

BUILT BY FARMERS FOR FARMERS

SEED GUIDE 2023



North Dakota
CROP IMPROVEMENT
& SEED ASSOCIATION



TABLE OF CONTENTS

BARLEY.....	4
DURUM	10
FLAX.....	14
HARD RED SPRING WHEAT	18
HARD RED WINTER WHEAT	22
OAT	26
PULSE CROPS.....	30
RYE.....	34
SOYBEAN	36



ENHANCING NORTH DAKOTA AGRICULTURE THROUGH THE PRODUCTION, PROMOTION, AND DISTRIBUTION OF PURE SEED.

Established in 1929, North Dakota Crop Improvement and Seed Association (NDCISA) is a non-profit organization. NDCISA works closely with the Experiment Stations, State Seed Department, the Extension Service, and seed growers to promote general crop improvement practices and increase varieties best adapted to the state, and to make seed easily available to farmers.

We actively support research, extension, and educational programs. We encourage the development and implementation of practical and scientific crop production practices and serve as a communication link for North Dakota crop producers in legislative matters.

NDCISA is a non-profit organization striving to improve crop practices to make seed readily available for farmers. We are researching and educating to advance crop production practices. We help crop producers with legislative matters. North Dakota Crop Improvement & Seed Association is focused on uniting the agricultural community.



PRODUCTION



PROMOTION



DISTRIBUTION

FINEST SEED

**WITH BEST
RESULTS**



BARLEY

ABI CARDINAL

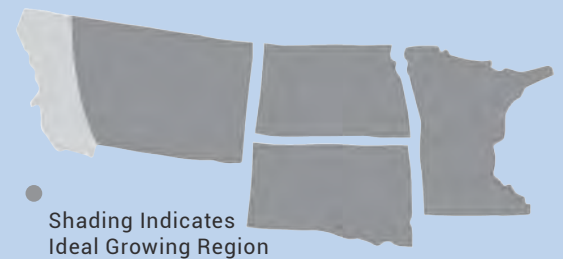


ABI Cardinal barley was developed by the Anheuser-Busch breeding program. ABI Cardinal is a midseason maturing two-row spring malting barley widely adapted to midwestern US. It has good yield potential, moderate straw length, moderate straw strength, good plumpness, and good foliar disease resistance. ABI Cardinal has lower DON and protein accumulation in the kernel.



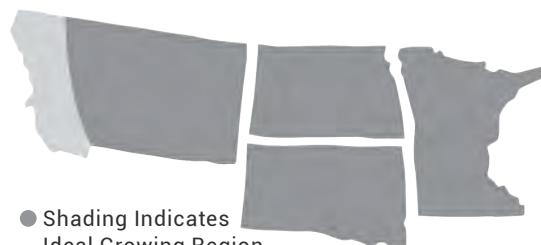
CHARACTERISTICS

Yield: **High**
Straw Strength: **Moderate**
Height: **Medium**



CDC AUSTENSON

- 2-Row Feed
- Large Kernels With High Test Weight
- Resistant to Stem Rust



CHARACTERISTICS

Yield: **High**
Straw Strength: **Strong**
Maturity: **Long**
Height: **Medium**



CDC BOW

- 2-Row Malt
- High Test Weight and Kernel Weight
- Resistant to Stem Rust



CHARACTERISTICS

Yield: **High**
 Straw Strength: **Strong**
 Maturity: **Medium**
 Height: **Short**



CDC FRASER

- 2-Row Malt
- Good Malting Characteristics
- Low Protein



CHARACTERISTICS

Yield: **High**
 Stem Strength: **Strong**
 Kernels: **Large Plump**



NOTES

CDC MAVERICK

- 2-Row Forage
- Smooth Awned for Improved Palatability
- Large, Plump Kernels
- High Test Weight, Kernel Weight and Protein
- Medium Resistant to Stem Rust
- Intermediate Resistance to FHB and DON Accumulation



CHARACTERISTICS

Yield: **High**
 Stem Strength: **Strong**
 Maturity: **Medium**
 Height: **Tall**



RAWSON

- 2-Row Feed
- Very Large Kernel



CHARACTERISTICS

Yield: **Good**
 Straw Strength: **Strong**
 Maturity: **Medium**
 Height: **Medium**



TRADITION

- 6-Row Malt
- Excellent Agronomic Performance
- Strong Straw Strength



CHARACTERISTICS

Yield: **High**
 Stem Strength: **Strong**
 Maturity: **Medium**
 Height: **Medium-Short**



2022 DRYLAND BARLEY VARIETY TRIAL CARRINGTON (CREC)

						PROTIEN			YIELD		
VARIETY	DAYS TO HEADING	PLANT HEIGHT	LODGING	PLUMP	THIN	2022	3-YR. AVG.	TEST WEIGHT	2022	2-YR. AVG.	3-YR. AVG.
INCHES			0-9	%	%	%		LB/BU	BU/A		
TWO ROW											
CONLON	46.3	30.6	6.3	96.4	0.5	11.69	13.4	48.4	78.6	61.4	67.1
PINNACLE	47.5	32.2	2.8	95.9	0.9	10.22	11.9	48.2	78.5	64.4	70.7
ND GENESIS	49.5	33.0	2.0	94.7	0.8	10.07	12.0	46.4	87.0	68.8	71.6
AAC SYNERGY	51.0	32.4	2.8	95.7	0.6	10.91	13.2	48.8	94.0	73.2	77.1
EXPLORER	49.5	26.7	3.0	93.2	0.7	10.82	13.3	47.7	85.5	68.1	73.2
BREWSKI	50.0	31.7	2.3	96.4	0.5	10.95	--	46.7	87.8	69.3	--
ABI CARDINAL	51.0	31.1	2.8	95.4	0.6	10.74	--	48.1	85.3	71.6	--
CDC AUSTENSON	53.5	33.2	2.8	92.1	0.8	10.83	--	52.6	89.7	71.4	--
SIX ROW											
TRADITION	47.0	33.3	2.0	95.3	0.8	11.77	13.6	48.5	81.9	67.5	73.6
MEAN	49.8	31.2	2.9	94.5	0.8	10.9	--	48.1	85.1	--	--
C.V. (%)	1.6	5.9	29.2	2.1	39.8	4.5	--	2.1	8.6	--	--

PLANTING DATE = MAY 23; HARVEST DATE = AUGUST 17; PREVIOUS CROP = SOYBEAN



SERVICE 365

THROUGHOUT THE GROWING SEASON
AND ALL YEAR LONG



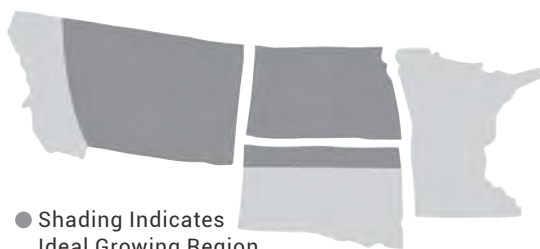
HIGH-QUALITY **DURUM** WITH THE OPTIONS **YOU NEED**



DURUM

AAC CABRI

- Solid Stem
- Resistant to Common Bunt as well as Stem, Leaf and Stripe Rust
- Low Grain Cadmium



CHARACTERISTICS

Yield: **High**
 Straw Strength: **Strong**
 Maturity: **Long**
 Height: **Medium**

Developed by Agriculture & Agri-Food Canada, Swift Current

AAC SPITFIRE

- Resistant to Common Bunt as well as Stem, Leaf and Stripe Rust
- Low Grain Cadmium



CHARACTERISTICS

Yield: **High**
 Straw Strength: **Strong**
 Maturity: **Medium**
 Height: **Medium**

Developed by Agriculture & Agri-Food Canada, Swift Current

AAC STRONGHOLD



- **SOLID STEM**
- Resistant to Common Bunt as well as Stem, Leaf and Stripe Rust
- Low Grain Cadmium



CHARACTERISTICS

Yield: **High**
 Straw Strength: **Strong (Solid Stem)**
 Maturity: **Medium**
 Height: **Medium**

Developed by Agriculture & Agri-Food Canada, Swift Current

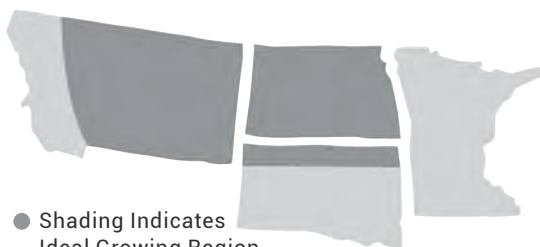


DURUM

CDC DEFY



- Good Quality
- Resistant to Common Bunt and Leaf Rust
- Good Lodging Tolerance



● Shading Indicates
Ideal Growing Region

CHARACTERISTICS

Yield: **High**

Disease: **MS for FHB**

Maturity: **Medium**

Height: **Tall**



ND GRANO

- Low Grain Cadmium
- Good Quality



● Shading Indicates
Ideal Growing Region

CHARACTERISTICS

Yield: **High**

Stem Rust: **Resistant**

Leaf Rust: **Resistant**

Test Weight: **High**



ND RIVELAND

- Low Grain Cadmium
- Good Quality



● Shading Indicates
Ideal Growing Region

CHARACTERISTICS

Yield: **High**

Stem Rust: **Resistant**

Leaf Rust: **Resistant**

Test Weight: **High**

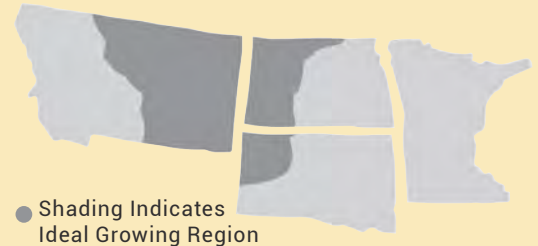


ND STANLEY



ND Stanley durum is a new variety developed at North Dakota State University (NDSU) in Fargo North Dakota by Dr. Elias Elias and his breeding team. This variety has extremely high yield, combined with strong straw and excellent protein. ND Stanley also has a strong disease package, and excellent end use quality durum millers are looking for. Take a look at the data and you will see that ND Stanley would be a good fit for any durum producer in the region.

CHARACTERISTICS

Yield: **High**Stem Rust: **Resistant**Leaf Rust: **Resistant**Test Weight: **High**

NDSU NORTH DAKOTA
STATE UNIVERSITY

2022 DURUM VARIETY TRIAL AT MINOT (NCREC)

VARIETY	DAYS TO HEAD	PLANT HEIGHT	LODGING	TEST WEIGHT	PROTEIN	GRAIN YIELD				
						2019	2020	2022	2 YEAR AVG	3 YEAR AVG
	DAP ¹	INCHES	0-9 ²	LBS/BU	%	BU/A				
ND STANLEY	52	38	1	60.7	13.3	43.9	78.0	83.8	80.9	68.6
MOUNTRAIL	52	38	2	58.0	13.8	55.3	70.0	78.6	74.3	68.0
ND GRANO	51	37	1	60.2	13.5	50.9	66.8	83.2	75.0	67.0
ND RIVELAND	51	41	2	59.5	13.1	36.5	67.7	77.7	72.7	60.6
DIVIDE	54	41	2	58.7	13.0	56.7	54.2	69.0	61.6	60.0
TCG BRIGHT	52	38	1	59.6	11.9	50.2	53.0	76.0	64.5	59.7
AAC STRONGHOLD	51	36	1	59.1	13.7	--	64.8	80.2	72.5	--
CDC DEFY	50	38	0	60.2	12.9	--	--	78.9	--	--
AAC SPITFIRE	50	35	1	57.5	14.5	--	--	72.5	--	--
TRIAL MEAN	51	38	1	59	13	49	65	78	--	--
C.V.%	2.4	5.0	72	1.5	5.6	13.2	6.7	6.2	--	--

¹DAP = DAYS AFTER PLANTING.

²LODGING: 0 = NONE, 9 = LYING FLAT ON THE GROUND.

NO-TILL PLANTED ON MAY 28 WITH A SEEDING RATE OF 1.5 MILLION PLS/A AND HARVESTED ON SEPTEMBER 7.

PREVIOUS CROP: 2018, 2019 & 2021 = SOYBEAN. SOIL TYPE: WILLIAMS LOAM

FLAX SEED OPTIONS YOU CAN RELY ON



FLAX

AAC BRIGHT

- Moderately Resistant to Flax Wilt
- Good Lodging Resistance
- Resistance to Flax Rust



Yield: **High**

Straw Strength: **Strong**

Maturity: **Long**

Height: **Tall**

Seed Color: **Yellow**

Developed by Agriculture & Agri-Food Canada, Swift Current

CDC GLAS

- Moderately Resistant to Fusarium Wilt
- Resistance to Flax Rust
- Good Lodging Resistance



CHARACTERISTICS

Yield: **High**

Straw Strength: **Strong**

Maturity: **Long**

Height: **Tall**

Seed Color: **Brown**



This unique system, NDCISA, a non-profit organization, allows for the highest quality and affordable seed for generations to come. Having foresight and vision for the future of farming, our board has made valuable decisions to help advance pure seed production and promotion. We are deeply rooted in the preservation of farming and the future it holds.

TROY COONS: NDCISA PRESIDENT



CDC ROWLAND



CDC Rowland flax was developed at the Crop Development Centre of University of Saskatchewan in Saskatoon, Saskatchewan. CDC Rowland is a large, high yielding brown seeded flax variety with very good lodging resistance and later maturity.

CHARACTERISTICS

Yield: **High**

Maturity: **Late**

Seed Color: **Brown**

Seed Size: **Large**



GOLD ND

- Excellent Yield
- Good Oil Content and Oil Quality
- Good Tolerance to Flax Wilt
- Resistant to Flax Rust

CHARACTERISTICS

Yield: **High**

Seed Color: **Yellow**

Maturity: **Medium**

Height: **Medium Tall**



ND HAMMOND

- Resistant to Flax Rust
- Good Oil Quality
- Resistant to Flax Wilt



CHARACTERISTICS

Yield: **High**
 Seed Color: **Brown**
 Maturity: **Medium**
 Height: **Medium**

NDSU NORTH DAKOTA
STATE UNIVERSITY

2022 FLAX VARIETY AT LANGDON (LREC)

VARIETY	DAYS TO FLOWER	PLANT HEIGHT	TEST WEIGHT	LODGING	YIELD				
					2020	2021	2022	2 YEAR AVG.	3 YEAR AVG.
		INCHES	LBS/BU	0-9			BU/A		
AAC BRIGHT	51	29	51.0	0.0	51.4	21.0	62.4	41.7	44.9
AAC MARVELOUS	49	28	53.9	0.1	--	21.7	63.7	42.7	--
CARTER	48	28	53.7	0.4	43.4	21.0	56.6	38.8	40.3
CDC DURADO	49	29	53.9	0.1	37.6	18.3	54.5	36.4	36.8
CDC GLAS	50	29	52.9	0.0	49.6	21.1	64.7	42.9	45.1
CDC KERNEN	51	29	53.7	1.8	--	--	57.2	--	--
CDC NEELA	50	29	53.7	0.5	43.4	21.7	59.2	40.5	41.4
CDC ROWLAND	49	29	53.4	0.1	--	20.7	68.2	44.5	--
GOLD ND	51	31	52.6	0.6	47.7	20.5	55.6	38.1	41.3
ND HAMMOND	48	32	53.0	0.0	39.5	21.0	58.4	39.7	39.6
OMEGA	50	27	53.8	1.9	40.2	20.9	50.1	35.5	37.1
WEBSTER	51	30	54.0	0.0	45.5	23.1	58.7	40.9	42.4
YORK	48	31	53.6	0.0	47.9	20.4	63.4	41.9	43.9
TRIAL MEAN	50	30	53.5	0.6	45.4	21.3	57.9	--	--
C.V. %	1.5	3.3	0.7	130.6	5.2	5.0	5.0	--	--

PLANTING DATE: MAY 27 HARVEST DATE: OCTOBER 10 PREVIOUS CROP: WHEAT

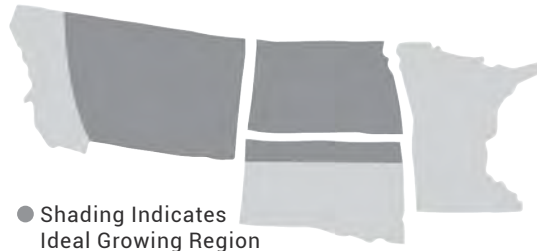
PROVIDING THE HIGHEST QUALITY SEED



HRSW

HARD RED SPRING WHEAT

AAC BRANDON



● Shading Indicates
Ideal Growing Region

CHARACTERISTICS

Height: **Short**

Yield: **High**

Stem Rust: **MR**

Leaf Rust: **MS**

Head Scab: **MR**

Test Weight: **High**

Developed by Agriculture &
Agri-Food Canada, Swift Current

AAC STARBUCK VB



AAC Starbuck VB is a very high yielding **semi-dwarf** spring wheat with good lodging resistance and is rated MR to Fusarium head blight. AAC Starbuck VB is also tolerant to the orange wheat blossom midge. AAC Starbuck VB is well-adapted to the wheat growing regions across North Dakota, Eastern Montana, and Northwest Minnesota. Certified seed of AAC Starbuck VB will be sold as a varietal blend made up of 90% AAC Starbuck and 10% AAC Brandon. AAC Brandon provides a refuge area for non-

virulent midge to survive at low levels, thereby extending the useful life of the Sm1 midge tolerant gene.

AAC Starbuck will be marketed as certified seed only (CSO).

This method will maintain the midge resistance going into the future. See our website for further information regarding orange wheat blossom midge stewardship.

CHARACTERISTICS

Yield: **High**

Protein: **High**

Test Weight: **High**

Straw Strength: **Good**



● Shading Indicates
Ideal Growing Region

Developed by Agriculture &
Agri-Food Canada, Swift Current

HRSW

NDCISA



HARD RED SPRING WHEAT

ND FROHBURG



- Good Straw Strength
- Excellent Disease Package
- Strong End-Use Quality



CHARACTERISTICS

Yield: **High**
 Stem Rust: **MR**
 Leaf Rust: **MS**
 Head Scab: **MR**
 Test Weigh: **High**

NDSU NORTH DAKOTA STATE UNIVERSITY

ND HERON



ND Heron is a new hard spring wheat variety from Dr. Andrew Green's wheat breeding program at North Dakota State University (NDSU). ND Heron has a competitive yield package coupled with high test weight and protein. It has excellent end-use quality that processors expect from a NDSU variety. ND Heron has good disease resistance to fusarium head blight (FHB), bacterial blight, and common rust races. ND Heron is a wheat variety that is targeted for the western 1/2 of ND and SD, and a large portion of Montana. ND Heron spring wheat would be a good fit for any spring wheat producer in that area.



CHARACTERISTICS

Yield: **High**
 Stem Rush: **MR**
 Leaf Rush: **MS**
 Head Scab: **MR**
 Test Weigh: **High**

NDSU NORTH DAKOTA STATE UNIVERSITY

HARD RED SPRING WHEAT

HRSW

ND VITPRO

- Improved Straw Strength
- High Protein and Test Weight
- Bright Vitreous Kernel



CHARACTERISTICS

Yield: **High**Straw Strength: **Medium-Strong**Maturity: **Medium Early**Height: **Medium**
NDSU NORTH DAKOTA
STATE UNIVERSITY

2022 HRSW STATEWIDE YIELD TRIAL (NDSU)

VARIETY	LOCATIONS								
	CARRINGTON	CASSELTON	HETTINGER	LANGDON	MANDAN	MINOT	PROSPER	THOMPSON	RAY
AP MURDOCK	79.3	73.1	103.2	118.2	61.0	53.1	71.5	102.1	43.9
BOOST	59.7	67.0	87.0	92.5	56.2	55.0	63.4	91.9	55.4
FALLER	82.1	66.6	94.9	103.8	62.9	61.0	71.4	93.9	44.3
GLENN	66.0	66.4	90.8	81.7	53.4	58.3	62.3	92.4	48.1
ND FROHBERG	74.3	68.2	92.1	93.7	58.3	64.3	69.1	81.7	41.8
ND HERON	76.7	69.4	98.1	88.7	54.5	56.4	62.5	88.1	55.3
ND VITPRO	61.3	65.6	92.3	93.0	52.6	55.6	64.2	87.1	40.0
SY VALDA	65.0	72.7	103.8	90.4	63.0	55.6	67.6	102.7	44.1
YEILD MEAN (BU)	70.6	68.6	95.3	95.3	57.7	57.4	66.5	92.5	46.6

NOTES

**CHOSEN
TO PERFORM
TRUSTED
TO SUCCEED**



HRWW

HARD RED WINTER WHEAT

ND NOREEN



- Very High Test Weight
- High Protein
- Stem Resistance
- Excellent Winter Hardiness
- Resistant to Bacterial Leaf Streak



CHARACTERISTICS

Yield: **High**
 Straw Strength: **Excellent**
 Maturity: **Medium**
 Height: **Tall**

NDSU NORTH DAKOTA STATE UNIVERSITY

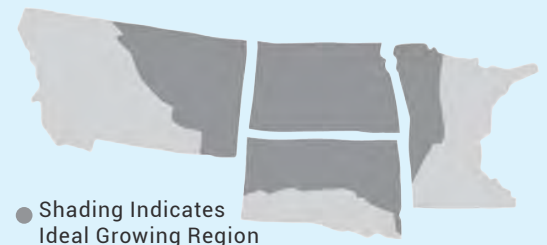
AAC GOLDRUSH



AAC Goldrush hard red winter wheat was developed at the Agriculture and Agri-Food Canada (AAFC) Lethbridge Research and Development Centre (LeRDC) in Lethbridge, AB. AAC Goldrush is a next generation, high yielding winter wheat with excellent winter hardiness, high yield, and good standability. This variety also has strong rust resistance, and is rated intermediate to fusarium head blight (FHB). AAC Goldrush would be a good choice for winter wheat producers in the region.

CHARACTERISTICS

Yield: **High**
 Straw Strength: **Excellent**
 Height: **Medium**
 Maturity: **Medium**



Developed by Agriculture & Agri-Food Canada, Swift Current

HRWW

NDCISA



HARD RED WINTER WHEAT

2022 HRWW STATEWIDE AGRONOMIC DATA (NDSU)

VARIETY	AGENT OR ORIGIN	YEAR	REACTION TO DISEASE ¹		
			STRIPE RUST	LEAF RUST	STEM RUST
AAC WILDFIRE	AAFC	2015	1	5	8
JERRY	ND	2001	8	3	1
ND NOREEN	ND	2020	3	3	1
SY MONUMENT	AGRIPRO	2014	3	3	1
SY WOLVERINE	AGRIPRO	2019	4	3	1
WB 4309	WB	2019	4	6	4

¹DISEASE REACTION SCORES FROM 1-9, WITH 1 = RESISTANT AND 9 = VERY SUSCEPTIBLE, NA = NOT AVAILABLE

²DAYS TO HEADING RELATIVE TO JERRY

³STRAW STRENGTH: 1 = STRONGEST, 9 = WEAKEST BASED ON FIELD OBSERVATIONS FROM LIMITED SITES

⁴RELATIVE WINTER HARDINESS RATING: 1 = EXCELLENT, 10 = NO SURVIVAL

VALUES ARE SUBJECT TO CHANGE AS ADDITIONAL INFORMATION BECOMES AVAILABLE

2022 HRWW STATEWIDE YIELD TRIAL (NDSU)

VARIETY	CASSELTON		CARRINGTON		LANGDON	
	2022	3-YR. AVG.	2022	2-YR.1 AVG.	2022	3-YR. AVG.
(BU/A)						
AAC WILDFIRE	74.4	85.5	76.7	65.4	70.4	--
JERRY	89.6	92.3	83.7	64.6	81.1	69.9
ND NOREEN	103.3	101.1	86.0	65.2	84.9	73.4
SY MONUMENT	80.5	87.8	83.9	65.2	60.6	60.6
SY WOLVERINE	70.8	89.2	74.2	59.3	50.1	58.1
WB4309	86.6	--	87.7	--	69.1	--
MEAN	84.2	91.2	82.0	63.9	69.4	65.5
CV (%)	8.9	--	6.6	--	9.5	--

¹CARRINGTON AND WILLISTON 2-YR. AVG. (2020 AND 2022)

HARD RED WINTER WHEAT

REACTION TO DISEASE ¹		DAYS TO HEADING ²	STRAW STRENGTH ³	HEIGHT (INCHES)	WINTER ⁴ HARDINESS
SCAB	TAN SPOT				
4	6	1	3	29	3
8	8	0	5	32	3
3	4	0	4	31	3
8	8	-2	4	27	3
4	3	-5	4	25	4
7	4	-2	NA	26	NA

HETTINGER		MINOT		WILLISTON		AVG. N.D.	
2022	3-YR. AVG.	2022	3-YR. AVG.	2022	2-YR. ¹ AVG.	2022	2/3-YR. AVG.
(BU/A)							
93.8	--	65.4	--	38.7	42.8	69.9	--
88.3	60.4	68.8	65.3	22.9	33.4	72.4	64.3
94.1	62.2	59.7	67.0	35.7	37.9	77.3	67.8
89.7	63.9	72.0	71.7	26.1	35.7	68.8	64.2
84.8	58.4	66.2	61.0	19.1	31.8	60.9	59.6
81.3	--	53.4	--	24.0	--	67.0	--
88.7	61.2	64.3	66.3	27.8	36.3	69.4	64.0
6.6	--	5.7	--	15.6	--	9.4	5.9

ADDING VALUE TO **YOUR FARM** WITH THE BEST OAT SEED OPTIONS



OAT

AAC DOUGLAS



AAC Douglas is a high β -glucan white hulled milling oat developed by Agriculture & Agri-Food Canada Cereal Research Centre in Winnipeg, Manitoba. This variety will be an industry leader with its high grain yield, strong short straw, and excellent milling quality coupled with very high groat percentage. AAC Douglas will replace several current milling oat varieties currently on the market today. This variety is rated resistant to smut and moderately resistant to oat crown rust and FHB. AAC Douglas has performed very well across all growing regions. Take a look at the data and you will see that AAC Douglas would be a variety well suited for producers looking for a high yielding grain oat.

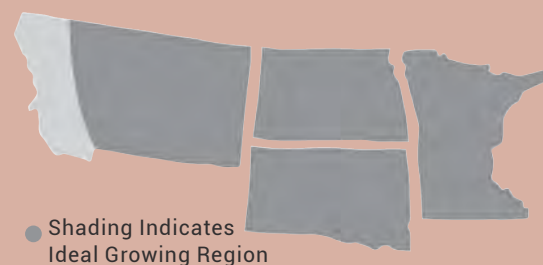
CHARACTERISTICS

Yield: **Very High**

Test Weight: **Very High**

Disease: **MR for Crown Rust**

Height: **Medium**



Developed by Agriculture & Agri-Food Canada, Swift Current

CDC HAYMAKER

- Good Forage Quality
- Forage Type
- Large Plump Seed



CHARACTERISTICS

Yield: **High**

Straw Strength: **Strong**

Maturity: **Late**

Height: **Tall**



JURY

- Grain or Forage Type
- Excellent Test Weight



● Shading Indicates
Ideal Growing Region

CHARACTERISTICS

Yield: **High**
 Straw Strength: **Medium**
 Maturity: **Medium**
 Height: **Tall**

NDSU NORTH DAKOTA
STATE UNIVERSITY

NEWBURG

- Grain or Forage Type
- Disease Resistance



● Shading Indicates
Ideal Growing Region

CHARACTERISTICS

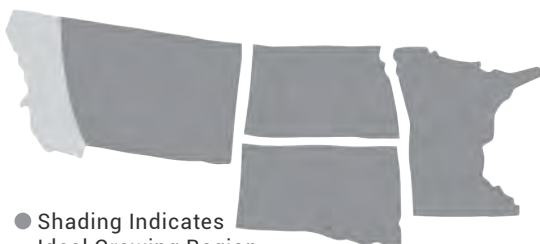
Yield: **High**
 Straw Strength: **Strong**
 Maturity: **Late**
 Height: **Medium**

NDSU NORTH DAKOTA
STATE UNIVERSITY

ORE3541M



- High Test Weight
- Resistant to Crown Rust and Smut
- Grain or Forage Type



● Shading Indicates
Ideal Growing Region

CHARACTERISTICS

Yield: **High**
 Straw Strength: **Strong**
 Maturity: **Average**
 Height: **Medium**

OAT
ADVANTAGE

ROCKFORD

- Grain or Forage Type
- High Test Weight



CHARACTERISTICS

Yield: **High**Straw Strength: **Strong**Maturity: **Late**Height: **Tall**

2022 OAT VARIETY TRIAL HETTINGER (HREC)

VARIETY	DAYS TO HEAD	PLANT HEIGHT	PLANT LODGE	TEST WEIGHT	GRAIN YIELD			AVERAGE YIELD	
	DAP ¹	INCHES	0-9 ²	LBS/BU	2020	2021	2022	2 YR	3 YR
BUSHELS PER ACRE									
AAC DOUGLAS	61	41	0	34.6	--	96.0	179.5	137.8	--
BEACH	61	41	0	37.2	44.9	63.0	153.3	108.1	87.1
CDC MINSTREL	62	38	0	33.3	47.8	72.6	175.5	124.0	98.6
CS CAMDEN	64	39	0	31.2	56.4	88.1	165.3	126.7	103.3
DEON	64	42	0	35.0	40.0	81.0	165.8	123.4	95.6
HIFI	63	42	0	34.7	50.6	68.7	165.5	117.1	94.9
JURY	62	44	0	34.1	48.2	80.5	165.1	122.8	97.9
MN PEARL	63	41		34.0	--	--	176.6	--	--
ND HEART	62	42	0	35.4	42.9	67.6	163.2	115.4	91.2
NEWBURG	65	39	0	32.8	40.5	78.2	164.5	121.4	94.4
ORE3541M	61	39	0	34.9	46.1	75.5	184.0	129.7	101.9
OTANA	63	43	0	35.0	42.9	81.9	168.0	124.9	97.6
ROCKFORD	63	42	0	36.3	55.9	86.7	162.9	124.8	101.8
SD BUFFALO	60	43	0	36.5	--	--	176.1	--	--
WARRIOR	61	40	0	35.4	47.4	91.1	171.3	131.2	103.3
PAUL (HULL-LESS)	64	43	0	43.0	32.9	44.3	121.9	83.1	66.4
MEAN	62.4	41.2	0	35.2	45.9	76.8	166.2	120.7	94.9
C.V. %	0.8	3.8	--	2.0	7.5	7.9	4.3	--	--

¹DAYS TO HEAD = THE NUMBER OF DAYS FROM PLANTING TO HEAD EMERGENCE FROM THE BOOT.²0 = NO LODGING, 9 = 100% LODGED.

PLANTING DATE: MAY 2

HARVEST DATE: AUGUST 15

PREVIOUS CROP: COVER CROP MIX

VARIETIES YOU CAN DEPEND ON FOR SUCCESS



PULSES



AVONDALE LENTIL

- Excellent Agronomic Performance
- High Seed Quality
- Excellent Standability



CHARACTERISTICS

Yield: **High**
 Type: **Medium Green**
 Maturity: **Medium**
 Height: **Medium**

Developed by USDA Pulse Program
 Pullman WA

HAMPTON FIELD PEA

- Good Resistance to Lodging
- Resistant to Fusarium Wilt
- Semi Dwarf
- Semi Leafless



CHARACTERISTICS

Yield: **High**
 Seed Color: **Green Cotelydon**

Developed by USDA Pulse Program
 Pullman WA

ND DAWN FIELD PEA

- Smooth Seed Coat
- Large Seed
- Average Protein
- Seed Type, Yellow Cotelydon



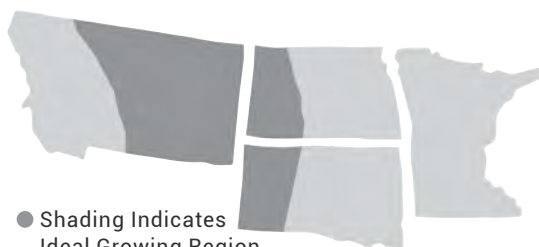
CHARACTERISTICS

Yield: **High**
 Standability: **Strong**
 Maturity: **Medium**
 Height: **Medium**

NDSU NORTH DAKOTA
 STATE UNIVERSITY

ND EAGLE LENTIL

- Excellent Agronomic Performance
- High Seed Quality
- Excellent Standability



CHARACTERISTICS

Yield: **High**
 Type: **Small Green**
 Maturity: **Medium**
 Height: **Medium**

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STATE UNIVERSITY

ND VICTORY



'ND Victory' is the first semi-leafless, green cotyledon field pea cultivar developed by the North Dakota State University Pulse Crops Breeding Program. This high yielding field pea has white flowers, with excellent plant height and standability. ND Victory is resistant to powdery mildew and moderately resistant to Ascochyta blight. ND Victory also has a low disease severity to Fusarium root rot. Overall ND Victory seed quality exceeds the industry standards with opaque seed coat, smooth round seed, and high protein. ND Victory has a protein content of 25.2%, exceeding the premium protein threshold of 24% that the processing industry is looking for. ND Victory will be a good fit for any green pea producers in the region.

CHARACTERISTICS

Yield: **High**
 Standability: **Strong**
 Height: **Tall**
 Maturity: **Late**



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STATE UNIVERSITY

PULSES

2022 FIELD PEA VARIETY TRIAL HETTINGER (HREC)

VARIETY	DAYS TO FLOWER	DAYS TO MATURE	CANOPY HEIGHT	LODGING	SEED PROTEIN	1,000 SEED WT.	SEEDS LB	TEST WEIGHT	SEED YIELD		
									2022	2-YR. AVG.	3-YR. AVG.
	DAP ¹	DAP ¹	INCHES	0 - 9 ²	%	GM	SEEDS	LB/BU	BUSHELS PER ACRE		
YELLOW COTYLEDON TYPE											
AAC ASHER	55	80	25	5	27.4	216	2100	62.3	34.0	31.1	32.9
AAC CHROME	57	81	25	4	26.9	206	2223	62.5	38.1	30.9	31.2
AAC JULIUS	57	81	25	4	28.4	168	2693	61.6	41.7	--	--
AAC PROFIT	58	82	26	5	29.0	194	2350	62.1	42.7	33.7	34.4
AGASSIZ	56	80	24	7	28.9	192	2365	62.1	39.1	31.6	31.7
CDC AMARILLO	58	82	27	3	27.2	195	2328	61.0	38.5	31.1	32.2
DS ADMIRAL	57	82	27	2	27.6	194	2342	63.0	48.6	35.8	32.6
DURWOOD	57	81	27	6	28.5	207	2209	61.6	40.9	33.0	31.7
KORANDO	54	79	25	7	28.6	225	2023	60.8	39.1	31.6	29.1
MS GROWPRO	58	82	27	7	29.9	252	1808	60.3	38.2	32.1	--
ND DAWN	57	80	23	7	26.8	194	2335	62.4	44.6	34.9	32.4
ORCHESTRA	56	80	26	7	30.2	225	2020	62.2	38.4	31.3	29.6
SALAMANCA	56	80	27	6	29.1	215	2113	61.9	46.6	36.1	33.1
GREEN COTYLEDON TYPE											
ARAGORN	54	78	21	8	27.9	162	2802	61.7	32.4	26.1	24.9
ARCADIA	56	82	22	8	27.2	159	2856	62.4	36.3	29.9	30.5
CDC STRIKER	56	80	24	5	29.0	212	2153	62.0	36.9	30.5	29.0
ND VICTORY	59	82	26	7	29.2	156	2905	63.1	40.1	--	--
SHAMROCK	58	82	24	6	28.3	189	2411	61.9	36.6	30.2	28.6
MS-20G1	59	83	28	6	27.6	216	2107	61.4	39.0	--	--
MEAN	57	81	25	6	28	199	2323	62	40	32	31
C.V. %	0.9	1.2	8.1	19.4	2.2	6.0	6.2	1.2	8.6	--	--

¹DAYS AFTER PLANTING.²LODGING: 0 = NONE, 9 = LYING FLAT ON GROUND.

PLANTING DATE: MAY 4

HARVEST DATE: AUGUST 8

PREVIOUS CROP: CORN

NOTES

PLANT PERFORMANCE HARVEST EXCELLENCE



RYE

ND DYLAN

- Improved Grain Production Over All Current Varieties
- Excellent Winter Hardness



CHARACTERISTICS

Yield: **High**
 Straw Strength: **Strong**
 Maturity: **Medium-Late**
 Height: **Tall**

NDSU NORTH DAKOTA STATE UNIVERSITY

ND GARDNER

- Forage/Cover Crop Type
- Fast Canopy Establishment



CHARACTERISTICS

Yield: **Good**
 Straw Strength: **Strong**
 Maturity: **Very Early**
 Height: **Tall**
 Winter Hardiness: **Very Good**

NDSU NORTH DAKOTA STATE UNIVERSITY



NDCISA is for the farmer/producer from start to finish. Our main goal is to provide and promote varieties that will give the farmer the best chance for success. NDCISA makes decisions to provide the best financial opportunity for the farmer, not the private industry or shareholders. Their success is with the farmer's success. The board consists of, the average farmer looking out for one another.

CAMERON WAHLSTROM: NDCISA SW DISTRICT DIRECTOR



SOYBEAN PRODUCTS BRED FOR YOUR FIELD



SOYBEAN

SOYBEAN

ND ROLETTE

- Purple Flower Color
- Gray Pubescence
- Tan Pod Color, Buff Hila With A Dull Seedcoat
- Good IDC Tolerance



CHARACTERISTICS

Yield: **High**Relative Maturity: **Early**Height: **Medium**Maturity Group: **00.7**
NDSU NORTH DAKOTA
STATE UNIVERSITY

ND17009GT

The appearance of ND17009GT includes a white flower, brown pod color, tawny pubescence, and black hila with a shiny seed coat luster. It has a high yield potential, is resistant to glyphosate, and is moderately tolerant to iron-deficiency chlorosis. This variety is a good fit for the northern areas of North Dakota because of its relative maturity of 00.9.

CHARACTERISTICS

Yield: **High**Relative Maturity: **Early**Height: **Medium**Maturity Group: **00.9**
NDSU NORTH DAKOTA
STATE UNIVERSITY


SOYBEAN

ND18008GT

- Glyphosate Resistance (GT)
- Aphid Tolerance
- Early Maturity
- CSO Variety



CHARACTERISTICS

Yield: **High**
 Relative Maturity: **Early**
 Height: **Medium**
 Maturity Group: **00.8**

NDSU NORTH DAKOTA
STATE UNIVERSITY

ND BENSON

- SCN Resistance
- Conventional Type
- White Flower Color
- Gray Pubescence
- Tan Pod Color And Buff Hila With Dull Seed Coat Luster



CHARACTERISTICS

Yield: **High**
 Relative Maturity: **Medium**
 Height: **Medium**
 Maturity Group: **0.4**

NDSU NORTH DAKOTA
STATE UNIVERSITY

ND DICKEY

- Medium IDC
- Purple Flower Color
- Gray Pubescence Color
- Tan Pods With Yellow Hila Color And Dull Seed Coat Luster



CHARACTERISTICS

Yield: **High**
 Relative Maturity: **Early**
 Height: **Medium**
 Maturity Group: **0.7**

NDSU NORTH DAKOTA
STATE UNIVERSITY

SOYBEAN

ND STUTSMAN

- Purple Flower Color
- Gray Pubescence
- Brown Pod Color And Yellow Hila With Dull Seed Coat Luster
- Resistant to Lodging



CHARACTERISTICS

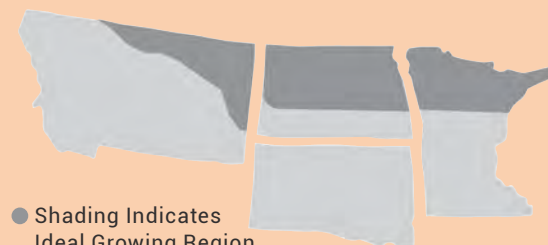
Yield: **High**Relative Maturity: **Medium-Late**Height: **Medium**Maturity Group: **0.7**
NDSU NORTH DAKOTA
STATE UNIVERSITY

ND21008GT20



Tested as (ND14-6120), ND21008GT20 is a 00.8 maturity glyphosate tolerant (GT) soybean with a high yield potential similar to 'ND17009GT', but has a much-improved tolerance to IDC with a score of 1.8. ND21008GT20 has a competitive yield package similar to many company RR2 types. ND21008GT20 is resistant to Race 4 of phytophthora root rot. It should be noted that ND21008GT20 is susceptible to Soybean Cyst Nematode. ND21008GT20 has purple flower color, tawny pubescence, brown pod with gray hila and dull seed coat luster.

CHARACTERISTICS

Yield: **High**Relative Maturity: **Early**Height: **Medium**Maturity Group: **00.8**
NDSU NORTH DAKOTA
STATE UNIVERSITY


SOYBEAN

NDCISA

ND2108GT73

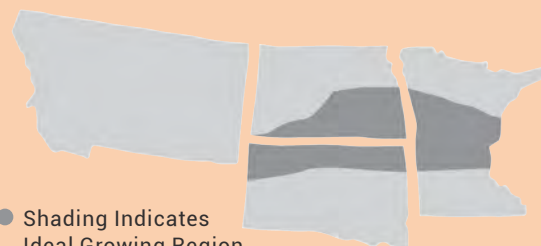


ND2108GT73 is the first NDSU GT soybean released that has a maturity suitable for central and southern North Dakota. ND2108GT73 has moderate tolerance to IDC with a score of 2.7 and is resistant to lodging. It should be noted that ND2108GT73 is susceptible to Soybean Cyst Nematode. ND2108GT73 has a white flower, tawny pubescence, brown pod color, dull seed coat, and yellow hila color. ND2108GT73 is a genetically modified organism with an off patent RR1 gene.



CHARACTERISTICS

Yield: **High**
Relative Maturity: **Late**
Height: **Tall**
Maturity Group: **0.8**



For a business to survive, it needs to adjust and change to remain relevant. Recently NDCISA has expanded its presence within the seed industry. Currently, NDCISA offers varieties not only from NDSU but from various states and Canada.

MARK SEASTRAND: NDCISA NE DISTRICT DIRECTOR



**RESEARCHING AND
EDUCATING TO ADVANCE CROP
PRODUCTION PRACTICES**

BRAND	VARIETY	TRAIT	MATURITY GROUP	MATURITY DATE	POD HEIGHT	PLANT HEIGHT
					INCHES	INCHES
NDSU	ND21008GT20	GT	00.8	9/4	3.0	28.6
NDSU	ND17009GT	GT	00.9	9/6	4.1	28.3
NK SEEDS	NK02-T4E3	E3	0.2	9/13	3.7	25.2
INTEGRA	70212	RR2XF	0.2	9/12	2.8	37.4
PROSEED	EL30-33	E3	0.3	9/13	3.5	28.3
STINE SEED	08EC32	E3	0.7	9/18	5.1	28.2
CHAMPION SEED	0743XL	RR2XF	0.7	9/18	5.7	27.9
LG SEEDS	LGS0701XF	RR2XF	0.7	9/17	5.5	31.7
DAIRYLAND SEED	DSR-0757E	E3	0.7	9/17	4.1	27.2
LEGACY SEEDS	LS092-22E	E3	0.8	9/15	4.7	26.4
NDSU	ND2108GT73	GT	0.8	9/19	5.1	29.3
MEAN	--	--	--	--	4.3	29.0
C.V. (%)	--	--	--	--	28.4	9.7

PLANTING DATE = MAY 26; HARVEST DATE = SEPTEMBER 27; PREVIOUS CROP = SPRING WHEAT

NOTES

NOTES

LEARN MORE ABOUT OUR VARIETIES

CONTACT YOUR LOCAL DEALER OR SCAN THE QR CODE TO
FIND A DEALER NEAR YOU. ndcropimprovement.com





BECOME A MEMBER

NDCISA encourages anyone interested in the certified seed industry to become a member. NDCISA's mission is to access the latest in cutting edge genetics best suited for your farm while actively supporting public breeding programs in the region with financial support. Your membership will allow access to new varieties, various advertising items to sell your seed, quarterly newsletters and reports generated for our members.

MEMBERSHIP

For more information about the organization and how to become a member visit our website at ndcropimprovement.com.



REGIONAL SEED DEALERS

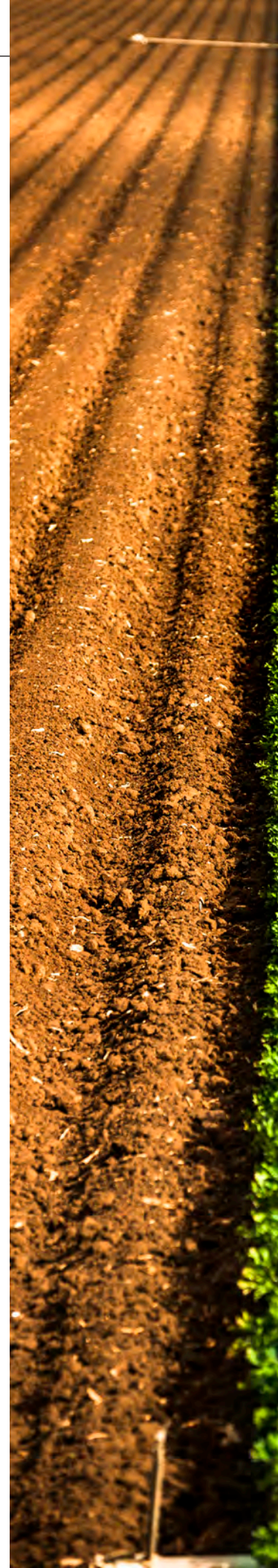
COUNTY

NAME, CITY

PHONE

Barnes	Broten Farms, Dazey	701-840-8082
Barnes	Muncy, Bruce, Dazey	701-840-2110
Barnes	Wittenberg Seed Farm, Valley City	701-490-0406
Benson	Herman Seed, Brinsmade	701-739-8332
Benson	Biby, Steve, Churchs Ferry	701-351-1304
Benson	Dulmage, Elizabeth, Leeds	701-351-2637
Benson	Haagenson, Lorin, Leeds	701-466-2814
Benson	Keller, Raphael, Leeds	701-740-8306
Benson	Reed, Derrick, Churchs Ferry	701-303-0447
Bottineau	Peterson, Darwin & Matt, Antler	701-263-1535
Bowman	Lutes, Jeff, Bowman	701-523-3803
Burke	Christiansen Farm Inc, Flaxton	701-596-3870

Burke	Overlee, Steve, McGregor	701-546-4213
Burleigh	Schatz, John B, Bismarck	701-320-7024
Burleigh	Schmitcke, Michael, Bismarck	701-250-8034
Cass	Buchholz Seed Farm, Durbin	701-730-2230
Cass	NDCISA, West Fargo	701-231-8067
Cass	Lockhart Elevator Company, Grandin	701-484-5537
Cass	Agronomy Seed Farm, Casselton	701-347-4743
Cavalier	Beck, Riley and Gary, Munich	701-370-8977
Cavalier	Dicks` Seed LLC, Munich	701-682-5151
Cavalier	Beck, Christopher, Munich	701-370-8585
Cavalier	Haraseth, Rodney, Nekoma	701-256-4510
Cavalier	McIntosh, Bradley, Hannah	701-283-5469
Divide	Anderson Seed and Grain LLC, Minot	701-839-8488
Divide	Larson, Kevin L, Alamo	701-641-9755
Divide	Norby, Carlyle M, Grenora	701-694-4411
Dunn	Flaget, William, Halliday	701-938-4688
Eddy	Seastrand, Mark, Sheyenne	701-720-8324
Foster	Carrington Res/Ext Center, Carrington	701-652-2951
Foster	Klein, Curtiss, Carrington	701-984-2669
Golden Valley	Zook, Michael, Beach	701-872-6109
Grand Forks	Stadstad, Wade, Emerado	218-779-9194
Grand Forks	Jodock, Karl, Northwood	218-779-6498
Grand Forks	Sproule Farms, Grand Forks	701-780-9616
Hettinger	Kouba, Carson, Regent	701-563-4412
Hettinger	Doe, Bryan, Regent	701-563-4333
Kidder	Schmaltz, John, Tappen	701-327-8343
LaMoure	Wald, David, Edgeley	701-493-2385
LaMoure	B & B Seed Farms, Jud	701-685-2263
LaMoure	Ketterling, Casey, Marion	701-367-7796
McHenry	Olson, Kellen, Anamoose	701-625-1171
McIntosh	Werth Seed Farm, Lehr	701-320-6976
McKenzie	Wahlstrom, Cameron, Alexander	701-770-6631
McKenzie	Wisness Ag Seed Service, Arnegard	701-770-1927
McKenzie	Signalness, Jason, Watford City	701-770-0926
McKenzie	Wahlstrom, Craig, Alexander	701-828-3051
McKenzie	Arnegard, Cameron, Arnegard	701-586-3542
McKenzie	Bruins, Steven, Arnegard	701-770-1713
McKenzie	Dahl, Nevin, Watford City	701-842-3907
McKenzie	Dwyer (Dan & Mike), Arnegard	701-400-4424
McLean	Johnson, Dwight, Roseglen	701-743-4230
McLean	Krebsbach, Chris, Max	701-661-0035
McLean	Doepke, Wes, Wilton	701-462-3576
McLean	Tweeten Seed Farm, Washburn	701-315-0112
Mercer	Miller, Max, Hazen	701-487-3616
Morton	Renner, Dennis J and Lance, Mandan	701-426-6944
Mountrail	C & C Farms LLP (Troy Coons), Donnybrook	701-482-7865
Mountrail	Bruhn, Jerimey, Blaisdell	701-822-2799
Nelson	Stein, Charles, McVillie	701-351-3643
Nelson	Ellingson, Terry A, Dahlen	701-384-6225



Nelson	Steffan, John, Michigan	701-247-3058
Nelson	Steffan, John & David, Michigan	701-259-2373
Oliver	Berg, David, Stanton	701-794-3767
Pembina	Wagner, William, Neche	701-520-2513
Pembina	Schluchter, Kent W, Cavalier	701-265-8879
Pierce	Teigen, David C, Rugby	701-208-1254
Pierce	Ostrem, Mark, Rugby	701-776-2878
Ramsey	Johnson, Allen, Devils Lake	701-662-8284
Ramsey	Webster Farms (Dan, Kallen, Evan), Penn	701-393-4328
Renville	Knutson, Brian/Matthew, Sherwood	701-459-2276
Renville	Gates Farm, Mohall	701-240-0500
Rolette	Lemieux, Mario, Rolette	701-550-9060
Sargent	Anderson Seed Farms Inc, Forman	701-680-2705
Sheridan	Saueressig, Kim, McClusky	701-460-0459
Slope	Nielsen, Stuart D, New England	701-579-4239
Stark	Hewson, Odis, Buffalo	605-375-3169
Towner	Lagein Farms, Rock Lake	701-266-5357
Towner	Reed, Rick, Cando	701-303-0287
Towner	Halley, Jeremiah, Bisbee	701-261-0714
Traill	Mueller Farms, Hillsboro	701-799-3032
Walsh	Berntson Seed Farm, Adams	701-331-1450
Walsh	Matejcek, Kent & Kevin, Bocket	701-259-2273
Walsh	Weinlaeder Seed Co, Drayton	701-454-6427
Walsh	Bina, Cameron, Lankin	701-593-6329
Ward	North Central Res/Ext Center, Minot	701-857-7677
Ward	Whillock, Dusty, Kenmare	701-389-2364
Ward	Diamond Plus Ranch & Seed, Minot	701-721-1272
Ward	Zablotney, Travis, Minot	701-721-2188
Ward	Genesis Seed Solutions LLC, Berthold	701-453-3687
Ward	Birdsall Grain & Seed LLC, Berthold	701-453-3300
Ward	Stafslie Perennial Farm (Tyler), Ryder	701-426-4028
Ward	Vangness, Stanley, Berthold	701-468-5520
Ward	Finken Farms & Seeds LLP, Douglas	701-529-4421
Ward	Knudsvig, Mark, Berthold	701-340-9877
Ward	Zaderaka Enterprises Inc, Minot	701-721-6832
Ward	Miller Golden Acres Inc (Doug), Kenmare	701-721-1107
Ward	Scheresky, Barry, Des Lacs	701-720-6123
Wells	Bibelheimer Farms Inc, Cathay	701-650-9997
Wells	Kutz, Luke, Sykeston	701-652-5478
Wells	Agronomy Solutions dba Hefty Seed, Hurdsfield	701-962-3343
Wells	Bollingberg, Kurt, Cathay	701-984-2486
Williams	Knox, Donald, Ray	701-570-2390
Williams	Mahlen, Luke, Williston	701-570-4790
Williams	Miller, Charles, Williston	701-570-1706
Williams	Williston Research Ext Center, Williston	701-774-4315
Williams	Anfinson, David, Williston	701-572-6497
Williams	Kupper, Jeff & Troy, Ray	701-568-2251
Williams	Graupe, Jeff, Williston	701-774-0093
Williams	Larson, Kyle, Grenora	701-694-8115



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