

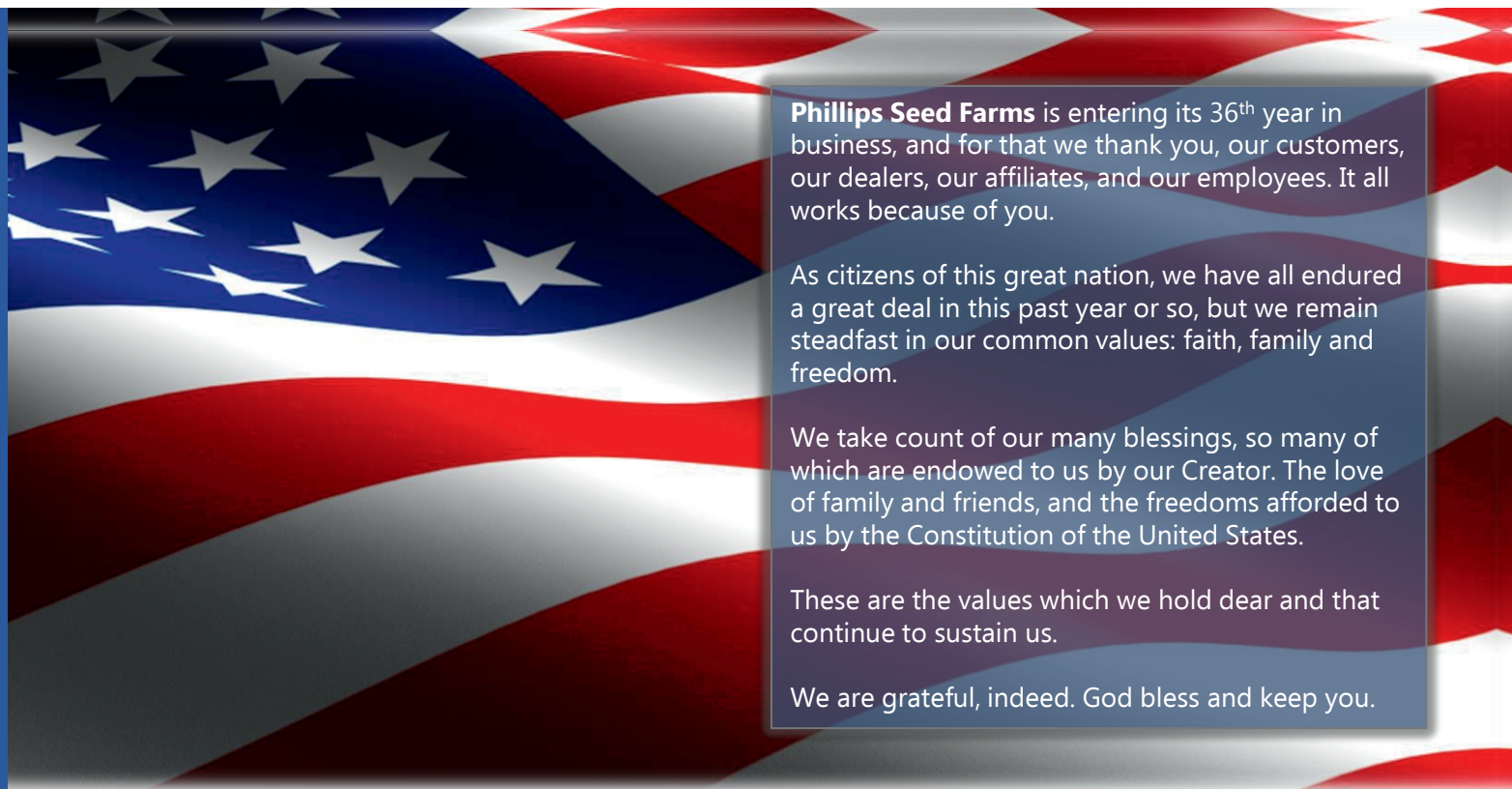


SERVE • INNOVATE • GROW



2022 **PRODUCT GUIDE**

ALFALFA – GRASSES – CORN – GRAIN SORGHUM
FORAGE SORGHUM – SOYBEANS – SORGHUM
SUDANGRASS – TEFF GRASS – COVER CROPS
TURF GRASS – WHEAT – AND MUCH MORE



New Logo...Same Mission & Vision

Our **MISSION** is ongoing.

To provide the best possible seed products and services for our customers.

Our **VISION** is clear.

Serve. Innovate. Grow.

GUIDE CONTENTS

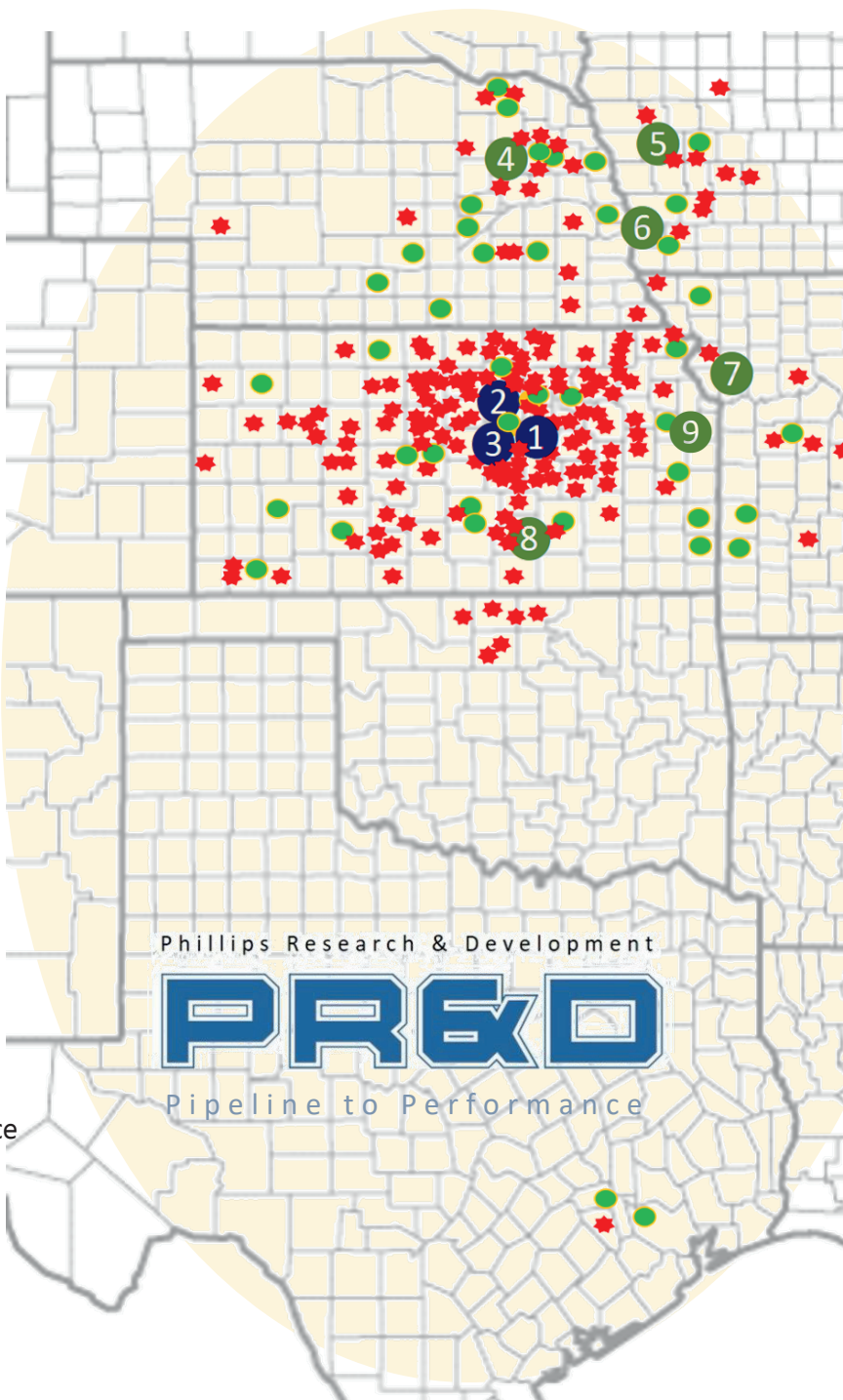
Intro, Mission, Vision & Guide Contents	2	Wheat Variety Ratings Chart	25
PSF Location & Contact Information	3	Forage Sorghum & Sudangrass Hybrids	26
Corn Hybrid Naming, Trait Info & RM Zones	4	Sudangrass, Millet & Turf Grass Varieties	27
Corn Hybrid Descriptions	5-10	PSF Alfalfa Variety Information	28
Corn Hybrid Ratings Chart	11	Cover Crops & Forage Grasses	29-31
Soybean Information	12	Key Crop Growth Development Charts	32
Soybean Variety Descriptions	13-17	Key Crop Basic Agronomy Information	33
Soybean Ratings Chart	17	Seeding Information	34
Grain Sorghum Information	18	Farm Math: Charts & Calculations	35
Grain Sorghum Hybrid Descriptions	19	John Deere Financial & Legal Information	36
Wheat Information	20	Legal Information	37-39
PSF – AgriPro Variety Descriptions	21	PSF Wildlife Division Product Information	40
PSF – AGSECO & KWA Variety Descriptions	22	RWWP Deer Nutrition & Food Plot Seed	41
PSF – WestBred Variety Descriptions	23	RWWP Food Plot & Cover Seed	42
PSF Wheat Blends	24	360° Blind Information	43

We thank YOU for your business.

Proudly Serving Great Plains Growers Since 1985



- 1 Hope KS – HQ, Processing Facility & Sales Office
980 Hwy 15, Hope KS
(785) 949-2204
(800) 643-4340
- 2 Tescott KS – Processing Facility & Sales Office
333 N 30th, Tescott KS
(785) 283-4734
(888) 436-4734
- 3 Assaria KS – Processing Facility & Sales Office
205 E Main, Assaria KS
(785) 914-5018
(800) 255-1021
- 4 Northeast NE – Sales Office
- 5 West Central IA – Sales Office
- 6 Southwest IA – Sales Office
- 7 Northwest MO – Sales Office
- 8 South Central KS – Sales Office
- 9 Eastern KS – Sales Office
- ★ Denotes Dealer Location
- Denotes PR&D Testing Site



Proud members of...



www.PhillipsSeed.com





Corn Hybrid Lineup & Trait Information

PSF Trait Code	PSF Corn Hybrids			TRAIT INFORMATION		INSECTS CONTROLLED OR SUPPRESSED		HERBICIDE TOLERANCE		REFUGE REQUIREMENTS	
	Up to 108 RM	109 - 112 RM	113 RM +	Trait Logo/s	PSF Code - Full Trait Name	ABOVE Ground	BELOW Ground	RR-GT	LL	CORN Area	Cotton Area
VPR	PS0134 VPR PS0770 VPR PSF082 VPR	PSF098 VPR PS1199VPR PSF121 VPR PSF128 VPR	PS1366 VPR PSF138 VPR PSF148 VPR PS1652 VPR	 	VPR - VT Double PRO® RIB Complete®	CEW, ECB, FAW, SB, SWCB	No GMO Trait Resistance	Y	N	5% RIB*	20%
DGR			PSF133 DGR	 	DGR - DroughtGard® + VT Double PRO® RIB Complete®	CEW, ECB, FAW, SB, SWCB	No GMO Trait Resistance	Y	N	5% RIB*	20%
SSR	PSF068 SSR	PS1199 SSR	PSF138 SSR	 	SSR - SmartStax® RIB Complete®	BCW, CEW, ECB, FAW, SB, SWCB	CRW	Y	Y	5% RIB*	20%
TRE			PS1372 TRE		TRE - Built on VT Double PRO® Technology	BCW, CEW, ECB, ECB, FAW, SB, SWCB, TAW, WBC	No GMO Trait Resistance	Y	N	5% RIB*	20%
GT	PS0850 GT				GT - Agrisure® GT or Agrisure® GTA	No GMO Trait Resistance	No GMO Trait Resistance	Y	N	N/R	N/R
V32	PS0535 V32 PS0844 V32 PS0897 V32	PS1091 V32 PS1260 V32		 	V32 - Agrisure Viptera® 3220 E-Z Refuge®	BCW, CEW, ECB, FAW, SB, SWCB, TAW, WBC	No GMO Trait Resistance	Y	Y ¹	5% RIB*	20%
GBL		PS1177 GBL		 	GBL - Agrisure® 3010 or Agrisure Artesian® 3010A	ECB, SWCB, CEW, FAW, SB	No GMO Trait Resistance	Y	Y	20%	50%
D51	PS0711 D51			 	D51 - Agrisure Duracade® 5122 E-Z Refuge® + LibertyLink®	BCW, CEW, ECB, FAW, SB, SWCB, WBC	CRW	Y	Y ¹	5% RIB*	20%
CNG ¹	PS0479 CNG PS0770 CNG PS0881 CNG	PS1091 CNG			CNG - Conventional / Non-GMO	No GMO Trait Resistance	No GMO Trait Resistance	N	N	N/R	N/R

CNG¹ hybrids are conventional / Non-GMO, so there are no traits included. Do NOT apply glufosinate or glyphosate - based herbicides to CNG hybrids or severe damage will occur. ¹Important: Always read and follow label, bag & tag instructions - only those labeled tolerant to glufosinate may be sprayed with glufosinate ammonium based herbicides. Insect Resistance Key: CEW=Coron Ear Worm; ECB=European Corn Borer; FAW=Fall Armyworm; SB=Stalk Borer; BCW=Black Cutworm SWCB=Southwestern Corn Borer; WBC=Western Bean Cutworm; TAW=True Armyworm; CRW=Corn Rootworm Refuge Requirements: RIB=Refuge In Bag, 5% refuge is included in the bag, and no further refuge is required; **E-Z** = 5% Refuge included in the bag - no add'l refuge is required; **20%** = a 20% refuge is required, in or adjacent to field; **50%** = means a 50% refuge within field, or adjacent to field is required. For more information on 20% & 50% structured refuge requirements, you may access the NCGA.com website. Herbicide Tolerance: "RR - GT" = glyphosate herbicide tolerant. Liberty "or LL" are tolerant to glufosinate-based herbicides.

DENOTES NEW HYBRID for 2022 PLANTING

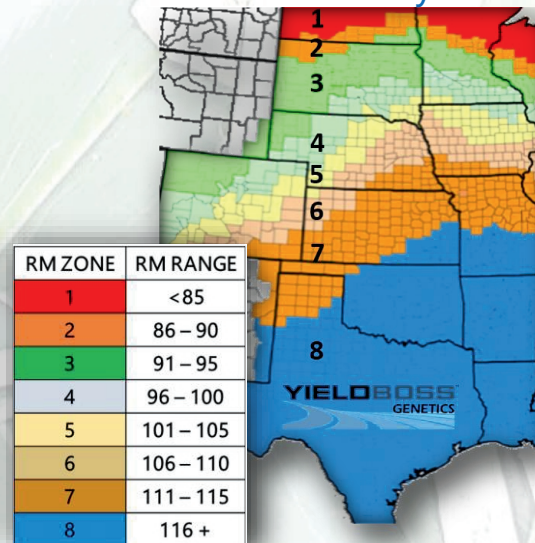
Corn Hybrid Naming System

Example 1: **PS0844 V32**

P S	0 8	4 4	V 3 2
First 2 to 3 characters denote a Phillips Seed Farms Corn Hybrid	1 st two digits denote the hybrid's Relative Maturity	Next 1 or 2 digits are hybrid differentiators	Hybrid suffix string denotes trait type (See PSF Trait Code chart above)
P S F	1 4	8	V P R

Example 2: **PSF148 VPR**

Corn Relative Maturity Zones



101 RM – 106 RM



PS0134 VPR



101 RM
Zones: 3,4,5,6
GDUs to BL: 2520



Impressive ear girth & flex
Solid yields for earlier RM
Ear type offers flexibility
Good response to fungicide
Good late season intactness

Plant Height: **Medium**

Ear Height: **Medium**

Ear Type: **Flex w/ Girth**

Key: 1=Exc; 5=Poor	5	4	3	2	1
Stalk Strength					
Root Strength					
Vigor					
Drydown					
Test Weight					
Drought Tolerance					
Staygreen					
Fungicide Response					
Silage Utility					
High PPA Tolerance					
Highly Productive Fields					
Moderately Productive Fields					
Less Productive Fields					
Corn on Corn					
Goss's Wilt					
Gray Leaf Spot					
Common Rust					
NCLB					

PS0479 CNG



104 RM
Zones: 3,4,5,6
GDUs to BL: 2600



Tall plants w/ dark green leaves
Excellent roots
Good test wt. & grain quality
Widely adaptable
Good non-GMO silage or D.P.

Plant Height: **Medium-Tall**

Ear Height: **Medium**

Ear Type: **Semi-Flex/Avg. Girth**

Key: 1=Exc; 5=Poor	5	4	3	2	1
Stalk Strength					
Root Strength					
Vigor					
Drydown					
Test Weight					
Drought Tolerance					
Staygreen					
Fungicide Response					
Silage Utility					
High PPA Tolerance					
Highly Productive Fields					
Moderately Productive Fields					
Less Productive Fields					
Corn on Corn					
Goss's Wilt					
Gray Leaf Spot					
Common Rust					
NCLB					

PS0535 V32



105 RM
Zones: 4,5,6
GDUs to BL: 2620



Attractive plants & ear line
Very good roots
Best results at higher PPAs
Good response to fungicide
Best in-zone; goes N & W well

Plant Height: **Medium-Tall**

Ear Height: **Medium**

Ear Type: **Semi-Flex w/ Avg. Girth**

Key: 1=Exc; 5=Poor	5	4	3	2	1
Stalk Strength					
Root Strength					
Vigor					
Drydown					
Test Weight					
Drought Tolerance					
Staygreen					
Fungicide Response					
Silage Utility					
High PPA Tolerance					
Highly Productive Fields					
Moderately Productive Fields					
Less Productive Fields					
Corn on Corn					
Goss's Wilt					
Gray Leaf Spot					
Common Rust					
NCLB					

PSF068 SSR



106 RM
Zones: 4,5,6
GDUs to BL: 2645



Flex ears with average girth
Strong stalks & roots
Lower greensnap risk
Good disease resistance
Widely adapted; moves south well

Plant Height: **Medium-Tall**

Ear Height: **Medium-High**

Ear Type: **Flex w/ Avg. Girth**

Key: 1=Exc; 5=Poor	5	4	3	2	1
Stalk Strength					
Root Strength					
Vigor					
Drydown					
Test Weight					
Drought Tolerance					
Staygreen					
Fungicide Response					
Silage Utility					
High PPA Tolerance					
Highly Productive Fields					
Moderately Productive Fields					
Less Productive Fields					
Corn on Corn					
Goss's Wilt					
Gray Leaf Spot					
Common Rust					
NCLB					



107 RM – 108 RM

PS0711 D51

107 RM Zones: 4,5,6,7
GDUs to BL: 2685



Yield for RM; 101,25% of plot mean
Good for no-till & cooler soils
Best In-Zone and N & W of zone
Excellent CRW resistance
Agrisure Artesian® Technology
Plant Height: Medium
Ear Height: Medium
Ear Type: Flex w/ Girth

Key: 1=Exc; 5=Poor	5	4	3	2	1
Stalk Strength					
Root Strength					
Vigor					
Drydown					
Test Weight					
Drought Tolerance					
Staygreen					
Fungicide Response					
Silage Utility					
High PPA Tolerance					
Highly Productive Fields					
Moderately Productive Fields					
Less Productive Fields					
Corn on Corn					
Goss's Wilt					
Gray Leaf Spot					
Common Rust					
NCLB					

PS0770 VPR (& CNG¹)

107 RM Zones: 4,5,6,7
GDUs to BL: 2690



Excellent yields for 107-day RM
Position on medium to good soils
Late flowering w/ fast drydown
Very good test weight
Deep kernels drydown well
Plant Height: Medium-Tall
Ear Height: Medium
Ear Type: Semi-Flex w/ Girth

¹Also available as PS0770 CNG, which is a conventional/Non-GMO hybrid.

Key: 1=Exc; 5=Poor	5	4	3	2	1
Stalk Strength					
Root Strength					
Vigor					
Drydown					
Test Weight					
Drought Tolerance					
Staygreen					
Fungicide Response					
Silage Utility					
High PPA Tolerance					
Highly Productive Fields					
Moderately Productive Fields					
Less Productive Fields					
Corn on Corn					
Goss's Wilt					
Gray Leaf Spot					
Common Rust					
NCLB					

PSF082 VPR

108 RM Zones: 5,6,7
GDUs to BL: 2700



Good stress hybrid
Very good roots & stalks
Maintains consistent ear size
Good test weight & grain quality
Minimal greensnap risk
Plant Height: Medium
Ear Height: Medium
Ear Type: Semi-Flex w/ Girth

Key: 1=Exc; 5=Poor	5	4	3	2	1
Stalk Strength					
Root Strength					
Vigor					
Drydown					
Test Weight					
Drought Tolerance					
Staygreen					
Fungicide Response					
Silage Utility					
High PPA Tolerance					
Highly Productive Fields					
Moderately Productive Fields					
Less Productive Fields					
Corn on Corn					
Goss's Wilt					
Gray Leaf Spot					
Common Rust					
NCLB					

PS0844 V32

106 RM Zones: 5,6,7
GDUs to BL: 2705



Big yields; 106.77% of plot mean
Excellent emergence & vigor
Very adaptable; Goes N to S well
Agrisure Artesian® Technology
Strong Goss's Wilt resistance
Plant Height: Medium
Ear Height: Medium
Ear Type: Semi-Flex w/ Girth

Key: 1=Exc; 5=Poor	5	4	3	2	1
Stalk Strength					
Root Strength					
Vigor					
Drydown					
Test Weight					
Drought Tolerance					
Staygreen					
Fungicide Response					
Silage Utility					
High PPA Tolerance					
Highly Productive Fields					
Moderately Productive Fields					
Less Productive Fields					
Corn on Corn					
Goss's Wilt					
Gray Leaf Spot					
Common Rust					
NCLB					

108 RM – 110 RM



PS0881 CNG



108 RM Zones: 5,6,7
GDUs to BL: 2710



Widely adaptable; North to South
Conventional/Non-GMO option
Semi-flex ears with average girth
VG stalks and roots; silage option
Solid Goss's Wilt & GLS resistance
Plant Height: Medium-Tall
Ear Height: Medium
Ear Type: Semi-Flex w/ Avg. Girth

Key: 1=Exc; 5=Poor	5	4	3	2	1
Stalk Strength					
Root Strength					
Vigor					
Drydown					
Test Weight					
Drought Tolerance					
Staygreen					
Fungicide Response					
Silage Utility					
High PPA Tolerance					
Highly Productive Fields					
Moderately Productive Fields					
Less Productive Fields					
Corn on Corn					
Goss's Wilt					
Gray Leaf Spot					
Common Rust					
NCLB					

PS0897 V32



108 RM Zones: 5,6,7
GDUs to BL: 2710



Big yields - S - N; 108.89% plot mn.
Excels in all environments
Fine companion to PS0844 V32
Agrisure Artesian® Technology
Very good disease protection
Plant Height: Medium
Ear Height: Medium
Ear Type: Semi-Flex w/ Girth

Key: 1=Exc; 5=Poor	5	4	3	2	1
Stalk Strength					
Root Strength					
Vigor					
Drydown					
Test Weight					
Drought Tolerance					
Staygreen					
Fungicide Response					
Silage Utility					
High PPA Tolerance					
Highly Productive Fields					
Moderately Productive Fields					
Less Productive Fields					
Corn on Corn					
Goss's Wilt					
Gray Leaf Spot					
Common Rust					
NCLB					

PSF098 VPR



109 RM Zones: 5,6,7
GDUs to BL: 2735



Solid performance history
Good dual purpose value option
Uniform ears w/ deep kernels
Good staygreen & intactness
Very adaptable: N-S & E-W
Plant Height: Medium-Tall
Ear Height: Medium-High
Ear Type: Semi-Flex w/ Girth

Key: 1=Exc; 5=Poor	5	4	3	2	1
Stalk Strength					
Root Strength					
Vigor					
Drydown					
Test Weight					
Drought Tolerance					
Staygreen					
Fungicide Response					
Silage Utility					
High PPA Tolerance					
Highly Productive Fields					
Moderately Productive Fields					
Less Productive Fields					
Corn on Corn					
Goss's Wilt					
Gray Leaf Spot					
Common Rust					
NCLB					

PS1091 V32 (& CNG¹)



110 RM Zones: 5,6,7
GDUs to BL: 2745



Good yield history; 103% plot mn.
Widely adapted; N to S
Good response to fungicide
Girthy ears; up to 22 rows
Ear flex offers PPA flexibility
Plant Height: Medium
Ear Height: Medium
Ear Type: Flex w/ Girth

Key: 1=Exc; 5=Poor	5	4	3	2	1
Stalk Strength					
Root Strength					
Vigor					
Drydown					
Test Weight					
Drought Tolerance					
Staygreen					
Fungicide Response					
Silage Utility					
High PPA Tolerance					
Highly Productive Fields					
Moderately Productive Fields					
Less Productive Fields					
Corn on Corn					
Goss's Wilt					
Gray Leaf Spot					
Common Rust					
NCLB					

¹Also available as PS1091 CNG, which is a conventional/Non-GMO hybrid.



111 RM – 112 RM

PS1177 GBL

111 RM Zones: 5,6,7,8
GDUs to BL: 2760



Top end yields; 105.61% plot mean
Excellent dual purpose utility
Big flex ears w/ PPA flexibility
Good against foliar disease
20% structured refuge required
Plant Height: Medium-Tall
Ear Height: Medium-High
Ear Type: Flex w/ Girth

Key: 1=Exc; 5=Poor	5	4	3	2	1
Stalk Strength					
Root Strength					
Vigor					
Drydown					
Test Weight					
Drought Tolerance					
Staygreen					
Fungicide Response					
Silage Utility					
High PPA Tolerance					
Highly Productive Fields					
Moderately Productive Fields					
Less Productive Fields					
Corn on Corn					
Goss's Wilt					
Gray Leaf Spot					
Common Rust					
NCLB					

Rating Not Available

PS1199 VPR (& SSR¹) **VTDoublePRO** SmartStax[®] RIB COMPLETE[®]

111 RM
Zones: 5,6,7,8
GDUs to BL:



Top yielder; 107.14% plot mean
Solid N to S; SSR vers. for CRW
Widely adaptable to all soils
Good against greensnap
Good on dryland or irrigation
Plant Height: Medium
Ear Height: Medium
Ear Type: Semi-Flex w/ Girth

¹Also available as PS1199 SSR, which is a Genuity SmartStax[®] hybrid.

Key: 1=Exc; 5=Poor	5	4	3	2	1
Stalk Strength					
Root Strength					
Vigor					
Drydown					
Test Weight					
Drought Tolerance					
Staygreen					
Fungicide Response					
Silage Utility					
High PPA Tolerance					
Highly Productive Fields					
Moderately Productive Fields					
Less Productive Fields					
Corn on Corn					
Goss's Wilt					
Gray Leaf Spot					
Common Rust					
NCLB					

PS1260 V32

112 RM
Zones: 6,7,8
GDUs to BL: 2775



Consistent! 104.3% plot mn. - 2 yr
Western bias genetics
Outstanding emergence/vigor
Excellent for grain or silage
Good above ground pest protection
Plant Height: Medium
Ear Height: Medium to Med-High
Ear Type: Semi-Flex w/Girth

Key: 1=Exc; 5=Poor	5	4	3	2	1
Stalk Strength					
Root Strength					
Vigor					
Drydown					
Test Weight					
Drought Tolerance					
Staygreen					
Fungicide Response					
Silage Utility					
High PPA Tolerance					
Highly Productive Fields					
Moderately Productive Fields					
Less Productive Fields					
Corn on Corn					
Goss's Wilt					
Gray Leaf Spot					
Common Rust					
NCLB					

Rating Not Available

PSF128 VPR

112 RM Zones: 6,7,8
GDUs to BL: 2780



Good, economical performer
Flex ears allow PPA flexibility
Very good on all soils & irrigation
5% RIB eliminate refuge worries
Moves South of zone well
Plant Height: Medium-Tall
Ear Height: Medium
Ear Type: Flex w/ Avg. Girth

Key: 1=Exc; 5=Poor	5	4	3	2	1
Stalk Strength					
Root Strength					
Vigor					
Drydown					
Test Weight					
Drought Tolerance					
Staygreen					
Fungicide Response					
Silage Utility					
High PPA Tolerance					
Highly Productive Fields					
Moderately Productive Fields					
Less Productive Fields					
Corn on Corn					
Goss's Wilt					
Gray Leaf Spot					
Common Rust					
NCLB					

112 RM – 113 RM



PS1295 A31

112 RM Zones: 6,7,8
GDUs to BL: 2790



Yields best on well-drained soils
Good dual purpose option
Good test weight & grain quality
Good against foliar diseases
5% E-Z Refuge® (refuge in-bag)
Plant Height: **Medium-Tall**
Ear Height: **Medium-High**
Ear Type: **Flex w/ Avg. Girth**

Key: 1=Exc; 5=Poor	5	4	3	2	1
Stalk Strength					
Root Strength					
Vigor					
Drydown					
Test Weight					
Drought Tolerance					
Staygreen					
Fungicide Response					
Silage Utility					
High PPA Tolerance					
Highly Productive Fields					
Moderately Productive Fields					
Less Productive Fields					
Corn on Corn					
Goss's Wilt					
Gray Leaf Spot					
Common Rust					
NCLB					

PSF133 DGR

113 RM
Zones: 6,7,8
GDUs to BL: 2800



Tall, rugged dual purpose
High yields; 107% plot mean - 2 yr
Minimal greensnap risk
DroughtGard® technology
Moves South & West well
Plant Height: **Tall**
Ear Height: **Med-High to High**
Ear Type: **Semi-Flex w/ Girth**

Key: 1=Exc; 5=Poor	5	4	3	2	1
Stalk Strength					
Root Strength					
Vigor					
Drydown					
Test Weight					
Drought Tolerance					
Staygreen					
Fungicide Response					
Silage Utility					
High PPA Tolerance					
Highly Productive Fields					
Moderately Productive Fields					
Less Productive Fields					
Corn on Corn					
Goss's Wilt					
Gray Leaf Spot					
Common Rust					
NCLB					

PS1366 VPR

112 RM Zones: 6,7,8
GDUs to BL: 2810



Consistent! 107% plot mean - 2 yr
Very good roots & stalks
Widely adaptable; Good N to S
Good tip fill & test weight
Very good late season health
Plant Height: **Medium-Tall**
Ear Height: **Medium**
Ear Type: **Flex w/Girth**

Key: 1=Exc; 5=Poor	5	4	3	2	1
Stalk Strength					
Root Strength					
Vigor					
Drydown					
Test Weight					
Drought Tolerance					
Staygreen					
Fungicide Response					
Silage Utility					
High PPA Tolerance					
Highly Productive Fields					
Moderately Productive Fields					
Less Productive Fields					
Corn on Corn					
Goss's Wilt					
Gray Leaf Spot					
Common Rust					
NCLB					

PS1372 TRE

113 RM Zones: 6,7,8
GDUs to BL: 2800



Top yielder; 113.03% of plot mean!
Attractive, robust plants
Very good on all soils & irrigation
5% RIB for refuge convenience
Very adaptable; moves south well
Plant Height: **Medium-Tall**
Ear Height: **Medium-High**
Ear Type: **Semi-Flex w/ Girth**

Key: 1=Exc; 5=Poor	5	4	3	2	1
Stalk Strength					
Root Strength					
Vigor					
Drydown					
Test Weight					
Drought Tolerance					
Staygreen					
Fungicide Response					
Silage Utility					
High PPA Tolerance					
Highly Productive Fields					
Moderately Productive Fields					
Less Productive Fields					
Corn on Corn					
Goss's Wilt					
Gray Leaf Spot					
Common Rust					
NCLB					



113 RM – 116 RM

PSF138 SSR

113 RM Zones: 6,7,8
GDUs to BL: 2820



SmartStax
RIB COMPLETE

Best w/ higher mgmt; 106.33% mn.
Semi-flex ears make solid yields
Excellent test weight
Good dual purpose potential
Good CRW control

Plant Height: Medium-Tall

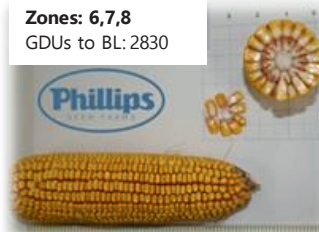
Ear Height: Medium

Ear Type: Flex w/ Avg. Girth

Key: 1=Exc; 5=Poor	5	4	3	2	1
Stalk Strength					
Root Strength					
Vigor					
Drydown					
Test Weight					
Drought Tolerance					
Staygreen					
Fungicide Response					
Silage Utility					
High PPA Tolerance					
Highly Productive Fields					
Moderately Productive Fields					
Less Productive Fields					
Corn on Corn					
Goss's Wilt					
Gray Leaf Spot					
Common Rust					
NCLB					

PSF143 VPR

114 RM
Zones: 6,7,8
GDUs to BL: 2830



VTDoublePRO
RIB COMPLETE

Best yields in NW KS & in-zone
Good early vigor; no-till option
Canopies early to shade soil
Best on heavier soils; avoid lt. sand
Minimal greensnap potential

Plant Height: Medium-Short

Ear Height: Medium to Med-Low

Ear Type: Flex w/ Girth

Key: 1=Exc; 5=Poor	5	4	3	2	1
Stalk Strength					
Root Strength					
Vigor					
Drydown					
Test Weight					
Drought Tolerance					
Staygreen					
Fungicide Response					
Silage Utility					
High PPA Tolerance					
Highly Productive Fields					
Moderately Productive Fields					
Less Productive Fields					
Corn on Corn					
Goss's Wilt					
Gray Leaf Spot					
Common Rust					
NCLB					

PSF148 VPR

114 RM Zones: 6,7,8
GDUs to BL: 2830



VTDoublePRO
RIB COMPLETE

Proven yielder; 104.5% plt mn - 2 yr
Lengthy, flex ears w/ good tip fill
Good on heat & drought stress
Good dual purpose utility
Best performance in rotation

Plant Height: Medium-Tall

Ear Height: Medium

Ear Type: Flex w/ Avg. Girth

Key: 1=Exc; 5=Poor	5	4	3	2	1
Stalk Strength					
Root Strength					
Vigor					
Drydown					
Test Weight					
Drought Tolerance					
Staygreen					
Fungicide Response					
Silage Utility					
High PPA Tolerance					
Highly Productive Fields					
Moderately Productive Fields					
Less Productive Fields					
Corn on Corn					
Goss's Wilt					
Gray Leaf Spot					
Common Rust					
NCLB					

PS1652 VPR

115-116 RM Zones: 7,8
GDUs to BL: 2860



VTDoublePRO
RIB COMPLETE

Excellent quality silage producer
Good drydown for maturity
Good canopy & husk cover
VG scores against Goss's & NCLB
Excellent feed values on silage

Plant Height: Medium-Tall

Ear Height: Medium

Ear Type: Semi-Flex w/ Girth

Key: 1=Exc; 5=Poor	5	4	3	2	1
Stalk Strength					
Root Strength					
Vigor					
Drydown					
Test Weight					
Drought Tolerance					
Staygreen					
Fungicide Response					
Silage Utility					
High PPA Tolerance					
Highly Productive Fields					
Moderately Productive Fields					
Less Productive Fields					
Corn on Corn					
Goss's Wilt					
Gray Leaf Spot					
Common Rust					
NCLB					

Corn Hybrid Ratings Chart



BRAND / HYBRID	PS0134 VPR	PS0479 CNG	PS0535 V32	PSF068 SSR	PS0711 D51	PS0770 VPR	PSF082 VPR	PS0844 V32	PS0881 CNG	PS0897 V32	PSF098 VPR	PS1091 V32	PS1177 GBL	PS1199 VPR	PS1260 V32	PSF128 VPR	PS1295 A31	PSF133 DGR	PS1366 VPR	PS1372 TRE	PSF138 SSR	PSF143 VPR	PSF148 VPR	PS1652 VPR
Trait No. 1	VPR	CNG	V32	SSR	D51	VPR	VPR	V32	CNG	V32	VPR	V32	GBL	VPR	V32	VPR	A31	DGR	VPR	TRE	SSR	VPR	VPR	VPR
Trait No. 2						CNG						CNG		SSR										
RM	101	104	105	106	107	107	108	108	108	108	109	110	111	111	112	112	112	113	113	113	113	114	114	116
GDU to Black Layer	2520	2600	2620	2645	2685	2690	2700	2705	2710	2710	2735	2745	2760	2760	2775	2780	2790	2800	2810	2800	2820	2830	2830	2860
Plant Height	M	MT	MT	MT	M	MT	M	M	MT	M	MT	M	MT	M	M	MT	MT	T	MT	MT	MT	MS	MT	MT
Ear Height	M	MT	MT	MH	M	MT	M	M	M	M	MH	M	MH	M	MH	M	MH	MH	MT	MH	MT	ML	MT	MT
Ear Flex	F	SF	SF	F	F	SF	SF	SF	SF	SF	SF	F	F	SF	SF	F	F	SF	F	SF	F	F	F	SF
Stalk Strength	2	3	3	3	3	3	2	2	2	2	3	2	1	2	3	3	2	3	2	3	2	2	3	2
Root Strength	2	1	2	2	3	2	1	2	2	3	2	3	2	2	1	3	1	3	2	2	2	1	3	2
Vigor	3	3	2	2	1	2	3	1	3	2	2	3	2	3	1	3	3	3	3	3	2	2	3	3
Drydown	2	2	2	2	2	1	3	1	3	1	3	3	1	2	2	3	2	3	3	1	3	3	2	2
Test Weight	3	3	3	3	2	2	3	3	2	3	3	3	3	3	3	3	2	3	3	2	3	2	2	2
Drought Tolerance	3	2	3	3	1	3	3	1	3	1	3	2	1	3	2	2	2	2	2	2	2	2	1	2
Staygreen	3	3	1	2	3	2	2	2	2	2	2	3	2	3	2	3	2	3	2	3	3	3	3	2
Fungicide Response	1	2	2	2	2	2	2	3	2	2	2	3	2	2	2	2	2	2	2	2	2	2	2	2
Silage Utility	3	2	3	2	3	2	2	3	1	2	1	3	1	3	2	2	2	1	1	2	2	3	2	1
High PPA Tolerance	3	2	2	2	1	2	3	2	2	2	2	2	3	2	2	2	2	3	2	2	3	3	2	2
Highly Prod. Fields	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
Moderately Prod. Fields	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Less Prod. Fields	2	2	2	2	1	2	2	1	1	1	2	1	1	1	1	2	2	2	1	2	2	2	2	1
Corn on Corn	3	3	3	3	1	2	3	2	3	2	3	3	3	3	3	3	2	2	1	3	3	4	4	1
Goss's Wilt	3	3	1	2	1	2	3	1	1	1	2	1	1	1	1	2	2	1	3	3	3	3	3	2
Gray Leaf Spot	3	3	3	2	3	2	3	3	2	1	2	1	1	1	3	3	3	3	2	3	3	4	3	3
Common Rust	2	2	3	3	3	3	2	3	3	N/A	2	3	N/A	3	N/A	3	2	3	3	3	3	3	2	3
NCLB	3	2	2	2	3	2	3	3	3	1	3	2	1	2	2	2	2	3	2	2	2	2	2	2
2-Yr Yld as % of Plot Mean	N/A	N/A	N/A	N/A	101.25	100.86	96.72	106.77	N/A	108.89	101.49	101.38	105.61	107.14	104.26	N/A	N/A	106.72	106.96	113.03	106.33	N/A	104.46	100.68
Test Loc's-2 yr	N/T	N/T	N/T	N/T	43	43	43	43	N/T	43	43	43	43	43	43	N/T	N/T	43	43	21	43	N/T	43	43

Key: 1 = Excellent; 2 = Very Good; 3 = Good/Avg.; 4 = Fair/Below Avg.; 5 = Poor

1-yr

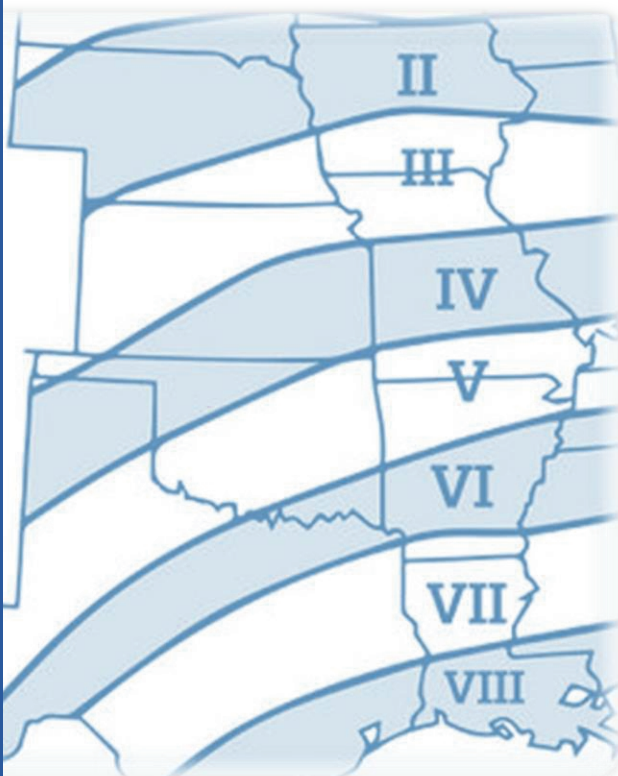
M = Medium; MT = Medium Tall; T = Tall; MH = Medium High; MS = Medium Short

N/A = Not Available; N/T = Not Tested. Ear Flex: F=Flex; SF=Semi-Flex



Soybean Information Page

SOYBEAN MATURITY GROUP ZONES



PHILLIPS SEED FARMS SOYBEAN VARIETIES

Trait > Maturity Group	XTENDFLEX SOYBEANS	ROUNDUP READY 2 XTEND SOYBEANS	Enlist E3 SOYBEANS
II	251XFS 262XFS		240E3 292E3
III	352XF 372XF	387NR2X	322E3 361E3
IV	442XFS 461XFS 492XFS	408NR2XS 430NR2XSE 456NR2XS 478NR2XSE	402E3 420E3S 460E3SE 482E3S
V		500NR2XS	

Varieties in **BLUE** are new for 2022 planting

SOYBEAN VARIETY NAMING SYSTEM

Example: 430NR2XSE

- 1st two numbers denote maturity
- 3rd number differentiates variety
- Remaining character string indicates trait type, and additional tolerances or gene presence:
 - "S" designation denotes STS tolerance
 - "E" denotes the salt "Excluder" gene



408NR2XS

PSF Variety Characteristic Chart Key for Individual Descriptions & Ratings Chart (At end of Soybean Section)

Trait Type: E3 = Enlist E3®; XF = XtendFlex®; R2X = Roundup Ready 2 Xtend®
 Flower Color: P = Purple; W = White Pubescence Color: G = Gray; LT = Light Tawny; T = Tawny
 Pod Color: BR = Brown; T = Tan; TY = Tawny Hilum Color: BL = Black; IB = Imperfect Black
 Plant Type: M = Medium or Intermediate; MB = Medium Bush; B = Bush
 Plant Height: M = Medium; M+ = Medium to Medium Tall; MT = Medium Tall; T = Tall
 Plant Characteristic & Disease Resistance Ratings: 1 = Excellent; 5 = Susceptible; NR = Not Rated
 Herbicide Resistance Rating: Y = Yes, it is resistant; N = No, it is not resistant

Soybean Varieties: Group II - III



240E3

2.4 Maturity



Provides standability with yield
Good IDC tolerance
Great defensive package
Consistent performer
Glyphosate, glufosinate & 2-4D choline tolerant

Characteristics	
Flower Color	Purple
Pubescence	Gray
Pod Color	Tan
Hilum Color	Buff
Plant Type	Intermediate
Plant Height	Medium-Tall

1=Exc; 5=Poor	5	4	3	2	1
Standability				2.5	
Emergence				2.0	
Stress Tolerance				2.5	
Iron Def. Chlorosis			3.5		
PRR Tolerance				2.0	
White Mold				2.0	
SDS				2.0	
Stem Canker					1.0

251XFS

2.5 Maturity



Excellent for 30" & narrower rows
Very good IDC, SDS, & WM tolerance
High yields for maturity & very good standability
Very good Stem Canker resistance
Glyphosate, dicamba & glufosinate tolerant

Characteristics	
Flower Color	Purple
Pubescence	Light Tawny
Pod Color	Gray
Hilum Color	Gray
Plant Type	Intermediate
Plant Height	Medium-Tall

1=Exc; 5=Poor	5	4	3	2	1
Emergence					1.1
Iron Def. Chlorosis					1.9
SCN Tolerance					1.5
PRR Tolerance					1.7
White Mold				2.0	
PRR Tolerance			3.0		
Brown Stem Rot			3.0		
Stem Canker				2.5	

262XFS

2.6 Maturity



Medium plants exhibit good standability
Very good IDC scores & average SDS tolerance
Excellent emergence, but note caution on WM
Strong in NE, IA, and as far south as NW MO
Glyphosate, dicamba & glufosinate tolerant

Characteristics	
Flower Color	Purple
Pubescence	Gray
Pod Color	Tawny
Hilum Color	Gray
Plant Type	Intermediate
Plant Height	Medium

1=Exc; 5=Poor	5	4	3	2	1
Emergence					1.2
Iron Def. Chlorosis					1.8
SCN Tolerance					1.5
PRR Tolerance				2.0	
White Mold		4.0			
Brown Stem Rot					1.5
SDS				3.0	

292E3

2.9 Maturity



High yielding for maturity
Solid East to West performance
Very good emergence and stability
Excellent field tolerance to PRR
Glyphosate, glufosinate & 2-4D tolerant

Characteristics	
Flower Color	Purple
Pubescence	Gray
Pod Color	Brown
Hilum Color	Imperfect Black
Plant Type	Medium Bush
Plant Height	Medium - MT

1=Exc; 5=Poor	5	4	3	2	1
Standability				2.0	
Emergence					1.5
Stress Tolerance					1.5
Iron Def. Chlorosis				2.2	
PRR Tolerance					1.5
SDS				3.0	
SCN Tolerance					2.0

322E3

3.2 Maturity



Solid yields from this offensive/defensive variety
Excellent stress tolerance from E - W in zone
Defends well against SDS, PRR & SCN
Performs well in high yield & low yield scenarios
Glyphosate, glufosinate & 2-4D tolerant

Characteristics	
Flower Color	Purple
Pubescence	Gray
Pod Color	Tan
Hilum Color	Imperfect Black
Plant Type	Medium Bush
Plant Height	Medium - MT

1=Exc; 5=Poor	5	4	3	2	1
Standability				2.5	
Emergence					1.0
Stress Tolerance					1.0
Iron Def. Chlorosis				2.5	
PRR Tolerance					1.5
SCN Tolerance					2.0
Frogeye Leaf Spot				2.5	
SDS					2.0

352XF

3.5 Maturity



Nice field appearance with impressive pod set
Medium-tall plants have excellent standability
Outstanding bean for no-till & narrow rows
Fair to average on IDC and PRR scores
Glyphosate, dicamba & glufosinate tolerant

Characteristics	
Flower Color	Purple
Pubescence	Gray
Pod Color	Brown
Hilum Color	Imperfect Black
Plant Type	Medium Bush
Plant Height	Medium-Tall

1 = Exc; 5 = Poor	5	4	3	2	1
Standability					1.0
Emergence					1.0
Stress Tolerance					1.5
Iron Def. Chlorosis			3.7		
PRR Tolerance			3.6		
Brown Stem Rot				2.5	
SDS			3.0		
SCN Tolerance					1.5

361E3

3.6 Maturity



Attractive field appearance & yield stability
Excellent stress tolerance & very good emergence
Solid PRR, BSR & Stem Canker resistance
Flexible, mid-Group III yields well E-W in zone
Glyphosate, glufosinate & 2-4D tolerant

Characteristics	
Flower Color	Purple
Pubescence	Gray
Pod Color	Tan
Hilum Color	Imperfect Black
Plant Type	Medium Bush
Plant Height	Medium-Tall

1 = Exc; 5 = Poor	5	4	3	2	1
Standability				2.5	
Emergence				2.0	
Stress Tolerance					1.0
PRR Tolerance				2.0	
Brown Stem Rot					1.0
SDS				2.5	
Frogeye Leaf Spot			3.5		
Stem Canker					1.0

372XF

3.7 Maturity



Excellent yields from southern NE/IA to KS & MO
Strong emergence and average standability
Medium-tall plants work well in narrow rows
Solid on No-Till; watch Metribuzin sensitivity
Glyphosate, dicamba & glufosinate tolerant

Characteristics	
Flower Color	Purple
Pubescence	Light Tawny
Pod Color	Tawny
Hilum Color	Black
Plant Type	Medium Bush
Plant Height	Medium-Tall

1 = Exc; 5 = Poor	5	4	3	2	1
Standability			3.0		
Emergence					1.0
Stress Tolerance					1.5
Iron Def. Chlorosis	4.7				
PRR Tolerance			3.0		
Brown Stem Rot					1.1
SDS				2.0	
Stem Canker					1.2

387NR2X

3.8 Maturity



Very good emergence
Canopies quickly w/wide body
Excellent stress tolerance
Good standability
Glyphosate & dicamba tolerant

Characteristics	
Flower Color	Purple
Pubescence	Gray
Pod Color	Tan
Hilum Color	Black
Plant Type	Intermediate
Plant Height	Medium-Tall
Protein Content	38.5
Oil Content	22.5

1 = Exc; 5 = Poor	5	4	3	2	1
Standability				2.6	
Emergence				2.0	
Stress Tolerance					1.5
PRR Tolerance					1.7
Brown Stem Rot					1.5
SDS					2.3

402E3

4.0 Maturity





Consistent, medium-tall early Group IV variety
Attractive light tawny/brown appearance
Widely adapted across soil types & environments
Bigger plant type offers PPA flexibility
Glyphosate, glufosinate & 2-4D tolerant

Characteristics	
Flower Color	White
Pubescence	Light Tawny
Pod Color	Brown
Hilum Color	Brown
Plant Type	Medium
Plant Height	Medium-Tall

1 = Exc; 5 = Poor	5	4	3	2	1
Emergence					1.0
Standability				2.5	
SCN Tolerance					1.5
PRR Tolerance				2.5	
SDS				2.7	
Frogeye Leaf Spot					1.5
Root Knot		4.0			

Soybean Varieties: Group IV



<div><div>408NR2XS</div><div>4.0 Maturity</div><div><p>This line will handle the West</p><p>Light tawny tan color</p><p>Very good standability</p><p>SDS excellent in limited reps</p><p>Glyphosate & dicamba tolerant</p></div></div> <div><div>ROUNDUP READY 2</div><div><div>X</div><div>TEND</div></div><div>SOYBEANS</div><div></div></div>	<div><div>Characteristics</div><table><tr><td>Flower Color</td><td>Purple</td></tr><tr><td>Pubescence</td><td>Light Tawny</td></tr><tr><td>Pod Color</td><td>Tan</td></tr><tr><td>Hilum Color</td><td>Black</td></tr><tr><td>Plant Type</td><td>NA</td></tr><tr><td>Plant Height</td><td>Medium+</td></tr></table></div>	Flower Color	Purple	Pubescence	Light Tawny	Pod Color	Tan	Hilum Color	Black	Plant Type	NA	Plant Height	Medium+	<table><tr><th>1=Exc; 5=Poor</th><th>5</th><th>4</th><th>3</th><th>2</th><th>1</th></tr><tr><td>Standability</td><td></td><td></td><td></td><td></td><td>1.8</td></tr><tr><td>Emergence</td><td></td><td></td><td></td><td></td><td>1.7</td></tr><tr><td>PRR Tolerance</td><td></td><td></td><td></td><td></td><td>2.0</td></tr><tr><td>SDS</td><td></td><td></td><td></td><td></td><td>1.9</td></tr><tr><td>Frogeye Leaf Spot</td><td></td><td></td><td></td><td>3.0</td><td></td></tr><tr><td>Stem Canker</td><td></td><td></td><td>4.0</td><td></td><td></td></tr><tr><td>Root Knot</td><td></td><td></td><td>4.0</td><td></td><td></td></tr></table>	1=Exc; 5=Poor	5	4	3	2	1	Standability					1.8	Emergence					1.7	PRR Tolerance					2.0	SDS					1.9	Frogeye Leaf Spot				3.0		Stem Canker			4.0			Root Knot			4.0								
Flower Color	Purple																																																																			
Pubescence	Light Tawny																																																																			
Pod Color	Tan																																																																			
Hilum Color	Black																																																																			
Plant Type	NA																																																																			
Plant Height	Medium+																																																																			
1=Exc; 5=Poor	5	4	3	2	1																																																															
Standability					1.8																																																															
Emergence					1.7																																																															
PRR Tolerance					2.0																																																															
SDS					1.9																																																															
Frogeye Leaf Spot				3.0																																																																
Stem Canker			4.0																																																																	
Root Knot			4.0																																																																	
<div><div>420E3S</div><div>4.2 Maturity</div><div><p>STS Tolerant; SR variety</p><p>Medium plants emerge & stand well</p><p>Good fit for lighter loam soils</p><p>Works well to mid-south</p><p>Glyphosate, glufosinate & 2-4D tolerant</p></div></div> <div><div>Enlist E3</div><div><div>X</div><div>TEND</div></div><div>SOYBEANS</div><div></div></div>	<div><div>Characteristics</div><table><tr><td>Flower Color</td><td>White</td></tr><tr><td>Pubescence</td><td>Gray</td></tr><tr><td>Pod Color</td><td>Brown</td></tr><tr><td>Hilum Color</td><td>Buff</td></tr><tr><td>Plant Type</td><td>Medium</td></tr><tr><td>Plant Height</td><td>Medium</td></tr></table></div>	Flower Color	White	Pubescence	Gray	Pod Color	Brown	Hilum Color	Buff	Plant Type	Medium	Plant Height	Medium	<table><tr><th>1=Exc; 5=Poor</th><th>5</th><th>4</th><th>3</th><th>2</th><th>1</th></tr><tr><td>Standability</td><td></td><td></td><td></td><td></td><td>1.5</td></tr><tr><td>Emergence</td><td></td><td></td><td></td><td></td><td>1.5</td></tr><tr><td>Frogeye Leaf Spot</td><td></td><td></td><td></td><td></td><td>2.0</td></tr><tr><td>Root Knot</td><td></td><td>4.5</td><td></td><td></td><td></td></tr><tr><td>SCN Tolerance</td><td></td><td></td><td></td><td></td><td>2.0</td></tr><tr><td>Stem Canker</td><td></td><td></td><td></td><td></td><td>1.0</td></tr></table>	1=Exc; 5=Poor	5	4	3	2	1	Standability					1.5	Emergence					1.5	Frogeye Leaf Spot					2.0	Root Knot		4.5				SCN Tolerance					2.0	Stem Canker					1.0												
Flower Color	White																																																																			
Pubescence	Gray																																																																			
Pod Color	Brown																																																																			
Hilum Color	Buff																																																																			
Plant Type	Medium																																																																			
Plant Height	Medium																																																																			
1=Exc; 5=Poor	5	4	3	2	1																																																															
Standability					1.5																																																															
Emergence					1.5																																																															
Frogeye Leaf Spot					2.0																																																															
Root Knot		4.5																																																																		
SCN Tolerance					2.0																																																															
Stem Canker					1.0																																																															
<div><div>430NR2XSE</div><div>4.3 Maturity</div><div><p>Tough yielder w/ STS Tolerance</p><p>Medium-tall variety that stands well</p><p>Excellent emergence w/ salt excluder gene</p><p>Top performer in Kansas/ SR variety</p><p>Glyphosate & dicamba tolerant</p></div></div> <div><div>ROUNDUP READY 2</div><div><div>X</div><div>TEND</div></div><div>SOYBEANS</div><div></div></div>	<div><div>Characteristics</div><table><tr><td>Flower Color</td><td>Purple</td></tr><tr><td>Pubescence</td><td>Light Tawny</td></tr><tr><td>Pod Color</td><td>Brown</td></tr><tr><td>Hilum Color</td><td>Black</td></tr><tr><td>Plant Type</td><td>Medium</td></tr><tr><td>Plant Height</td><td>Medium-Tall</td></tr></table></div>	Flower Color	Purple	Pubescence	Light Tawny	Pod Color	Brown	Hilum Color	Black	Plant Type	Medium	Plant Height	Medium-Tall	<table><tr><th>1=Exc; 5=Poor</th><th>5</th><th>4</th><th>3</th><th>2</th><th>1</th></tr><tr><td>Standability</td><td></td><td></td><td></td><td></td><td>1.7</td></tr><tr><td>Emergence</td><td></td><td></td><td></td><td></td><td>1.0</td></tr><tr><td>PRR Tolerance</td><td></td><td></td><td></td><td>2.5</td><td></td></tr><tr><td>SDS</td><td></td><td></td><td></td><td></td><td>2.0</td></tr><tr><td>Frogeye Leaf Spot</td><td></td><td></td><td></td><td></td><td>2.0</td></tr><tr><td>Stem Canker</td><td></td><td></td><td></td><td></td><td>1.0</td></tr><tr><td>Root Knot</td><td></td><td></td><td>3.7</td><td></td><td></td></tr><tr><td>SCN Tolerance</td><td></td><td></td><td></td><td></td><td>1.2</td></tr></table>	1=Exc; 5=Poor	5	4	3	2	1	Standability					1.7	Emergence					1.0	PRR Tolerance				2.5		SDS					2.0	Frogeye Leaf Spot					2.0	Stem Canker					1.0	Root Knot			3.7			SCN Tolerance					1.2
Flower Color	Purple																																																																			
Pubescence	Light Tawny																																																																			
Pod Color	Brown																																																																			
Hilum Color	Black																																																																			
Plant Type	Medium																																																																			
Plant Height	Medium-Tall																																																																			
1=Exc; 5=Poor	5	4	3	2	1																																																															
Standability					1.7																																																															
Emergence					1.0																																																															
PRR Tolerance				2.5																																																																
SDS					2.0																																																															
Frogeye Leaf Spot					2.0																																																															
Stem Canker					1.0																																																															
Root Knot			3.7																																																																	
SCN Tolerance					1.2																																																															
<div><div>442XFS</div><div>4.4 Maturity</div><div><p>Solid yields in central, southern KS, OK & MO</p><p>Sulfonylurea Tolerant, but has IDC susceptibility</p><p>SDS & Frogeye Leaf Spot resistant</p><p>Strong SDS package with Stem Canker resistance</p><p>Glyphosate, dicamba & glufosinate tolerant</p></div></div> <div><div><div>X</div><div>TENDFLEX</div></div><div>SOYBEANS</div><div></div></div>	<div><div>Characteristics</div><table><tr><td>Flower Color</td><td>Purple</td></tr><tr><td>Pubescence</td><td>Light Tawny</td></tr><tr><td>Pod Color</td><td>Tan</td></tr><tr><td>Hilum Color</td><td>Black</td></tr><tr><td>Plant Type</td><td>Medium Bush</td></tr><tr><td>Plant Height</td><td>Tall</td></tr></table></div>	Flower Color	Purple	Pubescence	Light Tawny	Pod Color	Tan	Hilum Color	Black	Plant Type	Medium Bush	Plant Height	Tall	<table><tr><th>1=Exc; 5=Poor</th><th>5</th><th>4</th><th>3</th><th>2</th><th>1</th></tr><tr><td>Standability</td><td></td><td></td><td></td><td></td><td>2.0</td></tr><tr><td>Emergence</td><td></td><td></td><td></td><td></td><td>1.7</td></tr><tr><td>PRR Tolerance</td><td></td><td></td><td>4.0</td><td></td><td></td></tr><tr><td>SDS</td><td></td><td></td><td></td><td></td><td>1.0</td></tr><tr><td>Frogeye Leaf Spot</td><td></td><td></td><td></td><td></td><td>2.0</td></tr><tr><td>Stem Canker</td><td></td><td></td><td></td><td></td><td>1.0</td></tr><tr><td>SCN Tolerance</td><td></td><td></td><td></td><td></td><td>1.2</td></tr><tr><td>Root Knot</td><td></td><td></td><td>4.0</td><td></td><td></td></tr></table>	1=Exc; 5=Poor	5	4	3	2	1	Standability					2.0	Emergence					1.7	PRR Tolerance			4.0			SDS					1.0	Frogeye Leaf Spot					2.0	Stem Canker					1.0	SCN Tolerance					1.2	Root Knot			4.0		
Flower Color	Purple																																																																			
Pubescence	Light Tawny																																																																			
Pod Color	Tan																																																																			
Hilum Color	Black																																																																			
Plant Type	Medium Bush																																																																			
Plant Height	Tall																																																																			
1=Exc; 5=Poor	5	4	3	2	1																																																															
Standability					2.0																																																															
Emergence					1.7																																																															
PRR Tolerance			4.0																																																																	
SDS					1.0																																																															
Frogeye Leaf Spot					2.0																																																															
Stem Canker					1.0																																																															
SCN Tolerance					1.2																																																															
Root Knot			4.0																																																																	
<div><div>456NR2XS</div><div>4.5 Maturity</div><div><p>Bush type soybean</p><p>Wide, canopies row quickly</p><p>Good Frogeye and Stem Canker resistance</p><p>Excellent Cercospora tolerance</p><p>Glyphosate & dicamba tolerant</p></div></div> <div><div>ROUNDUP READY 2</div><div><div>X</div><div>TEND</div></div><div>SOYBEANS</div><div></div></div>	<div><div>Characteristics</div><table><tr><td>Flower Color</td><td>Purple</td></tr><tr><td>Pubescence</td><td>Light Tawny</td></tr><tr><td>Pod Color</td><td>Brown</td></tr><tr><td>Hilum Color</td><td>Black</td></tr><tr><td>Plant Type</td><td>Bush</td></tr><tr><td>Plant Height</td><td>Medium-Tall</td></tr></table></div>	Flower Color	Purple	Pubescence	Light Tawny	Pod Color	Brown	Hilum Color	Black	Plant Type	Bush	Plant Height	Medium-Tall	<table><tr><th>1=Exc; 5=Poor</th><th>5</th><th>4</th><th>3</th><th>2</th><th>1</th></tr><tr><td>Standability</td><td></td><td></td><td></td><td></td><td>2.8</td></tr><tr><td>Emergence</td><td></td><td></td><td></td><td></td><td>1.8</td></tr><tr><td>PRR Tolerance</td><td></td><td></td><td></td><td></td><td>2.0</td></tr><tr><td>SDS</td><td></td><td></td><td></td><td>2.8</td><td></td></tr><tr><td>Frogeye Leaf Spot</td><td></td><td></td><td></td><td></td><td>1.9</td></tr><tr><td>Southern Stem Canker</td><td></td><td></td><td></td><td></td><td>1.0</td></tr><tr><td>Southern Root Knot</td><td></td><td></td><td>3.7</td><td></td><td></td></tr><tr><td>Cercospora</td><td></td><td></td><td></td><td></td><td>1.6</td></tr></table>	1=Exc; 5=Poor	5	4	3	2	1	Standability					2.8	Emergence					1.8	PRR Tolerance					2.0	SDS				2.8		Frogeye Leaf Spot					1.9	Southern Stem Canker					1.0	Southern Root Knot			3.7			Cercospora					1.6
Flower Color	Purple																																																																			
Pubescence	Light Tawny																																																																			
Pod Color	Brown																																																																			
Hilum Color	Black																																																																			
Plant Type	Bush																																																																			
Plant Height	Medium-Tall																																																																			
1=Exc; 5=Poor	5	4	3	2	1																																																															
Standability					2.8																																																															
Emergence					1.8																																																															
PRR Tolerance					2.0																																																															
SDS				2.8																																																																
Frogeye Leaf Spot					1.9																																																															
Southern Stem Canker					1.0																																																															
Southern Root Knot			3.7																																																																	
Cercospora					1.6																																																															



Soybean Varieties: Group IV - V

460E3SE

4.6 Maturity



Nice fit for clay soils

STS tolerant; SR variety

Salt excluder gene

Medium bush plants emerge & yield well

Glyphosate, glufosinate & 2-4D tolerant

Characteristics	
Flower Color	Purple
Pubescence	Gray
Pod Color	Brown
Hilum Color	Imperfect Black
Plant Type	Medium Bush
Plant Height	Medium-Tall

1=Exc; 5=Poor	5	4	3	2	1
Standability				2.5	
Emergence					1.5
Frogeye Leaf Spot				2.2	
Stem Canker					1.0
Root Knot		4.5			
SCN Tolerance				2.0	

461XFS

4.6 Maturity



Top yielder works well in southern KS/MO

Solid SCN & Stem Canker resistance

Average standability in late planting situations

Works well on narrow rows, no-till & heavy soils

Glyphosate, dicamba & glufosinate tolerant

Characteristics	
Flower Color	Purple
Pubescence	Light Tawny
Pod Color	Brown
Hilum Color	Black
Plant Type	Medium Bush
Plant Height	Tall

1=Exc; 5=Poor	5	4	3	2	1
Standability			3.5		
Emergence					1.5
SCN Tolerance					1.0
SDS			3.5		
Stem Canker					1.0
Root Knot		4.0			

478NR2XSE

4.7 Maturity



Tall line that stands

Stacked with STS & salt excluder

Stem Canker resistant

SDS excellent in limited reps

Glyphosate & dicamba tolerant

Characteristics	
Flower Color	Purple
Pubescence	Gray
Pod Color	Tan
Hilum Color	Black
Plant Type	Medium
Plant Height	Tall
Protein Content	41.7
Oil Content	22.1

1=Exc; 5=Poor	5	4	3	2	1
Standability				2.0	
Emergence					1.9
PRR Tolerance				2.3	
SDS					1.5
Frogeye Leaf Spot				2.3	
Stem Canker					1.0
Root Knot			3.7		

482E3S

4.7 Maturity



Nice & uniform medium plants

Flexible SR variety works well in KS, OK, MO

Stem Canker, BSR & SCN resistance, & more

Excellent pod clusters & standability

Glyphosate, glufosinate & 2-4D tolerant

Characteristics	
Flower Color	White
Pubescence	Gray
Pod Color	Brown
Hilum Color	Buff
Plant Type	Medium
Plant Height	Medium-MT

1=Exc; 5=Poor	5	4	3	2	1
Standability				2.0	
Emergence					1.0
PRR Tolerance				2.5	
SDS				2.7	
Frogeye Leaf Spot				2.0	
Stem Canker					1.0
Root Knot		4.0			
SCN Tolerance					1.0

492XFS

4.9 Maturity



High yields in KS, OK, MO & AR

Stacked with STS & salt excluder gene

Stem Canker & SCN resistant

Works well in narrow rows & no-till situations

Glyphosate, dicamba & glufosinate tolerant

Characteristics	
Flower Color	Purple
Pubescence	Light Tawny
Pod Color	Tan
Hilum Color	Black
Plant Type	Medium Bush
Plant Height	Tall
Protein Content	40.4
Oil Content	21.7

1=Exc; 5=Poor	5	4	3	2	1
Standability				2.0	
Emergence					1.0
PRR Tolerance				2.3	
SDS					1.5
Frogeye Leaf Spot			3.0		
Stem Canker					1.0
Root Knot		4.0			
SCN Tolerance					1.0

Soybean Variety Desc. & Ratings Chart



500NR2XS

5.0 Maturity

ROUNDUP READY 2
X TEND
SOYBEANS



SR variety; tolerates SU chemistry

Excellent for southern KS, MO & OK

Medium-Tall plants emerge & stand well

Tall variety makes it a good fit for clay soils

Glyphosate & dicamba tolerant

Characteristics

Flower Color	White
Pubescence	Light Tawny
Pod Color	Tan
Hilum Color	Black
Plant Type	Medium
Plant Height	Medium-Tall

1 = Exc; 5 = Poor

	5	4	3	2	1
Standability					2.0
Emergence					1.5
PRR Tolerance					2.0
SDS					2.0
Frogeye Leaf Spot				2.5	
Stem Canker					1.0
Root Knot			3.7		
Stress Tolerance					1.5



SOYBEAN RATINGS

	240E3	251XFS	262XFS	292E3	322E3	352XF	361E3	372XF	387NR2XS	402E3	420E3S	430NR2XSE	442XFS	456NR2XS	460E3SE	461XFS	478NR2XSE	482E3S	492XFS	500NR2XS
VARIETY & PLANT CHARACTERISTICS																				
Trait Type	E3	XF	XF	E3	E3	XF	E3	XF	R2X	E3	E3	R2X	XF	R2X	E3	XF	R2X	E3	XF	R2X
Maturity Rating	2.4	2.5	2.6	2.9	3.2	3.5	3.6	3.7	3.8	4.0	4.2	4.3	4.4	4.5	4.6	4.6	4.7	4.8	4.9	5.0
Flower Color	P	P	P	P	P	P	P	P	P	W	W	P	P	P	P	P	P	W	P	W
Pubescence Color	G	LT	G	G	G	G	G	LT	LT	LT	G	LT	LT	LT	G	LT	G	G	LT	LT
Pod Color	T	G	TY	BR	T	BR	T	TY	T	BR	BR	BR	T	BR	BR	BR	T	BR	T	T
Hilum Color	BF	G	G	IB	IB	IB	IB	BL	BL	BR	BF	BL	BL	BL	IB	BL	BL	BF	BL	BL
Plant Type	M	M	M	MB	MB	MB	MB	MB	M	M	M	M	MB	B	MB	MB	MB	M	MB	M
Plant Height	MT	MT	M	M+	M+	MT	MT	MT	MT	MT	M	MT	T	MT	MT	T	T	M+	T	MT
Standability	2.5	2.5	2.5	2.0	2.5	1.0	2.5	3.0	2.6	2.5	1.5	1.7	2.0	2.8	2.5	3.5	2.0	2.0	2.0	2.0
Emergence	2.0	1.1	1.2	1.5	1.0	1.0	2.0	1.0	2.0	1.0	1.5	1.0	1.7	1.8	1.5	1.5	1.9	1.0	1.0	1.5
Stress Tolerance	2.5	2.5	3.0	1.5	1.0	1.5	1.0	1.5	1.5	2.5	2.0	1.5	2.0	2.0	2.5	2.5	2.5	2.5	2.5	2.5
DISEASE RESISTANCE																				
IDC	3.5	1.9	1.8	2.2	2.5	3.7	3.0	4.7	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
PRR Tolerance	2.0	3.0	2.0	1.5	1.5	3.6	2.0	3.0	1.7	2.5	NR	2.5	4.0	2.0	NR	NR	2.3	2.5	2.3	2.0
SDS	2.0	2.0	3.0	3.0	2.0	2.5	2.5	2.0	2.3	2.7	NR	2.0	1.0	2.8	NR	3.5	1.5	2.7	1.5	2.0
White Mold	2.0	2.0	4.0	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Stem Canker	1.0	2.5	NR	NR	NR	NR	1.0	1.2	NR	NR	1.0	1.0	1.0	1.0	1.0	1.0	NR	1.0	1.0	1.0
BSR	NR	3.0	1.5	NR	NR	2.5	1.0	1.1	1.5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Frogeye Leaf Spot	NR	NR	NR	NR	2.5	NR	3.5	NR	NR	1.5	2.0	2.0	2.0	1.9	2.2	NR	2.3	2.0	3.0	2.5
SCN Tolerance	2.5	1.5	1.5	2.0	2.0	1.5	3.0	3.0	3.5	1.5	2.0	NR	1.2	NR	2.0	1.0	NR	1.0	1.0	NR
Root Knot	NR	NR	NR	NR	NR	NR	NR	NR	NR	4.0	4.5	3.7	4.0	3.7	4.5	4.0	3.7	4.0	4.0	3.7
HERBICIDE RESISTANCE																				
Sulfonylurea Resistant	N	Y	Y	N	N	N	N	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Glyphosate Res. (RR)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Glufosinate Res. (LL)	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	Y	N	Y	Y	N	Y	Y	N
Dicamba Resistant	N	Y	Y	N	N	Y	N	Y	Y	N	N	Y	Y	Y	N	Y	Y	N	Y	Y
2-4D Resistant	Y	N	N	Y	Y	N	Y	N	N	Y	Y	N	N	N	Y	N	N	Y	N	N
+ Salt (Chloride) Excluder	N	N	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	Y	N	N	N

Note: Grain sorghum pictures (below) were taken September 2, 2020 near Assaria, KS

530

Early



6033B

(Tested as PGX0C1)

Med-Early



637

Medium



6711R

(Tested as PGX0J4)

Medium



530 Milo



Grain Sorghum Hybrid Descriptions



530

Early Maturity

Red grain

53 days to mid-bloom

Good choice for late plant or double crop in the South

Plant height 42-48"

Very good resistance to Sugarcane Aphid

1=Exc; 5=Poor	5	4	3	2	1
Yield for Maturity					
Standability					
Highly Prod. Fields					
Mod. Variable Fields					
Low Prod. Fields					
Threshability					

1=Exc; 5=Poor	5	4	3	2	1
Head Exertion					
Anthracnose Resistant					
Sugarcane Aphid Res.					
Head Smut					
MDMV					

6033B (PGX0C1)

Medium-Early Maturity

Bronze Grain with good test weight & staygreen

59 - 60 days to mid-bloom

Strong yields for maturity (103.20% of mean - 2020)

Produces medium plants with good stalks & roots

Semi-open to open heads; Good SCA resistance

1=Exc; 5=Poor	5	4	3	2	1
Yield for Maturity					
Standability					
Stress Tolerance					
Test Weight					
Seedling Vigor					
Head Exertion					

1=Exc; 5=Poor	5	4	3	2	1
Anthracnose					
Charcoal Rot					
Downey Mildew					
Head Smut					
Fusarium					
Sugarcane Aphid Res.					

637

Medium-Early Maturity

Bronze Grain

63 days to mid-bloom

RM medium-early 105-110 days

Plant height 34-40"

Highly tolerant to Sugarcane Aphid

1=Exc; 5=Poor	5	4	3	2	1
Yield for Maturity					
Standability					
Drought Tolerance					
Test Weight					
Seedling Vigor					
Uniformity					

1=Exc; 5=Poor	5	4	3	2	1
Head Exertion					
Charcoal Rot					
Downey Mildew					
Head Smut					
MDMV					
Sugarcane Aphid Res.					

6711R (PGX0J4)

Medium Maturity

Solid performance at 118.95% of plot mean

67 days to mid-bloom (Rating - KS & North)

Medium-Tall to Tall plants with semi-closed heads

Medium-Tall to Tall plants; very good standability

Excellent SCA, MDMV & Head Smut Tolerance

1=Exc; 5=Poor	5	4	3	2	1
Yield for Maturity					
Standability					
Drought Tolerance					
Test Weight					
Seedling Vigor					
Uniformity					

1=Exc; 5=Poor	5	4	3	2	1
Head Exertion					
Anthracnose					
Downey Mildew					
Head Smut					
MDMV					
Sugarcane Aphid Res.					

6033B Milo









Wheat Intro & Variety Information

Phillips Seed Farms is your full-service quality wheat resource.

For those of you in a more convenient distance to a Phillips Seed Farms facility, we have custom wheat cleaning and treating. If this service is of interest to you, be sure to set an appointment to get on the list.

Source	Maturity		
	Medium - Early	Medium	Medium - Late
	ICON	TAM205 AG RADICAL	
	WB4269	WB4401	WB4699 GRAINFIELD
	BENEFIT WOLVERINE	AP18 AX BOB DOLE	MONUMENT
 WHEAT ALLIANCE	ZENDA		

Varieties in RED are new for Fall seeding



PSF Wheat Variety Descriptions



AP18AX



Medium Maturity

High yield potential variety

CoAXium® wheat production system

Aggressor™ herbicide tolerance

Wheat Streak Mosaic virus tolerance

Good winterhardness in initial testing

Showy fall growth



1=Exc; 5=Poor	5	4	3	2	1
Drought Tolerance					
Yield Potential					
Straw Strength					
Test Weight					
Fall Grazing Potential					
Winter Hardiness					
Tillering					
Shattering Reputation					
Acid Soil Tolerance					

1=Exc; 5=Poor	5	4	3	2	1
Leaf Rust					
Stripe Rust					
Stem Rust					
Scab					
Barley Yellow Dwarf					
Hessian Fly					
Tan Spot					
Wheat Streak Mosaic					
Soil Borne Mosaic	NA				

Bob Dole

Medium Maturity

Good overall disease package

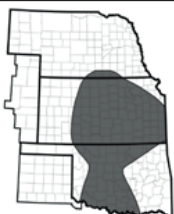
Excellent end-use qualities

Consistent yield performance

Intended for central corridor

Tall variety; good straw strength

Lower tillering capacity



1=Exc; 5=Poor	5	4	3	2	1
Drought Tolerance					
Yield Potential					
Straw Strength					
Test Weight					
Fall Grazing Potential					
Winter Hardiness					
Tillering					
Shattering Reputation					
Acid Soil Tolerance					

1=Exc; 5=Poor	5	4	3	2	1
Leaf Rust					
Stripe Rust					
Stem Rust					
Scab					
Barley Yellow Dwarf					
Hessian Fly					
Tan Spot					
Wheat Streak Mosaic					
Soil Borne Mosaic					

SY Benefit

Medium-Early Maturity

Good fit after dryland corn

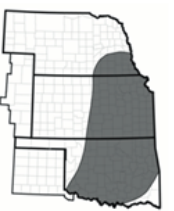
Intermediate resistance to (FHB)

Excellent Soil Borne Mosaic Tol.

Resistant to Stem Rust

Very good overall yield record

Good tolerance to low pH soils



1=Exc; 5=Poor	5	4	3	2	1
Drought Tolerance					
Yield Potential					
Straw Strength					
Test Weight					
Fall Grazing Potential					
Winter Hardiness					
Tillering					
Shattering Reputation					
Acid Soil Tolerance					

1=Exc; 5=Poor	5	4	3	2	1
Leaf Rust					
Stripe Rust					
Stem Rust					
Scab					
Barley Yellow Dwarf					
Hessian Fly					
Tan Spot					
Wheat Streak Mosaic					
Soil Borne Mosaic					

SY Monument

Medium-Late Maturity

Good choice after soybeans

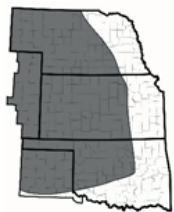
Consistently high yield record

Very high tillering capability

Good test weight

Excellent leaf disease package

Good grazing potential



1=Exc; 5=Poor	5	4	3	2	1
Drought Tolerance					
Yield Potential					
Straw Strength					
Test Weight					
Fall Grazing Potential					
Winter Hardiness					
Tillering					
Shattering Reputation					
Acid Soil Tolerance					

1=Exc; 5=Poor	5	4	3	2	1
Leaf Rust					
Stripe Rust					
Stem Rust					
Scab					
Barley Yellow Dwarf					
Hessian Fly					
Tan Spot					
Wheat Streak Mosaic					
Soil Borne Mosaic					

SY Wolverine

Medium-Early Maturity

New early emerging variety

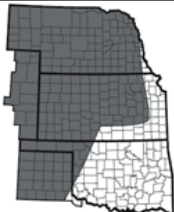
Excellent standability

Excellent yield in Central and High

Plains and under irrigation

Good disease tolerance

Not good in low pH soils

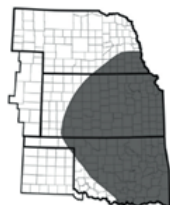


1=Exc; 5=Poor	5	4	3	2	1
Drought Tolerance					
Yield Potential					
Straw Strength					
Test Weight					
Fall Grazing Potential					
Winter Hardiness					
Tillering					
Shattering Reputation					
Acid Soil Tolerance					

1=Exc; 5=Poor	5	4	3	2	1
Leaf Rust					
Stripe Rust					
Stem Rust					
Scab					
Barley Yellow Dwarf					
Hessian Fly					
Tan Spot					
Wheat Streak Mosaic					
Soil Borne Mosaic					

AG Icon

Medium-Early Maturity
Exceptional yield potential
Exceptional leaf disease package
Excellent straw strength
Very good grazing potential
Very good winterhardiness
Excellent acid soil tolerance

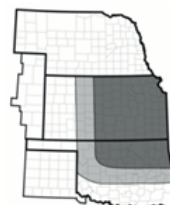


1=Exc; 5=Poor	5	4	3	2	1
Drought Tolerance					
Yield Potential					
Straw Strength					
Test Weight					
Fall Grazing Potential					
Winter Hardiness					
Tillering					
Shattering Reputation					
Acid Soil Tolerance					

1=Exc; 5=Poor	5	4	3	2	1
Leaf Rust					
Stripe Rust					
Stem Rust					
Scab					
Barley Yellow Dwarf					
Hessian Fly					
Tan Spot					
Wheat Streak Mosaic					
Soil Borne Mosaic					

AG Radical

Medium-Early Maturity
Features very good FHB ratings
Good to follow corn and on irrigation
Tolerant of acid soils
Resistant to Soilborne Mosaic
Excellent winterhardiness
Above average protein content

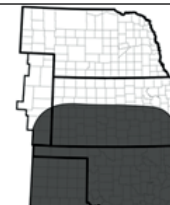


1=Exc; 5=Poor	5	4	3	2	1
Drought Tolerance					
Yield Potential					
Straw Strength					
Test Weight					
Fall Grazing Potential					
Winter Hardiness					
Tillering					
Shattering Reputation					
Acid Soil Tolerance					

1=Exc; 5=Poor	5	4	3	2	1
Leaf Rust					
Stripe Rust					
Stem Rust					
Scab					
Barley Yellow Dwarf	NA				
Hessian Fly					
Tan Spot					
Wheat Streak Mosaic	NA				
Soil Borne Mosaic					

TAM205

Medium Maturity
Good disease package
Good fall cover
Good fit after dryland corn
Good FHB tolerance
Great for grain and grazing
Large seed and high test weight

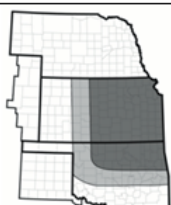


1=Exc; 5=Poor	5	4	3	2	1
Drought Tolerance					
Yield Potential					
Straw Strength					
Test Weight					
Fall Grazing Potential					
Winter Hardiness					
Tillering					
Shattering Reputation					
Acid Soil Tolerance					

1=Exc; 5=Poor	5	4	3	2	1
Leaf Rust					
Stripe Rust					
Stem Rust					
Scab					
Barley Yellow Dwarf					
Hessian Fly					
Tan Spot					
Wheat Streak Mosaic					
Soil Borne Mosaic					

Zenda

Medium-Early Maturity
One of most FHB tolerant varieties
Good variety to follow corn
Tolerant of acid soils
Resistant to Soilborne Mosaic
Moderately susceptible to WSMV



1=Exc; 5=Poor	5	4	3	2	1
Drought Tolerance					
Yield Potential					
Straw Strength					
Test Weight					
Fall Grazing Potential					
Winter Hardiness					
Tillering					
Shattering Reputation	NA				
Acid Soil Tolerance					

1=Exc; 5=Poor	5	4	3	2	1
Leaf Rust					
Stripe Rust					
Stem Rust					
Scab					
Barley Yellow Dwarf					
Hessian Fly					
Tan Spot					
Wheat Streak Mosaic					
Soil Borne Mosaic					



PSF Wheat Variety Descriptions



WB4269



Medium-Early Maturity
Good disease package
Good fall cover
Good after soybeans
Breaks dormancy well
Good FHB tolerance
Very good yield record



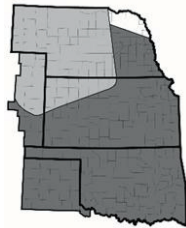
1=Exc; 5=Poor	5	4	3	2	1
Drought Tolerance					
Yield Potential					
Straw Strength					
Test Weight					
Fall Grazing Potential					
Winter Hardiness					
Tillering					
Shattering Reputation					
Acid Soil Tolerance					

1=Exc; 5=Poor	5	4	3	2	1
Leaf Rust					
Stripe Rust					
Stem Rust	NA				
Scab					
Barley Yellow Dwarf	NA				
Hessian Fly	NA				
Tan Spot					
Wheat Streak Mosaic	NA				
Soil Borne Mosaic					

WB4401



Medium Maturity
Very high yield potential
Excellent end-use quality
High forage yield potential
Excellent late planting option
Very solid overall disease pkg
Intermediate FHB (Scab) tolerance



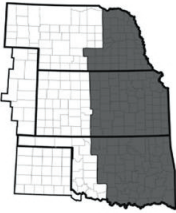
1=Exc; 5=Poor	5	4	3	2	1
Drought Tolerance					
Yield Potential					
Straw Strength					
Test Weight					
Fall Grazing Potential					
Winter Hardiness					
Tillering					
Shattering Reputation					
Acid Soil Tolerance					

1=Exc; 5=Poor	5	4	3	2	1
Leaf Rust					
Stripe Rust					
Stem Rust	NA				
Scab					
Barley Yellow Dwarf	NA				
Hessian Fly					
Tan Spot					
Wheat Streak Mosaic					
Soil Borne Mosaic					

WB4699



Medium-Late Maturity
Excellent yield potential
Very good standability
Very high spring tiller
Very good overall disease pkg
Holds winter dormancy well



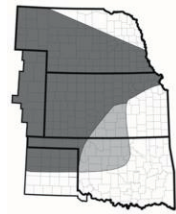
1=Exc; 5=Poor	5	4	3	2	1
Drought Tolerance					
Yield Potential					
Straw Strength					
Test Weight					
Fall Grazing Potential					
Winter Hardiness					
Tillering					
Shattering Reputation					
Acid Soil Tolerance					

1=Exc; 5=Poor	5	4	3	2	1
Leaf Rust					
Stripe Rust					
Stem Rust	NA				
Scab					
Barley Yellow Dwarf					
Hessian Fly					
Tan Spot					
Wheat Streak Mosaic					
Soil Borne Mosaic					

WB-Grainfield



Medium-Late Maturity
Good choice after soybeans
Strong yield history
Very good drought tolerance
Good grazing potential
Good choice for dryland fields
Good shattering reputation



1=Exc; 5=Poor	5	4	3	2	1
Drought Tolerance					
Yield Potential					
Straw Strength					
Test Weight					
Fall Grazing Potential					
Winter Hardiness					
Tillering					
Shattering Reputation					
Acid Soil Tolerance					

1=Exc; 5=Poor	5	4	3	2	1
Leaf Rust					
Stripe Rust					
Stem Rust					
Scab					
Barley Yellow Dwarf					
Hessian Fly					
Tan Spot					
Wheat Streak Mosaic	NA				
Soil Borne Mosaic					



WB4699 – 05-27-21- Maize, KS

Outlaw Blend



Medium Early-Medium Late

SY Wolverine/Bob Dole/WB4699

Excellent yield potential

Very good standability

Good overall disease package

Good tillering

Good test weight

Very good winterhardiness

Agronomics

Drought Tolerance	Below Average - Good
Yield Potential	Very Good - Excellent
Straw Strength	Very Good - Excellent
Test Weight	Good - Excellent
Fall Grazing Potential	Good
Winter Hardiness	Very Good
Tillering	Below Average - Excellent
Shattering Reputation	Excellent
Acid Soil Tolerance	Below Average - Excellent

Disease/Pest

Leaf Rust	Mod. Resistant - Resistant
Stripe Rust	Mod. Susceptible - Resistant
Stem Rust	NA - Moderately Resistant
Scab	Susceptible - Mod. Resistant
Barley Yellow Dwarf	Mod. Susceptible - Mod. Resistant
Hessian Fly	Susceptible - Mod. Susceptible
Tan Spot	Moderately Resistant
Wheat Streak Mosaic	Mod. Susceptible - Mod. Resistant
Soil Borne Mosaic	Mod. Resistant - Resistant

Corn Burner Blend



Medium-Early

WB4269/SY Benefit/Zenda

Good yield potential

Built to handle following corn

Intermediate scab (FHB) tolerance

Moderately resistant to stripe rust

Good straw strength

High tillering capability

Agronomics

Drought Tolerance	Good
Yield Potential	Very Good - Excellent
Straw Strength	Good - Excellent
Test Weight	Very Good - Excellent
Fall Grazing Potential	Below Average - Very Good
Winter Hardiness	Very Good
Tillering	Good - Very Good
Shattering Reputation	NA - Good
Acid Soil Tolerance	Good - Excellent

Disease/Pest

Leaf Rust	Susceptible - Resistant
Stripe Rust	Mod. Resistant - Resistant
Stem Rust	NA - Moderately Resistant
Scab	Moderately Susceptible
Barley Yellow Dwarf	NA - Moderately Susceptible
Hessian Fly	NA - Susceptible
Tan Spot	Mod. Resistant - Susceptible
Wheat Streak Mosaic	NA - Susceptible
Soil Borne Mosaic	Mod. Susceptible - Resistant

Regulator II Blend

Medium-Late

LCS Chrome/SY Monument/WB-Grainfield

Good choice after soybeans

Good for continuous wheat

Good in high residue

Very good leaf disease tolerance

Very good drought tolerance

Very good winterhardiness

Agronomics

Drought Tolerance	Very Good
Yield Potential	Excellent
Straw Strength	Good - Excellent
Test Weight	Very Good - Excellent
Fall Grazing Potential	Good
Winter Hardiness	Very Good - Excellent
Tillering	Very Good
Shattering Reputation	NA - Good
Acid Soil Tolerance	Good - Excellent

Disease/Pest

Leaf Rust	Susceptible - Resistant
Stripe Rust	Susceptible - Resistant
Stem Rust	Very Susceptible - Resistant
Scab	Susceptible - Resistant
Barley Yellow Dwarf	Mod. Susceptible - Resistant
Hessian Fly	Very Susceptible - Resistant
Tan Spot	Mod. Susceptible - Resistant
Wheat Streak Mosaic	NA - Susceptible
Soil Borne Mosaic	Resistant



Outlaw Blend - 04/01/21 - Tecumseh, NE

AGRONOMICS	AG Icon	AG Radical	AP18AX	SY Benefit	Bob Dole	SY Monument	SY Wolverine	TAM 205	WB4269	WB4401	WB4699	WB-Grainfield	Zendra	Outlaw Blend	Corn Burner Blend	Regulator II Blend
Maturity	ME	ME	M	ME	M	ML	ME	M	ME	M	ML	ML	ME	ME - ML	ME	ML
Height	M	MT	M	S	T	M	MS	M	MS	M	S	MT	MT	S - T	S - MT	M - MT
Coleoptile Length	M	L	M	M	M	M	M	NA	MS	NA	NA	MS	NA	NA - M	NA - M	MS - M
Seed Size	M	NA	NA	M	LG	M	NA	L	M	NA	NA	M	LG	NA - LG	M - LG	M
Drought Tolerance	3	3	2	3	3	2	3	1	3	2	4	2	3	3 - 4	3	2
Straw Strength	1	1	3	3	2	3	1	2	2	2	1	2	1	1 - 2	1 - 3	1 - 3
Test Weight	4	2	2	1	1	2	1	1	2	2	3	1	2	1 - 3	1 - 2	1 - 2
Fall Grazing Potential	2	3	2	4	3	3	3	1	3	1	3	3	2	3	2 - 4	3
Winterhardiness	2	1	2	2	2	1	2	3	2	2	2	2	2	2	2	1 - 2
Tillering	2	3	2	2	4	2	3	2	2	1	1	2	3	1 - 4	2 - 3	2
Shatter Reputation	3	3	1	1	1	1	1	2	3	2	1	3	NA	1	NA - 3	NA - 3
Acid Soil Tolerance	1	1	4	1	1	1	4	3	3	2	1	3	2	1 - 4	1 - 3	1 - 3
Fall Ground Cover	NA	NA	NA	3	3	3	3	2	3	1	3	4	NA	3	NA - 3	3 - 4
Early Spring Greenup	NA	NA	NA	M	M	LTM	NA	NA	M	NA	NA	M	NA	NA - M	NA - M	NA - LTM
Overall Yield Record (where adapted)	2	2	1	2	2	1	1	1	1	1	1	1	2	1 - 2	1 - 2	1

DISEASE/PEST

Leaf Rust	1	2	3	4	1	1	1	1	1	3	2	4	2	1 - 2	1 - 4	1 - 4
Stripe Rust	3	4	1	2	1	2	3	1	1	2	2	4	2	1 - 3	1 - 2	1 - 4
Stem Rust	1	5	2	2	2	1	1	1	NA	NA	NA	2	1	NA - 2	NA - 2	1 - 5
Scab	4	2	3	3	3	4	4	3	3	3	2	3	3	2 - 4	3	1 - 4
Barley Yellow Dwarf	4	NA	3	3	3	2	2	2	NA	NA	2	3	3	2 - 3	NA - 3	1 - 3
Hessian Fly	4	3	3	4	4	4	4	4	NA	2	3	5	4	3 - 4	NA - 4	1 - 5
Tan Spot	3	3	2	2	2	2	2	1	4	3	2	3	3	2	2 - 4	1 - 3
Wheat Streak Mosaic	4	NA	2	4	3	4	2	1	NA	4	3	NA	3	2 - 3	NA - 4	NA - 4
Soilborne Mosaic	1	2	NA	3	1	1	1	1	2	1	2	1	1	1 - 2	1 - 3	1
Powdery Mildew	3	NA	NA	2	2	3	3	3	1	1	1	3	3	1 - 3	1 - 3	3 - 4
Septoria Leaf Blotch	3	NA	2	2	2	2	1	NA	3	NA	NA	2	2	NA - 2	2 - 3	NA - 2

MILLING & BAKING

Milling Quality	3	3	NA	3	2	3	NA	2	2	1	3	2	3	NA - 3	2 - 3	2 - 3
Baking Quality	3	3	3	2	1	3	3	2	2	1	3	2	3	1 - 3	2 - 3	2 - 3
Protein	NA	3	NA	3	4	4	NA	NA	2	2	3	2	4	NA - 4	2 - 4	NA - 4

Codes:

Agronomics

1 = Excellent
2 = Very Good
3 = Average
4 = Below Average
5 = Poor

E = Early

ME = Medium Early
M = Medium
ML = Medium Late
L = Late
T = Tall
MT = Medium Tall
MS = Medium Short
S = Short

L = Long

ML = Medium Long
MS = Medium Short
VLG = Very Large
L = Large
A = Average
LTM = Later Than Most
ETM = Earlier Than Most

Disease/Pest

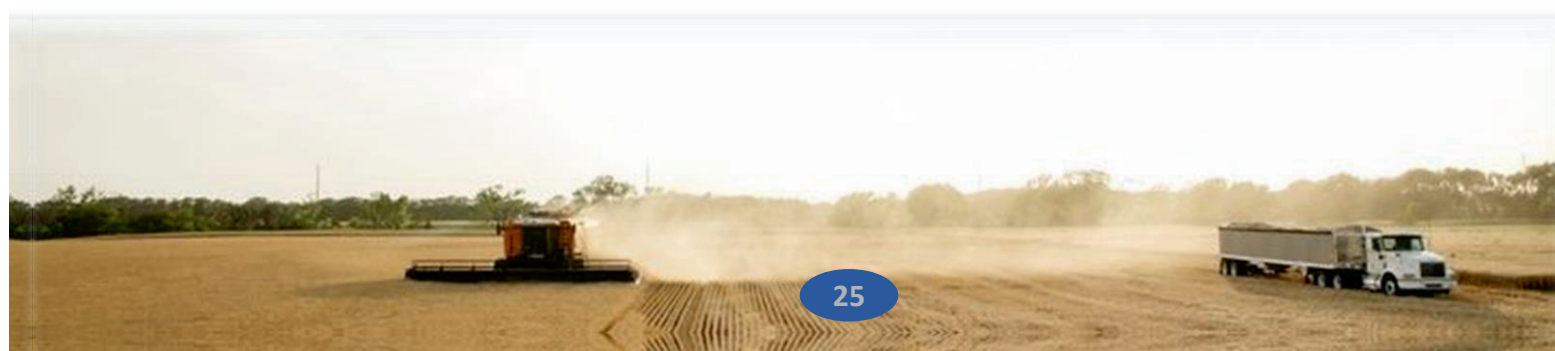
1 = Resistant
2 = Moderately Resistant
3 = Moderately Susceptible
4 = Susceptible
5 = Very Susceptible

Milling/Baking

1 = Exceptional
2 = Very Good
3 = Acceptable
4 = Average
5 = Less Desirable

Protein

1 = Very Good
2 = Good
3 = Somewhat Higher Than Most
4 = Average





Forage Sorghum & Sudangrass

Sweet Bal

Maturity 90 Days *Forage Sorghum*
Life Cycle: Annual
High yield potential for hay or silage
Plant height 6-7'
Single cutting

1=Exc; 5=Poor	5	4	3	2	1
Seedling Vigor					
Ease of Establishment					
Uniformity					
Drought Tolerance					
Rotational Grazing					

Planted In Rows: 4 - 8 lb/acre
 Drilled: 15 - 25 lb/acre

1=Exc; 5=Poor	5	4	3	2	1
Continuous Grazing					
Digestibility					
Palatability					
Hay					
Silage					

*Okay to graze re-growth

BMR 60D

Maturity 110-115 Days *Forage Sorghum*
Life Cycle: Annual
High yield potential silage
Plant height 6-8'
Brachytic Dwarf for standability
Single cutting

1=Exc; 5=Poor	5	4	3	2	1
Seedling Vigor					
Ease of Establishment					
Uniformity					
Drought Tolerance					
Rotational Grazing	No				

Planted in Rows: 4 - 8 lb/acre
 Drilled: 15 - 25 lb/acre

1=Exc; 5=Poor	5	4	3	2	1
Continuous Grazing	No				
Digestibility					
Palatability					
Hay					
Silage					

*Okay to graze re-growth

BMR5515D

Maturity 110-115 Days *Forage Sorghum*
Sugar Cane Aphid Tolerant
Life Cycle: Annual
High yield potential silage
Plant height 6-8'
Brachytic Dwarf for standability
Single cutting

1=Exc; 5=Poor	5	4	3	2	1
Seedling Vigor					
Ease of Establishment					
Uniformity					
Drought Tolerance					
Rotational Grazing	No				

Planted in Rows: 4 - 8 lb/acre
 Drilled: 15 - 25 lb/acre

1=Exc; 5=Poor	5	4	3	2	1
Continuous Grazing	No				
Digestibility					
Palatability					
Hay					
Silage					

*Okay to graze re-growth

Sweet Sil BMR 20D

Maturity 85-95 Days *Forage Sorghum*
Life Cycle: Annual
Earliest brown mid-rib, brachytic dwarf available
Plant height 6-7'
High quality silage producer with double crop potential
Works well from I-70 North to the Dakotas

1=Exc; 5=Poor	5	4	3	2	1
Seedling Vigor					
Ease of Establishment					
Uniformity					
Drought Tolerance					
Rotational Grazing	No				

Planted in Rows: 4 - 8 lb/acre
 Drilled: 15 - 25 lb/acre

1=Exc; 5=Poor	5	4	3	2	1
Continuous Grazing	No				
Digestibility					
Palatability					
Hay					
Silage					

*Okay to graze re-growth

Sweet Graz

Maturity 45-50 Days to First Cutting *Sorghum X Sudangrass*
Life Cycle: Annual
Dependable summer forage
Approximate first cutting height 38"
Hay, haylage and green chop
Excellent recovery after first cutting

1=Exc; 5=Poor	5	4	3	2	1
Seedling Vigor					
Ease of Establishment					
Uniformity					
Drought Tolerance					
Rotational Grazing					

Drilled: 15 - 30 lb/acre

1=Exc; 5=Poor	5	4	3	2	1
Continuous Grazing					
Digestibility					
Palatability					
Hay					
Silage					

*Okay to graze re-growth

Sweet Graz BMR15

Maturity 45-50 Days to First Cutting *Sorghum X Sudangrass*
Life Cycle: Annual
High digestibility
Approximate first cutting height 38"
Short season maturity
Excellent recovery after first cutting

1=Exc; 5=Poor	5	4	3	2	1
Seedling Vigor					
Ease of Establishment					
Uniformity					
Drought Tolerance					
Rotational Grazing					

Drilled: 15 - 30 lb/acre

1=Exc; 5=Poor	5	4	3	2	1
Continuous Grazing					
Digestibility					
Palatability					
Hay					
Silage					

*Okay to graze re-growth

Sweet Graz BMR Dry Stalk

Maturity 45-50 Days to First Cutting *Sorghum X Sudangrass*
Life Cycle: Annual
Dry Stalk trait, less time to dry down after cutting
Approximate first cutting height 38"
Potential for high tonnage yields with great forage quality
Tillers more than most fine, sweet soft stem hybrids

1=Exc; 5=Poor	5	4	3	2	1
Seedling Vigor					
Ease of Establishment					
Uniformity					
Drought Tolerance					
Rotational Grazing					

Drilled: 15 - 30 lb/acre

1=Exc; 5=Poor	5	4	3	2	1
Continuous Grazing					
Digestibility					
Palatability					
Hay					
Silage					

*Okay to graze re-growth

Sudangrass, Millet, & Turf Grass Varieties



SGBMR4155DS

Maturity 45-50 Days to First Cutting Sorghum X Sudangrass

Life Cycle: Annual

Dry Stalk trait, less time to dry down after cutting

Approximate first cutting height 38"

Potential for high tonnage yields with great forage quality

Tillers more than most fine, sweet soft stem hybrids

1 = Exc; 5 = Poor	5	4	3	2	1
Seedling Vigor					
Ease of Establishment					
Uniformity					
Drought Tolerance					
Rotational Grazing					
Drilled: 15 - 30 lb/acre					

1 = Exc; 5 = Poor	5	4	3	2	1
Continuous Grazing					
Digestibility					
Palatability					
Hay					
Silage					
*Okay to graze re-growth					

BMR 68D

Maturity 45-50 Days to First Cutting Sorghum X Sudangrass

Life Cycle: Annual

BMR combines top yield tillering with forage qualities

Plant height 6-8'

Brachytic Dwarf for optimal leaf area & standability

Improved digestibility and palatability

1 = Exc; 5 = Poor	5	4	3	2	1
Seedling Vigor					
Ease of Establishment					
Uniformity					
Drought Tolerance					
Rotational Grazing					
Drilled: 15 - 30 lb/acre					

1 = Exc; 5 = Poor	5	4	3	2	1
Continuous Grazing					
Digestibility					
Palatability					
Hay					
Silage					
*Okay to graze re-growth					

Pearl Millet

Maturity 85 Days Millet

Life Cycle: Annual

Warm season annual

Plant height 5-6'

Haying, grazing or green fodder

Good recovery after cutting

1 = Exc; 5 = Poor	5	4	3	2	1
Seedling Vigor					
Ease of Establishment					
Uniformity					
Drought Tolerance					
Rotational Grazing					
Drilled: 12 - 25 lb/acre					

1 = Exc; 5 = Poor	5	4	3	2	1
Continuous Grazing					
Digestibility					
Palatability					
Hay					
Silage					
*Okay to graze re-growth					

German Millet

Maturity 100 Days Millet

Life Cycle: Annual

Warm season annual

Plant height 1-4'

Use for haying and grazing

Single cutting

1 = Exc; 5 = Poor	5	4	3	2	1
Seedling Vigor					
Ease of Establishment					
Uniformity					
Drought Tolerance					
Rotational Grazing					
Drilled: 12 - 25 lb/acre					

1 = Exc; 5 = Poor	5	4	3	2	1
Continuous Grazing					
Digestibility					
Palatability					
Hay					
Silage					
*Okay to graze re-growth					

Playground

Mix of Tall Fescue and Kentucky Bluegrass

Excellent performance for high traffic areas

Superior turf quality

Slow growing = Less mowing

Lawn & Turf



Management	
Planting Rate New Lawn	6-8 lbs./1000 sq. ft.
Planting Rate Existing	3-4 lbs./1000 sq. ft.
Spring Planting	March to May
Fall Planting	August to Sept.

1 = Exc; 5 = Poor	5	4	3	2	1
Heat Tolerance					
Drought Tolerance					
Traffic Tolerance					
Insect & Disease Resistance					

FSG 402

High yielding, Endophyte free

Excellent persistence and drought tolerance

Excellent disease resistance

Superior summer regrowth

Superior to K31 Tall Fescue

Lawn & Turf



Management	
Planting Rate New Lawn	8-10 lbs./1000 sq. ft.
Planting Rate Existing	4-5 lbs./1000 sq. ft.
Spring Planting	March to May
Fall Planting	August to Sept.

1 = Exc; 5 = Poor	5	4	3	2	1
Heat Tolerance					
Drought Tolerance					
Traffic Tolerance					
Insect & Disease Resistance					

Buffalo Grass

Warm season grass

Needs full sun

Drought tolerant

Low water requirements

Lawn & Turf



Management	
Planting Rate New Lawn	3-4 lbs./1000 sq. ft.
Planting Rate Existing	1-2 lbs./1000 sq. ft.
Spring Planting	May to June
Fall Planting	Do not plant in the fall

1 = Exc; 5 = Poor	5	4	3	2	1
Heat Tolerance					
Drought Tolerance					
Traffic Tolerance					
Insect & Disease Resistance					

Common Bermuda Grass

Lawn & Turf

Warm season perennial grass

Needs full sun

Drought tolerant

Low water requirements



Management	
Planting Rate New Lawn	4-5 lbs./1000 sq. ft.
Planting Rate Existing	2-3 lbs./1000 sq. ft.
Spring Planting	May to June
Fall Planting	Do not plant in the fall

1 = Exc; 5 = Poor	5	4	3	2	1
Heat Tolerance					
Drought Tolerance					
Traffic Tolerance					
Insect & Disease Resistance					



Alfalfa Variety Information

Top alfalfa varieties for the top field & livestock performance you need

Shuttle EQ²

Alfalfa

Premium alfalfa with high yield & quality
Bred with non-GMO genetics for broad use
Wide 28-35 day harvest window
Solid disease protection; 34/35 DRI
Tolerant to saline soils & higher pH contents
Improved forage palatability & digestibility
Fall Dormancy: 4.0 | Winter Survival: 2.0

1=Exc; 5=Poor	5	4	3	2	1
Bacterial Wilt					
Fusarium Wilt					
Verticillium Wilt					
Anthracnose (Race 1)					
Phytophthora Root Rot					
Aphanomyces (Race 1)					
Aphanomyces (Race 2)					
Winter Survival Rating					

1=Exc; 5=Poor	5	4	3	2	1
Recovery after cutting					
Crown Placement					
Saline Soil Tolerance					
Multi-Foliate Expression					
Leaf Size	Large				
Root Type	TAP				
Forage Yield					
Forage Quality					

Shuttle II

Alfalfa

Resistant to Aphanomyces Race 2
Exceptional forage yield potential
Superior forage quality
High multifoliate leaf expression
Unmatched winterhardiness
Unmatched persistence
Fall Dormancy: 4.0 | Winter Survival: 2.0

1=Exc; 5=Poor	5	4	3	2	1
Bacterial Wilt					
Fusarium Wilt					
Verticillium Wilt					
Anthracnose					
Phytophthora Root Rot					
Aphanomyces-Race 1					
Aphanomyces-Race 2					
Pea Aphid					

1=Exc; 5=Poor	5	4	3	2	1
Stem Nematode	NA				
Recovery after cutting					
Yield Potential					
Forage Quality					
Stand Persistence					
Saline Soil Tolerance	NA				
Root Type	TAP				

Value Plus

Alfalfa

Most economical alfalfa option
Dependable crop for Great Plains region
Durable, common alfalfa variety
Fall Dormancy: 4.0 | Winter Survival: 2.0



Phillips Seed Farms Replant Policy for Shuttle EQ² and Shuttle II alfalfa is as follows:

1. The seeding rate has to be a minimum of 15# per acre
2. The field size has to be a minimum of 10 acres
3. The field in question must be inspected by a Phillips Seed Rep within 60 days of planting.
4. The accepted planting date ranges are as follows
 - a. Spring: April – May
 - b. Summer : August – September 15

There is no replant available for Value Plus alfalfa

Alfalfa Planting Rates: 15 - 20 lb/acre
Plant: Mar-April; Aug-September

Shuttle EQ² exhibits excellent canopy , large dark green leaves and strong multifoliate tendencies

Cover Crops



Dwarf Essex Rape

Annual winter brassica
Helps suppress parasitic nematodes
Root system helps break compaction
Increases earthworm activity
Drilled: 4 - 9 lb/acre
Plant: Mar-April; Aug-Sep



1=Exc; 5=Poor	5	4	3	2	1
N Source					
N Scavenger					
Soil Builder					
Subsoil Loosener					
Topsoil Loosener					
Erosion Preventer					

1=Exc; 5=Poor	5	4	3	2	1
Lasting Residue					
Weed Fighter					
Grazing Value					
Forage Value					
Quick Growth					
Attract Beneficials					

Forage Brassica

Very winter hardy Brassica
Extremely high forage quality
Reduces soilborne diseases
Rapid growth/Quick recovery
Drilled: 4 - 8 lb/acre
Plant: Mar-April; Aug-Sep



1=Exc; 5=Poor	5	4	3	2	1
N Source	NA				
N Scavenger					
Soil Builder					
Subsoil Loosener					
Topsoil Loosener					
Erosion Preventer					

1=Exc; 5=Poor	5	4	3	2	1
Lasting Residue					
Weed Fighter					
Grazing Value					
Forage Value					
Quick Growth					
Attract Beneficials					

Purple Top Turnips

Cool season brassica
Easy to grow
Establishes quickly
Cold tolerant
Drilled: 3 - 8 lb/acre
Plant: Mar-April; Aug-Sep



1=Exc; 5=Poor	5	4	3	2	1
N Source	NA				
N Scavenger					
Soil Builder					
Subsoil Loosener					
Topsoil Loosener					
Erosion Preventer					

1=Exc; 5=Poor	5	4	3	2	1
Lasting Residue					
Weed Fighter					
Grazing Value					
Forage Value					
Quick Growth					
Attract Beneficials					

Tillage Radish

Easy to grow Brassica
Helps suppress nematodes
Deep tap root (typically 30")
Improves soil fertility
Drilled: 8 - 15 lb/acre
Plant: Mar-April; Aug-Sep



1=Exc; 5=Poor	5	4	3	2	1
N Source	NA				
N Scavenger					
Soil Builder					
Subsoil Loosener					
Topsoil Loosener					
Erosion Preventer					

1=Exc; 5=Poor	5	4	3	2	1
Lasting Residue					
Weed Fighter					
Grazing Value					
Forage Value					
Quick Growth					
Attract Beneficials					

Austrian Winter Peas

Annual cool season legume
Very efficient water use
Very winter hardy
Recommended mix with grasses
Drilled: 30 - 40 lb/acre
Plant: Mar-April; Sep-Oct



1=Exc; 5=Poor	5	4	3	2	1
N Source					
N Scavenger					
Soil Builder					
Subsoil Loosener					
Topsoil Loosener					
Erosion Preventer					

1=Exc; 5=Poor	5	4	3	2	1
Lasting Residue					
Weed Fighter					
Grazing Value					
Forage Value					
Quick Growth					
Attract Beneficials					

Iron & Clay Cow Peas

Annual legume
Deep tap root, breaks soil pans
Excellent drought tolerance
Can be used for hay
Drilled: 75 - 120 lb/acre
Plant: May-June



1=Exc; 5=Poor	5	4	3	2	1
N Source					
N Scavenger					
Soil Builder					
Subsoil Loosener					
Topsoil Loosener					
Erosion Preventer					

1=Exc; 5=Poor	5	4	3	2	1
Lasting Residue					
Weed Fighter					
Grazing Value					
Forage Value					
Quick Growth					
Attract Beneficials					

Common Vetch

Winter hardy annual legume
Deep tap root, breaks soil pans
Good drought tolerance
Provides spring weed suppression
Drilled: 20 - 30 lb/acre
Plant: August-October



1=Exc; 5=Poor	5	4	3	2	1
N Source					
N Scavenger					
Soil Builder					
Subsoil Loosener					
Topsoil Loosener					
Erosion Preventer					

1=Exc; 5=Poor	5	4	3	2	1
Lasting Residue					
Weed Fighter					
Grazing Value					
Forage Value					
Quick Growth					
Attract Beneficials					

Cover Crops

Red Clover

*Fast establishing legume
Flowers attract beneficial insects
Can be used for hay or grazing
Thick and deep tap root
Drilled: 8 - 12 lb/acre
Plant: Feb-May; Aug-Oct*



1=Exc; 5=Poor	5	4	3	2	1
N Source					
N Scavenger					
Soil Builder					
Subsoil Loosener					
Topsoil Loosener					
Erosion Preventer					

1=Exc; 5=Poor	5	4	3	2	1
Lasting Residue					
Weed Fighter					
Grazing Value					
Forage Value					
Quick Growth					
Attract Beneficials					

Yellow Clover

*Legume with 2-year life cycle
Very winter hardy
Flowers attract beneficial insects
Good for cover crop and forage
Drilled: 6 - 15 lb/acre
Plant: Feb-May; Aug-Oct*



1=Exc; 5=Poor	5	4	3	2	1
N Source					
N Scavenger					
Soil Builder					
Subsoil Loosener					
Topsoil Loosener					
Erosion Preventer					

1=Exc; 5=Poor	5	4	3	2	1
Lasting Residue					
Weed Fighter					
Grazing Value					
Forage Value					
Quick Growth					
Attract Beneficials					

Ultra Graze

*Cover crop blend
Drilled: 15 - 25 lb/acre
Plant: May-July*



Blend Components	% of Mix
Sorghum x Sudangrass	25%
Flax	10%
Crimson Clover	5%
Oats	10%
Peas	10%
Forage Collards	15%
Winfred Brassica	15%
Rape	10%

Ultra Graze is a predominantly warm season mix that is well-suited for grazing. This mix will perform as a multi-purpose blend even in tough western conditions. If grazing is intended and soil fertility levels are low, consider applying 25 - 50# per acre of N at planting to increase total biomass production. Plant into a clean, weed-free seedbed. Can be grazed as soon as there is enough growth to support livestock, but best to wait until the sorghum-sudangrass is at least 18" - 20" tall. Regrowth potential on the blend is very good so multiple grazing passes is an option under good growing conditions.



Clover Food Plot – 05-20-21 – North Central Kansas

Forage Grasses



Meadow Brome

Perennial, cool season grass
Used for hay, pasture or silage
Highly palatable
High in protein
Drilled: 15 - 20 lb/acre
Plant: Jan-April; Sep-Dec



1 = Exc; 5 = Poor	5	4	3	2	1
N Source					
N Scavenger					
Soil Builder					
Subsoil Loosener					
Topsoil Loosener					
Erosion Preventer					

1 = Exc; 5 = Poor	5	4	3	2	1
Lasting Residue					
Weed Fighter					
Grazing Value					
Forage Value					
Quick Growth					
Attract Beneficials					

Dessie Teff Grass

Warm season annual grass
Ideal hay for horses
Very good palatability and digestibility
Very few disease and pest problems
Drilled: 8 - 15 lb/acre
Plant: Soil temp above 60° F (May-July)



1 = Exc; 5 = Poor	5	4	3	2	1
N Source					
N Scavenger					
Soil Builder					
Subsoil Loosener					
Topsoil Loosener					
Erosion Preventer					

1 = Exc; 5 = Poor	5	4	3	2	1
Lasting Residue					
Weed Fighter					
Grazing Value					
Forage Value					
Quick Growth					
Attract Beneficials					

Jerry Oats

Very winter hardy annual grass
High quality feed source
Rapid growth/quick recovery
Good weed suppression
Drilled: 65 - 100 lb/acre
Plant: Mar-April; Aug-Sep



1 = Exc; 5 = Poor	5	4	3	2	1
N Source					
N Scavenger					
Soil Builder					
Subsoil Loosener					
Topsoil Loosener					
Erosion Preventer					

1 = Exc; 5 = Poor	5	4	3	2	1
Lasting Residue					
Weed Fighter					
Grazing Value					
Forage Value					
Quick Growth					
Attract Beneficials					

Annual Ryegrass

Annual cool season grass
Suppresses weeds
Recovers well after grazing
Used for pastures & erosion control
Drilled: 12 - 20 lb/acre
Plant: Feb-May; Aug-Sep

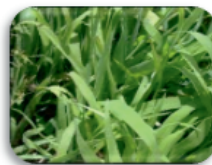


1 = Exc; 5 = Poor	5	4	3	2	1
N Source					
N Scavenger					
Soil Builder					
Subsoil Loosener					
Topsoil Loosener					
Erosion Preventer					

1 = Exc; 5 = Poor	5	4	3	2	1
Lasting Residue					
Weed Fighter					
Grazing Value					
Forage Value					
Quick Growth					
Attract Beneficials					

Mojo Crabgrass

Annual summer forage
Excellent for haying and grazing
Highly digestible
High in crude protein
Drilled: 5-8 lb/acre
Plant: May-June



1 = Exc; 5 = Poor	5	4	3	2	1
N Source					
N Scavenger					
Soil Builder					
Subsoil Loosener					
Topsoil Loosener					
Erosion Preventer					

1 = Exc; 5 = Poor	5	4	3	2	1
Lasting Residue					
Weed Fighter					
Grazing Value					
Forage Value					
Quick Growth					
Attract Beneficials					

Triticale

Very productive winter annual
Hybrid of wheat and ryegrass
Excellent forage for cattle
High protein and digestible feed
Drilled: 90 - 120 lb/acre
Plant: August-October

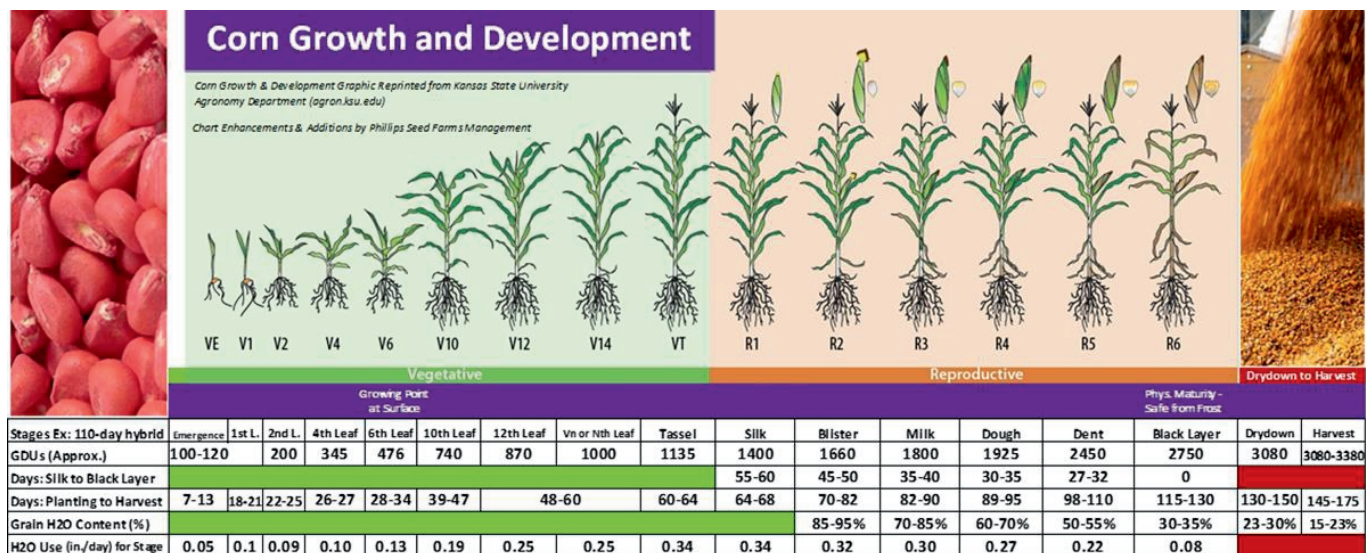


1 = Exc; 5 = Poor	5	4	3	2	1
N Source					
N Scavenger					
Soil Builder					
Subsoil Loosener					
Topsoil Loosener					
Erosion Preventer					

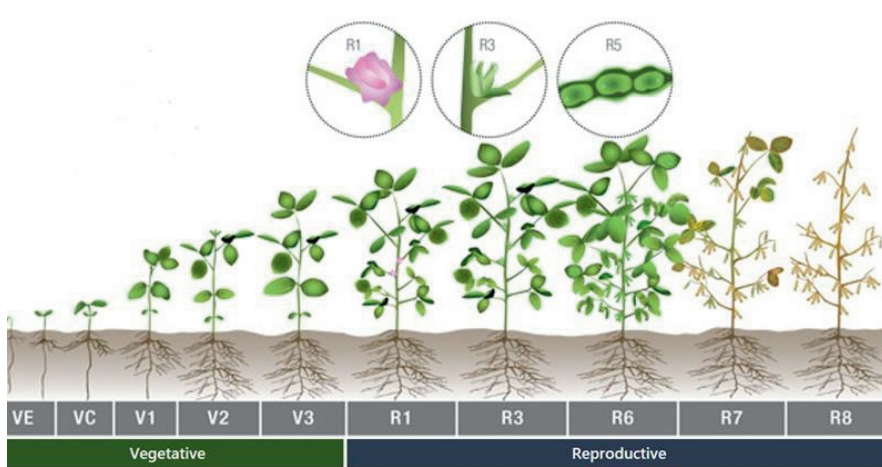
1 = Exc; 5 = Poor	5	4	3	2	1
Lasting Residue					
Weed Fighter					
Grazing Value					
Forage Value					
Quick Growth					
Attract Beneficials					

Key Crop Growth Development Charts

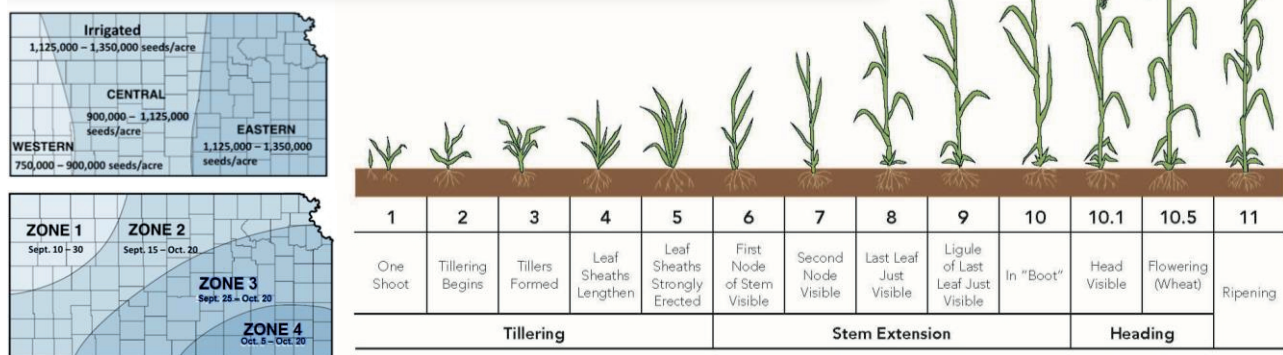
HYBRID SEED CORN



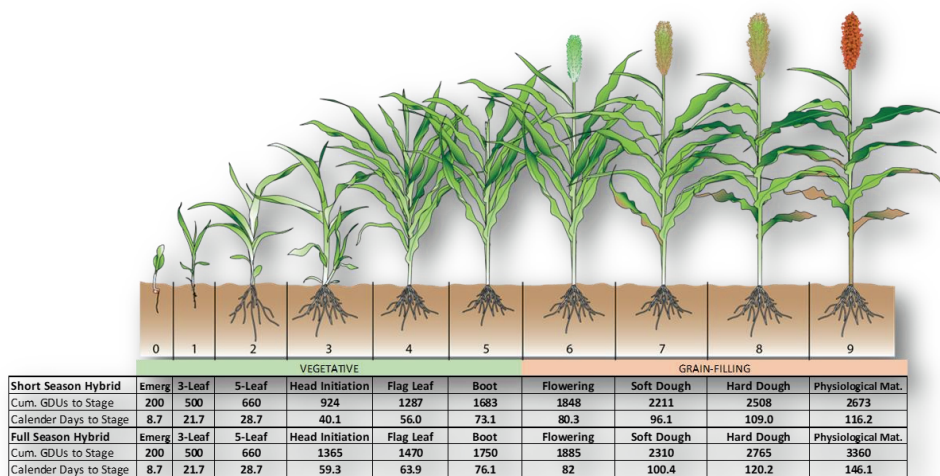
SOYBEAN



WHEAT



GRAIN SORGHUM



Basic Agronomy Information



BASIC CORN AGRONOMY CONSIDERATIONS

Hybrid (s) Selection Criteria for the Great Plains Region

- 1. Relative Maturity.** Select maturities capable of reaching black layer before frost, but still take advantage of the growing season's yield accumulation period.
 - a. Select flex or semi-flex hybrids** for management flexibility.
 - b. Plant three or more hybrids** to spread production risk.
 - c. Consider heat and drought tolerant hybrids.** Select solid genetics with good plant health and good drought tolerance traits.
 - d. Consider insect-resistant traits where issues persist.**
 - e. Consider weed pressure, and using herbicide-tolerant traits.**
- 2. Consider Plant population.** Check soil type, moisture and nutrients. For a basic guideline:
 - a.** Extreme drought conditions: 12,000 to 16,000 PPA (Plants Per Acre).
 - b.** Marginal dryland conditions: 16,000 to 20,000 PPA.
 - c.** Mod. dryland and ltd. irrigation conditions: 20,000 to 25,000 PPA.
 - d.** Excellent dryland and good irrigated conditions: 25,000 to 30,000 PPA.
 - e.** Ideal dryland conditions and excellent irrigation conditions: 30,000 to 35,000 PPA.
- 3. Planting Dates.** Consider soil temps and conditions. Corn germs best past 50° to 55° F.
- 4. Plant Seeds at Uniform Spacing and Depth.**
 - a. Match seed weight or grade size to planter type.** Optimize singulation.
 - b. Plant from 1 ½" to 2 ½" deep.** Consider soil conditions and type. **Consistent 2" depth is ideal.**
 - c. Regulate planting speed to equipment & conditions.**
 - d. Maintain consistent down pressure.**
 - e. Close furrow (vee) for proper seed-to-soil contact.**
- 5. Fertilization.** Test soil every 2 to 3 years. Set realistic yield goals.
 - a.** Corn requires 1.2 lb of N per bushel on average. Consider % O.M., N credits from prior crops, and other factors.
 - b.** Split apply the N, and don't ignore the micronutrients.
- 6. Insect pressure.** Consider hybrids with protective B.t. traits.
- 7. Disease Issues.** Select hybrids with resistance to Goss's Wilt, Southern Rust, Common Rust, SCLB, and others.
- 8. Fungicide Use.** Proper applications can help maintain plant health, protect, and even enhance yield. Please note, current fungicides does not control NCLB and Goss's Wilt, so opt for hybrids with favorable ratings for suspect areas.

BASIC SOYBEAN AGRONOMY CONSIDERATIONS

- 1. Variety Selection**
 - a.** Plant as full a season variety as early as you can
 - b.** Consider trait & genetic package for disease & pest control
- 2. Planting Depth 1" to 2"** - Dry conditions may warrant planting a bit deeper
- 3. Plants Per Acre (PPA):** 90K to 150K, but most common ranges from 120K to 140K
- 4. Consider treatments** – many offer root & plant health and yield advantages
 - a. Inoculant** – adding Rhizobia can increase nodulation and yield
 - b. Fungicide/insecticide** – these enhance vigor and can add uniformity in maturing plants
- 5. Fertilization:** Apply nutrients based on what expected yields will remove, e.g.,
 - a.** 1.4 lb of K per bushel of yield
 - b.** 0.8 lb of P per bushel of yield
- 6. Soil pH:** 6.3 to 6.5 is best, but 5.8-7.0 OK
- 7. Plant into warm soils.** Soil temps should be 50° F and above before germination can normalize
- 8. Rotating crops is a best practice**
- 9. Harvest** once 95% of pods are a mature tan color and moisture levels reach 13% to 15%. Harvesting too dry may result in shattering and lost yield

BASIC WINTER WHEAT AGRONOMY CONSIDERATIONS

- **Variety Selection:** Select varieties adapted to the area and the specific conditions, crop rotation, pest issues, weed issues, and the like. Consider a blend for spreading the risk over varying or uncertain conditions.
- **Suggested Planting Dates:** Plant within the first ten (10) days of the fly-free date to allow for good fall tillering. See map (previous page).
- **Fertility Considerations:**
 - Soil test for optimum soil nutrient levels and yield
 - Depending on pH, applying a band of Phosphorus in row can reduce the potential for aluminum toxicity, increase plant health and yield
 - Maintain high N levels by split applying at seeding, V5 stem elongation, and prior to heading. Split applying reduces lodging potential and enhances quality
- **Suggested Planting Rates:** See Kansas map (previous page):

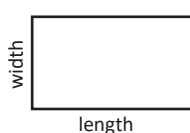
BASIC GRAIN SORGHUM AGRONOMY CONSIDERATIONS

- **Hybrid Selection:** Balance offensive & defensive characteristics. Don't plant all the same maturity.
 - Select hybrids with SugarCane Aphids & Greenbug Resistance
- **Soil Temps to Germinate:** 60° F and higher.
- **Planting Dates:** Usually earlier planting is best, but the planting window is fairly wide. Consider frost potential.
- **Planting Depth:** 1" – 2" range. Best is 1 ¼" – 1 ½".
- **Fertilization:** 1 to 1.1 lb of N per bushel is a general rule of thumb.
- **Crop Rotation:** Recommended
- **Harvesting:** 18% moisture or below is best, but if on the higher end, aeration and drying is warranted.
- **Crop Storage (Long-Term):** 13% is recommended.

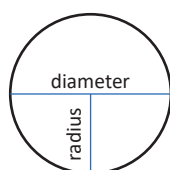
Seeding Information

Seed Type	Approximate Seeds/lb	Planting Rate lb/Acre (lb) or Seeds/Acre	Seeding Depth (Inches)	Suggested Planting Dates	Emergence Time (Days)	Primary Use
Alfalfa	227,000	15 to 20 lb	1/4" to 1/2"	March-May; August-September 15	7	Hay, Silage & Pasture
Brome, Smooth	138,000	15 to 20 lb	1/4" to 1/2"	January-April; September-December	14	Hay & Pasture
Clover, Red	272,000	8 to 12 lb	1/4" to 1/2"	February-May; August-October	7	Hay, Silage & Pasture
Clover, White	760,000	4 to 8 lb	1/8" to 1/2"	February-May; August-October	7	Hay & Pasture
Clover, Yellow	260,000	6 to 15 lb	1/8" to 1/2"	February-May; August-October	7	Hay & Pasture
Corn, Field	1,200 to 2,200	14,000 to 35,000	1.5" to 2.75"	Geo-specific: March-June	7 to 12	Grain & Silage
Forage Brassica	180,000	4 to 8 lb	1/4" to 1/2"	March-April; August-September	7	Pasture
Forage Sorghum: Drilled	17,000 to 20,000	15 to 20 lb	1"	May-July	10	Silage
Forage Sorghum: Rows	17,000 to 20,000	4 to 6 lb	1"	May-July	10	Silage
Grain Sorghum (Milo)	13,500 to 15,500	45,000 to 85,000	1" to 2"	Geo-specific: June-July	7 to 10	Grain & Silage
Millet, German	220,000	15 to 20 lb	1/2" to 1"	May-July	10	Hay
Millet, Pearl	60,000	15 to 20 lb	1/2"	May-July	7	Pasture & Silage
Oats	16,000	65 to 100 lb	1" to 2"	February-April; August-September	10	Hay & Pasture
Peas, Austrian Winter	2,000	30 to 40 lb	1/2" to 1"	February-April; September-October	7	Hay, Pasture & Silage
Peas, Iron & Clay Cow	3,000	75 to 120 lb	1/4" to 1/2"	May-June	8	Hay, Pasture & Silage
Purple Top Turnips	220,000	3 to 8 lb	1/2"	March-April; August-September	7	Pasture
Radish, Tillage	48,000	8 to 15 lb	1/4" to 1/2"	March-April; August-September	7	Pasture
Rape, Dwarf Essex	145,000	4 to 9 lb	1/4" to 1/2"	March-April; August-September	7	Hay & Pasture
Ryegrass, Annual	227,000	12 to 20 lb	1/4" to 1/2"	February-May; August-September	14	Hay & Pasture
Sorghum x Sudangrass	21,000	15 to 20 lb	1"	May-July	10	Hay & Pasture
Sorghum x Sudangrass BMR	21,000	15 to 20 lb	1"	May-July	10	Hay & Pasture
Soybean	2,500 to 3,500	90,000 to 150,000	1" to 2"	Geo-specific: April-June	7 to 10	Grain
Teff Grass (50% Coated)	650,000	8 to 15 lb	1/8" to 1/4"	May-July	4 to 7	Hay, Silage & Pasture
Triticale	15,000	90-120 lb	1" to 2"	August-October	7	Hay & Pasture
Vetch, Common	16,000	20 to 30 lb	1"	August-October	14	Hay & Pasture
Wheat, Hard Red Winter	18,000 to 19,000	900,000 to 1,300,000	3/4" to 1-1/4"	September-October	7 to 10	Grain

Farm Math: Charts & Calculations

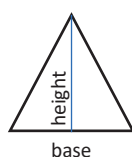


Area of rectangle or square = length x width

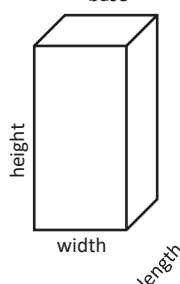


Area of a circle = 3.1416 x radius squared; or 0.7854 x diameter squared

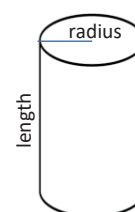
Circumference of a circle = 3.1416 x diameter or 6.2832 x radius



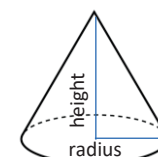
Area of a triangle = base x height ÷ 2



Volume of rectangular box or cube = length x width x height



Volume of a cylinder = 3.1416 x radius squared x length



Volume of a cone = 1.0472 x radius squared x height

SEED SPACING (in Inches) by Row Widths & Plants Per Acre (PPA) Targets

Row Spacing (in.)	Linear ft. per 1/1000 acre	Common Seed Corn PPAs					Common Grain Sorghum PPAs			Common Soybean PPAs			
		20,000	24,000	28,000	32,000	36,000	48,000	60,000	72,000	100,000	120,000	140,000	160,000
7	74' 8"	44.8	37.3	32.0	28.0	24.9	18.7	14.9	12.4	9.0	7.5	6.4	5.6
10	52' 3"	31.4	26.1	22.4	19.6	17.4	13.1	10.5	8.7	6.3	5.2	4.5	3.9
15	34' 10"	20.9	17.4	14.9	13.1	11.6	8.7	7.0	5.8	4.2	3.5	3.0	2.6
20	26' 2"	15.7	13.1	11.2	9.8	8.7	6.5	5.2	4.4	3.1	2.6	2.2	2.0
22	23' 9"	14.3	11.9	10.2	8.9	7.9	5.9	4.8	4.0	2.9	2.4	2.0	1.8
30	17' 5"	10.5	8.7	7.5	6.5	5.8	4.4	3.5	2.9	2.1	1.7	1.5	1.3
36	14' 6"	8.7	7.3	6.2	5.4	4.8	3.6	2.9	2.4	1.7	1.5	1.2	1.1
38	13' 9"	8.3	6.9	5.9	5.2	4.6	3.4	2.8	2.3	1.7	1.4	1.2	1.0

Calculating Crop Yield

Grain Formula: Yield = (100 – H2O) x (lbs. of grain) x (factor) divided by (row length in feet) divided by (row width in inches x number of rows). Grain Factors: Corn = 110.465; Soybean = 100.138; Grain Sorghum = 108.538; Wheat = 100.716

Example for Corn Grain: 5,000 lbs. of 16.5% shelled corn from 8 – 30" rows, 1,000 ft. long.

Yield = 83.5 x 5000 x 110.465 divided by 1000 divided by 240 = 192.16 bu/acre.

ACRES PLANTED PER UNIT OF SEED

CORN ¹		SOYBEAN ²		GRAIN SORGHUM ^{**}	
PPA Target	Acres Planted Per 80M Unit	PPA Target	Acres Planted Per 140M Unit	PPA Target	Acres Planted Per 700M Unit
12,000	6.67	90,000	1.56	45,000	15.56
14,000	5.71	100,000	1.40	50,000	14.00
16,000	5.00	110,000	1.27	55,000	12.73
18,000	4.44	120,000	1.17	60,000	11.67
20,000	4.00	130,000	1.08	65,000	10.77
22,000	3.64	140,000	1.00	70,000	10.00
24,000	3.33	150,000	0.93	75,000	9.33
26,000	3.08	160,000	0.88	80,000	8.75
28,000	2.86	170,000	0.82	85,000	8.24
30,000	2.67	180,000	0.78	90,000	7.78
32,000	2.50	190,000	0.74	95,000	7.37
34,000	2.35	200,000	0.70	100,000	7.00
36,000	2.22	210,000	0.67	105,000	6.67

CORN¹ Unit = 80,000 Seeds Per Unit. Typical Unit weights vary from 35 to 65 lbs.

SOYBEAN² Unit = 140,000 Seeds Per Unit. Typical Unit weights vary from 40 to 60 lbs.

Grain Sorghum^{**} is still packaged in 50 lb bags. The above example is calculated at 14,000 Seeds/lb. Be sure to read seed tags for actual seeds/lb.

Irrigation Water Measurements

Volume:

- 1 acre-inch (ac in.): volume of water required to cover one acre
- 1 inch deep = 27,154.29 gallons = 3,830 cubic feet
- 1 acre-foot (ac. Ft.) = 325,851 gallons = 43,560 cubic feet
- 1 cubic foot = 7.48 gallons = 62.4 lbs.
- 100 cubic meters = 100,000 liters = 26,417.2 gallons

Flow Rate:

1 ac-in./hour = 452.57 gallons/minute = ~1 cubic foot/sec

GDU = ((Daily High Temp + Daily Low Temp) divided by 2) minus 50
For Corn: High limit is 86°F; Low limit is 50°F



John Deere Financial & Legal Information



JOHN DEERE FINANCIAL

Phillips Seed Farms offers John Deere Financial seed financing to provide our customers with solid payment and finance options. Please call a Phillips Seed Farms office or ask your Phillips Seed Farms Area Sales Manager for more information.



DEFEND YOUR YIELD POTENTIAL WITH BEST-IN-CLASS INSECT CONTROL

The Agrisure® traits portfolio offers innovative trait stacks designed to control up to 16 key above- and below-ground insects.

All photos are either the property of Syngenta or are used with permission.
©2021 Syngenta. Agrisure®, Agrisure Duracade®, Agrisure Viptera® are registered trademarks of a Syngenta Group Company. More information about Agrisure Duracade is available at <http://www.biotradestatus.com/>.

Agrisure®, Agrisure Artesian®, Agrisure Duracade®, Agrisure Viptera® and E-Z Refuge® are registered trademarks of a Syngenta Group Company.

Important: Always read and follow label and bag tag instructions; only those labeled as tolerant to glufosinate may be sprayed with glufosinate ammonium based herbicides.

More information about Agrisure Duracade® is available at <http://www.biotradestatus.com/>.

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, non-selective, postemergent weed control of Liberty® herbicide for optimum yield and excellent weed control. LibertyLink®, Liberty® and the Water Droplet logo are registered trademarks of BASF Corporation. Agrisure® Technology incorporated into these seeds is commercialized under license from Syngenta Seeds, Inc. Herculex® Technology incorporated into these seeds is commercialized under license from Dow AgroSciences LLC. HERCULEX® and the HERCULEX Shield are trademarks of Dow AgroSciences LLC.

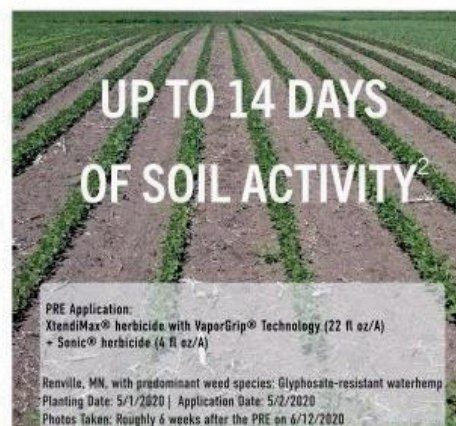
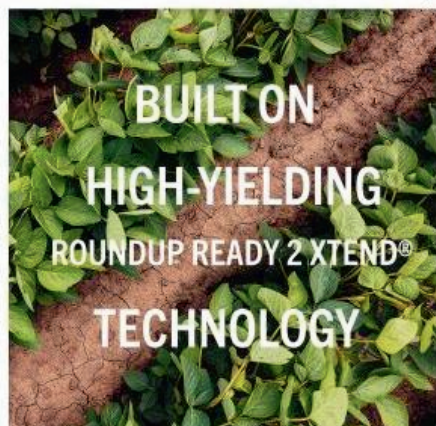


CHOOSE RESULTS

XtendFlex[®] SOYBEANS

TRIPLE-STACKED TOLERANCE FOR MORE FLEXIBILITY

XtendFlex[®] soybeans provide farmers with yet another option to drive and protect their yield potential with triple-stacked tolerance to dicamba, glyphosate and glufosinate.



¹ Based on approved EPA herbicide labels for the herbicides recommended for use in each system as of 10/25/2020. Includes XtendFlex[®] soybeans, XtendiMax[®] herbicide with VaporGrip[®] Technology (a restricted use pesticide), Roundup PowerMAX[®] herbicide and Liberty[®] herbicide.

² Results may vary, depending on rainfall and soil type. Always use dicamba with residual herbicides in pre-emergence and postemergence applications that have different, effective sites of action, along with other Diversified Weed Management Practices.



Think Before You Bin Run



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[®], Roundup Ready 2 Xtend[®] 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 more information on seed intellectual property protection, or to anonymously report a tip, please call 1-866-99-BAYER. For a list of relevant patents visit www.monsantotechnology.com



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 remove 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 glufosinate. Contact your seed brand dealer or refer to the Bayer Technology Use Guide for recommended weed control programs.

Bayer, Bayer Cross, Roundup Ready 2 Xtend[®], Roundup Ready 2 Yield[®], Roundup Ready[®], Roundup[®] and XtendFlex[®] are registered trademarks of Bayer Group. ©2020 Bayer Group. All rights reserved.

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, 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.

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

IMPORTANT IRM INFORMATION: RIB Complete® corn blend products do not require the planting of a structured refuge **except** in the Cotton-Growing Area where corn earworm is a significant pest. **See the IRM/Grower Guide for additional information. Always read and follow IRM requirements.**

Roundup Ready® 2 Technology contains genes that confer tolerance to glyphosate. **Products with XtendFlex® Technology contains 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 glufosinate. 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® and the Water Droplet Design® is a trademark of BASF Corporation. Respect the Refuge and Corn Design® and Respect the Refuge® are registered trademarks of National Corn Growers Association. DroughtGard®, RIB Complete®, Roundup Ready 2 Technology and Design™, Roundup Ready 2 Xtend®, Roundup Ready 2 Yield®, Roundup Ready®, SmartStax®, SR and Design®, Trecepta®, VT Double PRO® 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: <https://tug.bayer.com>. U.S. patents for Bayer technologies can be found at the following webpage: <http://www.monsantotechnology.com>



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 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.



Legal Information



Dow AgroSciences is a member of Excellence Through Stewardship® (ETS). Dow AgroSciences products are commercialized in accordance with ETS product launch stewardship guidance and Dow AgroSciences Product Launch Stewardship Policy. No crop or material produced from this product can be exported to, used, processed or sold 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. For further information about your crop or grain marketing options, contact DAS at 877-4-TRAITS (877-487-2487). Information regarding the regulatory and market status of agricultural biotechnology products can be found at: www.biotradestatus.com.



Seeds containing the Enlist, Herculex and PowerCore traits are protected under numerous US patents. Seeds containing patented traits can only be used to plant a single commercial crop and cannot be saved or replanted. 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 Technology Use Agreement and (ii) the Product Use Guides for all technologies in this seed, including the Herbicide Resistance Management (HRM), and Use requirements detailed therein (www.corteva.us/Resources/trait-stewardship.html). To plant Enlist, Herculex and PowerCore 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 the 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. Always read and follow herbicide label directions prior to use: Enlist® products contain the Enlist trait that provides crop safety for use of labeled over-the-top applications of glyphosate, glufosinate and 2,4-D featuring herbicides featuring Colex-D® technology when applied according to label directions. Following burndown, only 2,4-D containing herbicide products that may be used with Enlist® crops are products that feature Colex-D technology and are expressly labeled for use on Enlist crops. 2,4-D only products that do not contain Colex-D technology are not authorized for use in conjunction with Enlist products.

Soybean seeds containing the Enlist™ trait can only be used to plant a single commercial crop. It is unlawful to save and replant the 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 Dow AgroSciences technologies can be found at the following webpage: www.corteva.us/Resources/trait-stewardship.html.

The transgenic soybeans event in Enlist E3™ soybeans is jointly developed by Dow AgroSciences LLC and M.S. Technologies, L.L.C. ®™ Enlist, Enlist E3, the Enlist E3 logo, and Colex-D are trademarks of the Dow Chemical Company ("Dow") or an affiliated company of Dow. Excellence Through Stewardship is a registered trademark of Excellence Through Stewardship.



Seeds containing the LibertyLink® trait are protected under one or more US patents and may be planted only to produce one (1) commercial crop in a single season, and only after signing a BASF Grower Technology Agreement. It is illegal to save seeds containing the LibertyLink® trait for use as planting seed or for transfer to others for use as planting seed. Always read and follow label directions. Liberty and LibertyLink are registered trademarks of BASF. M.S. Technologies is a trademark of M.S. Technologies, L.L.C. ©2019 BASF Corporation / M.S. Technologies, L.L.C. All Rights Reserved. APN 18-INT-0014





Wildlife Division Products



**Growing bigger bucks,
healthier herds, and better
wildlife habitat for farmers,
ranchers & land managers**



**Jeremy Sluder's buck
Fall 2019 – 173 6/8"**



**Jeremy Sluder's buck
Fall 2020 – 172 3/8"**

We distribute these fine products:



**Contact Jeremy Sluder at: 785.949.2204
or jsluder@phillipsseed.com, to inquire
about wildlife products or Dealership
opportunities.**

Background photo taken from
Jeremy Sluder's trail camera



RWWP Deer Nutrition & Food Plot Seed



Real World Wildlife Products is much different than other food plot seed companies. First and foremost, they are hunters and land managers. They were not a seed company that decided to start marketing food plot seed to hunters, instead they are hunters who became frustrated with the food plot products on the market and the marketing tactics of the companies selling them. Their "business plan" has always been very simple – develop the very best wildlife food plot blends possible and then market them at a fair price while using education, rather than deception, to help customers get the most from the products. They refuse to use marketing ploys such as cheap filler seeds and excess seed coating to increase profit margins. Real World Wildlife Products is likely the only food plot seed company in business that challenges you to buy a competitor's similar product and plant it side-by-side next to theirs. Phillips Seed Farms could make our own seed blends, throw it in a bag and call it a food plot mix like other seed companies. However, we want to offer the best wildlife products available and RWWP has the experience and years of research finding seed varieties and nutritional products that are more preferred by deer and that maximize genetic potential. We encourage you to take their Dare To Compare challenge!



Expect Healthy Deer Technology® Patented probiotic unlike any other probiotic in the world

- **Benefits:** Strengthens immune system, optimum rumen function, gastrointestinal tract function and nutrient utilization
- **Results:** Improved performance during disease outbreaks, Better feed intake, weight gain and antler growth during stressful times (ie. hot weather), Helps with production of strong healthy fawns and supports antler and body growth of the deer



- Developed after over 20 years of extensive research
- Formulated with over 20 macro and micro nutrients
- Supports deer herd health, antler growth and fawn production
- Don't just attract deer, but maximize their full genetic potential
- Includes Real World's **Expect Healthy Deer Technology®**



- A concentrated feed additive for captive deer farmers or wild deer
- Developed by professional livestock nutritionists and a leading whitetail veterinarian
- Contains all of the minerals, vitamins and micro-nutrients necessary in a whitetail's diet
- Mix Maximizer-Plus Feed Concentrate at a rate of 200# per ton of feed
- Includes Real World's exclusive **Expect Healthy Deer Technology®**



- Designed to include every nutrient deer need to remain healthy and in top condition for maximum production.
- This mix includes protein, energy, minerals, vitamins and other nutrients that deer need to reach their genetic potential
- For best results provide deer all they can consume, year round and in a location that provides heavy cover
- Includes Real World's exclusive **Expect Healthy Deer Technology®**



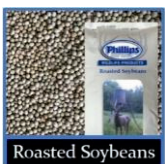
- This is a highly nutritious corn and it attracts deer, better than any corn tested by Real World Wildlife products
- 109 Day Corn: 2020 test plot results showed 11.12% Protein and 12.97% Fat compared to 6.86% Protein and 3.86% Fat in nearby ag field corn
- Test plot best in the following nutrients: phosphorus, magnesium, potassium, sulfur, zinc, iron and manganese
- 225% more calories than the same volume of typical field corn
- If you grow corn in your food-plots or for livestock feed, you really need to try Nutri-Crave corn!



- Real World Wildlife Products has become known as the leader in supplying the best soybean food plot products
- Enlist soybeans can be sprayed with Glyphosate (RoundUp®), Glufosinate (Liberty®) and 2-4D ColexD
- These additional herbicide options helps fight weeds that have become tolerant to Glyphosate
- This is an Enlist® blend of soybeans that provides weed resistance while maintaining deer attraction and shatter resistance
- Available in Regular and Northern Blend



- Blend of (4) different soybean Glyphosate (RoundUp®) varieties (4.0 to 5.4 maturity range), providing grain at different times
- They produce a tremendous amount of forage and grain to feed your deer throughout the entire hunting season
- They are shatter resistant, meaning the soybean grain will stay within the pods where deer can readily consume it
- They are higher in oil content than most other soybean varieties. High-oil soybeans are more nutritional and attractive
- Available in Regular and Northern Blend



- Cost effective, highly nutritious and naturally attractive to deer
- Locally grown, roasted and packaged soybeans
- Recommended mix 1/3 Roasted Soybeans, 2/3 Corn and 10% Maximizer Plus Feed Concentrate of grain volume
- Soybeans have an average protein level of 35-45% compared to only about 5-7% for typical ag field corn
- Roasting process makes grain more easily consumed by animals



RWWP Food Plot & Cover Seed



- Best clover varieties and chicory variety thoroughly tested for nutritional value and deer attraction
- Blend of (4) perennial clover varieties, no annuals
- Clover provides a great source of forage throughout the year and is a staple for the serious land manager
- Chicory provides a high protein and drought hardy forage companion crop for clover
- No cheap filler seed or excessive amounts of seed coatings



- Easy to grow and extremely attractive to deer
- Blend contains (3) cereal grains (wheat, barley and oats) and Austrian Winter Peas
- Extremely winter hardy variety of Austrian Winter Peas
- Deer will hammer the cereal grains when weather conditions have deer going to green food sources



- Can be planted by itself, broadcast into standing corn or soybeans, mixed with oats, or Harvest Salad
- **Includes:** purple top turnips, oil-seed radish, tillage radish, rape, sugar beets, forage collards, crimson clover and impact forage collards
- Deer are attracted to the forages in this blend as well as the vegetation from the plant bulbs
- The diverse mix of plants will provide a food source for deer from early fall and late into the season after a hard freeze



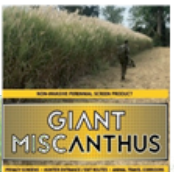
- Combination of two most popular fall-planted products Harvest Salad and Plot Topper
- Provides season long attraction from the time it germinates, throughout the hunting season and into the following spring
- **Includes:** Winter Hardy Oats, Winter Wheat, Winter Barley, Austrian Winter Peas, Tillage Radish, Purple Top Turnips, Rape Plus, Sugar Beets, Forage Collards, Impact Forage Collards, Crimson Clover and Oil Seed Radish
- Sold in 1/4 acre bags or 50# bag Harvest Salad and 3# bag Plot Topper = 1 acre Deadly Dozen



- It is a great product for attracting pheasants, quail, turkeys, rabbits, song birds and a wide variety of wildlife
- It is also a great product for deer food plots and creating edges around food plots
- It provides nesting and perching habitat for birds
- **Includes:** sunflowers, soybeans, sorghum and millet



- Real World's switch grass stood better than all varieties tested, including the popular Cave-In-Rock variety
- It will grow up to 7' to 8' tall
- Provides a great bedding cover for wildlife and better standability through entire winter
- It is also used to provide screening cover on the border of food plots or access routes to hunting stands
- The bigger the plot the more likely the wildlife is to use it for bedding and cover (recommended minimum of 5 acres)



- Ultimate plot screen: conceal plots from the roads and/or add improved hunting stand access
- Non-Invasive, extremely tall grass, typically grows to heights of 12' or taller
- Perennial plant will come back every year
- A cold hardy/heat tolerant grass that grows rapidly, has low nutrient requirements and is resistant to most pests and diseases

Background photo taken from
Jeremy Sluder's trail camera



- A. - Integrated ventilation
- B. - Seamless acrylic roof coating
- C. - Peep windows at standing height
- D. - 24' x 60' inward swinging door
- E. - Tinted rifle and archery windows
- F. - LP Smart Side exterior

The 360 blinds' spacious 6ft, 6in high interior allows the hunter to stand fully upright, and it's wide enough to comfortably seat two people.

The twelve by eighteen-inch tinted windows feature our state-of-the-art window raising mechanism - an utterly silent, one-handed operation.

Our solid wood frame construction and a seamless acrylic roof are built to provide hunters with many seasons of comfortable, weatherproof hunting.



Features & Upgrades

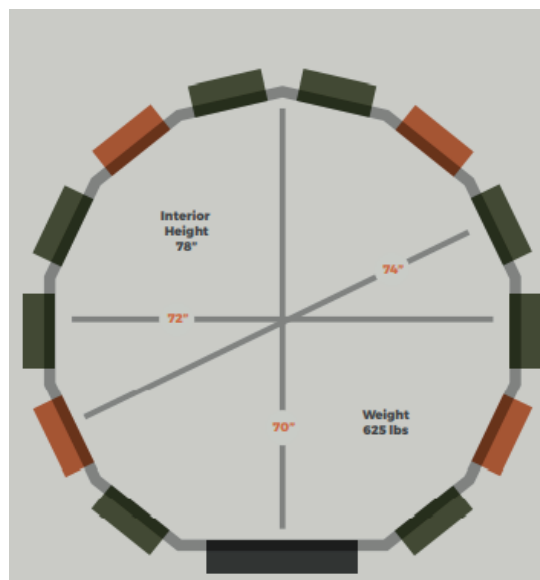
Features Included:

- ❖ Three 29"x16" tinted gun/crossbow windows
- ❖ One 18"x12" window in door
- ❖ Lockable door latch
- ❖ Four, 4x4 pockets for stand posts
- ❖ Padded shooting rails at each window
- ❖ Integrated ventilation above door
- ❖ Carpeted floor & walls up to bottom of windows

Upgrade Options:

- ❖ Insulated floor and walls
- ❖ Metal tower stand
- ❖ Wooden tower stand
- ❖ Handicap accessible door

360 PRO



360 PRO XL





RESEARCHED, SELECTED & PRODUCED IN THE USA

800.643.4340

PhillipsSeed.com



Facebook.com/PhillipsSeedFarms

SERVE • INNOVATE • GROW