



To all current and past wheat or cover crop customers:

Receive a 5% discount on your corn, soybeans, or grain sorghum orders.

Cash and volume discounts are available for qualifying early orders.

We also offer financing options for your Kauffman Seeds purchases.



Kauffman Seeds

Kauffman Seeds entered the seed business in 1965, when founder Edward Kauffman began an alfalfa seed cleaning business. It was not long after its inception that Edward's daughter Lois and her husband Jerry Wyse took over in 1972, adopting new products to meet customer needs. Certified seed wheat was the first and arguably the most important addition to our business. Soybeans were added in the next decade to add more customer seed choices from a local seed source. The products we added in the early years of our business paved the way for us to better serve our local customer base.

Production agriculture began to venture into new biological technologies for farmers by the mid-1990s. Kauffman Seeds was involved in the very beginning of these new product launches. Our partnership with other seed companies allowed us to form Midland Genetics[®]. Through this partnership, we were able to bring Roundup Ready[®] Soybeans to local farmers in genetics that performed locally. That partnership also allowed us to bring the newest technologies and genetics to corn, grain sorghum, and forages. It was a true game-changer for us and our customers.

More changes came a decade later, as Tom Clayman and Dustin Miller purchased the business. Striving to bring new innovations that our customers needed for their success, cover crops were the next transformation for us and our customers. This allowed us to provide seed products that met the seed needs of our customers' entire farming operations. This diversity has allowed us to meet the changing landscape in this new century of agriculture while also staying true to delivering locally adapted products for our customers.

In January 2023, we lost Tom unexpectedly to cancer. It feels different with Tom not around, but the products and services we provide our customers are not different. Along with this shift in our day-to-day, we also made another change in our business. We officially began selling our corn, soybeans, grain sorghum, and forage sorghum products under the Kauffman Seeds brand in 2023, as the Midland Genetics[®] brand was retired. We continue to bring you the same great products adapted for our region, now in a Kauffman Seeds bag. Our focus is still the same today as it was in the beginning: providing the best-adapted quality products to meet your farm's goals for success.

TABLE OF CONTENTS

Kauffman Seeds Numbering System3	Sorghum Products	19
Technology/Herbicide Trait Tolerances4		
Corn Products		
Corn Chart9	Legal	27
Soybean Products	Wheat	28
Soybean Chart	Alfalfa	33

KAUFFMAN SEEDS NEW NUMBERING SYSTEM

CORN HYBRIDS: 112-34 PCE			
112 First Three Digits is Relative Maturity of Hybrid	3 Random Signifies Last Digit in Number Year of Release		PCE Trait Package
SOYBEAN VARIETIES: 39-23 XFS			
39 Signifies Maturity of the Soybean is a 3.9 RM, scale of 00-70	2 3 Random Signifies Last Digit in Number Year of Release		XFS Trait Package
GRAIN SORGHUM: 5643			
5 Highly Tolerant to Sugar Cane Aphid Grain Sorghum	64 Days to Mid Bloom		3 Signifies Last Digit in Year of Release

All Other Grain Sorghum's Starting Numeral is "4" (Sugar Cane Aphid Susceptible to Moderately Tolerant)

KAUFFMAN SEEDS OLD NUMBERING SYSTEM

	<u>LD NUMBERING</u>	0101211	
DRN: 662 TRE			
6 Maturity 1 - 9	6 Sequence 0 - 9	2 Release Year	TRE Traits
OYBEAN: 4660 E3S			
46 Signifies Maturity of the Soybean is a 4.6 RM, scale of 00-70	6 Sequence 0 - 9	O Release Year	E3S Traits
RAIN SORGHUM: 5710			
5 Grain Sorghum	7 Sequence 0 - 9	1 Sequence 0 - 9	O Release Year
orani sorgiluni	Sequence 0 7	ocquence o 7	Notage 1941
Other Grain Sorghum's Starting Numeral is "4" (Sugar	·	•	100000 100
	·	•	100000 700
Other Grain Sorghum's Starting Numeral is "4" <i>(Sugar</i>	·	•	100000 700
Other Grain Sorghum's Starting Numeral is "4" <i>(Sugar</i>	·	•	
Other Grain Sorghum's Starting Numeral is "4" <i>(Sugar</i>	·	•	

ORN TECHNOLOGIES		GLYPHOSATE Tolerance	GLUFOSINATE Tolerance
AGRISURE VIPTERA® 3110 / 3110 Agrisure Viptera®, Agrisure® CB/LL, and Agrisure® GT	Agrisure Liberty Viptera	•	•
DURACADEVIPTERA™ E-Z REFUGE® / DV DuracadeViptera™ E-Z Refuge®	DuracadeViptera	~	~
DURACADEVIPTERA™ ARTESIAN® / DVA DuracadeViptera™ E-Z Refuge® + Artesian®	DuracadeViptera Artesian	~	~
TRE RIB / TRE Trecepta [®] RIB Complete [®] Corn Blend	Trecepta°	~	×
PR RIB / PR VT Double PRO® RIB Complete® Corn Blend	VTDoublePRO°	~	×
SS RIB / SS SmartStax [®] RIB Complete [®] Corn Blend	SmartStax [®]	~	~
SSP SmartStax® PRO RIB Complete® Corn Blend	SmartStax PRO	~	~
POWERCORE ENLIST / PWE PowerCore® Enlist® Corn	POWERCÚRE ⇒ Enlist	V	•
POWERCORE ENLIST / PCE PowerCore® Enlist® Refuge Advanced® Corn	POWERCORE Description of the control of the contro	~	~

SOYBEAN TECHNOLOGIES		GLYPHOSATE TOLERANCE	GLUFOSINATE Tolerance
XFS XtendFlex® Soybeans with STS® herbicide tolerant trait	TENDFLEX. STS* herbicide tolerant trait	•	~
E3S Enlist E3 [®] Soybeans with STS [®] herbicide tolerant trait	Enlist #3 SOYBEANS STS* Refroide tolerant tolt	~	~
E3 Enlist E3 [®] Soybeans	Enlist E3	V	~

Contact your Kauffman Seeds, Inc. Representative to ask any other questions on herbicide tolerances for specific corn or soybean traits.



100-13

100 RM | Available As: C, PR, SS

CHARACTERISTICS		ENVIRONMENT	
Stalk	4	Central Dryland	✓
Root	4	Western Dryland	✓
Early Growth	5	Limited Irrigation	✓
Stay Green	6	Full Irrigation	

- 100 RM hybrid available with above and below ground traits
- Solid performance in Kansas for early dryland maturity
- Semi-flex ear type hybrid
- Adapts well to stressful environments
- Potential to be an early silage option

105-85

105 RM | Available As: TRE

CHARACTERISTICS		ENVIRONMENT	
Stalk	5	Central Dryland	
Root	4	Western Dryland	
Early Growth	4	Limited Irrigation	Ī
Stay Green	4	Full Irrigation	

- Excellent choice for an early hybrid planted in early spring for early fall harvest
- Semi-determinate ear type that is typically 16-18 kernels around
- Handles heat and drought stress well for an earlier maturity for Central Kansas
- Use caution with growth regulator herbicides for post spray application
- \bullet Plan to harvest timely due to late season stalk integrity after reaching maturity

111-16

111 RM | Available As: PR, SSP

CHARACTERISTICS		ENVIRONMENT	
Stalk	4	Central Dryland	✓
Root	4	Western Dryland	
Early Growth	4	Limited Irrigation	✓
Stay Green	4	Full Irrigation	✓

- New 111 RM VT Double PRO® RIB Complete® Corn Blend hybrid
- Excellent yield potential product for areas growing 110-115 RM hybrids
- Medium-tall plant with medium ear height
- Good stalks, roots, and Green Snap ratings
- Excellent heat and stress tolerance in early testing
- Good Southern movement for a 111 RM hybrid

112-26

112 RM | Available As: C, PCE

CHARACTERISTICS		ENVIRONMENT	
Stalk	4	Central Dryland	✓
Root	4	Western Dryland	
Early Growth	4	Limited Irrigation	✓
Stay Green	3	Full Irrigation	✓

- New 112 RM hybrid PowerCore® Enlist® Refuge Advanced® Corn
- Excellent yield upside allows for it to be planted in 115-120 RM hybrid zone
- Great ability for ear flex, allowing to be planted at lower populations
- Solid plant health, Stay Green, and Green Snap ratings
- Has the ability to be a solid silage option
- Stalks and roots are good, but not excellent

Ratings: 1-2 = Excellent, 3-4 = Good, 5-6 = Average, 7-8 = Fair, 9 = Poor | Trait Key: C = Conventional, PR = VT Double Pro® RIB Complete® Corn Blend,

SS = SmartStax® RIB Complete® Corn Blend, SSP = SmartStax® PRO RIB Complete® Corn Blend, TRE = Trecepta® RIB Complete® Corn Blend, PCE = PowerCore® Enlist® Refuge Advanced® Corn

NOTES			



112-34

112 RM | Available As: C, PCE

CHARACTERISTICS		ENVIRONMENT	
Stalk	4	Central Dryland	
Root	4	Western Dryland	
Early Growth	4	Limited Irrigation	
Stay Green	5	Full Irrigation	

- 112 RM hybrid PowerCore® Enlist® Refuge Advanced® Corn
- Widely adapted to Western Cornbelt Environments
- Great Ear Flex potential and Test Weight
- Built to handle stressful dryland conditions and performs well on irrigated acres
- Good Goss's Wilt and Green Snap Tolerance

113-05

113 RM | Available As: C, PCE

CHARACTERISTICS		ENVIRONMENT
Stalk	2	Central Dryland
Root	3	Western Dryland
Early Growth	4	Limited Irrigation
Stay Green	4	Full Irrigation

- Excellent yield potential product for areas growing 110-115 RM hybrids
- Excellent combination of stalk and root strength
- Excellent performance on sandy irrigated soils in testing
- Performs best on irrigated acres; but also has had solid results on better performing dryland acres
- Early season vigor is just above average; watch for areas with Goss's Wilt

662

113 RM | Available As: TRE

CHARACTERISTICS		ENVIRONMENT		
Stalk	4	Central Dryland	✓	
Root	3	Western Dryland		
Early Growth	4	Limited Irrigation	✓	
Stay Green	5	Full Irrigation	✓	

- Trecepta® hybrid that excels in Central Kansas
- Consistent performance in Central Kansas dryland ever since its product launch
- Medium-tall plant type with medium-high ear placement
- Very good roots and good stalks; excels in moderate plant populations
- Semi-determinate ear that is 16-18 kernels around on average
- Does not move into Western Kansas with average Goss's Wilt and Green Snap rating

114-25

114 RM | Available As: TRE

CHARACTERISTICS		ENVIRONMENT
Stalk	3	Central Dryland
Root	5	Western Dryland
Early Growth	5	Limited Irrigation
Stay Green	3	Full Irrigation

- Excellent choice for Central Kansas dryland and irrigated acres
- Great performance in testing on silty loam to clay soils
- Does not move into Western Kansas due to Goss's Wilt and Green Snap ratings
- Girthy, flex ear type that performs well at lower to moderate populations
- Good ratings for stalks, test weight, and drydown

Ratings: 1-2 = Excellent, 3-4 = Good, 5-6 = Average, 7-8 = Fair, 9 = Poor

Trait Key: C = Conventional, TRE = Trecepta® RIB Complete® Corn Blend, PCE = PowerCore® Enlist® Refuge Advanced® Corn

DTES	



672

114 RM | Available As: C, 3110, DV

CHARACTERISTICS		ENVIRONMENT	
Stalk 4		Central Dryland	
Root	4	Western Dryland	
Early Growth	4	Limited Irrigation	
Stay Green	3	Full Irrigation	

- Consistent yielding hybrid with above and below ground trait options
- Able to move across moderate to high yielding environments well
- Semi-flex ear hybrid that is a tall, robust plant
- Very good stalks and roots; Green Snap rating is historically good for this hybrid
- Very good ratings for continuous corn and Goss's Wilt
- Drought tolerance is good but will perform better under irrigation

116-36

116 RM | Available As: PCE

CHARACTERISTICS		ENVIRO
Stalk	3	Central Dryland
Root	4	Western Dryland
Early Growth	4	Limited Irrigation
Stay Green	3	Full Irrigation

- New 116 RM hybrid PowerCore® Enlist® Refuge Advanced® Corn
- Excellent irrigated corn hybrid for Kansas with a history of very good test weight and yield
- Excellent performance as a dual purpose hybrid for silage
- Semi-flex ear type allows for it to work at lower populations for irrigated acres
- Solid disease tolerance overall; still will respond to a fungicide application
- Stalk strength is very good and the roots are solid

116-65

NIULEC

116 RM | Available As: TRE

CHARACTERISTICS		ENVIRONMENT
talk	3	Central Dryland
Root	2	Western Dryland
Early Growth	4	Limited Irrigation
Stay Green	3	Full Irrigation

- High yield performance in 2023 and 2024 Kansas testing
- Tall plant type with girthy, flex ear
- Excellent stalk and root package for full season hybrid
- Best performance was on silty loam to clay soils under irrigation
- Goss's Wilt and Green Snap rating reduces its movement to Western Kansas

118-95

118 RM | Available As: TRE

CHARACTERISTICS	ENVIRONMENT		
Stalk	3	Central Dryland	
Root	4	Western Dryland	
Early Growth	4	Limited Irrigation	✓
Stay Green	3	Full Irrigation	√

- Full season hybrid that works well as a choice for grain or silage production
- Excels in tough yield environments and high yield potential yield environments
- Excellent performance on sandy loam to clay soils under irrigation
- Does not move well into Southwest Kansas due to Goss's Wilt and Green Snap ratings
- Full flex hybrid that can handle moderate up to medium-high plant populations

Ratings: 1-2 = Excellent, 3-4 = Good, 5-6 = Average, 7-8 = Fair, 9 = Poor | Trait Key: C = Conventional, 3110 = Agrisure Viptera® 3110, Agrisure® CB/LL, and Agrisure® GT,

DV = DuracadeViptera™ E-Z Refuge® + Artesian®, TRE = Trecepta® RIB Complete® Corn Blend, PCE = PowerCore® Enlist® Refuge Advanced® Corn

110120		





syngenta.

© 2025 Syngenta. Important: Always read and follow label instructions. Some products may not be registered for sale or use in all states or counties. Please check with your local extension service to ensure registration status. CruiserMaxx® and the Syngenta logo are trademarks of a Syngenta Cruis Company

WHAT HAPPENS BELOW THE **GROUND IS JUST AS IMPORTANT** AS WHAT HAPPENS ABOVE. Bare patches and poor stands are signs of seedlings under attack. CruiserMaxx® Vibrance® Cereals seed treatment harnesses the power of Cruiser® 5FS insecticide to fight insects, increase seedling vigor and improve stand establishment. Vibrance, a third fungicide, boosts crop establishment and enables faster growing plants through its Rooting Power, while paying particular attention to controlling Rhizoctonia. To learn more about CruiserMaxx Vibrance Cereals, visit www.SyngentaUS.com/CMVibranceCereals



syngenta.

© 2025 Syngenta. Important Always read and allow label instructions. Some products may not be registered for sale or me in all states or counties. Please check with your local extension service to ensure registration status. Cruiser®, CruiserMaxx®, Vibrance and the Syngenta logo are trademarks of a Syngenta Group Company.

GS 8882_1_1



	PRODUCT	RELATIVE MATURITY	TRAITS	GDD-BLACK Layer	DRYDOWN	DROUGHT Tolerance	EARLY Growth	PLANT HEIGHT	EAR HEIGHT	
	100-13	100	C, PR, SS	2410	4	2	5	MT	М	
	105-85	105	TRE	2546	3	3	4	М	М	
	350	108	DVA	2592	3	3	3	MT	М	
	429	110	C, PR, SS	2660	4	4	3	MT	М	
	442	111	PR	2670	7	3	3	М	М	
NEW	111-16	111	PR, SSP	2664	4	4	4	MT	М	
NEW NEW	112-26	112	C, PCE	2676	5	4	4	MT	М	
	112-34	112	C, PCE	2701	4	2	4	MT	М	
	113-05	113	C, PCE	2709	5	5	4	MT	М	
	559	113	C, PWE	2736	8	3	3	T	МН	
	662	113	TRE	2712	3	4	4	MT	MH	
	114-25	114	TRE	2764	3	4	5	MT	М	
	672	114	C, 3110, DV	2752	7	4	4	T	MH	
	114-84	114	C, PCE	2736	5	6	4	MT	MH	
NEW	116-36	116	PCE	2750	5	5	4	T	MH	
	116-65	116	TRE	2796	4	5	4	MT	МН	
	117-23	117	PR, SS	2808	7	4	5	MT	MH	
	118-95	118	TRE	2815	4	4	4	T	МН	

Trait Key: PR = VT Double PRO® RIB Complete® Corn Blend, TRE = Trecepta® RIB Complete® Corn Blend, SS = SmartStax® RIB Complete® Corn Blend, C = Conventional, 3110 = Agrisure Viptera® 3110, Agrisure® CB/LL, and Agrisure® GT,
PCE = PowerCore® Enlist® Refuge Advanced® Corn, PWE = PowerCore® Enlist®, DVA = DuracadeViptera™ E-Z Refuge® + Artesian®, DV = DuracadeViptera™ E-Z Refuge®

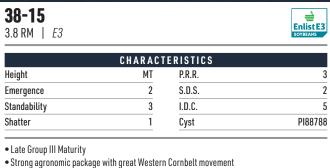
$\overline{}$



4 3 4 5 4 3 3 3 4 5 5 5 3 3 3 3 3 3 3 3	1 3 4 3 3 2 3 3 3 3 4 4 4 3 3	5 6 4 7 5 3 4 4 3 6 5 4 3 3	6 4 3 4 4 3 3 3 4 4 4 4	3 7 3 4 5 4 3 3 2 2 5 5 3 4 2	4 4 4 4 4 4 4 4 3 4 3 5 4 5	4 5 4 4 4 4 2 3 4 3 4 3		6 4 4 4 3 5 4 4 5 3 3 4 3	5 6 5 4 5 4 3 4 4 3 4 3 2 5 3 4 6 4 3 5 4 3 3 3 4 4	SF 5 6 SD 5 4 SF 5 4 SD 3 4 SF 4 4 SF 3 4 F 4 3 SF 2 5 SF 3 4 SF 6 4 SD 3 5 SF 4 3 SF 3 3 SF 4 4
---	-------------------------------	--	-------------------------	-------------------------------	--	-------------------------	--	---------------------------	---	--

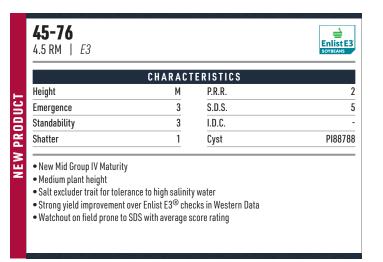
Ratings: 1-2 = Excellent, 3-4 = Good, 5-6 = Average, 7-8 = Fair, 9 = Poor, N/A = Rating Not Available | Plant Height: T = Tall, MT = Medium-Tall, M = Medium Ear Height: MH = Medium-High, M = Medium | Ear Flex: SD = Semi-Determinate, SF = Semi-Flex, F = Full-Flex

NOTES	



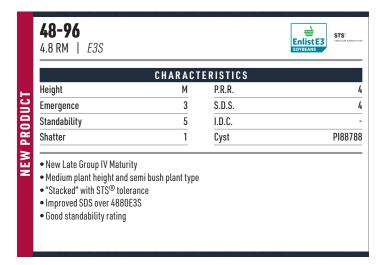
- Medium-tall plant height
- Excellent emergence and stress tolerance
- Salt excluder trait for tolerance to high salinity water

MT	ERISTICS	
2	S.D.S.	
3	I.D.C.	
1	Cyst	PI8878
	3	2 S.D.S. 3 I.D.C.



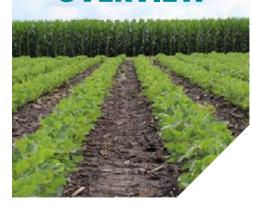
4660 4.6 RM <i>E3S</i>			Enlist E3 SOYBEANS
CH	IARACT	ERISTICS	
Height	М	P.R.R.	N
Emergence	4	S.D.S.	N
Standability	3	I.D.C.	
Shatter	1	Cyst	P18878
Mid Group IV Maturity Medium plant height "Stacked" with STS® tolerance Good standability Good performance on sandy loam s	oils		

Trait Key: E3S = Enlist E3® Soybeans with STS® herbicide tolerant trait, E3 = Enlist E3® Soybeans NOTES





ENLIST' WEED CONTROL SYSTEM OVERVIEW



NOTES

ON-TARGET APPLICATIONS: 90% less drift than traditional 2,4-D 96% less volatile than 2,4-D ester

Enlist Duo® and Enlist One® herbicides with Colex-D®

technology are the only herbicides containing 2,4-D



SOYBEANS

POWERCORE 🚔 Enlist

12,4-D choline

Glufosinate | Glufosinate

that are labeled for preemergence and postemergence use on Enlist® crops.

| FOP Herbicides **CORN** 12,4-D choline | Glyphosate

| Glyphosate

Convenient proprietary blend of 2,4-D choline and glyphosate The two modes of action work together to deliver control of yield-robbing weeds and help prevent resistance



- Straight goods 2,4-D choline with additional tank-mix flexibility
- Provides additional tank-mix flexibility with glyphosate, glufosinate and other qualified tank-mix products, allowing for a customized weed control program to fit each farm



Ratings: 1-2 = Excellent, 3-4 = Good, 5-6 = Average, 7-8 = Fair, 9 = Poor Trait Key: E3S = Enlist E3® Soybeans with STS® herbicide tolerant trait, E3 = Enlist E3® Soybeans

SOYBEAN

38-06 3.8 RM | XFS



CHARACTERISTICS			
Height	М	P.R.R.	5
Emergence	2	S.D.S.	4
Standability	3	I.D.C.	4
Shatter	1	Cyst	PI88788

- New Late Group III Maturity
- Medium plant height
- "Stacked" with STS® tolerance and salt "excluder" gene
- Good rating for IDC
- · Adapted to narrow row spacing and no-till

37 ⁻ Z3

3.9 RM | XFS



CHARACTERISTICS				
MT	P.R.R.	5		
4	S.D.S.	4		
4	I.D.C.	5		
1	Cyst	PI88788		
		MT P.R.R. 4 S.D.S. 4 L.D.C.		

- Late Group III Maturity
- Medium-tall plant type
- Has shown ability to excel in narrow row spacing
- Reliable performance across Kansas over multiple years
- Ability to be used on dryland and irrigated acres

41-26	TENDFLEX STS' SOYBEANS TOOGGISTION
4.1 RM <i>XFS</i>	SOYBEANS herbidde tolerant

CHARACTERISTICS				
Height	М	P.R.R.	3	
Emergence	3	S.D.S.	4	
Standability	3	I.D.C.	-	
Shatter	1	Cyst	PI88788	

- New Early Group IV Maturity
- Medium plant height and semi bush plant type
- Salt excluder trait for tolerance to high salinity water
- Strong yield performance versus checks in Western Data
- "Stacked" with STS® tolerance

NOTES

42-46	
/ O DI4	

4.2 RM | XFS



Height	М	P.R.R.	5
Emergence	3	S.D.S.	4
Standability	5	I.D.C.	7
Shatter	1	Cyst	Peking

- New Early Group IV Maturity
- Medium height plant
- Peking Soybean Cyst Nematoda Tolerance
- Strong performance history in Kansas tests
- Adapted to narrow row spacing and no-till

Ratings: 1-2 = Excellent, 3-4 = Good, 5-6 = Average, 7-8 = Fair, 9 = Poor **Trait Key:** XFS = XtendFlex® Soybeans with STS® herbicide tolerant trait



45-66

4.5 RM | XFS



CHARACTERISTICS				
Height	MT	P.R.R.	3	
Emergence	3	S.D.S.	4	
Standability	4	I.D.C.	-	
Shatter	1	Cyst	PI88788	

- New Mid Group IV Maturity
- Medium-tall plant type and full bush plant type
- Salt excluder trait for tolerance to high salinity water
- Great performance in multiple Kansas trial locations
- Good performance on multiple soil types

4.6 RM | XFS



CHARACTERISTICS				
Height	MT	P.R.R.	3	
Emergence	3	S.D.S.	5	
Standability	4	I.D.C.	-	
Shatter	1	Cyst	PI88788	

- Late Group IV Maturity
- Medium-tall plant type
- Full bush plant that branches aggressively
- Performs well on loam to heavy clay soils
- Keep off sandy soils and areas that need a Salt "excluder"

TENDFLEX STS SOYBEANS

CHARACTERISTICS				
Height	T	P.R.R.	4	
Emergence	3	S.D.S.	5	
Standability	4	I.D.C.	5	
Shatter	1	Cyst	PI88788	

- Late Group IV Maturity
- Tall plant type
- Salt excluder trait for tolerance to high salinity water
- Excellent double crop option
- Adapts to narrow row and no-till practices well







	CHARACT	ERISTICS	
Height	MT	P.R.R.	4
Emergence	2	S.D.S.	6
Standability	4	I.D.C.	5
Shatter	1	Cyst	PI88788

- Late Group IV Maturity
- Medium-tall plant type
- Salt excluder trait for tolerance to high salinity water
- Adapts well to no-till and narrow row spacing
- Excellent option for double crop acres

Ratings: 1-2 = Excellent, 3-4 = Good, 5-6 = Average, 7-8 = Fair, 9 = Poor Trait Key: XFS = XtendFlex® Soybeans with STS® herbicide tolerant trait

NOTES

SOYBEAN

	PRODUCT	STS®	RM	неіснт	EMERGENCE	STANDABILITY	SHATTER	P.R.R.	S.D.S.	I.D.C.	CYST	HIGHLIGHT
				En	list E3 ⁰	® Soybe	eans	Enlist	E3® Sc	ybean	s with STS® I	herbicide tolerant trait
	38-15		3.8	MT	2	3	1	3	2	5	PI88788	Versatile product with salt "excluder" gene
	42-34	✓	4.2	MT	2	3	1	4	5	-	PI88788	Enlist variety with yield potential and solid traits
NEW	45-76		4.5	М	3	3	1	2	5	-	PI88788	New high performing product with salt "excluder" gene
	4660	✓	4.6	М	4	3	1	N/A	N/A	-	PI88788	Works on light soils, "stacked" with STS®, salt "excluder"
NEW	48-96	✓	4.8	М	3	5	1	4	4	-	PI88788	New double crop option, "stacked" with STS®
						Xten	dflex®	Soybea	ans witl	n STS®	herbicide to	lerant trait
	36-05	✓	3.6	MT	2	3	1	5	4	5	PI88788	Salt "excluder" variety that is widely adapted product
NEW I	38-06	✓	3.8	М	2	3	1	5	4	4	PI88788	New widely adaptable late group three maturity
	39-23	✓	3.9	MT	4	4	1	5	4	5	PI88788	Salt "excluder" line adapted to irrigated and dryland
NEW	41-26	✓	4.1	М	3	3	1	3	4	-	PI88788	New Salt "excluder" line adapted to irrigated and dryland
NEW NEW	42-46	✓	4.2	М	3	5	1	5	4	7	Peking	New Peking SCN tolerant line for Central Kansas
	42-24	✓	4.2	MT	2	3	1	5	3	4	PI88788	Salt "excluder" line with SDS tolerance and yield
NEW	45-66	✓	4.5	MT	3	4	1	3	4	-	PI88788	New Salt "excluder" line adapted to irrigated and dryland
	46-45	✓	4.6	MT	3	4	1	3	5	-	PI88788	Variety "stacked" with STS® that performs on dryland
	47-65	✓	4.7	T	3	4	1	4	5	5	PI88788	Salt "excluder" line that excels under irrigation
	48-85	✓	4.8	MT	2	4	1	4	6	5	PI88788	Salt "excluder" line adapted to dryland or irrigated
									Conv	ention/	al	
	C49-21S	✓	4.9	MT	1.5	1.5	2.0	1.5	2.0	N/A	-	"Stacked" with STS®, excellent emergence rating

NOTES		

Verification Required The last patent on the original Roundup Ready® soybean trait expired a few years ago and U.S. farmers may legally plant saved seed from some varieties of soybean containing the Roundup Ready® soybean trait. However, it is important that you check with your seed supplier to determine if a specific Roundup Ready® soybean variety is covered by other intellectual property rights, and if so, the policy for saving seed of that variety.

Higher Seeding Rate A higher seeding rate may be required for bin-run Roundup Ready® soybeans compared to new branded seed.

Yield Loss Roundup Ready 2 Yield® soybean, Roundup Ready 2 Xtend® soybean, and XtendFlex® soybean varieties typically have a higher yield opportunity than Roundup Ready® soybean varieties.

Cleanout Loss Loss of seed and/or shrink occurs during the seed cleaning and handling processes for bin-run seed.

Seed Treatment Costs Treating your seed will add costs—both the cost of the treatment and the application of that treatment.

Lost Income Every bushel of saved seed you plant is a bushel you're not selling as commodity grain.

Increased Seed Management If you plan to save and bin-run Roundup Ready® soybeans for planting, you will have to manage your harvest operations and grain storage so that the seed isn't co-mingled with other seed that's covered by intellectual property rights.

High Value of New Branded Seed

Latest Technology

- // High-yielding soybean technologies
- // Better variety options
- // Leading seed treatment options

Customer Service

- // Dealer agronomic support before and after the sale
- // Replant policy support
- // Convenient packaging and delivery

Reliable Germination and Quality

- // Rigorously tested and meets
 U.S. Federal Seed Act requirements
- // Free of seed-borne diseases
- // Properly stored and conditioned

For a list of Bayer's trait patents go to cs.bayerpatents.bayer.com

For questions regarding seed intellectual property, or to anonymously report a saved seed tip, you can contact Bayer in the following ways:

- 1. Call 1-866-99-BAYER
- 2. Send a letter: Trait Stewardship, 622 Emerson Road, Suite 150, Creve Coeur, MO 63141
- 3. Submit a contact request at cropscience.bayer.us/contact or scan the QR code







Bayer is a member of the Seed Innovation and Protection Alliance. Visit www.seedipalliance.com to learn more. SIPA™ is a trademark of the Seed Innovation and Protection Alliance.

Bayer is a member of Excellence Through Stewardship® (ETS). Bayer products are commercialized in accordance with ETS Product Launch Stewardship Guidance, and in compliance with Bayer's Policy for Commercialization of Biotechnology-Derived Plant Products in Commodity Crops. Commercialized products have been approved for import into key export markets with functioning regulatory systems. Any crop or material produced from this product can only be exported to, or used, processed or sold in countries where all necessary regulatory approvals have been granted. It is a violation of national and international law to move material containing biotech traits across boundaries into nations where import is not permitted. Growers should talk to their grain handler or product purchaser to confirm their buying position for this product. Excellence Through Stewardship® is a registered trademark of Excellence Through Stewardship.

ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS. It is a violation of federal and state law to use any pesticide product other than in accordance with its labeling. NOT ALL formulations of dicamba or glyphosate are approved for in-crop use with Roundup Ready 2 Xtend® soybeans. NOT ALL formulations of dicamba, glyphosate or glufosinate are approved for in-crop use with products with Xtendflex® Technology. ONLY USE FORMULATIONS THAT ARE SPECIFICALLY LABELED FOR SUCH USES AND APPROVED FOR SUCH USE IN THE STATE OF APPLICATION. Contact the U.S. EPA and your state pesticide regulatory agency with any questions about the approval status of dicamba herbicide products for in-crop use with Roundup Ready 2 Xtend® soybeans or products with Xtendflex® Technology.

Roundup Ready® Technology contains genes that confer tolerance to glyphosate. Roundup Ready® 2 Technology contains genes that confer tolerance to glyphosate. Roundup Ready 2 Xtend® soybeans contain genes that confer tolerance to glyphosate and dicamba. Products with XtendFlex® Technology contain genes that confer tolerance to glyphosate, glufosinate and dicamba. Glyphosate will kill crops that are not tolerant to glyphosate. Dicamba will kill crops that are not tolerant to dicamba. Glufosinate will kill crops that are not tolerant to glyphosate. Ontamba will kill crops that are not tolerant to glyphosate. Ontact your seed brand dealer or refer to the Bayer Technology Use Guide for recommended weed control programs.

Contact your Bayer retailer, refer to the Bayer Technology Use Guide, or call the technical support line at 1-888-283-6847 for recommended Roundup Ready® Xtend Crop System weed control programs.

Bayer, Bayer Cross, Roundup Ready 2 Xtend®, Roundup Ready 2 Yield®, Roundup Ready® and XtendFlex® are registered trademarks of Bayer Group. LibertyLink® and the Water Droplet Design® is a trademark of BASF Corporation. ©2022 Bayer Group. All rights reserved.





With Exceed® brand inoculant you can always count on quality, reliable products at a great price with exceptional service.

Whichever crop you are planting, Visjon Biologics manufactures inoculant formulations for all legumes.

Soybeans

Exceed® SAR for Soybeans with Cell Armor Technology

- An increase of 3.8 bushels over the non-inoculated control was demonstrated in replicated Midwest trial locations.
- •By disrupting the life cycle of the J1 and J2 soybean cyst nematode, Exceed® SAR can alter the effect the nematode has on young soybean plants.
- •Enables the seed to germinate quickly and stimulates plant hormones responsible for root formation and development.

Package size: 1x500, 2x250 and 4x50



- Excellent choice for superior inoculation.
- Boasts one of the highest bacteria counts in the industry to maximize soybean yields. Package size: 1x200 and 4x50



Exceed® Granulated Peat for Soybeans

- The first choice for virgin soils to soybeans, high pH soils, or climates with limited rainfall or irrigation.
- Applied directly into the seed trench furrow.
- Specially formulated to flow evenly and consistently through application equipment. Package size: 40 lb bag and 520 lb tote

Exceed® STIC for Soybeans

• Created to increase seed adhesion, thus improving nodulation and performance in the field. Package size: 1500# and 300# Treat size

Exceed® Peat for Soybeans

Package size: 1500# and 300# Treat size







Pulse Crops

Forage Crops

Exceed® SAR for Garbanzo Beans

- •By disrupting the life cycle of the nematode, Exceed® SAR can alter the effect the nematode has on young garbanzo plants.
- •The Exceed® SAR mode of action enables the seed to germinate quickly and stimulates plant hormones responsible for root formation and development.

Package size: 1x200 and 4x50

Exceed® Traditional Liquid for Peas & Lentils

- Excellent choice for superior inoculation.
- Boasts one of the highest bacteria counts in the industry to maximize pea & lentil yields.

Package size: 1x200 and 4x50



Exceed® Granulated Peat for Pulse Crops

- The first choice for virgin soils to pulse crops, high pH soils, or climates with limited rainfall or irrigation.
- Applied directly into the seed trench furrow.
- Specially formulated to flow evenly and consistently through application equipment.

Package size: 40 lb bag and 520 lb tote

Exceed® STIC for Pulse Crops

• Created to increase seed adhesion, thus improving nodulation and performance in the field.

Package size: 1500# and 100# Treat size

Exceed[®] Peat for Pulse Crops

Package size: 1500# and 100# Treat size



Exceed® PreCoat

Advantages of Exceed® PreCoat

- Increased yields
- Increased nutrient use efficiency
- Superior seed adhesion

Specifications of Exceed® PreCoat

- •Exceed® PreCoat for Alfalfa guarantees a minimum of 300 million (3 x 10°) viable cells per gram.
- Exceéd® PreCoat for True Clover and Alfalfa/True Clover Combination guarantees a minimum of 100 million (1 x 10°) viable cells per gram.
- Compatible with most fungicide and insecticide seed treatment chemistries.
- Compatible with commercial seed treaters.
- Available for: Alfalfa Sweet Clover, True Clover, Alfalfa/True Clover Combination both in Bulk and *100# treat size to increase your flexibility when ordering.

Package size: 5,000# and *100# Treat Size

*Alfalfa/True Clover Combination Only

Exceed® Peat

EXCEED® Peat for Alfalfa, True Clover, Bird's Foot Trefoil,
Arrowleaf, Subterranean Clover, Sainfoin, Garden
Combination, Lupine and Crownvetch. All Visjon Biologics
Peat products, excluding Lupine and Crownvetch, are OMRI Listed.
Specialty strains also available.

Package size: Varies by product





5563

100-105 Days | Grain Sorghum

Stalk Strength	3
Drought Stress	2
SCA Tolerance	2

- Medium-early maturity
- Excellent Sugar Cane Aphid tolerance
- Semi-open bronze to cream head type in medium-short height plant
- Bred to handle tough environments
- Keep populations 10-15% higher in heavy residue with cooler soil temperatures

Medium-early maturity

5583

Stalk Strength Drought Stress

SCA Tolerance

• Excellent Sugar Cane Aphid tolerance

100-105 Days | Grain Sorghum

- Semi-open bronze head type in a medium height plant type
- Excels in tougher yield environments
- Stalks and roots are excellent

5603

100-105 Days | Grain Sorghum

CHARACTERIS	1168
Stalk Strength	2
Drought Stress	2
SCA Tolerance	2

- Medium-early maturity
- Excellent Sugar Cane Aphid tolerance
- Excellent stalk strength; thrives in tougher environments
- Semi-open head type with above average head exertion
- Potential for double crop in South Central Kansas

5605IG

100-105 Days | Grain Sorghum



2

2

CHARACTERISTIC	CS
Stalk Strength	4
Drought Stress	2
SCA Tolerance	4

CHARACTERISTICS

- Medium-early maturity
- Early maturing igrowth® hybrid for help with grass control
- Great option for double crop acres
- Handles drought stress really well
- Solid tolerance for sugarcane aphids

Ratings: 1-2 = Excellent, 3-4 = Good, 5-6 = Average, 7-8 = Fair, 9 = Poor

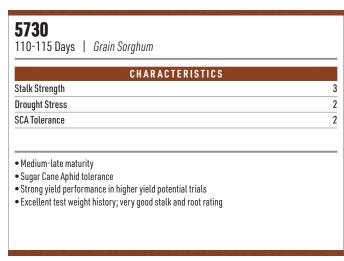
NOTES



5643 105-110 Days | Grain Sorghum CHARACTERISTICS Stalk Strength Drought Stress 2 **SCA Tolerance** 2 Medium maturity • Excellent Sugar Cane Aphid tolerance • Excellent standability and early seedling vigor • Good performance in stressful environments • Semi-open head type with good test weight

105-110 Days	J J	
	CHARACTERISTIC	\$
Stalk Strength		
Drought Stress		
SCA Tolerance • Medium maturity id	rrowth [®] hvbrid	

5710 105-110 Days | Grain Sorghum CHARACTERISTICS Stalk Strength 2 Drought Stress 3 2 SCA Tolerance Medium maturity • Highly tolerant to Sugar Cane Aphids • Excellent top-end yield potential for maturity • Excellent stalks and roots; FHB tolerance



NOTES		

Super Sioux

Medium-Early | Hay & Grazing Hybrids - Conventional

Hay Yield	3
Silage	N/A
Drought	2
Regrowth	3

- 55 days to boot stage on average
- Semi-sweet stalks
- Excellent regrowth
- Great quality for haying or grazing

Superb GrazeMedium | Hay & Grazing Hybrids - Conventional

CHARACTERISTICS		
Hay Yield	3	
Silage	N/A	
Drought	2	
Regrowth	3	
Regrowth		

- Sorghum-Sudangrass
- 65 days to boot stage average
- Male sterile hybrid
- Solid conventional hybrid for haying and grazing systems

Gun Smoke II

Late | Hay & Grazing Hybrids - Conventional

CHARACTE	RISTICS
Hay Yield	2
Silage	N/A
Drought	1
Regrowth	2

- Sorghum-Sudangrass
- 90 days to boot stage on average
- Good leaf to stem ratio
- Works well planted late
- Shows good tolerance to high salinity soils and irrigation water



IOTES	

Kritter Kandy II Medium-Early | Hay & Grazing Hybrids - BMR

CHARACTERISTICS		
Hay Yield	3	
Silage	N/A	
Silage Drought	2	
Regrowth	3	

- BMR Sorghum-Sudangrass
- 55 days to boot stage on average
- Excellent forage quality
- Excellent regrowth
- Highly palatable forage product for cattle

Shorty II

Medium | Hay & Grazing Hybrids - BMR

CHARACTERISTICS		
3		
3		
1		
1		

- BMR 6 Sorghum-Sudangrass
 Brachytic dwarf for maximum leaf area and standability
- Medium-late maturity
- BMR for improved digestibility and palatability
- Tonnage surpasses that of many non-brachytic dwarf hybrids

Sensation

PPS | Hay & Grazing Hybrids - BMR PPS

CHARACTERISTICS		
Hay Yield	1	
Silage	2	
Drought	1	
Regrowth	2	

- Photoperiod sensitive Sorghum-Sudangrass
- BMR 6 for improved hay quality and digestibility
- Excellent drought tolerance
- Works well for haying, grazing, or even a silage option



NOTES	

808 II

Late | Silage - BMR

CHARACTERISTICS		
Hay Yield	2	
Silage	1	
Silage Drought	2	
Regrowth	5	

- BMR 6 Forage Sorghum
 Consistent yields on irrigated and dryland acres
- High digestibility with BMR 6 trait
- Brachytic dwarf for maximum leaf area and standability
- Very high leaf to stem ratio along with excellent drought tolerance

815

Medium-Early | Silage - BMR

CHARACTERISTICS		
Hay Yield	7	
Silage	2	
Silage Drought	2	
Regrowth	5	

- BMR 6 Forage Sorghum
 Short statured early maturing silage product
- Excellent standability
- Great option for double crop silage



816W

Medium-Early | Silage - Conventional

CHARACTERISTICS		
Hay Yield	7	
Silage	2	
Silage Drought	3	
Regrowth	5	

- NEW Conventional Forage Sorghum
 Grain yield with forage tonnage makes high silage quality
- Widely adaptable to dryland and irrigated acres
 Can be utilized in double crop silage scenarios
- White/Cream grain colored head

Datinger 1-2	= Evcallant	3-1/ = Good	5-4 = Average	7-8 = Fair	Q = Doc

NOTES			



PRODUCT	DAYS TO 1/2 Bloom	RELATIVE MATURITY	HEIGHT HEAD TYPE G		GRAIN COLOR	STALK Strength	DROUGHT STRESS	SCA Tolerance						
	GRAIN SORGHUM													
4595	56-58	95-100 Days	30-36	Semi-Open	Red	3	2	2						
5563	56-58	100-105 Days	30-36	Semi-Open	Bronze	3	2	2						
5482	58-60	100-105 Days	48-52	Semi-Open	Bronze	3	2	2						
5583	56-58	100-105 Days	46-51	Semi-Open	Bronze	2	2	2						
5603	58-60	100-105 Days	42-47	Semi-Open	Red	2	2	2						
5605IG	59-61	100-105 Days	45-55	Semi-Compact	Red	4	2	4						
5643	63-65	105-110 Days	44-49	Semi-Open	Bronze	2	2	2						
5653IG	64-66	105-110 Days	36-44	Semi-Open	Red	3	2	2						
5710	64-66	105-110 Days	49-53	Compact	Bronze	2	3	2						
5727	70-74	110-115 Days	40-46	Semi-Open	Red	2	3	2						
5730	69-71	110-115 Days	49-53	Compact	Red	3	2	2						
5740	70-72	110-115 Days	53-57	Compact	Red	3	4	2						
				FOOD GRADE										
5745W	58-62	100-105 Days	40-45	Semi-Open	White	3	2	4						
5781W	66-68	110-115	45-50	Semi-Compact	White	3	4	4						

	PRODUCT	TRAIT	USAGE	DAYS TO BOOT	MATURITY	AVERAGE SEED SIZE	PLANTING RATE	HEIGHT AT BOOT	HAY Yield	SILAGE	DROUGHT	REGROWTH		
	HAY AND GRAZING HYBRIDS													
	Super Sioux	Conventional	H, G	55-60	ME	18-22,000	20-30 lb.	5-6 ft	3	N/A	2	3		
	Superb Graze	Conventional	H, G	65-70	М	20-24,000	15-25 lb.	7-8 ft	3	N/A	2	3		
	Gun Smoke II	Conventional	H, G, S	88-93	L	26-30,000	11-16 lb.	11-13 ft	2	N/A	1	2		
	Hay N Graze II	Conventional	H, G, S	PPS	PPS	12-14,000	23-38 lb.	9-11 ft	1	1	2	2		
	Kritter Kandy II	BMR	H, G	55-65	ME	19-21,000	18-32 lb.	5-6 ft	3	N/A	2	3		
	Kandy Graz II	BMR	H, G, S	55-60	ME	14-16,000	17-30 lb.	5-6 ft	3	3	1	2		
	Shorty II	BMR	H, G, S	65-70	М	13-15,000	18-34 lb.	5-6 ft	3	3	1	1		
	Bossy Bites	BMR	H, G, S	85-90	L	16-18,000	20-34 lb.	8-9 ft	2	N/A	1	1		
	Big Bale III	BMR	H, G	75-80	ML	15-17,000	21-35 lb.	7-8 ft	2	N/A	1	3		
	Sensation	BMR PPS	H, G,S	PPS	PPS	13-15,000	18-32 lb.	9-11 ft	1	2	1	2		
	Guardian	BMR PPS	H, G,S	PPS	PPS	14-16,000	18-32 lb.	10-12 ft	1	1	2	1		
					S	ILAGE HYBRID	8							
	808 II	BMR	S, GC	68-74	L	13-16,000	4-10 lb.	7-8 ft	2	1	2	5		
	815	BMR	S, GC	57-61	ME	17-19,000	4-10 lb.	5-6 ft	7	2	2	5		
NEW	816W	Conventional	S, GC	60-65	ME	15-17,000	4-10 lb.	5-6 ft	7	2	3	5		
				H	IYBRID AND \	/ARIETAL MILLI	ET PRODUCTS	3						
	Hybrid Pearl Millet	Conventional	H, G	40-60	ME	50-60,000	8-15 lb.	5-6 ft	2	N/A	1	2		
	Graze King BMR HPM*	BMR	H, G	40-65	ME	50-60,000	8-15 lb.	4-6 ft	2	N/A	1	2		
	German "R" Millet	Conventional	H, G	40-50	E	180-250,000	7.5-20 lb.	2-5 ft	4	N/A	1	9		

*HPM: HYBRID PEARL MILLET

RATINGS: 1-9, 1 = BEST | N/A = RATING NOT AVAILABLE | USAGE: H = HAY, G = GRAZING, S = SILAGE, GC = GREEN CHOP MATURITY: E = EARLY, ME = MEDIUM-EARLY, M = MEDIUM, ML = MEDIUM-LATE, L = LATE, PPS = PHOTOPERIOD SENSITIVE

COVER CROPS

SPRING

Spring Triticale

- · Cool season grass
- Upright plant
- High water use and good salinity tolerance
- · Excellent regrowth
- Very good forage quality and quantity
- Will form arbuscular mycorrhizal associations

Spring Barley

- · Cool season grass
- Upright plant
- Low water use and good salinity tolerance
- Benefits from arbuscular mycorrhizal association
- Very good forage production
- · Very good nitrogen scavenger

Black Oats

- Cool season grass
- · Winter cereal for Zone 8 and warmer
- Very fibrous root mass and tillers well
- Very good biomass production
- · Works as a spring planted crop in
- colder climates · Very durable residue when it
- reaches maturity

Spring Oats

- · Cool season grass
- Upright plant
- Medium water use and fair salinity tolerance
- Will form arbuscular mycorrhizal associations
- · Very good nitrogen scavenger
- Very good forage quality

Safflower

- Warm season broadleaf
- Upright plant
- · High water use and good salinity tolerance
- Deep rooting plant that can aid in reducing soil compaction
- Effective at reclaiming mobile nutrients deep in the soil profile
- Will form arbuscular mycorrhizal associations and flowers attract pollinators

Lentils

- Cool season legume
- · Upright and spreading plant
- · Low water use
- · Poor salinity tolerance
- Forms arbuscular mycorrhizal associations
- · Self pollinated, but flowers may attract pollinators

Yellow Field Peas

- Cool season legume
- Upright plant
- Low water use
- · Poor salinity tolerance
- Flowers attract pollinators
- Forms arbuscular mycorrhizal associations

Spring Forage Peas

- · Cool season legume
- Upright plant
- · Low water use
- · Poor salinity tolerance
- Flowers attract pollinators
- Forms arbuscular mycorrhizal associations

AC Greenfix (chickling vetch)

- · Cool season legume
- · Very good nitrogen producer
- Good forage production
- · Very efficient with moisture
- Short season plant, can produce up to 134# at 72 days of growth

SUMMER

Sunn Hemp

- Warm season legume
- Upright plant
- Tolerates poor, sandy, droughty soils and requires good drainage
- · Has a strong taproot with many welldeveloped lateral roots
- Very good nitrogen producer
- Can produce 6-7 tons of dry matter per acre

Laredo Soybeans

- Warm season legume
- · Upright and spreading plant
- Medium water use
- · Black seeded, pure forage soybean
- · Self pollinated, but flowers may attract pollinators
- Forms arbuscular mycorrhizal associations

Cowpeas

- Warm season legume
- Upright and spreading plant (vine)
- · Low water use
- Poor salinity tolerance
- Flowers attract pollinators
- Forms arbuscular mycorrhizal associations

Mungbeans

- Warm season legume
- Upright and spreading plant (vine)
- · Low to medium water use
- Poor salinity tolerance
- Forms arbuscular mycorrhizal associations
- Self pollinated

Sunflowers

- · Warm season broadleaf
- Upright plant
- High water use and fair salinity tolerance
- Deep rooting plant that can aid in reducing soil compaction
- Effective at reclaiming mobile nutrients deep in the soil profile
- Will form arbuscular mycorrhizal associations and flowers attract pollinators

Sorghum Sudangrass

- · Warm season grass
- Upright plant
- Medium water use
- Fair salinity tolerance
- Benefits from arbuscular mycorrhizal associations
- · Self pollinated by the wind

Pearl Millet

- · Warm season grass
- Upright plant
- Low water use
- Good protein content
- · Self pollinated by the wind
- Will form arbuscular mycorrhizal associations

- Warm season legume
- · Very good heat tolerance and drought tolerance
- 90-120 day maturity
- Good salinity tolerance
- Forms arbuscular mycorrhizal associations

German "R" Millet

- · Warm season, grass
- Annual
- Upright plant type
- Low water use
- · Poor salinity tolerance
- Forms arbuscular mycorrhizal associations

FALL

Subterranean Clover

- Leaume
- · Reseeding cool season annual
- · Excellent weed and erosion suppressor
- Prostrate very dense plant growth
- Forms seed pods at, or below ground level

Annual Ryegrass

- · Cool season grass
- · Annual or perennial types
- Medium water use
- Fair salinity tolerance
- Will form arbuscular mycorrhizal associations
- · Very good nitrogen scavenger

Phacelia

- Cool season broadleaf
- Upright plant
- · Low water use and low salinity tolerance
- Very fibrous roots and good nitrogen
- catch crop
- Will form arbuscular mycorrhizal associations

· Attracts beneficial insects

- Buckwheat • Cool season broadleaf with warm season
- growth characteristics
- Upright plant • Medium water use and poor salinity tolerance
- Enhances soil P availability · Does not form arbuscular
- mycorrhizal associations

· Attracts pollinators very well

- Oil Seed Radish
- Cool season broadleaf (Brassica)
- Upright and spreading plant • High water use and poor salinity tolerance
- · Very good nitrogen scavenger
- · Can aid in reducing compaction • Does not form arbuscular

mycorrhizal associations

- Turnips
- · Cool season broadleaf (Brassica)
- Upright and spreading plant
- High water use and poor salinity tolerance
- Good at scavenging nitrogen
- Good forage production • Does not form arbuscular

mycorrhizal associations

- **Dwarf Essex Rape**
- Cool season broadleaf
- Belongs to the cabbage family · High protein and high energy level feed
- Very cold, heat and drought tolerant • Valuable feed source when other crops are
- in a summer slump

· Good nutrient scavenger

- Hybrid Forage Brassicas • Works well in fall and spring plantings, as well
- · High protein and high energy level feed
- Usually very cold, heat, and drought tolerant · Bred specifically for forage production
- and grazing · Very good regrowth after grazing
- · Very good RFV

Ethiopian Cabbage

- · Unique multipurpose brassica cultivar
- · Very good biofumigant Very fast growing
- Generally flowers in 60 days
- · Effective taproot
- Up to 5,000 lb. DM/acre

WINTER

Austrian Winter Peas

- · Cool season legume
- Upright plant
- · Low water use
- · Poor salinity tolerance
- Flowers attract pollinators
- Forms arbuscular mycorrhizal associations

Common Vetch

- Cool season legume
- Annual or biennial
- Prostrate plant
- Low to medium water use and poor salinity tolerance
- Forms arbuscular mycorrhizal associations
- Flowers attract pollinators

Hairy Vetch

- Cool season legume
- Annual or biennial
- Prostrate plant
- Low to medium water use and poor salinity tolerance
- Forms arbuscular mycorrhizal associations
- · Flowers attract pollinators

Lupins

- · Cool season legume
- Upright plant
- Low water use
- · Prefers acid soils
- Flowers attract pollinators
- Does not form arbuscular mycorrhizal associations

Winter Barley

- Cool season grass
- Upright plant
- Low water use and good salinity tolerance
- Benefits from arbuscular mycorrhizal associations
- Very good forage production
- · Very good nitrogen scavenger

Winter Triticale

- Cool season grass
- Upright plant
- High water use and good salinity tolerance
- Excellent regrowth
- Very good forage quality and quantity
- Will form arbuscular mycorrhizal associations

Winter Oats

- Cool season grass
- Walken oats have enough cold tolerance to survive our winters for the last 6 years
- ${\mbox{\footnote{in}}}$ Very good early and late forage production
- Medium water use and fair salinity tolerance
- Very good nitrogen scavenger
- Will form arbuscular mycorrhizal associations

Cereal Rye

- Cool season grass
- Upright plant
- High water use and good salinity tolerance
- Will form arbuscular mycorrhizal associations
- Very good nitrogen scavenger
- Very good residue builder

Canola

- · Cool season broadleaf
- Annual and biennial
- Upright and spreading plant
- Medium water use and good salinity tolerance
- Very good at scavenging nitrogen and other nutrients from the soil
- Flowers attract pollinators, and it does not form arbuscular mycorrhizal associations

PERENNIAL

Alfalfa

- · Perennial legume
- Upright plant
- High water use and poor salinity tolerance generally
- Non-dormant cultivators can perform like an annual
- Forms arbuscular mycorrhizal associations
- Flowers attract pollinators

Red Clover

- Legume
- · Biennial or short lived perennial
- Upright plant
- Medium water use and poor salinity tolerance
- Forms arbuscular mycorrhizal associations
- Flowers attract pollinators

Crimson Clover

- Legume
- · Annual or biennial
- Upright plant
- Thrives well on both well-drained sandy soils and clay type soils
- · Does not do well in extreme cold or heat
- Good quick producer of nitrogen

White Clover

- Legume
- Perennial
- Upright plant
- Medium water use and poor salinity tolerance
- Forms arbuscular mycorrhizal associations
- Flowers attract pollinators

Yellow Sweet Clover

- Legume
- · Annual/biennial
- Upright plant
- Moderate water use and fair salinity tolerance
- Forms arbuscular mycorrhizal associations
- Flowers attract pollinators

Chicory

- Warm season broadleaf
- Perennial
- Upright and spreading plant (vine)
- Will form arbuscular mycorrhizal associations
- Attracts Pollinators it does not form arbuscular mycorrhizal associations





Before opening a bag of seed, be sure to read, understand and accept the stewardship requirements, including applicable refuge requirements for insect resistar nagement, for the biotechnology traits expressed in

the seed as set forth in the Technology/Stewardship Agreement that you sign. By opening and using a bag of seed, you are reaffirming your obligation and agreement to comply with the most recent stewardship requirements.

No dicamba may be used in-crop with seed with Roundup Ready® Xtend Technology, unless and until approved or specifically permitted, and no dicamba formulations are currently registered for such use in the 2025 season. Please follow www.roundupreadyxtend.com/pages/xtendimax-updates.aspx for status updates. Dicamba may harm crops that are not tolerant to dicamba

Bayer is a member of Excellence Through Stewardship® (ETS). Bayer products are commercialized in accordance with ETS Product Launch Stewardship Guidance, and in compliance with Baver's Policy for Commercialization of Biotechnology-Derived Plant Products in Commodity Crops. Commercialized products have been approved for import into key export markets with functioning regulatory systems. Any crop or material produced from this product can only be exported to, or used, processed or sold in countries where all applicable regulatory approvals have been granted. It is a violation of national and international law to move material containing biotech traits across boundaries into nations where import is not permitted. Growers should talk to their grain handler or product purchaser to confirm their buying position for this product. Excellence Through Stewardship® is a registered trademark of Excellence Through Stewardship.









ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS.

It is a violation of federal and state law to use any pesticide product other than in accordance with its labeling. NOT ALL formulations of dicamba or glyphosate are approved for in-crop use with Roundup Ready 2 Xtend® soybeans. NOT ALL formulations of dicamba, glyphosate or glufosinate are approved for in-crop use with products with XtendFlex® Technology, ONLY USE FORMULATIONS THAT ARE SPECIFICALLY LABELED FOR SUCH USES AND APPROVED FOR SUCH USE IN THE STATE OF APPLICATION. Contact the U.S. EPA and your state pesticide regulatory agency with any questions about the approval status of dicamba herbicide products for in-crop use with products with XtendFlex® Technology.

B.t. products may not yet be registered in all states. Check with your seed brand representative for the registration status

Refuge seed may not always contain the DroughtGard® trait. IMPORTANT IRM INFORMATION: Certain products are sold as RIB Complete® corn blend products, and do not require the planting of a structured refuge except in the Cotton-Growing Area where corn earworm is a significant pest. Products sold without refuge in the bag (non-RIB Complete) require the planting of a structured refuge. See the IRM/Grower Guide for additional information. Always read and follow IRM requirements.

Roundup Ready® Technology contains genes that confer tolerance to glyphosate. Roundup Ready® 2 Technology contains genes that confer tolerance to glyphosate. Roundup Ready 2 Xtend® soybeans contain genes that confer tolerance to glyphosate and dicamba. Products with XtendFlex® Technology contains genes that confer tolerance to glyphosate, glufosinate and dicamba. Plants that are not tolerant to glyphosate may be damaged or killed if exposed to those herbicides. Plants that are not tolerant to glyphosate, dicamba, and/or glufosinate may be damaged or killed if exposed to those herbicides. Plants that are not tolerant to dicamba may be damaged or killed if exposed to those herbicides. Contact your seed brand dealer or refer to the Bayer Technology Use Guide for recommended weed control programs.

Insect control technology provided by Vip3A is utilized under license from Syngenta Crop Protection AG. Herculex® is a registered trademark of Dow AgroSciences LLC. Agrisure Viptera® is a registered trademark of a Syngenta group company. LibertyLink logo® and LibertyLink® are trademarks of BASF Corporation. Respect the Refuge and Corn Design® and Respect the Refuge® are registered trademarks of National Corn Growers Association, Acceleron®, DroughtGard®, RIB Complete®, Roundup Ready 2 Technology and Design®, Roundup Ready 2 Xtend®, Roundup Ready 2 Yield®, Roundup Ready®, SmartStax®, Trecepta®, VT Double PRO®, VT4PRO™ and XtendFlex® are trademarks of Bayer Group.

Seed containing a patented trait can only be used to plant a single commercial crop. It is unlawful to save and replant Roundup Ready 2 Yield® soybeans, Roundup Ready 2 Xtend® soybeans, and XtendFlex® soybeans. Additional information and limitations on the use of these products are provided in the Technology Stewardship Agreement and the Bayer Technology Use Guide: tug.bayer.com. U.S. patents for Bayer technologies can be found at the following webpage:

Important: Always read and follow label and bag tag instructions; only those labeled as tolerant to qlufosinate may be sprayed with qlufosinate ammonium based herbicides. Agrisure®, Agrisure® Above, Agrisure Artesian®, Agrisure® Total, Agrisure Viptera®, Artesian®, Duracade®, DuracadeViptera™, DuracadeViptera™Z3, E-Z Refuge®, Saltro®, Viptera®, Viptera®Z3, Cruiser®, CruiserMaxx®, and Vibrance® are trademarks of a Syngenta Group

Important: Always read and follow label instructions. Some products may not be registered for sale or use in all states or counties. Please check with your local extension service to ensure registration status.

More information about Duracade® is available at www.biotradestatus.com.



LIBERTY Seed products with the LibertyLink® (LL) trait are resistant to the herbicide glufosinate ammonium, an alternative to glyphosate in corn, and combine high-yielding genetics with the powerful, nonselective, post-emergent weed control of Liberty® herbicide for optimum yield and excellent weed control. LibertyLink®, Liberty® and the Water Droplet logo are registered trademarks of BASF.



Corn trait technology incorporated into these seeds is commercialized under license from Syngenta Seeds, LLC. Herculex® Technology incorporated into these seeds is commercialized under license from Corteva Agriscience LLC. HERCULEX® and the HERCULEX Shield are trademarks of Corteva Agriscience LLC.

Seeds containing the PowerCore® Enlist®, PowerCore® Enlist® Refuge Advanced®, Enlist® Corn - REFUGE and Enlist E3® traits are protected under one or more U.S. patents which can be found at www.traitstewardship.com. The purchase of this traited seed includes a limited license to produce a single crop in the United States. The use of seed from such a crop and/or the progeny thereof for propagation or seed multiplication or for production or development of a hybrid or different variety of seed is strictly prohibited. You acknowledge and agree to be bound by the terms and conditions of the following documents in effect at the time of planting of this seed: (i) the Corteva Agriscience Technology Use Agreement and (ii) the Product Use $Guides\ for\ all\ technologies\ in\ this\ seed,\ including\ the\ Herbicide\ Resistance\ Management\ (HRM),\ and\ Use\ requirements.$ To plant PowerCore Enlist, PowerCore Enlist Refuge Advanced, Enlist Corn - REFUGE and Enlist E3 seed, you must have $a\ limited\ license\ from\ Corteva\ Agriscience\ (or\ other\ appropriate\ affiliates).\ In\ consideration\ of\ the\ foregoing,\ Corteva$ Agriscience grants to the Grower a limited license to use its technology to produce only a single commercial crop in the United States under the terms and conditions set forth in the Technology Use Agreement in effect at the time of planting of this seed

Enlist E3® soybean seeds containing the Enlist® trait can only be used to plant a single commercial crop. It is unlawful

to save and replant Enlist E3 soybeans. Additional information and limitations on the use of these products are provided in the Corteva Agriscience Technology Use Agreement and Enlist® Soybean Product Use Guide. U.S. patents for Corteva Agriscience technologies can be found at www.corteva.us/Resources/trait-stewardship.html.

 $Corteva Agriscience is a member of Excellence Through Stewardship ^{\circ} (ETS). Corteva Agriscience products are commercialized$ in accordance with ETS Product Launch Stewardship Guidance and in compliance with the Corteya Agriscience policies regarding stewardship of those products. In line with these guidelines, our product launch process for responsible launches of new products includes a longstanding process to evaluate export market information, value chain consultations, and regulatory functionality. Growers and end-users must take all steps within their control to follow appropriate stewardship



requirements and confirm their buyer's acceptance of the grain or other material being purchased. For more detailed information on the status of a trait or stack, please visit www.biotradestatus.com. Excellence Through Stewardship® is a registered trademark of Global Stewardship Group.

Properly managing trait technology is key to preserving it as a long term crop protection tool. Growers who fail to comply with IRM requirements risk losing access to this product. To help preserve the effectiveness of B.t. corn technologies, growers planting B.t. corn technologies are required to follow an IRM Plan. Consult the Corn Product Use Guide for appropriate refuge configuration options. Before opening a bag of seed, be sure to read, understand and accept the stewardship requirements, including applicable refuge requirements for insect resistance management, for the biotechnology traits expressed in the seed as set forth in the Technology Use Agreement and Product Use Guide. By opening and using a bag of seed, you are reaffirming your obligation to comply with the most recent stewardship requirements. For complete details on IRM requirements for hybrids with B.t. technology, including refuge examples and important information on the use of insecticides on refuge and B.t. corn acres, please consult appropriate Product Use Guide, Go to www.corteva.us/Resources/trait-stewardship.html to download the latest Corteva Agriscience Corn Product Use Guide.

Following burndown, Enlist Duo® and Enlist One® herbicides with Colex-D® technology are the only herbicides containing 2,4-D that are authorized for preemergence and postemergence use with Enlist® crops. Consult Enlist® herbicide labels for weed species controlled. Enlist Duo and Enlist One herbicides are not registered for use or sale in all states and counties; are not registered in AK, CA, CT, HI, ID, MA, ME, MT, NH, NV, OR, RI, UT, VT, WA and WY; and have additional subcounty restrictions in AL, GA, TN and TX, while existing county restrictions still remain in FL. All users must check "Bulletins Live! Two" no earlier than six months before using Enlist One or Enlist Duo. To obtain "Bulletins," consult epa.gov/espp/, call 1-844-447-3813, or email ESPP@epa. gov. You must use the "Bulletin" valid for the month and state and county in which Enlist One or Enlist Duo are being applied. Contact your state pesticide regulatory agency if you have questions about the registration status of Enlist® herbicides in your area. ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS. IT IS A VIOLATION OF FEDERAL AND STATE LAW TO LISE ANY PESTICIDE PRODUCT OTHER THAN IN ACCORDANCE WITH ITS LABELING ONLY USE FORMULATIONS THAT ARE SPECIFICALLY LABELED FOR SUCH USE IN THE STATE OF APPLICATION. USE OF PESTICIDE PRODUCTS, INCLUDING, WITHOUT LIMITATION, 2,4-D-CONTAINING PRODUCTS NOT AUTHORIZED FOR USE WITH ENLIST CORN AND SOYBEANS, MAY RESULT IN OFF-TARGET DAMAGE TO SENSITIVE CROPS/AREAS AND/OR SUSCEPTIBLE PLANTS, IN ADDITION TO CIVIL AND/OR CRIMINAL PENALTIES. Additional product-specific stewardship requirements for Enlist crops, including the Enlist Product Use Guide, can be found at www.traitstewardship.com. The transgenic sovbean event in Enlist E3® soybeans is jointly developed and owned by Corteva Agriscience and M.S. Technologies, L.L.C. ™®Trademarks of Corteva Agriscience and its affiliated companies.

Following burndown, Enlist Duo® and Enlist One® herbicides with Colex-D® technology are the only herbicides containing 2,4-D that are authorized for preemergence and postemergence use with Enlist® crops. Consult Enlist® herbicide labels for weed species controlled. Enlist Duo and Enlist One herbicides are not registered for use or sale in all states and counties; are not registered in AK, CA, CT, HI, ID, MA, ME, MT, NH, NV, OR, RI, UT, VT, WA and WY; and have additional subcounty restrictions in AL, GA, TN and TX, while existing county restrictions still remain in FL. All users must check "Bulletins Live! Two" no earlier than six months before using Enlist One or Enlist Duo. To obtain "Bulletins," consult epa.gov/espp/, call 1-844-447-3813, or email ESPP@epa. gov. You must use the "Bulletin" valid for the month and state and county in which Enlist One or Enlist Duo are being applied. Contact your state pesticide regulatory agency if you have guestions about the registration status of Enlist® herbicides in your area. ALWAYS READ AND FOLLOW PESTICIDE LAREL DIRECTIONS. IT IS A VIOLATION OF FEDERAL AND STATE LAW TO USE ANY PESTICIDE PRODUCT OTHER THAN IN ACCORDANCE WITH ITS LABELING. ONLY USE FORMULATIONS THAT ARE SPECIFICALLY LABELED FOR SUCH USE IN THE STATE OF APPLICATION. USE OF PESTICIDE PRODUCTS, INCLUDING, WITHOUT LIMITATION, 2,4-D-CONTAINING PRODUCTS NOT AUTHORIZED FOR USE WITH ENLIST CORN AND SOYBEANS, MAY RESULT IN OFF-TARGET DAMAGE TO SENSITIVE CROPS/AREAS AND/OR SUSCEPTIBLE PLANTS, IN ADDITION TO CIVIL AND/OR CRIMINAL PENALTIES, Additional product-specific stewardship requirements for Enlist crops, including the Enlist Product Use Guide, can be found at www.traitstewardship.com.

POWERCORE® multi-event technology developed by Corteva Agriscience LLC and Monsanto. LibertyLink® and the Water Droplet Design are registered trademarks of BASF. PowerCore® and Roundup Ready® are registered trademarks of Bayer Group. Always follow IRM, grain marketing and all other stewardship practices and pesticide label directions. B.t. products may not vet be registered in all states. Check with your seed representative for the registration status in your state. ™®Trademarks of Corteva Agriscience and its affiliated companies.

PowerCore® multi-event technology developed by Corteva Agriscience LLC and Monsanto. POWERCORE® is a registered







STS[®]

trademark of Bayer Group. Always follow IRM, grain marketing and all other stewardship herbicide tolerant trait practices and pesticide label directions. B.t. products may not yet be registered in all states. Check with your seed representative for the registration status in your state.

This variety contains a trait providing enhanced tolerance to labeled specific sulfonylurea soybean herbicides. The STS® gene will not safeguard this variety against other herbicide chemistries which are labeled to be used only over-the-top of crops that have a different and specified herbicide resistant gene. Always read and follow herbicide directions prior to use.

Not all herbicides are registered for sale or use in all states or counties in the United States or all provinces in Canada. Contact your local regulatory agency to determine if a product is registered for sale or use in your area. Always read and follow label directions.

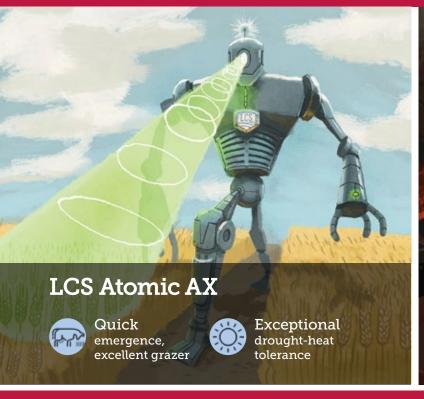
ACCIDENTAL APPLICATION OF INCOMPATIBLE HERBICIDES TO THIS VARIETY COULD RESULT IN TOTAL CROP LOSS. YOU MUST SIGN A TECHNOLOGY USE AGREEMENT AND READ THE PRODUCT USE GUIDE PRIOR TO PLANTING.

The purchase of these seeds includes a limited license to produce a single soybean crop in the United States (or other applicable country). The use of seed from such a crop or the progeny thereof for propagation or seed multiplication or for production or development of a hybrid or different variety of seed is strictly prohibited. Resale or transfer of the seed is strictly prohibited.



Maximize your wheat acres

Say goodbye to feral rye, cheatgrass and other grassy weeds with CoAXium® varieties

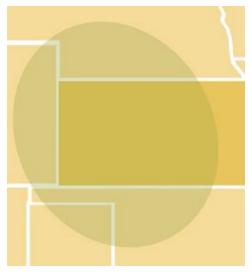










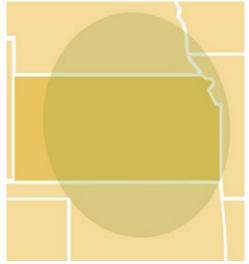


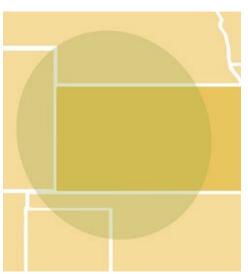
KS BILL SNYDER

- ✓ NEWEST K-STATE VARIETY
 WITH BROAD ADAPTATION
- ✓ WSMV AND TRIMV TOLERANCE
- ✓ GOOD DROUGHT TOLERANCE
 AND GRAIN QUALITY

KS PROVIDENCE

- ✓ PROVEN CONSISTENCY IN CENTRAL KANSAS
- ✓ STRONG ALL-AROUND DISEASE PACKAGE
- ✓ MODERATE SCAB TOLERANCE





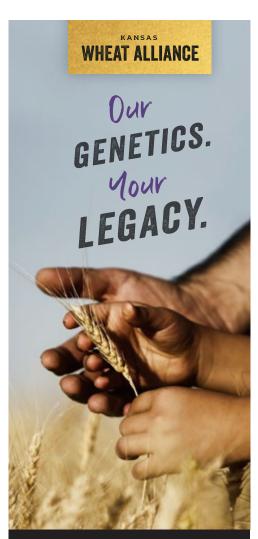
KS WESTERN STAR

- √ VERY GOOD DROUGHT TOLERANCE
- ✓ WHEAT CURL MITE RESISTANCE
- ✓ GOOD MILLING AND BAKING QUALITY













KSWheatAlliance.org

N E W

OKLAHOMA GENETICS, INC.

***** DOUBLESTOP CL+ ***** GREEN HAMMER

*****STRAD CL+

****** BUTLER'S GOLD ****** OK CORRAL

*** HIGH COTTON**

OGI PROVEN PERFORMERS

HIGH WHEAT PROTEIN

Butler's Gold Doublestop CL+ Green Hammer

Skydance Strad CL+

GRAZING TOLERANCE

Bentley Big Country Doublestop CL+ High Cotton **OK Corral**

Showdown Smith's Gold Strad CL+ Uncharted

BEST FUNCTIONALITY

Baker's Ann Bentley Big Country Butler's Gold Doublestop CL+ Green Hammer Ruby Lee Skydance Smith's Gold Strad CL+

HESSIAN FLY RESISTANCE

W

H

E A

Duster **OK Corral** Gallagher Showdown Green Hammer Smith's Gold

BEST DISEASE PROTECTION

Big Country Skydance Butler's Gold Smith's Gold Doublestop CL+ Strad CL+ **OK Corral** Uncharted

ACID-SOIL TOLERANCE

Baker's Ann Lonerider Bentley Skydance Butler's Gold Strad CL+ Doublestop CL+ Uncharted Green Hammer



From farmer to consumer, OGI varieties are proven performers every year. Our wheat varieties provide the quality characteristics end-users and consumers desire, and they provide the agronomics wheat producers require. We strive to create diverse, high-quality and resilient wheat varieties that the entire wheat foods chain can trust and rely upon.



CONDITIONS CHANGE. STANDARDS DON'T. WB4422 | WB4445CLP | WB4401 | WB4699 | WB4792

You don't lower expectations just because growing conditions across the Central Plains don't cooperate. Neither does WestBred® Wheat. Our regionally proven varieties deliver top-yield potential for Central Plains growers like you, who prioritize performance — no matter what the season throws at them. Elite seed for elite wheat growers. We're 'Bred Differently. Just like you.



Seize the Season at WestBred.com





The Most-Planted Wheat Variety in Kansas for 2025...

Complete 2025 NASS report: https://bit.ly/4hUYLgA

After six years at the top of the list, SY Monument holds onto the #2 spot for 2025 planted acres - Kansas wheat farmers plant what works.

AgriPro® Brand Hard Red Winter Wheat																		
Variety		Disease and Pest																
	Relative Maturity	Plant Height	Coleoptile Length	Test Weight	Straw Strength	Winter Hard.	Alum. Tol. (Low pH)	Stem Rust	Leaf Rust	Stripe Rust	Soil Borne Complex	BYDV	Leaf Blotch	Tan Spot	Powdery Mildew	Bacterial Leaf Disease	Wheat Streak Mosaic	FHB*
New! AP Sunbird	Е	S	M	2	5	3	3	5	2	8	3	4	5	6	_	2	4	7
AP Prolific	М	M	L	2	5	4	1	2	2	5	1	4	4	4	_	4	4	4
AP Bigfoot	Е	M	M	1	2	3	3	2	2	6	5	5	4	5	_	4	4	6
SY Wolverine	Е	S	S	2	2	3	8	2	2	7	1	4	2	3	6	2	4	7
SY Monument	L	М	М	3	5	2	2	2	1	6	2	4	4	3	5	5	7	8

Visit AgriProWheat.com for complete comparison chart.

1-2 = Excellent

8-9 = Poor

3-4 = Very Good5 = Good

E = Early M = Medium

S = Short M = Medium Coleoptile Length: S = Short M = Medium L = Long

New! AP Sunbird

Great Plains Yield



- » High yield potential in grain, silage, and forage production systems
- » Excellent test weight
- » Very good wheat streak mosaic virus tolerance
- » Pedigree: Byrd / SY Sunrise // SY Wolf

Area of primary adaptation

AgriPro

syngenta®



VARIETY LINEUP



AmeriStand
482 HVXRR



FALL DORMANCY: 4.2
WINTERHARDINESS: 1.9

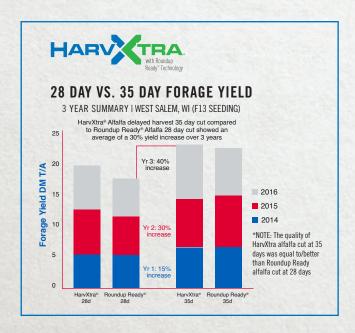
A Technology Powerhouse: HarvXtra® Alfalfa Paired with the UltraCut™ Alfalfa Disease Package

- Building on AmeriStand 481 HVXRR with improved UltraCut disease resistance, cold tolerance, persistence and HarvXtra forage quality.
- Latest advancement in disease resistance, featuring the UltraCut[™] alfalfa disease package with a DRI of 39/40, which includes High Resistance to Aphanomyces Root Rot Race 1, 2 and evolving strains¹; and includes multi-race resistance to Anthracnose²
- HarvXtra® Alfalfa gives growers the ability to better manage the yield-versusquality tradeoff. It offers more flexibility in cutting schedule to achieve improved forage quality or greater yield potential, when compared to conventional alfalfa at the same stage of maturity



High Quality Traffic Tested® Alfalfa with UltraCut™ Alfalfa Disease Package and Roundup Ready® Technology

- Highly resistant to multiple races of Aphanomyces for protection during establishment and early season cool and wet soil conditions
- Highly resistant to multiple races of Anthracnose for protection during warm and humid weather conditions







FALL DORMANCY: 4.4
WINTERHARDINESS: HARDY

Excellent Yield Potential with High Nematode Resistance

- Ideal 4 to 5 cut variety adapted for western US areas with nematode pressure
- High resistance to diseases and pests, including stem nematode
- · Excellent rotation variety for nematode resistance



UltraCut™ Alfalfa Disease Package Ups Ante on Yield and Persistance Leader

- Outstanding yield potential and agronomic performance under 4 to 5-cut harvest management systems (FD=4.4) in various locations throughout dormant alfalfa use areas
- A new day in disease resistance greatly affecting establishment and in-crop
 performance, AmeriStand 428TQ features the UltraCut™ alfalfa disease
 package with a perfect Disease Resistance Index (DRI) of 40/40 including HR
 (high resistance) to aphanomyces race 1, race 2, and evolving strains¹, and HR
 to anthracnose race 1 and race 5²
- Superb winterhardiness (WH=1.3); AmeriStand 428TQ delivers excellent cold tolerance and persistence





FALL DORMANCY: 5.2 Winterhardiness: 2

High Yield Potential with Nematode Resistance

- · Widely adapted variety with excellent winter hardiness
- High resistance to yield-robbing diseases and pests
- · Very fast recovery for frequent harvest schedules under intensive management



The UltraCut™ alfalfa disease package helps you grow a healthy alfalfa crop even in field conditions susceptible to Anthracnose and Aphanomyces disease strains.

The UltraCut alfalfa disease package can help deliver an advantage through improved agronomic performance and yield potential.

^{*}In tests established by the NAAIC Review Board, this variety demonstrated improved salt tolerance of germinating seeds (Ger) as compared to the industry salt tolerant checks in each category. References available upon

Includes race 1 and race 2 protection. In addition, Forage Genetics International, LLC (FGI) has identified a novel source of Aphanomyces resistance in the greenhouse and field that visibly outperforms unrelated varieties on the market when grown under natural or artificial disease pressure. FGI researchers have been working cooperatively with universities collecting and testing the most virulent strains of Aphanomyces to help determine the level of resistance to this novel source.

²Includes race 1 protection, along with Anthracnose Race 5, which was recently confirmed by USDA's Agricultural Research Service.



PRODUCTION TIPS



Use these tips to help you establish a great stand of high yielding, high quality alfalfa.

SOIL SELECTION

- · Choose a field with good drainage
- · Test the soil for pH and fertility
- Soils should have a pH of 6.5 or above
- If soil pH is below 6.5, an application of lime may be required 12 months ahead of seeding to raise soil pH

SOIL TEST

- Soil test for phosphorus (P), potassium (K) and other elements like sulfur
- Your local soil testing lab can make best recommendations for fertility
- P and K can be applied anytime prior to and/or at seeding
- Soil and plant tissue tests can also guide ongoing topdressing ratios throughout the life of the stand

SEEDING

- With proper management, alfalfa can be seeded conventionally, into reduced tillage or into no-till
- Seed a minimum of 15 pounds per acre
- Spring seedings can begin as soon as frost is out of the ground, seeding early will help improve first year yields
- Fall seedings should occur at least 6 weeks before the historic freeze date for performance the following year

SEEDING DEPTH

- · Start with a firm seed bed
- Seed to soil contact and proper seeding depth makes the difference in stand performance
- Plant 1/4 to 1/2 inch deep in heavier soils
- Plant 1/2 to 3/4 inch deep in sandy soils

HARVEST

- Cut first year spring seeded stands at early to mid-bloom (about 70-80 days after seedings)
- Subsequent harvests can be made 25 to 28 days later
- Established stands (second year or older) can be harvested more frequently without severe stand damage
- Most growers like to start first harvest on established stand with a bud cut and following harvests at early bloom (about 26-30 days in most areas)
- Traffic Tested® varieties have been proven to withstand more frequent harvests

Variety Characteristics	Fall Dorm.	Traffic 12	Satt Tolo	Phytophthor.	Amhiagn.	Anthracus	Verticilling.	Fusanium w.	Bacterial Mr.	Aphanomyces p	Aphanomyces p	Evolving Appa	Stem Nem	Root King	Pea Aphid	18	ana Aphid
AmeriStand 482 HVXRR	4.2	_	Ger	HR	HR	R	HR	HR	HR	HR	HR	HR	R	_	R	R	
AmeriStand 423TQ RR	4	EX	Ger	HR	HR	HR	HR	HR	HR	HR	HR	HR	R	_	R	R	
AmeriStand 446NT	4.4	EX	Ger	HR	HR	_	HR	HR	HR	R	_	_	HR	_	HR	R	
AmeriStand 428TQ	4.4	EX	Ger	HR	HR	HR	HR	HR	HR	HR	HR	HR	HR	_	R	R	
AmeriStand 518NT	5.2	EX	Ger	HR	HR	_	HR	HR	HR	HR	_	_	HR	HR	HR	HR	

HR = >51% Resistance, R = 31-50% Resistance, MR = 15-30% Resistance, LR = 6-14% Resistance

"In tests established by the NAAIC Review Board, this variety demonstrated improved salt tolerance of germinating seeds (Ger) as compared to the industry salt tolerant checks in each category. References available upon request.

Includes race I and race 2 protection. In addition, Forage Genetics International, LLC (FGI) has identified a novel source of Aphanomyces resistance in the greenhouse and field that visibly outperforms unrelated varieties on the market when grown under natural or artificial disease pressure. FGI researchers have been working cooperatively with universities collecting and testing the most virulent strains of Aphanomyces to help determine the level of resistance to this novel source.

Ancludes race I protection, along with Anthracnose Race 5, which was recently confirmed by USDA's Agricultural Research Service.

In the following states, purchase and use of HarrXitra "Alfalfa with Roundup Ready" Technology is subject to a Seed and Feed Use Agreement, requiring that products of this technology can only be used on farm or otherwise be used in the United States: Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington and Wyoming, In addition, due to the unique cropping practices do not plant HarrXtra" Alfalfa with Roundup Ready" Technology in Imperial County, California, pending import approval and until Forage Genetics International, LLC (FGI) grants express permission for such planting.

Forage Genetics International, LLC ("FGI") is a member of Excellence Through Stewardship" (ETS). FGI products are commercialized in accordance with ETS Product Launch Stewardship Guidance, and in compliance with FGI's Policy for Commercialization of Biotechnology-Derived Plant Products in Commodity Crops. As of June 2017, HarxXtra" Alfalfa with Roundup Ready" TECHNOLOGY SEE OR GROPS (INCLUDING HAY AND HAY PRODUCTS) ONLY TO UNITED STATES DOMESTIC USE. Any crop or material produced from this product can only be exported to, or used, processed or sold in countries where all necessary regulatory approvals have been granted. It is a violation of national and international law to move material containing biotech trias across boundaries into nations where import is not permitted. Growers should talk to their grain handler or product purchaser to confirm their buying position for this product. Growers should refer to http://www.blottondestatus.com/ for any updated information on import country approvals. Excellence Through Stewardship" is a registered trademark of Biotechnology Industry Organization.

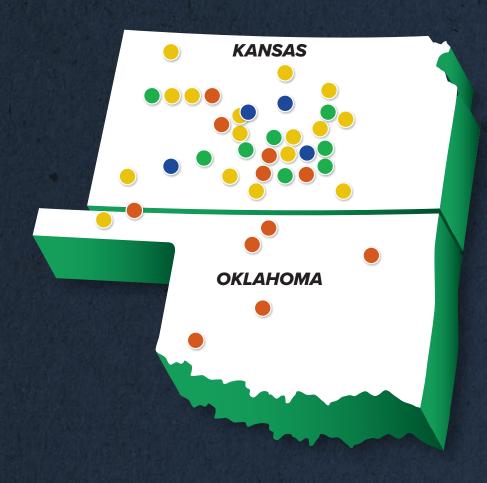
ALWAYN FEAD AND FOLLOW PESTICIDE LABEL DIRECTIONS. Roundup Ready" cryps contain genes that confer tolerance to glyphosate, Roundup Ready" is registered trademarks of Forage Genetics International, LLC, Merica's Alfalla', Traffic Tested" and HarrXtra" are registered trademarks of Forage Genetics International, LLC, HarrXtra" Alfalla with Roundup Ready" technology is enabled with Technology from The Samuel Roberts Noble Foundation, Inc. Due to factors outside of Forage Genetics International, LLC, HarrXtra" Alfalla with Roundup Ready" technology is enabled with Technology from The Samuel Roberts Noble Foundation, Inc. Due to factors outside of Forage Genetics International, LLC, HarrXtra" Alfalla with Roundup Ready" trong that are registered trademarks of Forage Genetics International, LLC, America's Alfalla', Traffic Tested" and HarrXtra" are registered trademarks of Forage Genetics International, LLC, America's Alfalla', Traffic Tested" and HarrXtra" are registered trademarks of Forage Genetics International, LLC, Burstra's Alfalla with Roundup Ready" is registered trademarks of Forage Genetics International, LLC, Burstra's Alfalla with Roundup Ready" is registered trademarks of Forage Genetics International, LLC, Burstra's Alfalla with Roundup Ready" is registered trademarks of Forage Genetics International, LLC, Burstra's Alfalla', Traffic Tested and Tested Tested



Contact Us!

9218 S. Halstead Street, Hutchinson, KS 67501 800.634.2836 | info@kauffmanseed.com KauffmanSeed.com

RESEARCH TRIAL LOCATIONS









SORGHUM

