



DAHLMAN

PREMIUM SEED | PERFORMANCE PROVEN



2016 PRODUCT GUIDE

CORN | SOYBEANS | ALFALFA | WHEAT





DAHLMAN

PREMIUM SEED | PERFORMANCE PROVEN

At Dahlman Seed we take great pride in delivering personal service, turning a transaction into more than just a seed purchase. That is why we are involved in all steps of our seed production and processing to focus on maintaining the highest quality seed, product performance and product knowledge for you, the customer.

Our Dahlman Seed sales team builds relationships because of our years of experience gaining the knowledge to understand the challenges that come with farming in our market geography. We use that knowledge and get to know your fields and farming practices so we can provide the right combination of genetics and traits for your fields and the way you farm.

We don't take this decision lightly to choose the right products for your fields. That's why, year after year we strive to provide you with the highest level

of quality in seed, performance and knowledge to meet and surpass your expectations.

Thank you, we appreciate your business and wish you continued success this season.

Sincerely,
The Dahlman Seed Team

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Seed

We are committed to delivering top quality seed. Seed quality starts with planting and a strong production plan, then harvest. Once the seed is dry and ready for the cleaning and grading process you can be certain that each step has been guided by strict standards. Delivering high quality seed is top priority. You can count on the experience of the Dahlman team.



Performance

Our assurance of consistent performance is based on many hours of observations before any product is commercialized. We personally observe pre-commercial and commercial products in a wide range of environments from emergence to harvest. Field observation notes taken all season are coupled with yield data to help decide what products are added to the Dahlman line-up.



Knowledge

We aim to surpass your expectations. Our team is committed to personal service by maintaining a year-round relationship getting to know your fields and farming practices. Combining our experience with a strong understanding of your farming operation we are confident we can deliver a customized, local product placement recommendation for every soil type.



CHOOSE YOUR LEVEL OF CORN ROOTWORM PROTECTION











EVERY KERNEL COUNTS

CORN-GROWING AREA

Dual Modes-of-Action Products for corn rootworm

Single Mode-of-Action Products for corn rootworm

	Genuity® SmartStax® RIB Complete® Corn Blend ¹	Optimum® AcreMax® XTreme	Agrisure 3122 E-Z Refuge ²	Agrisure Duracade™ 5222	Agrisure Duracade™ 5122	Genuity® VT Triple PRO® RIB Complete® Corn Blend ³	Optimum® AcreMax® Xtra ³	Optimum® AcreMax® 1
PRIMARY PESTS								
European Corn Borer	***	**	**	**	**	**	**	*
Southwestern Corn Borer	***	**	**	***	**	**	**	*
Northern Corn Rootworm	**	**	**	**	**	*	*	*
Western Corn Rootworm	**	**	**	**	**	*	*	*
Corn Earworm ²	**			*		**		
Fall Armyworm	***	*	*	**	*	**	*	*
Western Bean Cutworm	*	*	*	**	*		*	*
Black Cutworm	*	*	*	**	*		*	*
HERBICIDE TOLERANCE	Roundup Ready® 2 Technology/LibertyLink®	Roundup Ready® Corn 2/LibertyLink®	Glyphosate	Glyphosate	Glyphosate	Roundup Ready® 2 Technology	Roundup Ready® Corn 2	Roundup Ready® Corn 2/LibertyLink®
REFUGE (Corn-Growing Area)	5% Refuge-in-a-Bag	5% Refuge-in-a-Bag	5% Refuge-in-a-Bag	5% Refuge-in-a-Bag	5% Refuge-in-a-Bag	10% Refuge-in-a-Bag	10% Refuge-in-a-Bag	10%-below ⁴ Refuge-in-a-Bag 20%-above Structured
REFUGE EXAMPLE (Corn-Growing Area)								

*** Triple-mode activity ** Dual-mode activity * Single-mode activity Modes of action equal control of pest

¹Genuity® SmartStax® RIB Complete® is a corn seed blend of 95% *Bt* seed and 5% non-*Bt* seed.

²Pioneer claims suppression of corn earworm on the Optimum® AcreMax® 1, Optimum® AcreMax® and Optimum® AcreMax® Xtreme labels; Syngenta claims suppression of corn earworm with *Bt11*.

³Genuity® VT Triple PRO® RIB Complete® and Optimum® AcreMax® Xtra are corn seed blends of 90% *Bt* seed and 10% non-*Bt* seed.

⁴Refuge for Optimum® AcreMax® 1 is partially in the bag.



Monsanto Company is a member of Excellence Through Stewardship® (ETS). Monsanto products are commercialized in accordance with ETS Product Launch Stewardship Guidance, and in compliance with Monsanto's Policy for Commercialization of Biotechnology-Derived Plant Products in Commodity Crops. This product has 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 Biotechnology Industry Organization.

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

IMPORTANT IRM INFORMATION: Genuity® 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. Genuity® SmartStax® RIB Complete® and Genuity® VT Triple PRO® RIB Complete® corn are blended seed corn products. See the IRM/Grower Guide for additional information. Always read and follow IRM requirements.

Individual results may vary, and performance may vary from location to location and from year to year. This result may not be an indicator of results you may obtain as local growing, soil and weather conditions may vary. Growers should evaluate data from multiple locations and years whenever possible.

ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS. Roundup Ready® crops contain genes that confer tolerance to glyphosate, the active ingredient in Roundup® brand agricultural herbicides. Roundup® brand agricultural herbicides will kill crops that are not tolerant to glyphosate. Genuity Design®, Genuity Icons, Genuity®, RIB Complete and Design®, RIB Complete®, Roundup Ready 2 Technology and Design®, Roundup Ready®, Roundup®, SmartStax® and VT Triple PRO® are trademarks of Monsanto Technology LLC. LibertyLink and the Water Droplet Design® is a registered trademark of Bayer. Herculex® is a registered trademark of Dow AgroSciences LLC. Respect the Refuge and Corn Design® is a registered trademark of National Corn Growers Association. All other trademarks are the property of their respective owners. ©2013 Monsanto Company. 32306_v2 3J8L149949

For more information, visit genuity.com

CHOOSE YOUR LEVEL OF CORN EARWORM PROTECTION



EVERY KERNEL COUNTS

CORN-GROWING AREA

	Dual-Mode-of-Action Products for corn earworm	Single-Mode-of-Action Products for corn earworm			Suppression Only Products for corn earworm		
	Genuity® VT Double PRO® RIB Complete® Corn Blend ¹	Agrisure Viptera® 3220 E-Z Refuge™	Agrisure Viptera® 3110	Optimum® Leptra™	Herculex® 1	Optimum® AcreMax®	Optimum® Intrasect®
PRIMARY PESTS							
European corn borer	**	**	*	**	*	**	**
Southwestern corn borer	**	***	**	***	*	**	**
Corn earworm ²	**	*	*	*			
Fall armyworm	**	**	*	**	*	*	*
Western bean cutworm		**	*	**	*	*	*
Black cutworm		**	*	**	*	*	*
HERBICIDE TECHNOLOGY	Roundup Ready® 2 Technology	Glyphosate	Glyphosate/LibertyLink®	Roundup Ready® Corn 2/LibertyLink®	Roundup Ready® Corn 2/LibertyLink®	Roundup Ready® Corn 2	Roundup Ready® Corn 2/LibertyLink®
REFUGE (Corn-Growing Area)	5% refuge-in-a-bag	5% refuge-in-a-bag	20% Structured	5% Structured	20% Structured	5% refuge-in-a-bag	5% Structured
REFUGE EXAMPLES (Corn-Growing Area)							

*** Triple-mode activity ** Dual-mode activity * Single-mode activity Modes of action equal control of pest

¹Genuity® VT Double PRO® RIB Complete® is a corn seed blend of 95% *Bt* seed and 5% non-*Bt* seed.

²Pioneer claims suppression of corn earworm on the Optimum® AcreMax® and Herculex® 1 labels; Syngenta claims suppression of corn earworm with *Bt11*.

Contact your local seed rep for more info on Genuity® VT Double PRO® RIB Complete® corn, scouting tips and best management practices for corn earworm.



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.



Monsanto Company is a member of Excellence Through Stewardship® (ETS). Monsanto products are commercialized in accordance with ETS Product Launch Stewardship Guidance, and in compliance with Monsanto's Policy for Commercialization of Biotechnology-Derived Plant Products in Commodity Crops. This product has 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 Biotechnology Industry Organization.

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For more information, visit genuity.com

CORN PRODUCTS

Dahlman Brands	Relative Maturity	GDUs to Mid-Silk	GDUs to Black Layer	Population Tolerance	Emergence	Early Vigor	Root Strength	Stalk Strength
R39-11	78	1030	1930	30-36	8	9	7	9
D39-01	78	1030	1930	30-36	8	9	7	9
R41-28VT2PRIB	81	1090	2020	30-36	8	9	7	9
R41-12	81	1090	2020	30-36	8	9	7	9
D41-02	82	1090	2000	32-36	8	8	8	7
R42-21VT2PRIB	84	1135	2165	30-34	8	8	9	7
D42-05	85	1150	2145	30-34	8	8	8	8
R43-23VT2PRIB	85	1155	2160	32-36	8	9	9	8

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

R39-11 78 RM

Medium-Tall Plant Height | 1930 GDU to Black Layer

Strengths

- › Best when kept north of US HWY #2
- › Very good stalk strength and late season intactness
- › Excellent grain quality and test weight
- › Adapts to most soil types
- › Handles moderate drought stress very well



D39-01 78 RM

Medium-Tall Plant Height | 1930 GDU to Black Layer

Strengths

- › Best when kept north of US HWY #2
- › Very good stalk strength and late season intactness
- › Excellent grain quality and test weight
- › Adapts to most soil types
- › Handles moderate drought stress very well

R41-28VT2PRIB 81 RM

Medium Plant Height | 2020 GDU to Black Layer

Strengths

- › Excellent root and stalk strength
- › Early maturity and rapid drydown
- › Excellent fall appearance and intactness
- › Plant at higher populations to maximize yield performance
- › **RIB COMPLETE® - 5% refuge in the bag**



R41-12 81 RM

Medium Plant Height | 2020 GDU to Black Layer

Strengths

- › Adapts from North Dakota to Wisconsin
- › Excellent root and stalk strength
- › Early maturity and rapid drydown
- › Excellent fall appearance and intactness
- › Plant at higher populations to maximize yield performance



Drought Tolerance	Plant Height	Ear Type	Plant Health	Fall Appearance	Drydown	Ear Retention	Test Weight	Corn Belt Refuge Requirement	Dahlman Brands
9	MT	SD	7	8	8	8	9		R39-11
9	MT	SD	7	8	8	8	9		D39-01
8	M	SD	8	8	9	8	8	RIB	R41-28VT2PRIB
8	M	SD	8	8	9	8	8		R41-12
9	MT	SF	8	8	7	9	7		D41-02
8	M	SF	7	8	9	8	8	RIB	R42-21VT2PRIB
7	MT	SF	8	8	8	8	7		D42-05
8	MT	SD	7	8	8	8	8	RIB	R43-23VT2PRIB

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

D41-02 82 RM

Medium-Tall Plant Height | 2000 GDU to Black Layer

Strengths

- › Handles stress environments very well
- › Excellent emergence and early growth
- › Strong agronomics and disease package
- › Plant at medium high populations

R42-21VT2PRIB 84 RM

Medium Plant Height | 2165 GDU to Black Layer

Strengths

- › Very good stress tolerance
- › Excellent root strength
- › Position from Wisconsin west across all environments
- › Excellent drydown
- › **RIB COMPLETE® - 5% refuge in the bag**



D42-05 85 RM

Medium-Tall Plant Height | 2145 GDU to Black Layer

Strengths

- › Very good stalk and root strength
- › Excellent late season plant intactness
- › Solid overall agronomics and general plant health
- › Plant at medium high populations
- › Can move south of adapted maturity zone

R43-23VT2PRIB 85 RM

Medium-Tall Plant Height | 2160 GDU to Black Layer

Strengths

- › Very good stress tolerance
- › Excellent root strength
- › Best on average to above average soils
- › Rapid drydown and great late season intactness
- › **RIB COMPLETE® - 5% refuge in the bag**



Dahlman Brands	Relative Maturity	GDUs to Mid-Silk	GDUs to Black Layer	Population Tolerance	Emergence	Early Vigor	Root Strength	Stalk Strength
R43-13	85	1155	2160	32-36	8	9	9	8
D42-07	85	1160	2160	30-34	8	8	8	9
R44-66	88	1200	2220	32-36	9	9	8	8
R44-26VT2PRIB	89	1175	2220	32-36	8	9	9	8
R45-30VT3PRIB	90	1200	2230	32-36	9	9	9	9
R45-22VT2PRIB	90	1200	2230	32-36	9	9	9	9
R45-10	90	1200	2230	32-36	9	9	9	9

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

R43-13

85 RM

Medium-Tall Plant Height | 2160 GDU to Black Layer

Strengths

- › Very good stress tolerance
- › Performs med-high to high plant populations
- › Very solid overall standability ratings
- › Best on average to above average soils
- › Fast drydown plus great late season intactness



D42-07

85 RM

Medium-Tall Plant Height | 2160 GDU to Black Layer

Strengths

- › Excellent stress tolerance
- › Outstanding root strength
- › Adapts from Wisconsin to North Dakota
- › Work horse conventional hybrid
- › Rapid drydown plus great test weight

R44-66

88 RM

Medium-Tall Plant Height | 2220 GDU to Black Layer

Strengths

- › Consistent performance from year to year
- › Outstanding stalk strength
- › Very good plant health and fall intactness
- › Solid agronomics well suited for most environments
- › Plant at higher populations to maximize yield potential



Drought Tolerance	Plant Height	Ear Type	Plant Health	Fall Appearance	Drydown	Ear Retention	Test Weight	Corn Belt Refuge Requirement	Dahlman Brands
8	MT	SD	7	8	8	8	8		R43-13
9	MT	SF	8	6	9	8	9		D42-07
8	MT	D	8	9	8	8	8		R44-66
8	MT	SD	8	8	8	8	8	RIB	R44-26VT2PRIB
9	M	SD	8	9	7	9	7	RIB	R45-30VT3PRIB
9	M	SD	8	9	7	9	7	RIB	R45-22VT2PRIB
9	M	SD	8	9	7	9	7		R45-10

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

R44-26VT2PRIB 89 RM

Medium-Tall Plant Height | 2220 GDU to Black Layer

Strengths

- › Strong overall agronomic and disease package
- › Outstanding root and stalk strength
- › Consistent performance across different environments
- › Good choice for corn on corn
- › **RIB COMPLETE® - 5% refuge in the bag**



R45-30VT3PRIB 90 RM

Medium Plant Height | 2230 GDU to Black Layer

Strengths

- › Very good drought tolerance
- › Excellent stalk & root strength
- › Recommended for corn on corn
- › Responds well to higher populations where soils, fertility & moisture allow
- › **RIB COMPLETE® - 10% refuge in the bag**



R45-22VT2PRIB 90 RM

Medium Plant Height | 2230 GDU to Black Layer

Strengths

- › Very good drought tolerance
- › Excellent stalk & root strength
- › Recommended for corn on corn
- › Responds well to higher populations where soils, fertility & moisture allow
- › **RIB COMPLETE® - 5% refuge in the bag**



R45-10 90 RM

Medium Plant Height | 2230 GDU to Black Layer

Strengths

- › Very good drought tolerance
- › Excellent stalk & root strength
- › Recommended for corn on corn
- › Responds well to higher populations where soils, fertility & moisture allow



Dahlman Brands	Relative Maturity	GDUs to Mid-Silk	GDUs to Black Layer	Population Tolerance	Emergence	Early Vigor	Root Strength	Stalk Strength
D45-03	90	1200	2230	32-36	9	9	9	9
NEW! R45-28VT2PRIB	90	1220	2260	30-34	8	8	8	7
R46-27VT2PRIB	92	1240	2295	32-36	8	9	8	8
NEW! D46-04	92	1240	2295	32-36	8	9	8	8
R45-46	92	1230	2275	30-34	9	8	7	8
R47-35VT3PRIB	94	1230	2330	32-36	8	7	9	9
R47-10	94	1230	2330	32-36	8	7	9	9
R48-301SSRIB	95	1250	2360	32-36	8	7	9	8

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

D45-03 90 RM

Medium Plant Height | 2230 GDU to Black Layer

Strengths

- › Very good drought tolerance
- › Excellent stalk & root strength
- › Recommended for corn on corn
- › Responds well to higher populations where soils, fertility & moisture allow
- › Consistent performance from year to year

R45-28VT2PRIB 90 RM **NEW!**

Medium Tall Plant Height | 2260 GDU to Black Layer

Strengths

- › Very good drought tolerance
- › Solid overall disease package
- › Recommended for corn on corn
- › Above average Goss' Wilt tolerance
- › **RIB COMPLETE® - 5% refuge in the bag**



R46-27VT2PRIB 92 RM

Medium-Tall Plant Height | 2295 GDU to Black Layer

Strengths

- › Consistent performance across many soils
- › Rapid drydown plus strong early vigor
- › Best in adapted RM zone with good southern movement
- › Good choice for corn on corn
- › **RIB COMPLETE® - 5% refuge in the bag**



D46-04 92 RM **NEW!**

Medium Tall Plant Height | 2295 GDU to Black Layer

Strengths

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

Drought Tolerance	Plant Height	Ear Type	Plant Health	Fall Appearance	Drydown	Ear Retention	Test Weight	Corn Belt Refuge Requirement	Dahlman Brands
9	M	SD	8	9	7	9	7		D45-03
8	MT	SF	9	8	8	9	7	RIB	R45-28VT2PRIB <small>NEW!</small>
8	MT	SD	7	9	9	9	7	RIB	R46-27VT2PRIB
8	MT	SD	7	9	9	9	7		D46-04 <small>NEW!</small>
9	M	SF	8	8	9	8	7		R45-46
8	MS	D	8	9	7	9	9	RIB	R47-35VT3PRIB
7	MS	D	8	9	7	9	9		R47-10
7	MT	SD	7	9	8	9	8	RIB	R48-301SSRIB

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

R45-46 92 RM

Medium Plant Height | 2275 GDU to Black Layer

Strengths

- › Very good drought tolerance
- › Excellent emergence
- › Solid overall health package
- › Consistent performance across many soil types
- › Early flowering & fast drydown



R47-35VT3PRIB 94 RM

Medium-Short Plant Height | 2330 GDU to Black Layer

Strengths

- › Outstanding root and stalk strength
- › Good Goss's Wilt tolerance
- › Excellent late season health and intactness
- › Great choice for corn on corn
- › **RIB COMPLETE® - 10% refuge in the bag**



R47-10 94 RM

Medium-Short Plant Height | 2330 GDU to Black Layer

Strengths

- › Outstanding root and stalk strength
- › Good Goss's Wilt tolerance
- › Very good test weight and grain quality
- › Above average drought & greensnap tolerance
- › Great choice for corn on corn



R48-301SSRIB 95 RM

Medium-Tall Plant Height | 2360 GDU to Black Layer

Strengths

- › Best positioned as a full season hybrid
- › Responds well to higher populations where soils, fertility & moisture allow
- › Good Goss's Wilt tolerance
- › Quick drydown with an open husk
- › **RIB COMPLETE® - 5% refuge in the bag**



Dahlgman Brands	Relative Maturity	GDUs to Mid-Silk	GDUs to Black Layer	Population Tolerance	Emergence	Early Vigor	Root Strength	Stalk Strength
NEW! R48-29VT2PRIB	96	1230	2330	32-36	8	7	9	9
D48-08	96	1230	2330	32-36	8	7	9	9
R48-32VT3PRIB	96	1260	2380	30-34	8	9	8	8
R48-17	96	1260	2380	30-34	8	9	8	8
R49-315SSRIB	99	1265	2390	32-36	8	8	8	9
R50-33VT3PRIB	100	1265	2400	32-38	8	8	9	9
R50-25VT2PRIB	100	1255	2420	30-34	8	8	9	8

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

R48-29VT2PRIB 96 RM **NEW!**

Medium Short Plant Height | 2330 GDU to Black Layer

Strengths

- › Outstanding root and stalk strength
- › Good Goss's Wilt tolerance
- › Excellent late season health and intactness
- › Great choice for corn on corn
- › **RIB COMPLETE® - 5% refuge in the bag**



D48-08 96 RM

Medium Plant Height | 2350 GDU to Black Layer

Strengths

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

R48-32VT3PRIB 96 RM

Medium Plant Height | 2380 GDU to Black Layer

Strengths

- › Very good stalk and root strength
- › Will adapt to varying stress prone environments
- › Excellent fall intactness & harvest appearance
- › Recommended for corn on corn
- › **RIB COMPLETE® - 10% refuge in the bag**



R48-17 96 RM

Medium Plant Height | 2380 GDU to Black Layer

Strengths

- › Consistent high yield potential
- › Very good stalk & root strength
- › Good choice for early planting
- › Will adapt to varying stress prone environments
- › Solid overall health package



Drought Tolerance	Plant Height	Ear Type	Plant Health	Fall Appearance	Drydown	Ear Retention	Test Weight	Corn Belt Refuge Requirement	Dahlman Brands
8	MS	D	8	9	7	9	9	RIB	R48-29VT2PRIB <small>NEW!</small>
8	MS	D	8	9	7	9	9		D48-08
9	M	SF	7	9	9	9	7	RIB	R48-32VT3PRIB
9	M	SF	7	9	9	9	7		R48-17
8	M	SD	8	7	8	9	8	RIB	R49-315SSRIB
8	M	D	9	7	8	9	9	RIB	R50-33VT3PRIB
7	MT	SF	8	7	9	8	8	RIB	R50-25VT2PRIB

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

R49-315SSRIB 99 RM

Medium Plant Height | 2390 GDU to Black Layer

Strengths

- › Strong Goss's Wilt tolerance
- › Excellent stalk strength
- › Handles drought and heat stress very well
- › Adapts to varying soil types and can move south
- › **RIB COMPLETE® - 5% refuge in the bag**



R50-33VT3PRIB 100 RM

Medium Plant Height | 2400 GDU to Black Layer

Strengths

- › Solid agronomic package
- › Excellent stalk & root strength
- › Responds well to higher populations where soils, fertility & moisture allow
- › Good choice for cold soils
- › **RIB COMPLETE® - 10% refuge in the bag**



R50-25VT2PRIB 100 RM

Medium-Tall Plant Height | 2420 GDU to Black Layer

Strengths

- › Very good test weight grain
- › Excellent root strength
- › Adapts to most soil types
- › Outstanding early season vigor
- › **RIB COMPLETE® - 5% refuge in the bag**



Dahlman Brands	Relative Maturity	GDUs to Mid-Silk	GDUs to Black Layer	Population Tolerance	Emergence	Early Vigor	Root Strength	Stalk Strength
NEW! R50-20	100	1255	2420	30-34	8	8	9	8
D50-01	100	1255	2420	30-34	8	8	9	8
R50-306SSRIB	101	1245	2490	30-34	8	8	9	7
NEW! R52-328SSRIB	103	1260	2560	32-38	8	8	9	9
R52-03VT3PRIB	103	1250	2590	32-38	8	8	9	7
R53-319SSRIB	105	1260	2630	30-34	8	8	8	8

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

R50-20

100 RM **NEW!**

Medium-Tall Plant Height | 2420 GDU to Black Layer

Strengths

- › Very good test weight grain
- › Excellent root strength
- › Adapts to most soil types
- › Outstanding early season vigor



D50-01

100 RM

Medium-Tall Plant Height | 2420 GDU to Black Layer

Strengths

- › Very good test weight grain
- › Excellent root strength
- › Adapts to most soil types
- › Handles drought conditions well
- › Outstanding early season vigor

R50-306SSRIB 101 RM

Medium-Tall Plant Height | 2490 GDU to Black Layer

Strengths

- › Superior grain quality and good ear flex
- › Excellent root strength
- › Responds well to productive soil types
- › Can move south of adapted RM zone
- › **RIB COMPLETE® - 5% refuge in the bag**



R52-328SSRIB 103 RM **NEW!**

Medium-Tall Plant Height | 2560 GDU to Black Layer

Strengths

- › Excellent root and stalk strength
- › Early season vigor and dark green color
- › Medium tall plant with a girthy semi flex ear
- › Very good drought tolerance
- › **RIB COMPLETE® - 5% refuge in the bag**



Drought Tolerance	Plant Height	Ear Type	Plant Health	Fall Appearance	Drydown	Ear Retention	Test Weight	Corn Belt Refuge Requirement	Dahlman Brands
7	MT	SF	8	7	9	8	8		R50-20 <small>NEW!</small>
7	MT	SF	8	7	9	8	8		D50-01
7	MT	SF	8	7	7	9	8	RIB	R50-306SSRIB
9	MT	SF	8	8	8	8	8	RIB	R52-328SSRIB <small>NEW!</small>
8	MT	SD	7	7	8	8	8	RIB	R52-03VT3PRIB
8	M	SF	9	7	9	8	8	RIB	R53-319SSRIB

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

R52-03VT3PRIB 103 RM

Medium-Tall Plant Height | 2590 GDU to Black Layer

Strengths

- › Excellent root strength
- › Great grain quality and very good test weight
- › Early flowering hybrid adapts to varying environments
- › Responds well to higher populations where soils, fertility & moisture allow
- › **RIB COMPLETE® - 10% refuge in the bag**



R53-319SSRIB 105 RM

Medium Plant Height | 2630 GDU to Black Layer

Strengths

- › Very good drydown and ear flex
- › Strong Goss's Wilt tolerance
- › Solid overall agronomics and health package
- › Adapts north to south very well
- › **RIB COMPLETE® - 5% refuge in the bag**



SOYBEAN PRODUCTS

Dahlman Brands	Maturity	Plant Height	Plant Type	Iron Chlorosis	Emergence	Min-Till Adaptability	Stress Tolerance	Standability
5203RR2Y	0.3	M	M	7	9	9	9	9
5405NRR2Y	0.5	M	M	8	9	9	9	8
5108RR2Y	0.8	M	M/B	8	9	9	9	8
5309NRR2Y	0.9	M	M/B	7	8	8	8	8

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

5203RR2Y

0.3

Medium Plant Height | Medium Plant Type

Strengths

- › Broadly adapted across North Dakota & Minnesota
- › Very high yield potential
- › Rps 3a gene for multi-race phytophthora
- › Excellent emergence and standability
- › Above average White Mold tolerance



5405NRR2Y

0.5

Medium Plant Height | Medium Plant Type

Strengths

- › Very good IDC tolerance
- › Multiple characteristics well suited for the north
- › Rps 3a gene for multi-race Phytophthora
- › Excellent emergence and stress tolerance
- › Good plant height

› SCN Tolerance



5108RR2Y

0.8

Medium Plant Height | Medium/Bush Plant Type

Strengths

- › Adapts to soils in the Dakotas, Minnesota and Wisconsin
- › Dominating high yield potential
- › Rps 3a gene for multi-race Phytophthora
- › Outstanding PRR package and brown stem rot protection
- › Aggressive plant type with uniform heavy pod set



5309NRR2Y

0.9

Medium Plant Height | Medium/Bush Plant Type

Strengths

- › Adapts to soils in the Dakotas, Minnesota and Wisconsin
- › Very consistent yields across varying environments
- › IDC equal to or better than 5108RR2Y
- › Rps 1c gene for multi-race Phytophthora
- › Excellent standability and harvestability

› SCN Tolerance



Soybean Cyst Nematode Race	Soybean Cyst Nematode Source	Phytophthora Gene	Phytophthora Field Tolerance	Brown Stem Rot	White Mold	Sudden Death Syndrome	Charcoal Root Rot	Dahlman Brands
S	None	Rps 3a	9	7	8	NA	7	5203RR2Y
R3, MR14	PI88788	Rps 3a	9	7	7	NA	7	5405NRR2Y
S	None	Rps 3a	9	9	8	NA	7	5108RR2Y
R3, MR14	PI88788	Rps 1c	8	8	7	NA	8	5309NRR2Y

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

What's next in weed control technology?

ROUNDUP READY 2 XTEND™ SOYBEANS

An advanced soybean product that will:

- Provide tolerance to dicamba and glyphosate
- Be built on the high-yielding Genuity® Roundup Ready 2 Yield® trait

See Roundup Ready 2 Xtend™ Soybeans in action in Ground Breakers® Field Trials Under Use Permit:

xtendfollowfield.com

Roundup Ready 2 Xtend™ soybeans are not currently available for commercial sale or commercial planting. Dicamba herbicide is not currently approved for commercial in-crop use with Roundup Ready 2 Xtend soybeans and nothing herein is a promotion or an offer to sell dicamba herbicide for this use. It is a violation of federal law to promote or offer to sell an unregistered pesticide or a registered pesticide for an unregistered use. Commercialization is dependent on multiple factors, including successful conclusion of the regulatory process.

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ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS. Roundup Ready® crops contain genes that confer tolerance to glyphosate, the active ingredient in Roundup® brand agricultural herbicides. Roundup® brand agricultural herbicides will kill crops that are not tolerant to glyphosate.

Genuity®, Ground Breakers®, Roundup Ready 2 Yield®, Roundup Ready 2 Xtend™, Roundup Ready® and Roundup® are trademarks of Monsanto Technology LLC.

Dahlman Brands	Maturity	Plant Height	Plant Type	Iron Chlorosis	Emergence	Min-Till Adaptability	Stress Tolerance	Standability
5311NRR2Y	1.1	MT	M/B	7	8	8	8	8
5215NRR2Y	1.5	M	M	7	9	9	9	9
5420NRR2Y	2.0	MT	M	8	8	9	8	9
5321NRR2Y	2.1	M	M/B	7	8	7	8	8

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

5311NRR2Y

1.1

Medium-Tall Plant Height | Medium/Bush Plant Type

Strengths

- › Dominate yields in WC Minnesota and the Dakotas
- › Solid IDC tolerance
- › Excellent standability
- › Rps 1k gene for multi-race Phytophthora
- › Very good performance on stress prone soils

› SCN Tolerance



5215NRR2Y

1.5

Medium Plant Height | Medium Plant Type

Strengths

- › Position S. Dakota, Minnesota and Wisconsin
- › High yield potential with solid agronomics
- › Rps 1c gene for multi-race Phytophthora
- › Good choice for beans on beans
- › Excellent Brown Stem Rot tolerance

› SCN Tolerance



Soybean Cyst Nematode Race	Soybean Cyst Nematode Source	Phytophthora Gene	Phytophthora Field Tolerance	Brown Stem Rot	White Mold	Sudden Death Syndrome	Charcoal Root Rot	Dahlman Brands
R3, MR14	PI88788	Rps 1k	7	8	7	NA	8	5311NRR2Y
R3, MR14	PI88788	Rps 1c	8	9	8	8	8	5215NRR2Y
R3, MR14	PI88788	Rps 1k	9	9	8	8	8	5420NRR2Y
R3, MR14	PI88788	Rps 1k	8	8	6	8	8	5321NRR2Y

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

5420NRR2Y

2.0

Medium-Tall Plant Height | Medium Plant Type

Strengths

- › Key variety for Minnesota and Wisconsin
- › Outstanding PRR tolerance and brown stem rot protection
- › Rps 1k gene for multi-race phytophthora
- › Solid agronomic package
- › Very good SDS & Charcoal Root Rot tolerance

› SCN Tolerance



5321NRR2Y

2.1

Medium Plant Height | Medium/Bush Plant Type

Strengths

- › Adapts to many soil types including clay
- › Good choice for stress prone soils
- › Rps 1k gene for multi-race Phytophthora
- › Can move north into earlier RMs
- › Very good IDC tolerance

› SCN Tolerance



Benefits of New Seed

Think Before You Bin Run

Yield Loss

- Genuity® Roundup Ready 2 Yield® soybean seed outyielded bin-run Roundup Ready® soybeans by 6.1 bu/A.¹

Lost Income

- Income lost by not selling a bushel of soybeans that is saved for planting the next year.

Customer Service

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

Verification Required

- Most soybeans are still covered by a variety patent, and you will not be able to save and plant the seed from those varieties without a license giving you the added right. Check with your seed supplier before saving.

Latest Technology

- Highest yielding soybean technology available
- Six soybean trait products anticipated to come from Monsanto in the next 2-7 years*
- Leading seed treatment options

¹ First year results of two-year protocol study with independent cooperators across eight locations examining the yield differences of saved Roundup Ready soybeans versus newly purchased Roundup Ready 2 Yield soybeans.

*Pending regulatory approvals



WL 356HQ.RR Alfalfa

- › Excellent tolerance to Roundup® non-selective herbicide
- › Very high yielding under 3-5 cut harvest managements
- › **Unique wet soil disease resistance package (HR to Aphanomyces Race 2) promoting better stand establishment, persistence, and forage yield**
- › WL 356HQ.RR carries the “HQ” designation, exhibiting strong potential to deliver higher feed intake, improve milk production, and increase profitability when fed
- › Very winterhardy (WH=1.6); WL 356HQ.RR delivers long stand life under adverse weather and soil conditions
- › Highly resistant (HR) to stem nematode
- › Perfect Disease Resistance Index (DRI) of 35/35 promotes fast seedling establishment and long stand life
- › **Ideal FD4 variety for Midwest and Northeastern region of the U.S. for hay and haylage uses**

Agronomic Traits
Maturity Early
Fall Dormancy 3.8
Winterhardiness 1.6
Forage Yield Index Very High
Digestibility/Feed Value Superior
Persistence Index Very High
Recovery After Harvest Very Fast
Traffic Tolerance Very Good
Standability Excellent
Multileaf Expression Very High (76%)
Pest Resistance Traits
Bacterial Wilt HR (78%)
Fusarium Wilt HR (83%)
Anthracoze HR (63%)
Phytophthora Root Rot HR (55%)
Aphanomyces Root Rot - Race 1 HR (62%)
Aphanomyces Root Rot - Race 2 HR (59%)
Verticillium Wilt HR (64%)
Leaf Disease R
Aphids HR
Stem Nematode HR (58%)
Disease Resistance Index 35/35

HR = High Resistance R = Resistant



WL 372HQ.RR Alfalfa

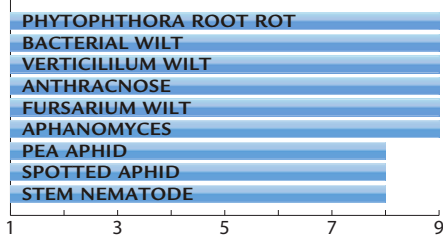
- › Excellent tolerance to Roundup® non-selective herbicide
- › Our highest-yielding winterhardy RR FD5 released to date
- › Very high yielding under 4-6 cut harvest schedules
- › **WL 372HQ.RR demonstrates “HQ” forage quality levels to deliver higher feed intake, improved milk production, and greater profitability when fed**
- › Very winterhardy (WH=1.8); WL 372HQ.RR delivers long stand life even under harsh weather conditions
- › Very strong disease package with a “perfect” Disease Resistance Index (DRI) of 30/30 to promote fast establishment
- › High resistance (HR) to stem nematode
- › **Ideal FD5 variety for cash hay growers, dairy producers, or other intensive managers; WL 372HQ.RR consistently produces big yields of leafy, fine-stemmed hay with high RFQ levels**

Agronomic Traits
Maturity Early
Fall Dormancy 4.9
Winterhardiness 1.8
Forage Yield Index Very High
Digestibility/Feed Value Superior
Persistence Index Very High
Recovery After Harvest Very Fast
Traffic Tolerance Very Good
Standability Excellent
Multileaf Expression Very High (74%)
Pest Resistance Traits
Bacterial Wilt Hr (68%)
Fusarium Wilt Hr (70%)
Anthracoze Hr (56%)
Phytophthora Root Rot Hr (57%)
Aphanomyces Root Rot (Race 1) Hr (56%)
Verticillium Wilt Hr (60%)
Leaf Disease R
Aphids Hr
Stem Nematode Hr (55%)
Disease Resistance Index 30/30

HR = High Resistance R = Resistant

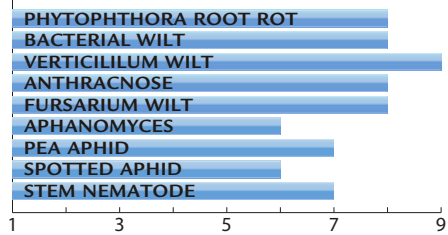
Perfect Plus Alfalfa

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



Colt's Alfalfa

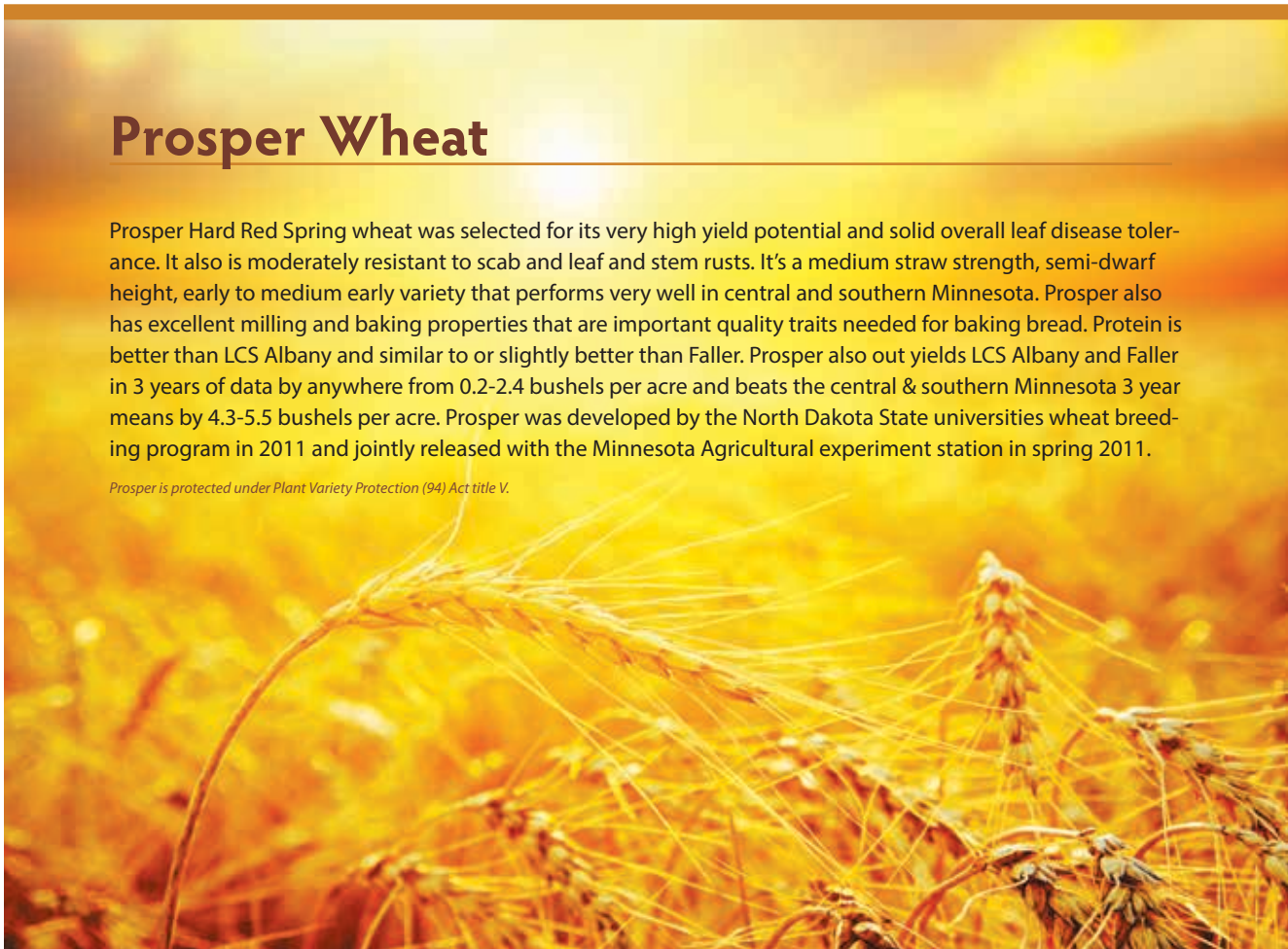
- › Winter hardiness – hardy
- › Recovery – very fast
- › Wisconsin disease rating – 29 of 30
- › Leaf to stem ratio – high





Prosper Wheat

Prosper Hard Red Spring wheat was selected for its very high yield potential and solid overall leaf disease tolerance. It also is moderately resistant to scab and leaf and stem rusts. It's a medium straw strength, semi-dwarf height, early to medium early variety that performs very well in central and southern Minnesota. Prosper also has excellent milling and baking properties that are important quality traits needed for baking bread. Protein is better than LCS Albany and similar to or slightly better than Faller. Prosper also out yields LCS Albany and Faller in 3 years of data by anywhere from 0.2-2.4 bushels per acre and beats the central & southern Minnesota 3 year means by 4.3-5.5 bushels per acre. Prosper was developed by the North Dakota State universities wheat breeding program in 2011 and jointly released with the Minnesota Agricultural experiment station in spring 2011.

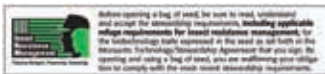
Prosper is protected under Plant Variety Protection (94) Act title V.



2016 Dahlman Corn Reference Chart

RM					Conventional
Relative Maturity	Genuity® VT Double PRO® RIB Complete® corn blend	Genuity® SmartStax® RIB Complete® corn blend	Genuity® VT Triple PRO® RIB Complete® corn blend	Roundup Ready® 2	Conventional
78				R39-11	D39-01
81	R41-28VT2PRIB			R41-12	
82					D41-02
84	R42-21VT2PRIB				
85	R43-23VT2PRIB			R43-13	D42-05
85					D42-07
88				R44-66	
89	R44-26VT2PRIB				
90	R45-22VT2PRIB		R45-30VT3PRIB	R45-10	D45-03
90	R45-28VT2PRIB 				
92	R46-27VT2PRIB			R45-46	D46-04 
94			R47-35VT3PRIB	R47-10	
95		R48-301SSRIB			
96	R48-29VT2PRIB 		R48-32VT3PRIB	R48-17	D48-08
99		R49-315SSRIB			
100	R50-25VT2PRIB		R50-33VT3PRIB	R50-20 	D50-01
101		R50-306SSRIB			
103		R52-328SSRIB 	R52-03VT3PRIB		
105		R53-319SSRIB			

Matching colors indicate corn hybrids from the same base genetic family



Do not export Genuity® Roundup Ready® Alfalfa seed or crop, including hay or hay products, to China pending import approval. In addition, due to the unique cropping practices do not plant Genuity® Roundup Ready® Alfalfa in Imperial County, California, pending import approvals and until Monsanto grants express permission for such planting.

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

IMPORTANT IRM INFORMATION: Genuity® 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.

ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS. Roundup Ready® crops contain genes that confer tolerance to glyphosate, the active ingredient in Roundup® brand agricultural herbicides. Roundup® brand agricultural herbicides will kill crops that are not tolerant to glyphosate. Acceleron and DesigZn®, Genuity Design®, Genuity Icons, Genuity®, RIB Complete and Design®, RIB Complete®, Roundup Ready 2 Technology and Design®, Roundup Ready 2 Yield®, Roundup Ready®, Roundup®, SmartStax®, VT Double PRO® and VT Triple PRO® are trademarks of Monsanto Technology LLC. LibertyLink and the Water Droplet Design® is a registered trademark of Bayer. Herculex® is a registered trademark of Dow AgroSciences LLC. All other trademarks are the property of their respective owners.



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- **Genuity® SmartStax® RIB Complete®** corn blend is a blend of 95% B.t. seed and 5% non-B.t. seed. You get all the benefits of Genuity® SmartStax® Corn, plus the convenience of 5% non-B.t. seed, interspersed in every bag.



- **Genuity® VT Triple Pro® RIB Complete®** corn blend adds below-ground insect protection and Roundup Ready 2® technology to the Double PRO package.



- **Genuity® VT Double Pro® RIB Complete®** corn blend is a blend of 95% B.t. seed and 5% non-B.t. seed. You get all the benefits of Genuity® VT Double Pro® Corn, plus the convenience of 5% non-B.t. seed, interspersed in every bag.



- **Roundup Ready® Corn 2** has in-plant tolerance to Roundup® brand herbicides.



- **Genuity® Roundup Ready 2 Yield®** soybeans were developed using gene mapping to identify specific DNA regions in soybeans that have a positive impact

on yield. These advanced insertion and selection technologies are used to deliver the high yield potential.



- **Acceleron®** is a seed treatment designed to enhance plant health, offer disease protection and insect control in Genuity® Roundup Ready 2 Yield® soybeans.



- **Respect the Refuge:** Before opening a bag of seed, be sure to read, understand and accept the stewardship and applicable refuge requirements for insect resistance management for the traits that hybrid carries.



- **LibertyLink®** is a non-selective herbicide alternative to Roundup® and it combines high yielding genetics with postemergent weed control with Liberty®.

LibertyLink® Patent Statement

Soybean seeds containing the LibertyLink® trait are protected under multiple United States patents and may be planted only to produce one (1) commercial crop and only after signing a Grower Trait License agreement. It is illegal to save or catch soybean seeds containing the LibertyLink trait for use as planting seed or for transfer to others for use as planting seed.

Seeds containing the Genuity® Roundup Ready 2 Yield® trait are protected under numerous U.S. patents. Seed containing patented traits, such as seed containing Roundup Ready 2 Yield® traits, can only be used to plant a single commercial crop. It is unlawful to save and replant Genuity® Roundup Ready 2 Yield® soybeans. Additional information and limitations on these products are provided in the Monsanto Technology Stewardship Agreement and the Monsanto Technology Use Guide. The licensed U.S. patents for Monsanto technologies can be found at the following webpage: www.monsantotechnology.com





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