>Leiseth, Paul</b> , 44405 179th Street Hazel, SD 57242-5131.....	605-628-2099
<b>Lewis, Larry</b> , 42243 230th Street Fedora, SD 57337.....	605-527-2451
<b>Locken Farms</b> , 39643 137th Street Bath, SD 57427 .....	605-380-2264

<b>Lorang, Nick</b> , 25406 398th Avenue Mt. Vernon, SD 57363 .....	605-770-5794
<b>Lubbers Farms, Inc.</b> , 33681 289th Street Gregory, SD 57533-4008.....	605-830-8782
<b>LW Sales, Inc.</b> , 300 Railroad Ave PO Box 668 Groton, SD 57445 .....	605-397-8111
<b>Mac's Corner Ag Supply/Jeff Ellsworth</b> , 33553 SD Hwy 34 Highmore, SD 57345 .....	605-870-1421
<b>Malsam Farms, Inc.</b> , 12988 342nd Avenue Roscoe, SD 57471.....	605-380-7832
<b>Matucha, Lance</b> , 34642 Frey Road Burke, SD 57523-0445 .....	605-830-7810
<b>Midstate Agronomy</b> , 43204 Highway 14, PO Box 10 DeSmet, SD 57231-0010.....	605-854-9282
<b>Millborn Seeds, Inc</b> , 2132 32nd Avenue Brookings, SD 57006.....	605-697-6306
<b>Misar, Mark</b> , 41721 294th Street Scotland, SD 57059.....	605-661-1094
<b>Moeckly Elevator, Inc.</b> , 41648 SD Hwy 10 Britton, SD 57430-5505 .....	605-448-2212
<b>MPM Certified Seed</b> , 22875 383rd Avenue Wess Springs, SD 57382.....	605-539-0070
<b>Mustang Seeds, Inc.</b> , 306 S. Washington PO Box 466 Madison, SD 57042 .....	605-256-6529
<b>Nelson Grain Farms LLC</b> , 14696 455th Ave Summit, SD 57266.....	605-881-4258
<b>Nelson's HB Seed</b> , 1020 N Broadway PO Box 87 Miller, SD 57362 .....	605-853-3025
<b>Norberg, Dean</b> , 34536 282nd Street Burke, SD 57523.....	605-830-2062
<b>Nutrien Ag Solutions</b> , 10 W Main Street PO Box 109 Northville, SD 57465.....	605-887-3422
<b>Olsen Custom Farms</b> , 1355 300th Street Hendricks, MN 56136 .....	507-275-3176
<b>Patterson, Paul</b> , 28032 244th Street Draper, SD 57531-3142.....	605-669-2647
<b>Pearlsgaard Farm, LLC</b> , 46855 200th Street Bruce SD, 57220.....	605-690-8669
<b>Pharmco Industries - Platte</b> , 36590 SD Hwy 44 Platte, SD 57369.....	605-337-3374
<b>Rahm Seed Cleaning</b> , 40340 161st Street Turton, SD 57477.....	605-897-6623
<b>Rankin &amp; Sons Inc.</b> , 27924 239th Street Draper, SD 57531 .....	605-669-2511
<b>REH Farms Inc.</b> , 16332 SD Hwy 1804 Gettysburg, SD 57442 .....	605-765-9552
<b>Reuman, Drew</b> , PO Box 12 Presho, SD 57568 .....	605-280-5330
<b>Roghair, Henry Glen</b> , 25951 241st Street Okaton, SD 57562 .....	605-669-2819
<b>Roghair, Raymond</b> , 24051 261st Avenue Okaton, SD 57562 .....	605-669-2248

<b>Roitsch, Jerry</b> , 60 - 5th Avenue E. Bristol, SD 57219-5804.....	605-492-3330
<b>Rothschadl, Keith &amp; Justin</b> , 29414 415th Avenue Scotland, SD 57059.....	605-661-0487
<b>Safflower Technologies International</b> , PO BOX 907 Laurel, MT 59044.....	406-480-4797
<b>SE Research Farm</b> , 29974 University Road Beresford, SD 57004.....	605-563-2989
<b>Sexauer Discount Farm Services</b> , PO Box 540 Brookings, SD 57006-0540.....	605-696-7924
<b>Sioux Nation, LLC</b> , 309 Farwest Ave PO Box 452 Ft. Pierre, SD 57532.....	605-223-2427
<b>Speck, Bob</b> , 36370 197th Street St. Lawrence, SD 57373.....	605-853-2643
<b>Spieker, David</b> , 19345 423rd Avenue Willow Lake, SD 57278.....	605-625-3685
<b>Stevicks, Ray or Ted</b> , 34143 295th Street Burke, SD 57523.....	605-830-0270
<b>Stiefvater, Kurt</b> , 25108 445th Avenue Salem, SD 57058.....	605-360-1618
<b>Stiegelmeier Farms</b> , 13402 306th Avenue Selby, SD 57472-5802.....	605-854-6034
<b>Storley Farms</b> , 44136 130th Street Roslyn, SD 57261.....	605-881-5843
<b>Strand, Wade</b> , 25798 409th Avenue Mitchell, SD 57301-5801.....	605-996-7533
<b>Sumption Farms</b> , 10997 390th Ave Frederick, SD 57441.....	605-380-1016
<b>Syngenta Seeds, Inc. - AgriPro</b> , P.O. Box 2377 Loveland, CO 80539.....	907-532-3721
<b>TDK Partnership</b> , 37067 Hwy 18 Fairfax, SD 57335.....	605-654-2812
<b>Thiry Feedlot, Inc.</b> , 36933 252nd Street White Lake, SD 57383.....	605-249-2777
<b>Thompson, Robert</b> , 45956 206th Street Bruce, SD 57220.....	605-983-3984
<b>Thyen Farms</b> , 46220 165th Street Watertown, SD 57201-8765.....	605-520-8159
<b>Tritle, Carper, Cahill Homestead LLC</b> , 27495 SD Hwy 49 Winner, SD 57580.....	605-208-6116
<b>Troske, Rory</b> , 40559 162nd Street Turton, SD 57477-5911.....	605-897-6656
<b>Van Dusseldorp Ag</b> , 521 Wisconsin Ave PO Box 308 Platte, SD 57369.....	605-337-3052
<b>Vander Ley, Larry</b> , 38051 273rd Street Corsica, SD 57328.....	605-946-5409
<b>Vetter, Jeff</b> , 1805 10th Ave Belle Fourche, SD 57717.....	605-415-3375
<b>Warrington Seeds</b> , 35 County Road 33 Bristol, SD 57219.....	605-492-3500
<b>Weber, Alec</b> , 38284 289th Street Lake Andes, SD 57356.....	605-660-3198

**Weisbeck & Sons**, 11193 US Hwy 83  
 Herreid, SD 57632-5802 ..... 605-437-2963  
**Weisbeck, Mark & Paul**, 11193 US Hwy 83  
 Herried, SD 57632-5802 ..... 605-437-2963  
**Wittler Seed Farm**, 29471 176th Street  
 Agar, SD 57520 ..... 605-258-2431  
**Yardley & Co, Inc.**, 20101 Kelly Hill Rd.  
 Quinn, SD 57775 ..... 605-386-2375

# South Dakota Seed Trade Association Members

**Albert Lea Seed House,**

1414 W. Main St, PO Box 127, Albert Lea, MN 56007

**Fairway Seed Company,**

802 Depot St, PO Box 580, Armour, SD 57313

**Foothills Seed Inc.,**

2323 S. Junction Avenue, PO Box 338, Sturgis, SD 57785

**Golden Willow Seeds Inc.,**

21304 238th Ave, Midland, SD 57552

**Green Thumb Commodities,**

21718 445 Ave, PO Box J, Oldham, SD 57051

**Halls Seed, LLC,**

20466 451st Ave, Arlington, SD 57212

**Hansmeier & Son Inc.,**

77 South Main, PO Box 136, Bristol, SD, 57219

**Heritage Seed Co., Inc.,**

324 Main St, PO Box 544, Crawford, NE 69339

**Howe Seeds Inc.,**

11198 272 Ave, PO Box 496, McLaughlin, SD 57642

**Jorgensen Land & Cattle,**

31250 265th St, Ideal, SD 57541

**Kuecker Seed Farm, Inc.,**

14762 438 Ave, Webster, SD 57274

**LaCrosse Seed,**

2810 W 3rd St, Sioux Falls, SD 57104

**Midstate Agronomy,**

43204 Hwy 14, DeSmet, SD 57231

**Millborn Seeds,**

2132 32nd Ave, Brookings, SD 57006

**MPM Certified Seeds,**

22875 383 Ave, Wessington Springs, SD 57382

**Mustang Seeds, Inc.,**

PO Box 466, Madison, SD 57042

**Nelson's HB Seed,**

1020 N Broadway, PO Box 87, Miller, SD 57362-0087

**Olsen Custom Farms,**

1355 300th St, Hendricks, MN 56136

**Reuman Ag,**

30403 SD Hwy 248, Presho, SD 57568

**SD Crop Improvement Assn,**

2380 Research Park Way Suite 136, Brookings, SD 57006-1785

**SDSU Foundation Seed Stocks,**

1211 North Campus Dr, SDSU BOX 2125, Brookings, SD 57007

**Seed Exchange,**

PO Box 247, Platte, SD 57369

**Sexauer Discount Farm Services, Inc.,**

413 1st St S, PO Box 540, Brookings, SD 57006

**Sioux Nation, LLC,**

309 Farwest Ave, PO Box 452, Ft Pierre, SD 57532

# Approved Certified Seed Conditioners

The following seed conditioning plants have been approved for cleaning South Dakota Certified Seed for the 2020-2021 year:  
(Sorted alphabetically by town)

NAME, TOWN, PHONE	CROPS ELIGIBLE TO CONDITION	
Hall's Seed LLC 20466 451st Avenue <b>Arlington, SD 57212</b>	605-690-3594	Buckwheat, field peas, millet, small grains, soybeans
Fairway Seed Company 802 Depot, PO Box 580 <b>Armour, SD 57313-0580</b>	605-724-2401/ 605-770-2896	All crops
*Custom Grain Cleaning PO Box 522 <b>Bath, SD 57427-0522</b>	605-226-3540/ 605-380-0513	Small grains, Portable Cleaner
*Blotske's Grain Cleaning (Allen) 4110 England Street <b>Bismarck, ND 58504-8990</b>	701-258-2333/ 701-220-3773	Wheat, Portable Cleaner
*Central Seed Service PO Box 270 <b>Blunt, SD 57522</b>	605-280-9085	Small grains, soybeans, Portable Cleaner
Eisenbeisz Farms, Inc. 32512 127th Street <b>Bowdle, SD 57428-5005</b>	605-285-6738/ 605-281-1154	Small grains
Hansmeier & Son, Inc. 77 S. Main Street, PO Box 136 <b>Bristol, SD 57219-0136</b>	605-492-3611/ 605-377-3325/ 605-492-3531	All crops
Warrington Seed 35 County Road 33 <b>Bristol, SD 57219-2048</b>	605-492-3500/ 605-216-4944	Flax, millet, small grains, soybeans
Moeckly Elevator, Inc. 41648 SD Highway 10 <b>Britton, SD 57430-5505</b>	605-448-2212/ 605-237-2054	Corn, millet, small grains, soybeans
Arrow Seed Co., Inc. 126 North 10th Ave, PO Box 722 <b>Broken Bow, NE 68822-0722</b>	800-622-4727	Grasses, small grains, small-seeded legumes

\* Portable Cleaner



Sexauer Discount Farm Services, Inc. PO Box 540 <b>Brookings, SD 57006-0540</b>	605-696-7924	Millet, small grains
*Pharmco Industries, LLC 1250 E. King Avenue <b>Chamberlain, SD 57325</b>	605-234-5209/ 605-730-0624	Small grains, Portable Cleaner
Koeppe Seeds PO Box 64 <b>Claire City, SD 57224-0064</b>	605-652-4529/ 605-742-4336	Buckwheat, flax millet, small grains, soybeans
Larson Seed Farm 43445 171st Street <b>Clark, SD 57225-5200</b>	605-532-5557/ 605-880-5087	Flax, small grains, soybeans
*B & L Ag Inc. 18257 471st Avenue <b>Clear Lake, SD 57226</b>	605-956-1389	Small grains, Portable Cleaner
*Voeller Superior Seed Grading 11475 391st Avenue <b>Columbia, SD 57433</b>	701-320-4486/ 701-320-0934	Small grains, Portable Cleaner
Legend Seeds Processing Plant PO Box 241 <b>DeSmet, SD 57231-0241</b> Cleaning plant is located near Willow Lake, along Hwy 25.	800-678-3346/ 605-854-3346	Soybeans
CHS Dakota Prairie 306 1st Street, PO Box 8 <b>Edgeley, ND 58433-0008</b>	701-493-2808/ 701-493-2481	Flax, small grains, soybeans
*Mid Dakota Seed Service PO Box 373 <b>Faulkton, SD 57438-0373</b>	605-460-1119	Millet, small grains, soybeans, Portable Cleaner
Dakota Mill & Grain, Inc. 507 Elevator Road, PO Box 338 <b>Ft. Pierre, SD 57532-0338</b>	605-223-2557/ 605-223-2558	Small grains
*Sioux Nation, LLC PO Box 452 <b>Ft. Pierre, SD 57532</b>	605-223-2427/ 605-223-3101	Field Peas, flax, millet, pulse crops, small grains, Portable Cleaner
*Sioux Nation of Fort Pierre 504 Deadwood, PO Box 452 <b>Ft. Pierre, SD 57532</b>	605-223-2427/ 605-223-3101	Field Peas, flax, millet, pulse crops, small grains, Portable Cleaner

\* Portable Cleaner

Rix Farms Inc. 12960 406th Avenue <b>Groton, SD 57445-5475</b>	605-397-8382/ 605-397-7118/ 605-216-0342	Millet, soybeans, wheat
LW Sales, Inc. PO Box 668 <b>Groton, SD 57445</b>	605-397-8111	Small grains
*Pullan Grain Cleaning 14041 402nd Avenue <b>Groton, SD 57445</b>	605-395-6456	Small grains, soybeans, Portable Cleaner
*General Grain Cleaning 930 115th Avenue SE <b>Hannaford, ND 58448</b>	701-769-2300/ 800-797-3268	Dry beans, small grains, soybeans, Portable Cleaner
*General Grain Cleaning #2 930 115th Avenue SE <b>Hannaford, ND 58448</b>	701-769-2300/ 800-797-3268	Dry beans, small grains, soybeans Portable Cleaner
OCF Seeds 1355 300th Street <b>Hendricks, MN 56136</b>	507-275-3176 605-690-0918	Millet, small grains
*Cotten Seed Service 203 2nd Street, PO Box 125 <b>Henry, SD 57243-0125</b>	605-532-3738/ 605-881-6178	Small grains, soybeans, Portable Cleaner
*Weisbeck & Sons 11193 US Highway 83 <b>Herreid, SD 57632-5802</b>	605-437-2963/ 605-850-1806/ 605-230-0089	Small grains, Portable Cleaner
*Mac's Corner Ag Supply 33553 SD Hwy 34 <b>Highmore, SD 57345</b>	605-852-9280/ 605-870-1421	Small grains, Portable Cleaner
*Mark Perrion Grain Cleaning 212 Cambridge Avenue <b>Ipswich, SD 57451</b>	605-216-6836	Small grains, Portable Cleaner
*Pharmco Industries, LLC 36704 252nd Street <b>Kimball, SD 57355</b>	605-778-6579/ 605-682-9175	Small grains, Portable Cleaner
Howe Seeds, Inc. 11198 272nd Avenue, PO Box 496 <b>McLaughlin, SD 57642</b>	605-823-4892/ 605-845-5892	Flax, pulse crops, small grains, small-seeded legumes
Mustang Seed Cleaning Plant PO Box 466 <b>Madison, SD 57042-0466</b> Plant is located 13 miles north of Highmore, SD.	605-256-6529/ 605-270-7540 (Jason) 605-871-3624 (Matt)	Oats

\* Portable Cleaner

Mettler Fertilizer 656 E. Highway 18, PO Box 325 <b>Menno, SD 57045-0325</b>	605-387-5513/ 605-464-0078	Wheat
Golden Willow Seeds, Inc. 21304 238th Avenue <b>Midland, SD 57552-3122</b>	605-843-2187/ 605-843-2809/ 605-685-5911	Grasses, small grains, small-seeded legumes, sorghum
*Van Tassel Seed Cleaning 21306 238th Avenue <b>Midland, SD 57552-4008</b>	605-843-2171/ 605-685-4406	Millet, safflower, small grains, sunflower, Portable Cleaner
Stengel Seed & Grain 14698 SD Highway 15 <b>Milbank, SD 57252-5424</b>	605-432-6030	Flax, small grains, soybeans
*Nelson's HB Seed 1020 North Broadway, PO Box 87 <b>Miller, SD 57362-0087</b>	605-853-3025/ 605-870-1472/ 605-870-3048	Grasses, small grains, small- legumes, soybeans, Portable Cleaner
*Wade Strand 25798 409th Avenue <b>Mitchell, SD 57301-5801</b>	605-996-7533/ 605-770-8790	Small grains, Portable Cleaner
Frey Seed 12532 290th Avenue <b>Mobridge, SD 57601</b>	605-762-3326/ 605-848-1486	Millet, small grains,
*Heskin Grain Processing, Inc. PO Box 111 <b>New Rockford, ND 58356-0111</b>	701-947-5111/ 701-302-0653/ 701-947-5114	Wheat, field peas, Portable Cleaner
*Heskin Grain Processing, Inc. #2 PO Box 111 <b>New Rockford, ND 58356-0111</b>	701-947-5111/ 701-302-0653/ 701-947-5114	Wheat, field peas, Portable Cleaner
Green Thumb Commodities 21718 445th Ave., PO Box J <b>Oldham, SD 57051-0018</b>	605-482-8295/ 800-843-3327	Flax, millet, small grains, small- seeded legumes
Dakota's Best Seed Co., Inc. 36656 West Hwy 44 Platte, SD 57369-6337	605-337-3318/ 605-337-3319/ 605-680-4284	Grasses, small grains, small- seeded legumes
*Pharmco Industries, LLC 36590 SD Hwy 44 Platte SD 57369	605-337-3374	Small grains, Portable Cleaner

\* Portable Cleaner

Seed Exchange (Conditioning Plant) 36787 SD Hwy 44, PO Box 247 <b>Platte, SD 57369-0247</b>	605-337-9882	All crops
*Seed Exchange PO Box 247 <b>Platte, SD 57369-0247</b>	605-337-9882	Small grains, Portable Cleaner
Van Dusseldorp Ag PO Box 308 <b>Platte, SD 57369</b>	605-337-3052	Oats
*Reuman Ag 30403 SD Hwy 248 <b>Presho, SD 57568</b>	605-683-4175/ 605-222-1712	Small grains, Portable Cleaner
Fiedler Farms, Inc. 13073 309th Avenue <b>Selby, SD 57472-5809</b>	605-845-6700/ 605-649-6280/ 605-649-7795	Millet, small grains
Foothills Seeds, Inc. 2323 South Junction Avenue PO Box 338 <b>Sturgis, SD 57785-0338</b>	605-347-4578	Grasses, small grains, small- seeded legumes
*Rahm Seed Cleaning 40340 161st Street <b>Turton, SD 57477</b>	605-897-6623/ 605-897-6540/ 605-887-7300/ 605-887-7800 (Jason)	Small grains, Portable Cleaner
*Spink County Grain Cleaners, Inc. 40604 161st Street <b>Turton, SD 57477-5900</b>	605-897-6628/ 605-635-6281	Small grains, Portable Cleaner
*Joe Blotske Grain Cleaning, LLC PO Box 694 <b>Underwood, ND 58576-0694</b>	701-442-3549/ 701-400-1792	Small grains, Portable Cleaner
*Blotske's Grain Cleaning (Dale) PO Box 167 <b>Underwood, ND 58576-0167</b>	701-301-2585	Wheat, Portable Cleaner
Pioneer Hi-Bred Int., Inc. 17835 Hwy 13 West, PO Box 93 <b>Wahpeton, ND 58074-0093</b>	701-642-5300	Soybeans
*Sandal Seed Cleaning 703 Husted Street <b>Wall, SD 57790</b>	605-441-7921	Field peas, millet, Safflower, small grains Portable Cleaner

\* Portable Cleaner

*Quality Seed Service 17613 449th Avenue <b>Watertown, SD 57201-7675</b>	605-881-7000	Soybeans, wheat, Portable Cleaner
Agwrx Cooperative 811 B N Drive <b>Watertown, SD 57201</b>	605-886-4406	Flax, small grains
LaBolt Farmers Grain 75 Central Avenue <b>Waverly, SD 57263</b>	605-882-4095/ 605-881-9850	Small grains
Kuecker Kountry Farms 43846 147th Street <b>Webster, SD 57274-6025</b>	605-345-4601/ 605-345-4328/ 605-345-3463/ 605-265-0229	Millet, small grains, soybeans
Kuecker Seed Farm, Inc. 14762 438th Avenue <b>Webster, SD 57274-6027</b>	605-345-3169/ 605-345-4397/ 605-380-3925	Flax, millet, small grains, soybeans
MPM Certified Seed 22875 383rd Avenue <b>Wessington Springs, SD 57382</b>	605-770-6537/ 605-539-0070	All crops
*Gene's Custom Grain Cleaning 11646 387th Avenue <b>Westport, SD 57481</b>	605-290-1236	Small grains, Portable Cleaner
*Pharmco Industries, LLC 27768 317th Avenue <b>Winner, SD 57580</b>	605-842-0703	Small grains, Portable Cleaner
Winner Seed 27763 317th Ave, E Hwy 44 <b>Winner, SD 57580</b>	605-842-0481/ 605-840-0373	Small grains, small-seeded legumes

\* Portable Cleaner

# Approved Bulk Retail Facilities

(Sorted alphabetically by town)

---

Wittler Farms 605-258-2431/  
29471 176th Street 605-280-0152  
**Agar, SD 57520**

---

Kelsey Seed & Ag Service, LLC 605-849-3454/  
421 - 5th Street S 605-350-7242  
**Alpena, SD 57312**

---

S S & H Ag Supplies, Inc. 605-472-1020/  
12 West Main 605-450-1131  
**Ashton, SD 57424-0246**

---

CBH CO-OP, Feed & Ag Services 605-723-3333  
77 North 6th Avenue  
**Belle Fourche, SD 57717**

---

Dakota Mill & Grain 605-892-2543  
808 5th Avenue  
**Belle Fourche, SD 57717**

---

Millborn Seeds, Inc. 605-697-6306/  
2132 32nd Avenue 605-690-4159  
**Brookings, SD 57006**

---

Agtegra Cooperative 605-352-7210/  
535 415th Avenue, PO Box 113 605-350-4076  
**Carpenter, SD 57322-0113**

---

Agtegra Cooperative 605-234-4230  
250 West 249th Street  
**Chamberlain, SD 57325**

---

Agri Partners, Inc. 605-874-2550/  
47453 SD Hwy 22 605-695-9698  
**Clear Lake, SD 57226**

---

CHS Farmer's Alliance 605-946-6215/  
PO Box 65 605-946-6200  
**Corsica, SD 57328-0065**

---

Agland Coop - A & D Fertilizer 605-779-2003/  
39833 US Highway 18 605-928-3627/  
**Delmont, SD 57330-6908**

---

Midstate Agronomy 43204 U.S. Hwy 14, PO Box 10 <b>DeSmet</b> , SD 57231-0010	605-854-9282/ 605-203-1694
Northern Plains Cooperative #1 RR Street, PO Box 127 <b>Dupree</b> , SD 57623-0127	605-365-5331/ 605-365-5332/ 800-564-0883
CHS Northern Plains 11103 Walnut Rd <b>Eureka</b> , SD 57437	605-284-2673
Agtegra Cooperative 16253 355th Avenue, PO Box 69 <b>Faulkton</b> , SD 57438	605-598-6500
CHS-dba-Northern Plains 609 9th Avenue S. <b>Faulkton</b> , SD 57438	605-598-4532
CHS Midwest Cooperative PO Box 276 <b>Fairfax</b> , SD 57335-0276	605-654-2619/ 605-830-0848
CHS Farmer's Alliance 803 N. US Hwy 81, PO Box F <b>Freeman</b> , SD 57029	605-925-7424/ 605-648-3231/ 605-660-3371
Beringer Seed Sales LLC 16188 314th Avenue, PO Box 82 <b>Gettysburg</b> , SD 57442	605-769-0272
Brown Agronomy 30831 U.S. Hwy 212, PO Box 305 <b>Gettysburg</b> , SD 57442	605-765-9133
CHS Northern Plains 503 North Potter <b>Gettysburg</b> , SD 57442-1029	605-765-2476/ 605-765-2498
Lubbers Farms, Inc. 33681 289th Street <b>Gregory</b> , SD 57533-4008	605-830-8782
Abeln Farm, Inc. 40344 134th Street <b>Groton</b> , SD 57445	605-397-8113

Bollweg Farms (Michael) 20210 322nd Avenue <b>Harrold</b> , SD 57536	605-875-3440/ 605-870-1725
Agtegra Cooperative 32080 U.S. Hwy 14, PO Box 3 <b>Harrold</b> , SD 57536-0003	605-875-3375
Agtegra Cooperative 525 Commercial Ave., PO Box 352 <b>Highmore</b> , SD 57345	605-852-2558/ 605-350-7264
Pinnacle Agriculture 200 U.S. Hwy 14 E., PO Box 564 <b>Highmore</b> , SD 57345	605-852-2777/ 605-295-0461
Western Consolidated Cooperative PO Box 78 <b>Holloway</b> , MN 56249	605-432-4531/ 320-394-2171 Located in Twin Brooks
Hoven Equity Exchange PO Box 785 <b>Hoven</b> , SD 57450-0785	605-948-2226
Howard Farmers Coop Assn. PO Box 706 <b>Howard</b> , SD 57349-0706	605-772-5543/ 605-579-0352
Agtegra Cooperative 1000 4th Street NW, PO Box 18 <b>Huron</b> , SD 57350-0018	605-352-4390/ 605-352-4404
Agtegra Cooperative 36075 U.S. Hwy 12, PO Box 366 <b>Ipswich</b> , SD 57451	605-426-6999/ 605-426-6021
Helena Agri-Enterprises 128 N Sioux Street, PO Box 68 <b>Iroquois</b> , SD 57353	605-546-2504/ 605-256-3973
Northern Plains Cooperative 224 North Main, PO Box 15 <b>Isabel</b> , SD 57633-0015	605-466-2159
Agtegra Cooperative PO Box 157 <b>Java</b> , SD 57452	605-649-6291



Agtegra Cooperative 115 N. SD Hwy 273, PO Box 99 <b>Kennebec</b> , SD 57544	605-869-2255
Agtegra Cooperative 36654 Iron Horse Drive <b>Kimball</b> , SD 57355	605-778-6141
LaBolt Farmers Grain 102 E. Georgia Avenue, PO Box 91 <b>LaBolt</b> , SD 57246-0091	605-623-4581
Prairie Ag Partners PO Box 158 <b>Lake Preston</b> , SD 57249-0158	605-847-4551
Agtegra Cooperative 605 Railroad Street <b>Lebanon</b> , SD 57455	605-768-9465
Southwest Grain, Division of CHS, Inc. 201 2nd Street E., PO Box 239 <b>Lemmon</b> , SD 57638-0239	605-374-3301
Agtegra Cooperative 109 Elevator Road, PO Box 640 <b>McLaughlin</b> , SD 57642-0640	605-823-4441
Mustang Seeds 306 South Washington, PO Box 466 <b>Madison</b> , SD 57042-0466	605-256-6529/ 800-952-2324/ 605-270-7540
Fremar, LLC (Dimock) PO Box 357 <b>Marion</b> , SD 57043-0357	605-928-3392  Located in Dimock
Agtegra Cooperative PO Box 107 <b>Mellette</b> , SD 57461-0107	605-887-3572
Buy Rite Seed, LLC 35539 U.S. Hwy 14 <b>Miller</b> , SD 57362	605-853-2513/ 605-204-0217/ Dale 605-870-2515/ Ryan 605-530-1895 Mick
Agtegra Cooperative PO Box 5 <b>Miller</b> , SD 57362	605-853-2351/ 605-377-4774

Agtegra Cooperative-West PO Box 425 <b>Miller, SD 57362-0425</b>	605-853-3006
Wilbur Ellis Air, LLC 609 14th Street W., PO Box 414 <b>Miller, SD 57362</b>	605-853-2382/ 605-461-3292
Agronomy Plus, Inc. 2500 W. Havens Street <b>Mitchell, SD 57301</b>	605-996-3339
CHS Farmer's Alliance 1100 N. Elevator Rd, PO Box 1286 <b>Mitchell, SD 57301</b>	605-996-7322/ 605-999-4914
Barber Chemicals, LLC PO Box 905 <b>Onida, SD 57564</b>	605-380-0672
Midwest Cooperative 305 Cedar Avenue <b>Onida, SD 57564-0424</b>	605-258-2687/ 605-258-2688
Shepherd Seed Company, LLC 18514 301st Avenue <b>Onida, SD 57564</b>	605-264-5559/ 605-280-8058/ 605-280-9058
Aesoph Seeds, LLC 34339 172nd Street <b>Orient, SD 57467</b>	605-870-0329
Agland Coop 115 South 1st Street <b>Parkston, SD 57366-6213</b>	605-928-3627/ 605-680-0078
Midwest Cooperative 1919 East Sioux <b>Pierre, SD 57501-5830</b>	605-224-5935
Turnis Farm Service, Inc. PO Box 516 <b>Platte, SD 57369-0516</b>	605-337-3643
Wilbur Ellis Air, LLC 17150 US Highway 281 <b>Redfield, SD 57469</b>	605-472-2600

Agtegra Cooperative 1227 3rd Street East <b>Redfield</b> , SD 57469	605-472-0300
Karlen Ranch Partnership PO Box 1343 <b>Reliance</b> , SD 57569-1343	605-473-5605/ 605-730-5606
Revilla Farmers Elevator PO Box 98 <b>Revilla</b> , SD 57259-0098	605-623-4411
Agtegra Cooperative 13345 341st Avenue, PO Box 138 <b>Roscoe</b> , SD 57471-0138	605-287-4311
CHS Northern Plains 1510 3rd Avenue, PO Box 323 <b>Selby</b> , SD 57472-0323	605-649-7682
Stiegelmeier Farms, Inc. 13402 306th Avenue <b>Selby</b> , SD 57472-5802	605-649-7009/ 605-845-6034
LaCrosse Seed, LLC 2810 West 3rd Street, Ste. #1 <b>Sioux Falls</b> , SD 57104	877-338-9639/ 765-551-6010
Wheaton Dumont Coop Elevator 101 West Oak Street, PO Box 161 <b>Sisseton</b> , SD 57262-0161	605-698-3251 Located in New Effington
Agtegra Cooperative 38784 262nd Street, PO Box 248 <b>Stickney</b> , SD 57375-0248	605-732-4240
Wilbur Ellis Air, LLC 45149 152nd Street <b>Summit</b> , SD 57266	605-947-4800
Mettler Fertilizer PO Box 216 <b>Tripp</b> , SD 57376	605-935-6106
Agtegra Cooperative 102 Main Street, PO Box 126 <b>Tulare</b> , SD 57476-0126	605-596-4114

Leber Ag Service, LLC 308 Sally Avenue <b>Vale, SD 57788</b>	605-456-2538
CHS Farmer's Alliance 310 W. Railroad Street, PO Box 159 <b>Wagner, SD 57380-0159</b>	605-384-3671
Dakota Mill & Grain 111 2nd Ave., Box 419 <b>Wall, SD 57790</b>	605-279-2261
Broken Heart Ranch 23268 383rd Avenue <b>Wessington Springs, SD 57382</b>	605-539-9615/ 605-999-1196/ 605-350-0334
MPM Certified Seed (West River) 22875 383rd Avenue <b>Wessington Springs, SD 57382</b>	605-539-0236/ 605-770-6537 Located in Hayes
Agtegra Cooperative PO Box 350 <b>Wessington Springs, SD 57382-0350</b>	605-539-1555
Wilbur Ellis Air, LLC 22888 U.S. Hwy 281 <b>Wessington Springs, SD 57382</b>	605-539-0240/ 605-350-4538
CHS Farmer's Alliance 409 S Main Street <b>White Lake, SD 57383</b>	605-249-2610/ 605-249-2233
South Central Livestock Supply PO Box 455 <b>Winner, SD 57580</b>	605-840-4070
Agtegra Cooperative 20137 U.S. Hwy 281 <b>Wolsey, SD 57384</b>	605-883-4317/ 800-290-2430
CHS 47014 SD Hwy 44 <b>Worthing, SD 57077</b>	605-372-3700
Agtegra Cooperative 218 So. Main <b>Yale, SD 57386</b>	605-599-2911

## NOTES

## NOTES

## WEIGHTS AND MEASURES

### Linear Measure (Length)

1 Mile = 5,280 feet or 320 rods  
1 Rod = 16½ feet

### Square Measure (Area)

1 Acre = 160 square rods or  
43,560 square feet  
1 Square Rod = 30¼ sq. yds.  
1 Square Yard = 9 sq. feet

### Weight

1 Pound = 16 ounces  
1 Long Ton = 2,240 pounds  
(Great Britain)  
1 Short Ton = 2,000 pounds  
(USA)

### Cubic Measure (Area)

1 Cubic Yard = 27 cubic feet  
1 Cubic Foot = 1,728 cubic  
inches

### TEMPERATURE CONVERSIONS

To convert Centigrade to Fahr-  
enheit:

$$\frac{^{\circ}\text{C} \times 9}{5} + 32 = ^{\circ}\text{F}$$

To convert Fahrenheit to Centi-  
grade:

$$(^{\circ}\text{F} - 32) \times \frac{5}{9} = ^{\circ}\text{C}$$

### DETERMINING PLANT POPULATION

Row length to equal 1/1000<sup>th</sup> acre

Row Width in inches	Row width 1/1000 <sup>th</sup> acre
7"	74'8"
10"	52'3"
14"	37'4"
15"	34'10"
20"	26'2"
24"	21'9"
28"	18'8"
30"	17'5"
32"	16'4"
36"	14'6"
38"	13'9"
40"	13'1"

### Metric Equivalents

#### (Linear Measure)

1 Mile = 1.6093 kilometers  
1 Kilometer = 0.62137 mile  
1 Rod = 0.5029 decameter  
1 Decameter = 1.9884 rods  
1 Meter = 39.37 inches or 1.0936  
yds.

#### Meter Equivalents

##### (Square Measure)

1 Acre = 0.04047 hectare  
1 Hectare = 2.471 acres  
1 Square Rod = 0.2529 acre  
1 Acre = 8.594 square rods  
1 Square Yard = 0.8361  
square meter

#### Metric Equivalents (Volume)

1 Bushel = 0.3524 hectoliter  
1 Hectoliter = 2.8375 bushels  
1 Quart dry = 1.101 liters  
1 Quart liquid = 0.9463 liters  
1 liter = 0.908 quart dry  
1 liter = 1.0567 quarts liquid

#### Metric Equivalents (Weight)

1 Pound = 0.4536 kilogram  
1 Kilogram = 2.2046 pounds  
1 Metric Ton = 2,204.6 pounds

#### Volume Conversion Factors/ Area Conversion Factors

Cubic ft.  $\times$  0.8 = bushels grain  
Cubic ft.  $\times$  7.48 = gallons  
Cubic ft.  $\times$  62.4 = pounds water  
Gallons  $\times$  8.330 = pounds water  
Gallons  $\times$  0.1337 = cubic ft.  
Cubic inches  $\div$  1,728 = cubic ft.  
Cubic yard  $\times$  27 = cubic ft.  
Cubic ft.  $\div$  27 = cubic yards

### GROWING DEGREE DAY EQUATION

$$\text{GDD} = \frac{\text{Daily Max. Temp.}^* + \text{Daily Min. Temp.}^{\dagger} - 50^{\circ}}{2}$$

\*: Up to a maximum of 86°F

†: Not below 50°F



**SDCIA/SEED CERTIFICATION DIVISION  
2380 RESEARCH PARK WAY, SUITE 136  
BROOKINGS, SD 57006-1785  
(605) 688-4604**

**NON-PROFIT ORG.  
U.S. Postage**

**PAID**

**Brookings, SD 57006  
PERMIT NO. 3**

**RETURN SERVICE REQUESTED**