



DAHLMAN[®]

PREMIUM SEED | PERFORMANCE PROVEN



2023 PRODUCT GUIDE

CORN | SOYBEANS | ALFALFA | WHEAT





Buying the right seed is the most important decision you make every year. Big yields start with the best set of products for your farm fields. That is why **Dahlman Seed**, an **INDEPENDENT, FAMILY owned** and operated Seed Company since 1922, is dedicated to being the **LEADER** you can trust when making planting decisions. Our Dahlman Seed mission is to provide **PREMIUM SEED/PERFORMANCE PROVEN** products with the best technology choices to growers in the upper Midwest. Thank you for considering Dahlman Seed for Spring 2023.

We are extremely excited to present our 2023 product line-ups. We are offering **36 corn hybrids with THREE of these being new.** Our robust soybean line-up is anchored by **14 high performing XtendFlex®/Roundup Ready 2 Xtend® soybean varieties, with FOUR NEW XtendFlex varieties!** As well as a strong **Enlist E3® soybean variety lineup.** Our products have **PROVEN** to perform consistently at high levels year after year.

The Dahlman Seed Team strives to be **LEADERS** every day in every way so we can deliver “Success” and “High Return on Investment”. And we know there isn’t room for compromise when selecting a seed supplier “Partner”. **Dahlman Seed is your Trusted Partner** and our local experts’ can help you find **PROVEN** products for your farm that will help you reach your goals!

We take this responsibility of **PREMIUM SEED/ PERFORMANCE PROVEN** very seriously because we know buying the right seed for your farm is one of the most important decisions you make every year. **Dahlman Seed is your Trusted Partner.**

Sincerely,
The Dahlman Seed Team

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Premium Seed

High quality seed is who we are. Seed quality starts with the harvest. Having discussions about seed moisture content, weather, combine harvesting capability, trucking, and dryer capacity. Then once the seed comes out of the dryer the next series of events begin: cleaning, grading, treating, blending, packaging, and lab testing. Each step being guided by strict quality control protocols with unique expertise being passed on from one Dahlman generation to the next. ***Perhaps the most important element in the entire process is our people.*** It's people that execute the plan and shoulder the responsibility for success. You can trust the experience and integrity that goes into every bag of Dahlman Seed.



Performance Proven

Consistent performing products. Dahlman seed has focused on bringing forward the best technology and genetics for the growers in the upper Midwest for decades. In order to identify consistent performing genetics for our market area, we personally observe plots multiple years, over a wide range of environments. Field observation notes taken during a season are evaluated in conjunction with yield data to make a final decision to commercialize as a Dahlman Seed product.



Expert Knowledge

Dahlman Seed is your Trusted Partner. Dedicated to building relationships because maximizing yield starts with educated recommendations. Our Sales Managers and local Dealers have years of experience and their on-going product training provides the foundation for every corn hybrid and soybean variety recommendation. We also strive to get to know your fields and farming practices so we can provide the correct recommendation of the right technology and genetics for your fields so you can reach your goals.

CORN PRODUCTS

Dahlgren Brand	Relative Maturity	GDUs to Mid-Silk	GDUs to Black Layer	Population Tolerance	Emergence	Early Vigor	Root Strength	Stalk Strength	Drought Tolerance
R41-22VT2PRIB	82	1110	2040	30-36	8.5	9.0	8.0	8.0	8.0
R42-28VT2PRIB	85	1145	2100	30-36	8.0	8.5	8.0	8.0	8.5
R43-29VT2PRIB	85	1155	2125	30-34	8.0	8.5	7.5	8.0	7.0
R43-19	85	1155	2125	30-34	8.0	8.5	7.5	8.0	7.0
D43-01	85	1155	2125	30-34	8.0	8.5	7.5	8.0	7.0
R43-24VT2PRIB	86	1160	2225	30-34	8.5	9.0	7.0	8.5	8.5
R45-25VT2PRIB	90	1160	2240	32-36	8.0	8.5	8.5	8.0	7.5
R45-28VT2PRIB	90	1225	2240	30-34	8.0	8.0	8.0	7.0	8.0

KEY: 1 = Poor 2-3 = Fair 4-5 = Good 6-7 = Very Good 8-9 = Excellent

R41-22VT2PRIB 82 RM

Medium-Tall Plant Height | 2040 GDU to Black Layer

Strengths

- › Adapts to varying soils and environments
- › Excellent early season vigor for the northern cornbelt
- › Very good test weight
- › Solid overall disease tolerance
- › **RIB COMPLETE® - 5% refuge in the bag**



R42-28VT2PRIB 85 RM

Medium Plant Height | 2100 GDU to Black Layer

Strengths

- › Adapts to varying soils and environments
- › Great Goss's Wilt rating
- › Very good drought stress tolerance
- › Strong overall agronomics plus excellent stability
- › **RIB COMPLETE® - 5% refuge in the bag**



R43-29VT2PRIB 85 RM

Medium-Tall Plant Height | 2125 GDU to Black Layer

Strengths

- › Excellent emergence and early season vigor
- › Good choice for reduced tillage
- › Adapts to varying soils and environments
- › Very girthy ear type
- › **RIB COMPLETE® - 5% refuge in the bag**



R43-19 85 RM

Medium-Tall Plant Height | 2125 GDU to Black Layer

Strengths

- › Excellent emergence and early season vigor
- › Good choice for reduced tillage
- › Adapts to varying soils and environments
- › Very girthy ear type
- › Medium tall plant with strong stalks



Plant Height	Ear Type	Plant Health	Goss's Wilt	Fall Appearance	Drydown	Ear Retention	Test Weight	Corn Belt Refuge Requirement	Dahlman Brand
MT	SF	8.0	7.0	7.5	8.0	8.5	8.5	RIB	R41-22VT2PRIB
M	SF	8.5	7.0	7.0	7.0	8.0	7.5	RIB	R42-28VT2PRIB
MT	SD	8.5	5.5	7.5	8.5	8.0	7.0	RIB	R43-29VT2PRIB
MT	SD	8.5	5.5	7.5	8.5	8.0	7.0		R43-19
MT	SD	8.5	5.5	7.5	8.5	8.0	7.0		D43-01
MT	SF	7.0	5.0	6.5	8.0	7.5	7.0	RIB	R43-24VT2PRIB
M	SF	8.5	8.5	6.0	8.5	7.5	7.0	RIB	R45-25VT2PRIB
MT	SF	8.5	8.0	7.5	8.0	9.0	7.0	RIB	R45-28VT2PRIB

KEY: 1 = Poor 2-3 = Fair 4-5 = Good 6-7 = Very Good 8-9 = Excellent

D43-01 85 RM

Medium-Tall Plant Height | 2125 GDU to Black Layer

Strengths

- › Excellent emergence and early season vigor
- › Good choice for reduced tillage
- › Adapts to varying soils and environments
- › Very girthy ear type
- › Medium tall plant with strong stalks

CONVENTIONAL

R43-24VT2PRIB 86 RM

Medium-Tall Plant Height | 2225 GDU to Black Layer

Strengths

- › Strong yield performance across environments
- › Outstanding early season vigor
- › Excellent stress tolerance and stalk strength
- › Strong disease tolerance package
- › **RIB COMPLETE® - 5% refuge in the bag**



R45-25VT2PRIB 90 RM

Medium Plant Height | 2240 GDU to Black Layer

Strengths

- › Great choice for cold soils, superior emergence and early vigor
- › Excellent disease package
- › Prefers med-high to high plant populations
- › Very strong Goss's Wilt tolerance
- › **RIB COMPLETE® - 5% refuge in the bag**



R45-28VT2PRIB 90 RM

Medium-Tall Plant Height | 2240 GDU to Black Layer

Strengths

- › Good ear flex and grain drydown
- › Overall solid disease package
- › Excellent on clay soils plus good stress tolerance
- › Very strong Goss's Wilt tolerance
- › **RIB COMPLETE® - 5% refuge in the bag**



Dahlman Brand	Relative Maturity	GDUs to Mid-Silk	GDUs to Black Layer	Population Tolerance	Emergence	Early Vigor	Root Strength	Stalk Strength	Drought Tolerance
R45-12	90	1225	2240	30-34	8.0	8.0	8.0	7.0	8.0
NEW! R45-236VT2PRIB	91	1200	2245	32-36	8.0	8.0	8.5	8.5	8.0
R46-27VT2PRIB	92	1240	2305	32-36	8.0	8.5	8.5	8.5	8.5
R46-14	92	1240	2305	32-36	8.0	8.5	8.5	8.5	8.5
D46-04	92	1240	2305	32-36	8.0	8.5	8.5	8.5	8.5
R46-313SSRIB	94	1235	2315	30-34	8.5	8.5	9.0	8.0	8.5
R47-24VT2PRIB	94	1220	2250	32-36	8.5	8.5	8.0	7.5	8.0
R48-28VT2PRIB	95	1250	2340	30-34	8.0	9.0	9.0	8.5	8.5

KEY: 1 = Poor 2-3 = Fair 4-5 = Good 6-7 = Very Good 8-9 = Excellent

R45-12

90 RM

Medium-Tall Plant Height | 2240 GDU to Black Layer

Strengths

- › Good ear flex and grain drydown
- › Overall solid disease package
- › Excellent on clay soils plus good stress tolerance
- › Very strong Goss's Wilt tolerance



R45-236VT2PRIB 91 RM

NEW!

Medium-Tall Plant Height | 2245 GDU to Black Layer

Strengths

- › Very good test weight and grain quality
- › Excellent staygreen and late season intactness
- › Prefers average to better soils at moderate to high populations
- › Solid Goss's Wilt tolerance and overall agronomics
- › **RIB COMPLETE[®] - 5% refuge in the bag**



R46-27VT2PRIB 92 RM

Medium-Tall Plant Height | 2305 GDU to Black Layer

Strengths

- › Consistent performance across many soils
- › Very strong early season vigor
- › Best in adapted RM zone with good southern movement
- › Good drought tolerance
- › **RIB COMPLETE[®] - 5% refuge in the bag**



R46-14

92 RM

Medium-Tall Plant Height | 2305 GDU to Black Layer

Strengths

- › Consistent performance across many soils
- › Very strong early season vigor
- › Best in adapted RM zone with good southern movement
- › Good drought tolerance



Plant Height	Ear Type	Plant Health	Goss's Wilt	Fall Appearance	Drydown	Ear Retention	Test Weight	Corn Belt Refuge Requirement	Dahlman Brand
MT	SF	8.5	8.0	7.5	8.0	9.0	7.0		R45-12
MT	SF	8.5	8.0	9.0	7.5	8.5	8.0	RIB	R45-236VT2PRIB <small>NEW!</small>
MT	SF	7.5	6.0	8.0	7.0	8.5	7.0	RIB	R46-27VT2PRIB
MT	SF	7.5	6.0	8.0	7.0	8.5	7.0		R46-14
MT	SF	7.5	6.0	8.0	7.0	8.5	7.0		D46-04
MT	SF	8.0	8.0	8.0	8.5	8.0	7.0	RIB	R46-313SSRIB
MT	SF	7.5	6.0	8.0	8.0	8.5	7.0	RIB	R47-24VT2PRIB
M	SF	8.0	6.5	8.5	7.5	8.5	8.5	RIB	R48-28VT2PRIB

KEY: 1 = Poor 2-3 = Fair 4-5 = Good 6-7 = Very Good 8-9 = Excellent

D46-04

92 RM

Medium-Tall Plant Height | 2305 GDU to Black Layer

Strengths

- › Consistent performance across many soils
- › Very strong early season vigor
- › Best in adapted RM zone with good southern movement
- › Good drought tolerance

CONVENTIONAL

R46-313SSRIB

94 RM

Medium-Tall Plant Height | 2315 GDU to Black Layer

Strengths

- › Solid root and stalk strength
- › Good choice for cold soils and minimum tillage
- › Excellent stay green and a season long healthy appearance
- › Very strong Goss's Wilt tolerance
- › **RIB COMPLETE® - 5% refuge in the bag**

SmartStax
RIB COMPLETE

R47-24VT2PRIB 94 RM

Medium-Tall Plant Height | 2250 GDU to Black Layer

Strengths

- › Can position as a full season hybrid
- › Adapts to most soils and yield environments
- › Solid agronomics with quick drydown
- › Good choice for high management practices
- › **RIB COMPLETE® - 5% refuge in the bag**

VTDoublePRO
RIB COMPLETE

R48-28VT2PRIB 95RM

Medium Plant Height | 2340 GDU to Black Layer

Strengths

- › Strong drought tolerant and versatile hybrid
- › Adapts to most soils across our market area
- › Good choice for cold soils and minimum tillage
- › Excellent late season intactness and standability
- › **RIB COMPLETE® - 5% refuge in the bag**

VTDoublePRO
RIB COMPLETE

Dahlman Brand	Relative Maturity	GDUs to Mid-Silk	GDUs to Black Layer	Population Tolerance	Emergence	Early Vigor	Root Strength	Stalk Strength	Drought Tolerance
D48-04	95	1250	2340	30-34	8.0	9.0	9.0	8.5	8.5
NEW! R48-239VT2PRIB	95	1245	2340	32-36	8.0	8.0	9.0	8.5	8.0
R48-21VT2PRIB	96	1250	2340	30-34	8.5	9.0	8.5	8.0	7.0
R47-10	94	1230	2340	32-36	7.5	7.5	9.0	7.5	8.5
D48-08	96	1230	2340	32-36	7.5	7.5	9.0	7.5	8.5
R49-25VT2PRIB	98	1225	2400	30-34	8.5	8.5	8.5	8.0	8.0
D49-02	98	1225	2400	30-34	8.5	8.5	8.5	8.0	8.0
R49-340SSRIB	98	1240	2400	32-36	8.5	8.5	8.5	8.5	8.5

KEY: 1 = Poor 2-3 = Fair 4-5 = Good 6-7 = Very Good 8-9 = Excellent

D48-04

95 RM

Medium Plant Height | 2340 GDU to Black Layer

Strengths

- › Strong drought tolerant and versatile hybrid
- › Adapts to most soils across our market area
- › Good choice for cold soils and minimum tillage
- › Excellent late season intactness and standability
- › Very good Goss's Wilt tolerance

CONVENTIONAL

R48-239VT2PRIB 95 RM

NEW!

Medium-Tall Plant Height | 2340 GDU to Black Layer

Strengths

- › Consistent hybrid across yield environments & years
- › Top end performance potential from Dakotas east into Wisconsin
- › Very strong stalk and root strength enhancing yield potential
- › Excellent late season intactness & open husks allow rapid drydown

› **RIB COMPLETE® - 5% refuge in the bag**

VTDoublePRO®
RIB COMPLETE

R48-21VT2PRIB 96 RM

Medium Plant Height | 2340 GDU to Black Layer

Strengths

- › Top end yield across a very large area of adaptation
- › Semi flex ear that can be positioned on tough ground
- › Good choice for cold soils and minimum tillage
- › Very good test weight
- › **RIB COMPLETE® - 5% refuge in the bag**

VTDoublePRO®
RIB COMPLETE

R47-10

94 RM

Medium Plant Height | 2340 GDU to Black Layer

Strengths

- › Excellent grain quality and test weight
- › Outstanding root and stalk strength
- › Good Goss's Wilt tolerance
- › Plant at medium high populations
- › Good choice on stress prone acres

Roundup Ready 2
CORN

Plant Height	Ear Type	Plant Health	Goss's Wilt	Fall Appearance	Drydown	Ear Retention	Test Weight	Corn Belt Refuge Requirement	Dahlman Brand
M	SF	8.0	6.5	8.5	7.5	8.5	8.5		D48-04
MT	SF	7.5	6.5	7.5	8.0	8.0	7.0	RIB	R48-239VT2PRIB <small>NEW!</small>
M	SF	7.0	4.5	7.5	8.0	8.0	9.0	RIB	R48-21VT2PRIB
M	SD	8.0	8.0	8.5	7.0	9.0	8.5		R47-10
M	SD	8.0	8.0	8.5	7.0	9.0	8.5		D48-08
M	SF	8.5	8.0	8.5	7.5	8.0	8.5	RIB	R49-25VT2PRIB
M	SF	8.5	8.0	8.5	7.5	8.0	8.5		D49-02
MT	SF	8.5	7.5	8.5	8.5	8.5	8.5	RIB	R49-340SSRIB

KEY: 1 = Poor 2-3 = Fair 4-5 = Good 6-7 = Very Good 8-9 = Excellent

D48-08 96 RM

Medium Plant Height | 2340 GDU to Black Layer

Strengths

- › Excellent grain quality and test weight
- › Outstanding root and stalk strength
- › Good Goss's Wilt tolerance
- › Plant at medium high populations
- › Good choice on stress prone acres

CONVENTIONAL

R49-25VT2PRIB 98 RM

Medium Plant Height | 2400 GDU to Black Layer

Strengths

- › Adapts to medium and high yield environments
- › Excellent late season intactness
- › Overall solid agronomic and disease package
- › Very good Goss's Wilt tolerance
- › **RIB COMPLETE® - 5% refuge in the bag**

VTDoublePRO®
RIB COMPLETE

D49-02 98 RM

Medium Plant Height | 2400 GDU to Black Layer

Strengths

- › Adapts to medium and high yield environments
- › Excellent late season intactness
- › Overall solid agronomic and disease package
- › Very good Goss's Wilt tolerance

CONVENTIONAL

R49-340SSRIB 98 RM

Medium-Tall Plant Height | 2400 GDU to Black Layer

Strengths

- › Thrives in all yield environments
- › Plant medium to medium high populations
- › Excellent stay green and fall intactness
- › Solid overall disease package with very good drought tolerance
- › **RIB COMPLETE® - 5% refuge in the bag**

SmartStax®
RIB COMPLETE

Dahlgman Brand	Relative Maturity	GDUs to Mid-Silk	GDUs to Black Layer	Population Tolerance	Emergence	Early Vigor	Root Strength	Stalk Strength	Drought Tolerance
R49-29VT2PRIB	98	1230	2425	32-36	8.5	8.5	8.0	8.0	8.5
NEW! D49-039	98	1230	2425	32-36	8.5	8.5	8.0	8.0	8.5
R49-23VT2PRIB	98	1210	2420	32-36	8.5	8.5	8.5	8.0	8.0
D49-09	98	1210	2420	32-36	8.5	8.5	8.5	8.0	8.0
R50-355SSRIB	100	1260	2495	30-34	8.0	8.0	8.5	8.5	8.0
R50-25VT2PRIB	100	1260	2495	30-34	8.0	8.0	8.5	8.5	8.0
R52-24VT2PRIB	103	1280	2440	30-34	8.5	9.0	8.5	8.5	8.0
R52-14	103	1280	2440	30-34	8.5	9.0	8.5	8.5	8.0

KEY: 1 = Poor 2-3 = Fair 4-5 = Good 6-7 = Very Good 8-9 = Excellent

R49-29VT2PRIB 98 RM

Medium Plant Height | 2425 GDU to Black Layer

Strengths

- › Adapts to all yield environments
- › Exceptional fall appearance and staygreen
- › Position west to east
- › Very good Goss's Wilt tolerance
- › **RIB COMPLETE® - 5% refuge in the bag**



D49-039 98 RM **NEW!**

Medium Plant Height | 2425 GDU to Black Layer

Strengths

- › Adapts to all yield environments
- › Exceptional fall appearance and staygreen
- › Position west to east
- › Very good Goss's Wilt tolerance

CONVENTIONAL

R49-23VT2PRIB 98 RM

Medium Plant Height | 2420 GDU to Black Layer

Strengths

- › Outstanding yield potential plus quick drydown
- › Consistent ear size that shows nice girth
- › Excellent late season intactness
- › Very early flowering 98 day hybrid
- › **RIB COMPLETE® - 5% refuge in the bag**



D49-09 98 RM

Medium Plant Height | 2420 GDU to Black Layer

Strengths

- › Outstanding yield potential plus quick drydown
- › Consistent ear size that shows nice girth
- › Excellent late season intactness
- › Very early flowering 98 day hybrid
- › Fast emergence and excellent early season vigor

CONVENTIONAL

Plant Height	Ear Type	Plant Health	Goss's Wilt	Fall Appearance	Drydown	Ear Retention	Test Weight	Corn Belt Refuge Requirement	Dahlman Brand
M	SF	8.0	8.0	9.0	7.0	8.5	7.0	RIB	R49-29VT2PRIB
M	SF	8.0	8.0	9.0	7.0	8.5	7.0		D49-039 <small>NEW!</small>
M	SD	7.0	4.5	9.0	8.5	8.0	7.0	RIB	R49-23VT2PRIB
M	SD	7.0	4.5	9.0	8.5	8.0	7.0		D49-09
MT	SF	7.5	7.5	7.0	7.5	8.0	7.0	RIB	R50-355SSRIB
MT	SF	7.5	7.5	7.0	7.5	8.0	7.0	RIB	R50-25VT2PRIB
MT	SF	8.0	8.0	8.0	7.5	8.5	7.0	RIB	R52-24VT2PRIB
MT	SF	8.0	8.0	8.0	7.5	8.5	7.0		R52-14

KEY: 1 = Poor 2-3 = Fair 4-5 = Good 6-7 = Very Good 8-9 = Excellent

R50-355SSRIB 100 RM

Medium-Tall Plant Height | 2495 GDU to Black Layer

Strengths

- › Strong yield potential with very good ear flex
- › Position on average to better soils
- › Plant medium populations
- › Very good stalk and root strength
- › **RIB COMPLETE® - 5% refuge in the bag**



R50-25VT2PRIB 100 RM

Medium-Tall Plant Height | 2495 GDU to Black Layer

Strengths

- › Strong yield potential with very good ear flex
- › Position on average to better soils
- › Plant medium populations
- › Very good stalk and root strength
- › **RIB COMPLETE® - 5% refuge in the bag**



R52-24VT2PRIB 103 RM

Medium-Tall Plant Height | 2440 GDU to Black Layer

Strengths

- › Widely adapted across environments and soil types
- › Overall solid agronomic package
- › Excellent early season vigor good for cold soils
- › Good Goss's Wilt tolerance
- › **RIB COMPLETE® - 5% refuge in the bag**



R52-14 103 RM

Medium-Tall Plant Height | 2440 GDU to Black Layer

Strengths

- › Widely adapted across environments and soil types
- › Overall solid agronomic package
- › Excellent early season vigor good for cold soils
- › Good Goss's Wilt tolerance



Dahlman Brand	Relative Maturity	GDUs to Mid-Silk	GDUs to Black Layer	Population Tolerance	Emergence	Early Vigor	Root Strength	Stalk Strength	Drought Tolerance
D52-04	103	1280	2440	30-34	8.5	9.0	8.5	8.5	8.0
R52-26VT2PRIB	104	1290	2570	30-34	8.5	9.0	8.5	8.5	8.5
R53-359SSRIB	106	1240	2480	32-36	7.5	8.0	8.5	8.5	8.5
R53-350SSRIB	106	1280	2580	32-36	8.0	8.0	8.5	8.5	8.5

KEY: 1 = Poor 2-3 = Fair 4-5 = Good 6-7 = Very Good 8-9 = Excellent

D52-04

103 RM

Medium-Tall Plant Height | 2440 GDU to Black Layer

Strengths

- › Widely adapted across environments and soil types
- › Overall solid agronomic package
- › Excellent early season vigor good for cold soils
- › Good Goss's Wilt tolerance

CONVENTIONAL

R52-26VT2PRIB 104 RM

Medium Plant Height | 2570 GDU to Black Layer

Strengths

- › Thrives in all yield environments and soil types
- › Plant medium populations
- › Excellent early season vigor and grain drydown
- › Excellent Goss's Wilt tolerance
- › **RIB COMPLETE® - 5% refuge in the bag**



R53-359SSRIB 106 RM

Medium Plant Height | 2480 GDU to Black Layer

Strengths

- › Adapts to all yield environments
- › Excellent Goss's Wilt tolerance
- › Very good drought tolerance and late season intactness
- › Outstanding early season vigor and test weight
- › **RIB COMPLETE® - 5% refuge in the bag**



R53-350SSRIB 106 RM

Medium-Tall Plant Height | 2580 GDU to Black Layer

Strengths

- › Consistent performance year after year
- › Strong overall disease package
- › Very good Goss's Wilt tolerance
- › Very good drought tolerance and grain drydown
- › Outstanding stalk and root strength
- › **RIB COMPLETE® - 5% refuge in the bag**



Plant Height	Ear Type	Plant Health	Goss's Wilt	Fall Appearance	Drydown	Ear Retention	Test Weight	Corn Belt Refuge Requirement	Dahlman Brand
MT	SF	8.0	8.0	8.0	7.5	8.5	7.0		D52-04
M	SF	8.5	8.5	8.5	8.5	8.5	7.0	RIB	R52-26VT2PRIB
M	SF	8.5	8.5	8.5	8.0	8.5	8.5	RIB	R53-359SSRIB
MT	SF	8.0	8.0	8.0	8.5	8.5	7.0	RIB	R53-350SSRIB

KEY: 1 = Poor 2-3 = Fair 4-5 = Good 6-7 = Very Good 8-9 = Excellent

SmartStax[®]
TECHNOLOGY

**STAY TRUE TO
YOUR
ROOTS**

**This is where corn rootworm
inflicts the worst damage.**

Learn how to do the ideal root dig at traits.bayer.com/DigDeeper

SMARTSTAX[®] TECHNOLOGY: PROVEN ON
OVER 100 MILLION ACRES.

Performance may vary from location to location and from year to year, as local growing, soil and weather conditions may vary. Growers should evaluate data from multiple locations and years whenever possible and should consider the impacts of these conditions on the grower's fields. Details of these practices can be found in the Trait Stewardship Responsibilities Notice to Farmers printed in this publication.
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BAYER

SOYBEAN PRODUCTS

Dahlgren Brand	Maturity	Plant Height	Plant Type	Iron Chlorosis	Emergence	Min-Till Adaptability	Stress Tolerance	Standability
68008XN	0.08	MT	MTh	8.0	8.5	8.5	8.5	7.0
7201XF	0.1	MT	M/B	7.0	8.5	8.5	7.5	7.0
NEW! 7301XF	0.1	T	M/B	8.0	8.5	8.5	8.0	7.0
7203XF	0.3	T	M/B	8.0	8.5	8.5	8.0	7.5
6903XN	0.3	MT	M/B	8.5	8.0	7.5	8.5	7.0
6703XN	0.3	M	M	7.0	8.5	9.0	8.5	8.5
NEW! 7304XF	0.4	M	M/B	7.5	8.5	8.5	8.5	8.0
6004XN	0.4	M	M/B	8.0	8.5	7.0	7.0	7.0

KEY: 1 = Poor 2-3 = Fair 4-5 = Good 6-7 = Very Good 8-9 = Excellent

68008XN

0.08

Medium-Tall Plant Height | Medium-Thin Plant Type

Strengths

- › BEST in class IDC
- › Very solid SWM tolerance
- › Brown Stem Rot resistant
- › Great choice for continuous soybeans or min-till
- › Rps 1k gene for multi-race Phytophthora

› SCN Tolerance



7201XF

0.1

Medium-Tall Plant Height | Medium-Bush Plant Type

Strengths

- › Aggressive lateral branching
- › Very good stress tolerance
- › Moderate resistance to Brown Stem Rot
- › Rps 1k gene for multi-race Phytophthora

› SCN Tolerance



7301XF

0.1



Medium-Tall Plant Height | Medium-Bush Plant Type

Strengths

- › Adapts well to variable soil types
- › Excellent IDC tolerance
- › Brown Stem Rot resistant
- › Rps 1c gene for multi-race Phytophthora



7203XF

0.3

Medium-Tall Plant Height | Medium-Bush Plant Type

Strengths

- › Adapts well to variable soil types
- › Excellent IDC tolerance
- › Brown Stem Rot resistant
- › Rps 1c gene for multi-race Phytophthora



Soybean Cyst Nematode Race	Phytophthora Gene	Phytophthora Field Tolerance	Brown Stem Rot	White Mold	Sudden Death Syndrome	Charcoal Root Rot	Dahlman Brand
R3, MR14	Rps 1k	7.0	9.0	7.0	NA	8.0	68008XN
R3, MR14	Rps 1k	6.5	7.0	5.0	4.5	NA	7201XF
S	Rps 1c	6.5	9.0	7.0	4.5	NA	7301XF <small>NEW!</small>
S	Rps 1c	6.5	9.0	7.0	4.5	NA	7203XF
R3, MR14	Rps 1c	8.0	6.5	7.0	NA	8.5	6903XN
R3, MR14	Rps 3a	8.5	6.5	7.0	NA	7.0	6703XN
R3, MR14	Rps1c	7.0	7.5	5.5	NA	NA	7304XF <small>NEW!</small>
MR3, MR14	Rps H1c	7.0	6.5	5.5	NA	8.0	6004XN

KEY: 1 = Poor 2-3 = Fair 4-5 = Good 6-7 = Very Good 8-9 = Excellent

6903XN

0.3

Medium-Tall Plant Height | Medium-Bush Plant Type

Strengths

- › Excellent IDC tolerance
- › Adapts to most environments in ND & Northern MN
- › Outstanding stress tolerance
- › Rps 1c gene for multi-race Phytophthora
- › Very consistent top performing variety

› SCN Tolerance



6703XN

0.3

Medium Plant Height | Medium Plant Type

Strengths

- › Overall very solid agronomics
- › Adapts to variable soil types and environments
- › Rps 3a gene for multi-race Phytophthora
- › Outstanding emergence and stress tolerance
- › Excellent standability

› SCN Tolerance



7304XF

0.4 NEW!

Medium Plant Height | Medium-Bush Plant Type

Strengths

- › Excellent emergence and standability
- › Solid IDC and Phytophthora Root Rot tolerance
- › Position on average to better soils
- › Rps 1c gene for multi-race Phytophthora

› SCN Tolerance



6004XN

0.4

Medium Plant Height | Medium-Bush Plant Type

Strengths

- › Very good IDC tolerance
- › Adapts to high & low yield environments, west to east
- › Excellent emergence and cold soil tolerance
- › Rps H1c gene for multi-race Phytophthora
- › Great companion variety for 6903XN

› SCN Tolerance



Dahlgman Brand	Maturity	Plant Height	Plant Type	Iron Chlorosis	Emergence	Min-Till Adaptability	Stress Tolerance	Standability
NEW! 7308XF	0.8	MT	M	7.0	8.0	8.5	8.0	7.5
7210XF	1.0	MT	M/B	7.0	8.5	8.0	8.0	7.0
7213XF	1.3	MT	M/B	6.5	8.0	7.5	7.0	7.0
NEW! 7315XF	1.5	MT	M	6.5	8.0	8.5	8.5	8.0
7218XF	1.8	MT	M	6.0	8.5	8.0	7.0	8.0
7220XF	2.0	MT	M/B	7.0	8.0	7.5	7.5	7.0

KEY: 1 = Poor 2-3 = Fair 4-5 = Good 6-7 = Very Good 8-9 = Excellent

7308XF

0.8 **NEW!**

Medium-Tall Plant Height | Medium Plant Type

Strengths

- › Outstanding performance and broad adaptability
- › Excellent emergence and stress tolerance
- › Resistant to Brown Stem Rot and Stem Canker
- › Rps 1k gene for multi-race Phytophthora
- › **SCN Tolerance**



7210XF

1.0

Medium-Tall Plant Height | Medium-Bush Plant Type

Strengths

- › Adapts to varying environments
- › Aggressive lateral branches
- › Moderate resistance to Brown Stem Rot
- › Rps H3a gene for multi-race Phytophthora
- › **SCN Tolerance**



7213XF

1.3

Medium-Tall Plant Height | Medium-Bush Plant Type

Strengths

- › Strong performance west to east
- › Solid overall disease and agronomic package
- › Moderate resistance to Brown Stem Rot
- › Rps 1c gene for multi-race Phytophthora
- › **SCN Tolerance**



7315XN

1.5 **NEW!**

Medium-Tall Plant Height | Medium Plant Type

Strengths

- › Strong performance across South Dakota & Minnesota
- › Excellent field appearance and standability
- › Resistant to Brown Stem Rot and Stem Canker
- › Very strong stress tolerance
- › **SCN Tolerance**



Soybean Cyst Nematode Race	Phytophthora Gene	Phytophthora Field Tolerance	Brown Stem Rot	White Mold	Sudden Death Syndrome	Charcoal Root Rot	Dahlman Brand
R3, MR14	Rps 1k	7.5	9.0	6.0	6.5	7.5	7308XF <small>NEW!</small>
R3, MR14	Rps H3a	7.0	8.5	6.5	NA	6.5	7210XF
R3, MR14	Rps 1c	7.5	8.0	6.0	6.0	NA	7213XF
R3, MR14	NG	7.0	9.0	6.5	6.0	6.5	7315XF <small>NEW!</small>
R3, MR14	NG	6.5	9.0	6.5	6.5	6.5	7218XF
R3, MR14	Rps 3a	7.0	8.5	5.5	6.0	NA	7220XF

KEY: 1 = Poor 2-3 = Fair 4-5 = Good 6-7 = Very Good 8-9 = Excellent

7218XF

1.8

Medium-Tall Plant Height | Medium Plant Type

Strengths

- › Adapts to all yield environments
- › Aggressive lateral branching
- › Brown Stem Rot resistance
- › High yield potential with a large range of adaptability
- › **SCN Tolerance**



7220XF

2.0

Medium-Tall Plant Height | Medium Plant Type

Strengths

- › Solid agronomics, high yield potential
- › Very good IDC tolerance
- › Moderate resistance to Brown Stem Rot
- › Rps 3a gene for multi-race Phytophthora
- › **SCN Tolerance**



You want high-yielding performance. You also need innovative options for managing tough weeds. XtendFlex® soybeans offer proven performance and herbicide tolerance to dicamba, glyphosate and glufosinate.

YIELD

TRIPLE TOLERANCE

WEED CONTROL



Dahlman Brand	Maturity	Plant Height	Plant Type	Iron Chlorosis	Emergence	Min-Till Adaptability	Stress Tolerance	Standability
1102E3N	0.2	M	M	6.5	8.5	8.0	7.0	8.5
NEW! 1317E3N	1.7	MT	M	8.0	8.0	8.0	7.5	8.0

KEY: 1 = Poor 2-3 = Fair 4-5 = Good 6-7 = Very Good 8-9 = Excellent

SOYBEANS

1102E3N

0.2

Medium Plant Height | Medium Plant Type

Strengths

- › Solid SWM tolerance
- › Consistent in either high or low yield environments
- › Stem Canker resistant
- › Rps 1c gene for multi-race Phytophthora
- › Dark green, large round leaves

› SCN Tolerance



1317E3N

1.7

NEW!

Medium-Tall Plant Height | Medium Plant Type

Strengths

- › Position on variable soils
- › Solid overall disease and agronomic package
- › Very good IDC tolerance
- › Rps 1k gene for multi-race Phytophthora

› SCN Tolerance; Peking



ENLIST[®] WEED CONTROL SYSTEM—

GET CONTROL OF TOUGH WEEDS



Following burndown, Enlist Duo[®] and Enlist One[®] herbicides with Colex-D[®] technology are the only herbicides containing 2,4-D that are labeled for preemergence and postemergence use with Enlist E3[®] soybeans.

2,4-D choline | Glyphosate | Glufosinate



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



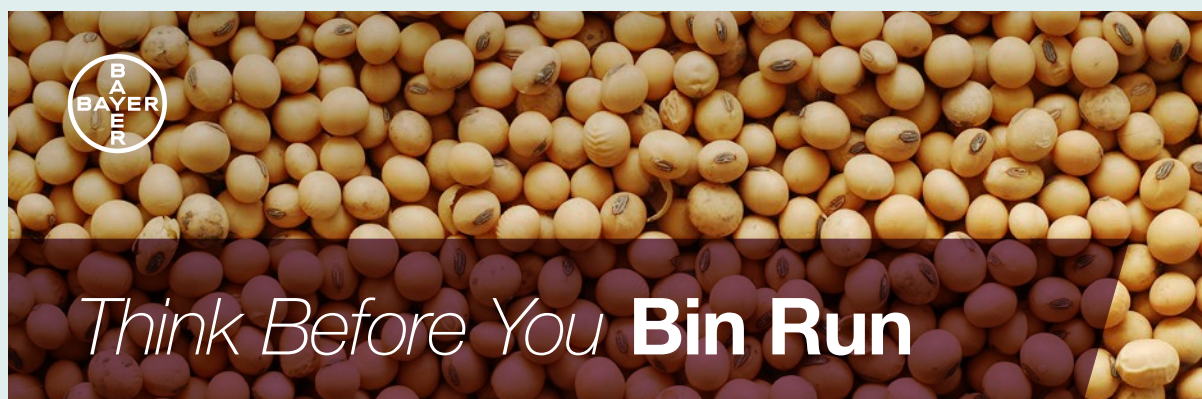
- Straight goods 2,4-D choline with additional tank-mix flexibility
- Provides additional tank-mix flexibility with Durango[®] DMA[®] herbicide, Liberty[®] herbicide and other qualified tank-mix products, allowing for a customized weed control program to fit each farm

On-Target Application

- 90% less drift than traditional 2,4-D
- 96% less volatile than 2,4-D ester

Soybean Cyst Nematode Race	Phytophthora Gene	Phytophthora Field Tolerance	Brown Stem Rot	White Mold	Sudden Death Syndrome	Charcoal Root Rot	Dahlman Brand
R3, MR14	Rps 1c	7.5	6.5	7.5	NA	7.0	1102E3N
Peking	Rps 1k	8.0	7.0	8.0	7.0	6.5	1317E3N <small>NEW!</small>

KEY: 1 = Poor 2-3 = Fair 4-5 = Good 6-7 = Very Good 8-9 = Excellent



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

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

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

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

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

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

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

High Value of New Branded Seed

Latest Technology

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

Customer Service

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

Reliable Germination and Quality

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

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

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

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





AFX 455-HVX Alfalfa

Performance

- AFX 455-HVX is an alfalfa with the HarvXtra® trait and Roundup Ready® technology used to produce the highest quality alfalfa forage in the industry.
- Strong disease resistance package and is very winterhardy.
- High yield potential in multiple growing environments.

Management

- Early season weed control with glyphosate herbicides help improve establishment success and first year yield potential compared to conventional varieties.
- Choice of delaying cutting by 7-10 days or cutting for highest RFQ.

Agronomics

Yield rating:	5 or Best
Fall dormancy class:	FD 4
Winter hardiness class:	WS 2
Multifoliate leaf expression:	Moderate
FastGrowth rating:	Average
Relative feed quality rating:	5 or Best

Pest Package

	HR	R	MR	LR	S
Diseases					
Anthrachnose	●				
Aphanomyces-Race 1	●				
Aphanomyces-Race 2			●		
Bacterial wilt	●				
Fusarium wilt	●				
Phytophthora root rot		●			
Verticillium wilt	●				
Insects					
Pea aphid		●			
Spotted alfalfa aphid		●			
Nematode Resistance					
Stem nematode		●			

5= Best; 3= Average; 1= Poor



AFX 463-RR Alfalfa

Performance

- AFX 463-RR is an alfalfa with the Roundup Ready® technology for use in multiple growing regions including areas prone to stem nematode pressure.
- 33 of 35 disease resistance package and is very winterhardy.
- Very good standability and high yield potential in multiple growing environments.

Management

- Early season weed control with glyphosate herbicides helps improve establishment success and first year yield potential compared to conventional varieties.

Agronomics

Yield rating:	5 or Best
Fall dormancy class:	FD 4
Winter hardiness class:	WS 2
Multifoliate leaf expression:	Low
FastGrowth rating:	Average
Relative feed quality rating:	3

Pest Package

	HR	R	MR	LR	S
Diseases					
Anthrachnose	●				
Aphanomyces-Race 1		●			
Aphanomyces-Race 2		●			
Bacterial wilt	●				
Fusarium wilt	●				
Phytophthora root rot	●				
Verticillium wilt	●				
Insects					
Pea aphid		●			
Nematode Resistance					
Stem nematode	●				

5= Best; 3= Average; 1= Poor



IN THE FOLLOWING STATES, PURCHASE AND USE OF HARVXTRA® ALFALFA WITH ROUNDUP READY® TECHNOLOGY IS SUBJECT TO A SEED AND FEED USE AGREEMENT, REQUIRING THAT PRODUCTS OF THIS TECHNOLOGY CAN ONLY BE USED ON FARM OR OTHERWISE BE USED IN THE UNITED STATES: ARIZONA, CALIFORNIA, COLORADO, IDAHO, MONTANA, NEVADA, NEW MEXICO, OREGON, UTAH, WASHINGTON AND WYOMING (THE "WESTERN STATES"). IN ADDITION, DUE TO THE UNIQUE CROPPING PRACTICES DO NOT PLANT HARVXTRA® ALFALFA WITH ROUNDUP READY® TECHNOLOGY IN IMPERIAL COUNTY, CALIFORNIA, PENDING IMPORT APPROVALS AND UNTIL FORAGE GENETICS INTERNATIONAL, LLC (FGI) GRANTS EXPRESS PERMISSION FOR SUCH PLANTING.

Forage Genetics International, LLC ("FGI") is a member of Excellence Through Stewardship® (ETS). FGI products are commercialized in accordance with ETS Product Launch Stewardship Guidance, and in compliance with FGI's Policy for Commercialization of Biotechnology-Derived Plant Products in Commodity Crops. HarvXtra® Alfalfa with Roundup Ready® Technology has pending import approvals. GROWERS IN THE WESTERN STATES MUST DIRECT ANY PRODUCT PRODUCED FROM HARVXTRA® ALFALFA WITH ROUNDUP READY® TECHNOLOGY SEED OR CROPS (INCLUDING HAY AND HAY PRODUCTS) ONLY TO UNITED STATES DOMESTIC USE.



Hi-Gest 360 Alfalfa

Performance

- ▶ A high yield potential, variety with Hi-Gest® Alfalfa Technology with improved fiber digestibility, intake and extent of digestion versus other conventional alfalfas.
- ▶ A product of traditional plant breeding with a variety patent pending.
- ▶ A variety that has been meeting grower and livestock producers expectations since 2015 growing season.

Management

- ▶ Adapted to today's best alfalfa management practices.
- ▶ Adapted to aggressive high quality or more relaxed high tonnage management systems.
- ▶ Rations using Hi-Gest can be easily balanced by nutritionists with the results of an accurate feed test.

Appearance at Harvest Maturity

- ▶ Plants are medium-tall, with a higher stem count, axillarial branching, and a dense canopy of leaves** up and down each stem.
- ▶ A high leaf-to-stem ratio and more crude protein than other conventionally bred, high quality, dormant alfalfa varieties at harvest maturity.

Head to Head Comparison Yield in DM Tons per Acre

Competitor	Competitor	Hi-Gest 360	Harvest Years ¹	% Yield Advantage
N-R-GEE	6.15	7.26	6	18%
WL 336HQ RR	2.20	2.45	1	12%
WL 355RR	2.26	2.45	1	8%
AmeriStand 403T	3.18	3.40	3	7%
L-449	6.38	6.73	15	6%
WL 319HQ	6.71	7.02	46	5%
AmeriStand 445-N	5.95	6.17	2	4%
Mountaineer 2.0	7.92	8.05	4	2%
WL 372HQ.RR	6.11	6.17	2	1%
WL 363HQ	7.42	7.42	6	0%
Legendaire XHD	5.85	5.83	69	0%
DKA 44-16	7.00	6.91	1	-1%

¹ Harvest Years = the number of years in either Public and/or Private trials where the two varieties have been in the same trial and are on harvest schedule for the yield comparisons to be listed.

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. Growers should refer to <http://www.biotradestatus.com/> for any updated information on import country approvals. Excellence Through Stewardship® is a registered trademark of Excellence Through Stewardship.

ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS. Roundup Ready® crops contain genes that confer tolerance to glyphosate. Glyphosate herbicides will kill crops that are not tolerant to glyphosate.

Roundup Ready® is registered trademarks of Bayer Group, used under license by Forage Genetics International, LLC. HarvXtra® is a registered trademark of Forage Genetics International, LLC. HarvXtra® Alfalfa with Roundup Ready® Technology is enabled with Technology from The Samuel Roberts Noble Foundation, Inc.

Agronomics

Yield rating:	5 or Best
Fall dormancy class:	FD 3
Winter hardiness class:	WS 1.5
Multifoliate leaf expression:	73%/Moderate MF
FastGrowth rating:	1.83/Average
Salinity tolerance:	Germination: Tolerant

Pest Package

	HR	R	MR	LR	S
Diseases					
Anthraco nose	●				
Aphanomyces-Race 1	●				
Aphanomyces-Race 2	●				
Bacterial wilt	●				
Fusarium wilt	●				
Phytophthora root rot	●				
Verticillium wilt	●				
Insects					
Blue alfalfa aphid		●			
Cowpea aphid		●			
Pea aphid			●		
Spotted alfalfa aphid	●				
Nematode Resistance					
Northern root knot		●			
Stem nematode		●			

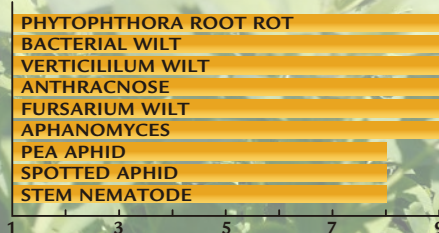
5= Best; 3= Average; 1= Poor

* The increased rate of fiber digestion, extent of digestion, and crude protein data was developed from replicated research and on-farm testing. During the 2015 growing season at West Salem, WI and Woodland, CA, the following commercial dormant, semi-dormant and non-dormant alfalfa varieties were compared head-to-head with Hi-Gest® alfalfa for rate of digestion, extent of digestion and percent crude protein: America's Alfalfa Brand AmeriStand 427TQ, Croplan Brands Legendaire XHD and Artesia Sunrise, Fertilzona Brand Fertilac, S&W Seed Brands SW6330, SW7410 and SW10 and W-L Brands WL 319HQ and WL 354HQ. Also during the 2015 growing season, 32 on-farm Hi-Gest hay and silage samples were submitted to Rock River Laboratory, Inc., for forage analysis. The results for rate of digestion, extent of digestion and percent crude protein were averaged and compared to the 60-day and four-year running averages for alfalfa in the Rock River database which included approximately 1,700 alfalfa hay and 3,800 silage 60-day test results and 23,000 hay and 62,000 silage tests results in the four-year average.

** Improved Hi-Gest® alfalfa leafiness, as documented by Alflorex Seeds replicated trials at West Salem, WI and Woodland, CA, versus the following commercial alfalfa varieties: America's Alfalfa Brand AmeriStand 427TQ, Croplan Brands Legendaire XHD and Artesia Sunrise, Fertilzona Brand Fertilac, S&W Brands SW6330, SW7410 and SW10 and W-L Brands WL 319HQ and WL 354HQ.

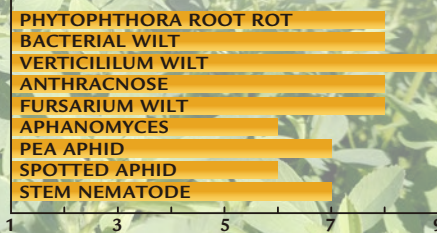
Perfect Plus Alfalfa

- › Winter hardiness – very hardy
- › Recovery – very fast
- › Wisconsin disease rating – 30 of 30
- › Leaf to stem ratio – very high



Colt's Alfalfa

- › Winter hardiness – hardy
- › Recovery – very fast
- › Wisconsin disease rating – 29 of 30
- › Leaf to stem ratio – high



Shelly Wheat

"Shelly" wheat variety was developed by the University of Minnesota and Released in January, 2016, Shelly is a high-yielding spring wheat variety well suited for all of the spring wheat-growing region.

In state trials it yielded equal to the popular varieties "Faller" and "Prosper," but with slightly better protein. The heading date of Shelly is similar to Faller. It possesses a good disease-resistance package with moderate resistance to scab, leaf rust and bacterial leaf streak. It also has an excellent rating for resistance to stripe and stem rust. Shelly is slightly shorter than Faller and has similar straw strength. It has good test weight and pre-harvest sprouting resistance.

Jochum Wiersma, University of Minnesota Extension Agronomist, says, "Shelly is a nice compliment in the strong University of Minnesota line-up of HRSW cultivars and replaces Norden in the top yield segment. It is a strong contender to replace both Faller and its sister line Prosper, which together have accounted for roughly a third of Minnesota's wheat acreage in recent years."

The release is named after the town of Shelly, Minnesota. It is on the west side of Norman County, Minnesota, near the Red River and in prime wheat growing country.





Agronomy Spotlight



Corn Insect B.t. Trait Reference Table - Above Ground Protection

					ABOVE-GROUND					BELOW-GROUND				
	<ul style="list-style-type: none"> • One effective mode of action • Two effective modes of action <p>Refer to the table on page 3 for information regarding efficacy against specific insect pests.</p>	% Refuge in Bag	Glyphosate Tolerant	Glufosinate Tolerant	VT Double PRO®	Herculex® I	YieldGard® Corn Borer	Agrisure Viptera®	Agrisure® CB	YieldGard VT Rootworm/RR2™	Herculex® RW	Agrisure® RW	Agrisure Duracade®	RNAi (No Trade Name)
BAYER CROP SCIENCE	VT Double PRO® corn		•		••									
	VT Double PRO® RIB Complete® corn blend	5%	•		••									
	Trecepta® corn		•		••			•						
	Trecepta® RIB Complete® corn blend	5%	•		••			•						
CORTEVA AGRI-SCIENCE	Herculex® I		•	•		•								
	Optimum® Intrasect®		•	•		•	•							
	Optimum® AcreMax®	5%	•	•		•	•							
	Optimum® Leptra®		•	•		•	•	•						
	Optimum® AcreMax® Leptra®	5%	•	•		•	•	•						
	PowerCore®		•	•	••	•								
	PowerCore® Refuge Advanced	5%	•	•	••	•								
SYNGENTA	Agrisure® 3010		•	•					•					
	Agrisure® 3120 E-Z Refuge®	5%	•			•			•					
	Agrisure Viptera® 3110 or 3110A		•	•				•	•					
	Agrisure Viptera® 3220 E-Z Refuge®	5%	•			•		•	•					
	Agrisure Viptera® 3220A E-Z Refuge®	5%	•			•		•	•					
	Agrisure Viptera® 3330 E-Z Refuge®	5%	•		••			•	•					

Corn Insect B.t. Trait Reference Table - Above and Below Ground Protection

				ABOVE-GROUND					BELOW-GROUND					
				% Refuge in Bag	Glyphosate Tolerant	Glufosinate Tolerant	VT Double PRO®	Herculex® I	YieldGard® Corn Borer	Agrisure Viptera®	Agrisure® CB	YieldGard VT Rootworm/RR2™	Herculex® RW	Agrisure® RW
	<ul style="list-style-type: none">• One effective mode of action• • Two effective modes of action <p>Refer to the table on page 3 for information regarding efficacy against specific insect pests.</p>													
BAYER CROP SCIENCE	VT Triple PRO® corn		•		••					•				
	VT Triple PRO® RIB Complete® corn blend	10%	•		••					•				
	SmartStax® corn		•	•	••	•				•	•			
	SmartStax® RIB Complete® corn blend	5%	•	•	••	•				•	•			
	SmartStax® PRO corn blend		•	•	••	•				•	•			•
	SmartStax® PRO RIB Complete brand blend	5%	•	•	••	•				•	•			•
CORTEVA AGRISCIENCE	Optimum® Intrasect® XTreme		•	•		•	•				•	•		
	Optimum® AcreMax® XTreme	5%	•	•		•	•				•	•		
	Qrome®*	5%	•	•			•					•		
	SmartStax®		•	•	••	•				•	•			
	SmartStax® Refuge Advanced	5%	•	•	••	•				•	•			
	Herculex® XTRA		•	•		•					•			
	Optimum® TRlsect®		•	•		•						•		
	Optimum® Intrasect® Xtra		•	•		•	•				•			
	Optimum® AcreMax® Xtra	10%	•	•		•	•				•			
	Optimum® Intrasect® TRlsect®		•	•		•	•					•		
	Optimum® AcreMax® TRlsect®	10%	•	•		•	•					•		
SYNGENTA	Agrisure® 3000 GT		•	•					•			•		
	Agrisure® 3122 E-Z Refuge®	5%	•			•			•		•	•		
	Agrisure Viptera® 3111 or 3111A		•	•				•	•			•		
	Agrisure Duracade® 5122 E-Z Refuge®	5%	•			•			•			•	•	
	Agrisure Duracade® 5122A E-Z Refuge®	5%	•			•			•			•	•	
	Agrisure Duracade® 5222 E-Z Refuge®	5%	•			•		•	•			•	•	
	Agrisure Duracade® 5222A E-Z Refuge®	5%	•			•		•	•			•	•	

*Qrome contains event DP4114 which is a molecular stack of the insect protection genes in Herculex® I and Herculex® RW.



Corn Insect B.t. Trait Reference Table

	ABOVE-GROUND					BELOW-GROUND				
	VT Double PRO® corn	Herculex® I	YieldGard® Corn Borer	Agrisure Viptera®	Agrisure® CB	YieldGard VT Rootworm/ RR2™	Herculex® RW	Agrisure® RW	Agrisure Duracade®	RNAi (No Trade Name)
European corn borer	**	*	*		*					
Southwestern corn borer	**	*	*	*	*					
Fall armyworm	**	*		*						
Corn earworm ^{1,2}	**			*						
Western bean cutworm				*						
Black cutworm		*		*						
Western corn rootworm						*	*	*	*	*
Northern corn rootworm						*	*	*	*	*
Mexican corn rootworm						*	*	*	*	*
**Dual-mode activity *Single-mode activity Mode of action equals control of pest.										
¹ Pioneer claims suppression of corn earworm with Herculex I® technology. Syngenta claims suppression of corn earworm with Bt11.										
² Cry1A.105 and Cry2Ab2 from B.t. controls or suppresses corn earworm.										

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.

SmartStax® PRO corn products will be commercially available for the 2022 growing season.

ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS. 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.

Performance may vary, from location to location and from year to year, as local growing, soil and weather conditions may vary. Growers should evaluate data from multiple locations and years whenever possible and should consider the impacts of these conditions on the grower's fields.

Roundup Ready® 2 Technology contains genes that confer tolerance to glyphosate. Glyphosate will kill crops that are not tolerant to glyphosate. 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. Bayer, Bayer Cross, RIB Complete®, Roundup Ready 2 Technology and Design™, Roundup Ready®, SmartStax®, Trecepta®, VT Double PRO® and VT Triple PRO® are trademarks of Bayer Group. All other trademarks are the property of their respective owners. ©2021 Bayer Group. All rights reserved. 1014_S1



Before opening a bag of seed, be sure to read, understand and accept the stewardship requirements, including applicable refuge requirements for insect resistance management, for the biotechnology traits expressed in the seed as set forth in the Monsanto Technology/Stewardship Agreement that you sign. By opening and using a bag of seed, you are reaffirming your obligation to comply with the most recent stewardship requirements.

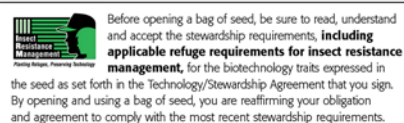


2023 Dahlman Corn Reference Chart

RM Relative Maturity	VT Double PRO[®] RIB COMPLETE [®] VT Double PRO [®] RIB Complete [®] corn blend	SmartStax[®] RIB COMPLETE [®] SmartStax [®] RIB Complete [®] corn blend	Roundup Ready[®] 2 CORN Roundup Ready [®] 2	Conventional Conventional
82	R41-22VT2PRIB			
85	R42-28VT2PRIB			
85	R43-29VT2PRIB		R43-19	D43-01
86	R43-24VT2PRIB			
90	R45-25VT2PRIB			
90	R45-28VT2PRIB		R45-12	
91	R45-236VT2PRIB <small>NEW</small>			
92	R46-27VT2PRIB		R46-14	D46-04
94	R47-24VT2PRIB	R46-313SSRIB	R47-10	
95	R48-28VT2PRIB			D48-04
95	R48-239VT2PRIB <small>NEW</small>			
96	R48-21VT2PRIB			D48-08
98	R49-29VT2PRIB			D49-039 <small>NEW</small>
98	R49-25VT2PRIB			D49-02
98	R49-23VT2PRIB	R49-340SSRIB		D49-09
100	R50-25VT2PRIB	R50-355SSRIB		
103	R52-24VT2PRIB		R52-14	D52-04
104	R52-26VT2PRIB			
106		R53-359SSRIB		
106		R53-350SSRIB		

Matching colors indicate corn hybrids from the same base genetic family





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

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.

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. Roundup Ready 2 Xtend® soybeans contain genes that confer tolerance to glyphosate and dicamba. Products with XtendFlex® Technology contains genes that confer tolerance to glyphosate, glufosinate and dicamba. 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. Acceleron®, DroughtGard®, RIB Complete®, Roundup Ready 2 Technology and Design™, Roundup Ready 2 Xtend®, Roundup Ready 2 Yield®, Roundup Ready®, SmartStax®, Trecepta®, VT Double PRO® and XtendFlex® are trademarks of Bayer Group.

Corteva Agriscience is a member of Excellence Through Stewardship® (ETS). Corteva Agriscience products are commercialized in accordance with ETS Product Launch Stewardship Guidance and in compliance with the Corteva Agriscience policies regarding stewardship of those products. In line with these guidelines, our product launch process for responsible launches of new products includes a longstanding process to evaluate export market information, value chain consultations, and regulatory functionality. Growers and end users must take all steps within their control to follow appropriate stewardship requirements and confirm their buyer's acceptance of the grain or other material being purchased. For more detailed information on the status of a trait or stack, please visit www.biotradestatus.com.

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 herbicides featuring Colex-D® technology when applied according to label directions. Following burndown, the 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 products that do not contain Colex-D technology are not authorized for use in conjunction with Enlist products.

The transgenic soybean event in Enlist E3® soybeans is jointly developed and owned by Corteva Agriscience and M.S. Technologies, L.L.C.™ Enlist, Enlist E3, the Enlist E3 logo, and Colex-D are trademarks of Corteva Agriscience and its affiliated companies. Excellence Through Stewardship® is a registered trademark of Excellence Through Stewardship.

Enlist E3® soybean seeds containing the Enlist® trait can only be used to plant a single commercial crop. It is unlawful to save and replant Enlist E3® soybeans. Additional information and limitations on the use of these products are provided in the Corteva Agriscience Technology Use Agreement and Enlist® Soybean Product Use Guide. U.S. patents for Dow AgroSciences technologies can be found at the following webpage: www.corteva.us/Resources/trait-stewardship.html



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