Integra Product Guide









09 PRODUCT GUIDE
Integra Fortified Seed™
Manifest TM Treatment System
Hybrid Corn
STP Leafy Silage
Alfalfa
Soybeans
Sorghum
Sunflowers
Canola
Notes
Technology Stewardship
Legal Information
Quality Assurance
Integra Website
Sales Contacts



This is it.

Advanced agricultural technology at its finest.

FVFRY SFFD FORTIFIFD FOR SUCCESS WITH MANIFEST™

Integra Fortified Seed™

Primed with the best traits and genetics, it's the seed from which potential grows into something wonderful. Something real. An honest-to-goodness beginning to a strong crop foundation, improved performance and yield, and reduced input costs.

Integra chooses the best trait and genetic components for each crop and region.

We then fortify every seed with Manifest, a unique treatment system that improves seedling development for more of what every grower wants.

Maximum protection of seed investment for maximum yield potential.

The only fortified seed on the market, nothing else compares.

Every Integra seed comes with a team of experts in trait, insecticide, herbicide, fungicide, nutrition, and application technology. A 100 percent replant guarantee. We promise experience and integrity that only 90 years in the field can fulfill.

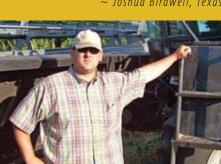
Which is exactly what you'd expect from Wilbur-Ellis Company, owner of Integra and a leading international marketer and distributor of agricultural products.

The Best Seed in the Land, Fortified by Manifest

Sorting through endless statistics on genetics, trait technologies and treatment programs, **a single question emerges:** What seed is right for your operation?

This was my first year planting the Integra hybrids in my corn plot. We had an unusually cold spring this year and a lot of water and some of the other hybrids had problems coming up and when they did finally come up, plant health was an issue. The Integra corn with Manifest treatment popped up fast even in the cold wet conditions. That's the kind of performance I'm looking for!

~ Joshua Birdwell, Texas



The answer, a seed created specifically for your growing conditions and specific area.

The best seed in the land, selected by Integra and fortified by Manifest. When it comes to yield potential, no other seed offers greater protection on your investment. A simple fact that should take the guesswork out of your decision.

Integra chooses the seed—corn, canola, sunflower, alfalfa, sorghum, leafy silage or soybeans—with the right traits and genetics for each crop and region. We apply a customized Manifest seed treatment that combines patented technology with the most effective materials available... all to create a unique form of protection from yield-robbing stress and diseases that affect early plant health and seedling vigor.

Manifest Treatment System contains distinctive and naturally occurring plant extracts considered essential for normal plant growth and development. The formula varies by seed type and is complemented by other carefully selected and proven components.

Manifest gives Integra seed improved plant stand and vigor, increased rate of canopy closure, and improved uptake of nutrients. Helping you to reach maximum yield potential with every bag.







PERFORMANCE-TESTED GENETICS

Integra accesses a broad base of the most highly developed breeding programs in the world. We license germplasm from many private and public sources to find the very best genetic groupings, including those generated from advanced technology such as molecular breeding.

Always performance-tested and never rushed to market, we release only elite and specialized genetics that perform in your particular soil type and growing environment. We offer our recommendations for precise placement and planting. Something we like to do to ensure optimal performance.

ADVANCED TRAIT TECHNOLOGIES

Integra's independent relationships with developers allow us to choose trait technologies—with names like Roundup Ready®, YieldGard® VT3, YieldGard, Herculex®, and Clearfield®—that provide the most value. We assemble the most advanced traits with superior, locally selected genetics to produce the best possible combinations. The kind that make sense out in the field.

Of course, like a good seed company should, we always keep an eye on what the future might bring. Pushing the limits of innovation to find better ways to help growers produce greater yields.

our 100% replant quarantee.

-PLAN

A few conditions apply, of course: Our replant quarantee pertains to corn, silage, sunflower and canola seed. You can change seed type, if necessary. Fianlly, replacement seed must be planted in the same season.

To be eligible, you must meet the following requirements: Make a qualified minimum purchase. Complete a crop plan—CPCs, nutrition, seed, etc.—for the specified field. Be sure to report your claim and have your field inspected prior to replanting within 60 days of the original planting.





Integra™ Hybrid Corn

Our Integra brand corn hybrids are protected with the most effective and reliable seed treatment products available. The active ingredients used in the Manifest™ Seed

Protection starts with Apron® XL LS that guards against seed decay and damping-off caused by Pythium.

Additionally, the seed is protected from seed-borne and soil-borne fungi such as Fusarium, Rhizoctonia Solani, and Helminthosporium through the use of Maxim® 4FS and Trilex® fungicides.

Integra corn hybrids are treated with Poncho™ 250 systemic insecticide to protect the seed from certain insects, including wireworms and seed corn maggot.

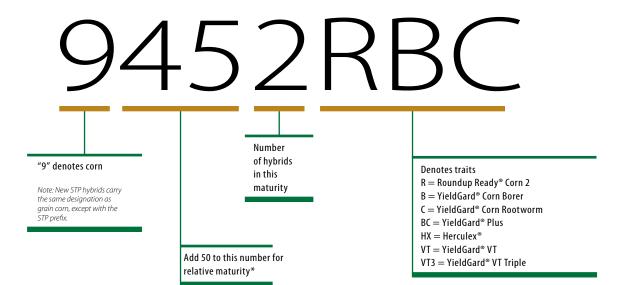
Completing the Manifest Seed Treatment System is the addition of a proprietary and patented plant extract that can promote plant health and growth, especially when the plants are under stress such as temperature extremes, soil moisture, soil strength, and soil chemistry.

Field tests have demonstrated that a stronger, healthier seedling will have a better opportunity to achieve maximum yield potential.

Each component of the Manifest Seed Treatment System was selected with the intention of providing the best protection and value for the Integra brand seed in most crop situations.

Due to different cropping practices the Manifest Treatment System may vary as described above to meet the needs of our customers.

Integra Brand Corn Hybrid Numbering System





Hybrids introduced prior to 2007 can be understood by the following nomenclature:



"6" denotes grain corn with trait option

"7" denotes conventional grain corn

"8" denotes leafy silage

corn introduced after 2005.

All leafy silage corn hybrids begin with STP as a prefix to denote "Silage that Produces". Grain corn assumes the "INT" prefix.

These numbers denote days to relative maturity*

Trait notation has been updated to

the new nomenclature

This number denotes the first commerical year, e.g.: "3" introduced in 2003

RELATIVE MATURITY RATINGS

* The relative maturity ratings on new hybrids are based on limited data and may change as more data are collected. However, the hybrid name will stay the same.

ROUNDUP READY® CORN 2 **TECHNOLOGY**

Roundup Ready® Corn 2 contains enhanced in-plant tolerance to Roundup® agricultural herbicides, enabling growers to use overthe-top applications of Roundup® brand herbicides to control both grasses and broadleaf weeds. Growers are provided with excellent crop safety and full yield z potential, with applications made from planting through 48 inches of corn height. Drop nozzles must be used between 30 inches to 48 inches of corn height.







TECHNOLOGY







YIELDGARD®PLUS TECHNOLOGY

YieldGard® Plus technology combines YieldGard® Corn Technology into a single southwestern corn borers, sugarcane borer, southern corn stalk borers, western corn rootworm, northern corn rootworm, and Mexican corn rootworm. YieldGard® Plus corn hybrids also provide suppression of corn earworm, fall armyworm and stalk borer. By providing full season protection against the above insect pests, the genetic vield potential of YieldGard® Plus corn hybrids is preserved.

YIELDGARD® CORN BORER TECHNOLOGY

Yield-Gard® Corn Borer hybrids contain an insecticidal protein from Bacillus thuringiensis (B.t.) that protects corn plants from specific lepidopteran insect pests The YieldGard® Corn Borer trait delivers, whole plant, full season protection against European corn borer, southwestern corn borer, sugarcane borer and southern cornstalk borer resulting in maximum yield potential. YieldGard® Corn Borer hybrids also provide effective suppression of corn earworm, fall armyworm and stalk borer. By providing whole plant protection against corn borers, the genetic yield potential of YieldGard® Corn Borer hybrids is preserved.

YIELDGARD® ROOTWORM

YieldGard® Rootworm corn

hybrids contain an insecticidal

(B.t.) that protects corn roots

northern, and Mexican corn

yield potential of YieldGard®

Rootworm hybrids.

from larvae feeding by western,

rootworm. Protecting the root of

the corn plant from feeding by

corn rootworm larvae decreases

lodging and protects the genetic

protein from Bacillus thuringiensis







Borer and YieldGard® Rootworm plant. YieldGard® Plus corn hybrids control European and



YIELDGARD VT® ROOTWORM

PROTECTION TECHNOLOGY

YieldGard® VT Rootworm/RR2

control, compared to current

corn rootworm, and Mexican

larval feeding period. A huge

is that you get stacked-trait

hybrids with a highly active

of the rootworm gene. The

turns on the gene to produce

the insect-contorl protein and

more effectively distribute it

throughout the root system.

and more consistent promoter

promoter is a biotech switch that

corn rootworm throughout the

insect-protected corn provides

improved consistency and better

rootworm-protected products of

western corn rootworm, northern

benefit of YieldGard® VT products









YIELDGARD VT® TRIPLE

YieldGard® VT Triple hybrids

are created using a process

called VecTranTM technology,

which stands for Vector-stack

Transformation. By combining

two traits using a single DNA-

insertion process, it is a better

way to produce stacked straits:

• Enhanced trait performance.

but for the stalk and includes

for more available moisture

protection not only for the roots,

weed control as well. This allows

and nutrients, more uptake and

translocation, less lodging and

ear drop and broad-spectrum

weed control in the Roundup

Ready® 2 Technology System.

YieldGard® VT Triple offers

More efficient and more

Less time-consuming

consistent

PROTECTION TECHNOLOGY







HERCULEX® I INSECT PROTECTION TECHNOLOGY

Herculex® I Insect Protection delivers superior in-plant protection against more aboveground destructive pests than any other trait, and is the only trait that protects against western bean cutworm and black cutworm. Herculex® I provides powerful protection against: First- and second-generation European corn borer, western bean cutworm, black cutworm all generations of southwestern corn borer, fall armyworm, southern corn stalk borer, lesser cornstalk borer and sugarcane borer. Plus, it offers suppression of corn earworm, so your corn is shielded from the effects of multiple yield-robbing pests.

LibertyLink® trait for tolerance to LIBERTY® herbicide when applied over-the-top in accordance with the LIBERTY herbicide label. For maximum herbicide flexibility, many Herculex I hybrids are also available stacked with Roundup Ready® Corn 2 technology. Grain from hybrids containing Herculex I only is fully approved for food and feed use in the European Union. Herculex is no longer a Market Choices® product. However, grain (or processed products from this grain) from hybrids stacked with Herculex I and Roundup Ready Corn 2 is not approved in the European Union and carries the Market Choices designation.

All Herculex I hybrids contain the

Stack Up Your Benefits with These Trait Combinations



CORN 2



YIELDGARD® CORN BORER

WITH ROUNDUP READY®













YIELDGARD® ROOTWORM WITH

ROUNDUP READY® CORN 2











YIELDGARD® PLUS WITH **ROUNDUP READY® CORN 2**



YIELDGARD VT® ROOTWORM WITH ROUNDUP READY® CORN 2



















HERCULEX® I WITH ROUNDUP READY® CORN 2

*Herculex I corn contains a gene making it tolerant ONLY to glufosinate ammonium herbicides such as LIBERTY herbicide from Bayer. This herbicide resistance gene will NOT safeguard this hybrid against application of other herbicides. ACCIDENTAL APPLICATION OF OTHER HERBICIDES TO THIS HYBRID COULD RESULT IN TOTAL CROP LOSS. ALWAYS READ AND FOLLOW PESTICIDE **LABEL DIRECTIONS.** Growers should refer to the Technology

Use Guide for information on crop stewardship regarding the potential movement of pollen to neighboring crops. Follow IRM and Grain Marketing Requirements. Roundup® agricultural herbicides will kill crops that do not contain the Roundup Ready® gene. Roundup® refers to Monsanto's Roundup® agricultural herbicides. Roundup®, Roundup Ready®, Roundup WeatherMAX® YieldGard®, are trademarks used under license from Monsanto Company LLC. Herculex and the Herculex Shield Logo are trademarks of Dow AgroSciences L.L.C. Liberty LibertyLink and the LibertyLink Logo are registered trademarks of Bayer CropScience. Herculex Insect Protection by Dow AaroSciences and Pioneer Hi-Bred.



Ethanol Corn

The dry mill ethanol market continues to grow, offering new local markets for area corn growers. Current estimates are that as much as 30% of the corn production in the United States

Reliable Research

At Integra™, we want to help you take advantage of these new market opportunities and we support the use of ethanol and promote its use.

We do field research that helps identify corn hybrids that improve ethanol yields and efficiencies. We have designated products as Processor Preferred® High Fermentable Corn (HFC) for dry mill ethanol plants.

Integra Processor Preferred® HFC products offer 2-4% improved ethanol yield potential per bushel of corn. Processor Preferred® HFC hybrids from Integra can help you:

- Achieve higher potential return for grower investors
- Realize higher yield potential in your field and your ethanol plant
- Reduce reliance on foreign oil
- Support your local economy and a cleaner environment.

Ask your local ethanol plant if they use Processor Preferred® HFC in their facilities.





MARKETING ADVANTAGES

Integra™ Fortified Seed offers Processor Preferred® corn hybrids. These hybrids have been selected to deliver grain compositional benefits to processors and unlock marketing opportunities for growers. These hybrids have been rigorously tested and have achieved the Processor Preferred® designation for their agronomic characteristics and higher levels of fermentable starch.

ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS.

Processor Preferred® is a registered trademark of Monsanto Technology LLC.

PROCESSOR PREFERRED™ HIGH FERMENTABLE CORN (HFC)

Corn that can deliver higher levels of fermentable starch to dry mill ethanol plants, producing higher ethanol yields for greater profit potential.

Integra

Fortified Seed

Corn Hybrids

All value-added trait

options are accepted.

Hybrid	RM
6584	84
6385	85
6390	91
63F90	91
6193	92
6395	94
9682	118



Corn that can deliver higher levels of extractable starch to corn wet millers, producing higher pure starch yields that are turned into high fructose corn syrup, specialty and commodity starch products and ethanol.

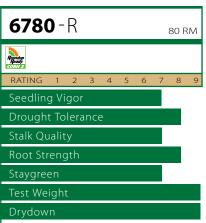


Hybrid	RM
9480	98
9521	102
9641	114
9673	117

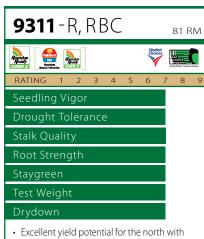
Integra Fortified Seed Corn Hybrids HFC & HES All value-added trait options are accepted.

0

Hybrid Corn • Relative Maturity 80-86 day



- Exceptional full-dent hybrid for the Northern Corn Belt
- Delivers impressive, high yields for an 80 day
- Fast grain set, with very good grain quality and test weight
- Good stalk with excellent root strength
- Kernel rows 14-18



- solid argonomic characteristics
- Very good root and stalk rating
- Moderately high plant populations will maximize yield potential
- Kernel rows 12-16
- Medium plant and ear height
- Very good early plant vigor
- · Several trait options available



- Impressive stalk and root strength
- Flowers early Heavy test weight
- Semi-flex ear type; 12-16 kernel rows
- Medium-tall plant height



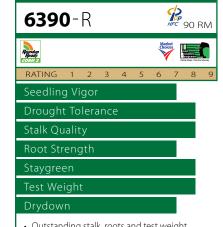
- corn market
- Impressive yields with excellent yield to moisture ratio
- · Medium plant and ear height
- Flowers three days earlier than 6584
- Semi-flex ear, kernel rows 16-18

9381 - R, RB, VT3 Regardage VieldGard VT RATING 1 2 3 4 5 6 7 8 Seedling Vigor Stalk Quality Root Strength Test Weight Drydown Excellent yield for maturity Medium-tall plant height

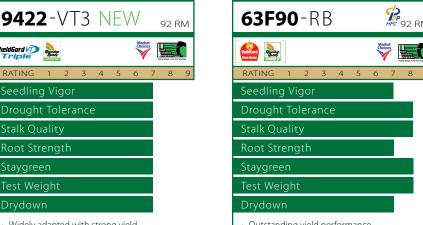
- Consistent semi-flex ear, kernel rows 12-16

Hybrid Corn • Relative Maturity 88-97 day

- Very good stalk and root strength
- Exemplary test weight
- Suggested 28,000-32,000 plants per acre

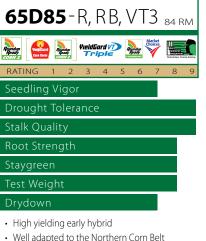


- · Outstanding stalk, roots and test weight • Very good ear flex, deep kernel rows 16-18
- The right choice for no-till operations
- Excellent drought tolerance allows for southern movement as an early hybrid
- Industry approved for High Fermentable Corn/High Extractable Starch





- Unique genetic background provides for excellent yields Features solid agronomics with excellent
- drydown and plant health Medium-tall hybrid, semi-flex ear
- · Excellent root and stalk strength



- · High yielding early hybrid
- Early to tassel with fast grain set
- Medium plant height
- Features excellent stalk and root strength
- 14-16 kernels per row
- Very good drought tolerance



- performance
- Impressive drought tolerance
- Exceptional stalk quality and root strength
- · Girthy flex ear, with very good late season plant health
- Highly adaptable across soil types, including
- Trait options available

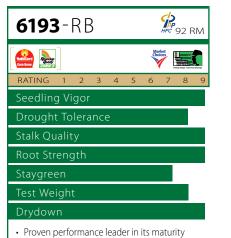


Features strong root and stalk ratings

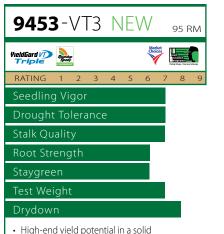
Semi-flex ear type, kernel rows 16-20

Broadly adapted east and west

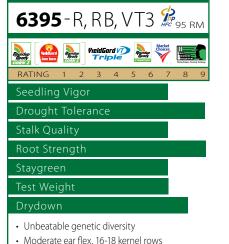
· Medium plant and ear height



- Rapid emergence, strong early vigor in cool soils and high residue environments
- Strong glex ear gives ability to adapt to lower populations Excellent choice for no-till
- · Soils: sandy loam to clay loam



- · High-end yield potential in a solid performing hybrid
- Early flowering for maturity
- Excellent ear girth with desirable drydown Medium plant and ear height
- Semi-flex ear, kernel rows 16-18



Impressive drought tolerance

and the Dakotas

Broadly adapted across soil types

Strong performing hybrid for MN, WI

Excellent root and very good stalk quality

9422-VT3 NEW

VieldGard VT Rounday

Seedling Vigor

taygreen

Test Weight

performance

Tall plant height

Drought Tolerance

Widely adapted with strong yield

• Girthy semi-flex ear, kernel rows 18-20

• Beat 63F90 by 4+bu. in 59 replicated trials

Flowers early for maturity

• Tolerates lower populations

Very good emergence and seedling growth
 Constant del control

- · Great yield potential Girthy semi-flex ear, 16-18 kernels

VieldGard VT Roundup

Triple Roody

eedling Vigor

Stalk Quality

Test Weight

oot Strength

- Very good root, stalk and test weight
 - Medium plant and ear height



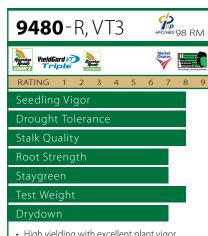
RATING 1 2 3 4 5 6 7 8

FC 92 RM

Hybrid Corn • Relative Maturity 97-109 day



- Performance driven hybrid with outstanding yield potential
- Flex ear, kernel rows 18-20
- Fall appearance is good
- Very good roots and stalks
- Solid overall disease package with very good staygreen



- High yielding with excellent plant vigor Medium plant and ear height
- Semi-flex ear type, 16-18 kernels per row Very good test weight and grain quality
- Good staygreen
- Several trait options available



Excellent stalks, very good roots

Available in several trait options

vield potential

plant vigor

· Delivers good emergence and early

Semi-flex ear type, 16-18 kernel rows

Medium plant and ear height

Very good stalk and root rating

· Late season health is very good

Semi-flex ear type, kernel rows 16-18

Outstanding late season intactness

VieldGard Roundup Corn Borer CORN 2 Market RATING 1 2 3 4 5 6 7 8 Seedling Vigor Drought Tolerance Stalk Quality Root Strength Staygreen Test Weight Drydown · Solid and dependable yields Widely adapted for the Western and Eastern Corn Belt

101 RM

6602-RB

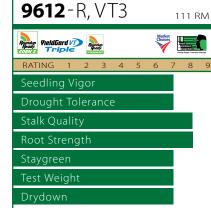
- Starts strong with favorable early season growth
- Solid semi-flex ear type, kernel rows 16-18
- · Unbeatable drought and heat tolerance

Hybrid Corn • Relative Maturity 110-117 day

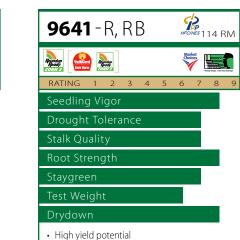


Test Weight

- · Outstanding yield potential Very good roots and stalks
- Excellent fall appearance and intactness



- · All new and awesome Available in VT3 technology
- Very good stalk and root strength
- Tall plant height with high ear placement
- Fixed ear type requires maximum populations to capture outstanding yield potential
- Kernel rows 14-16

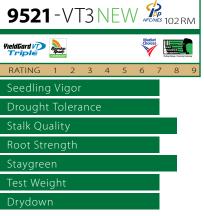


- Rapid drydown
- · Consistent ear size
- · Very good plant health



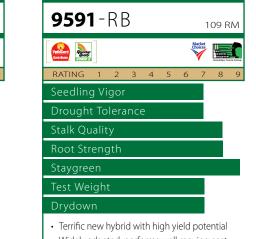


- Consistent ear size, 14-18 kernel rows
- Fixed ear type requiring higher populations to maximize yield
- Good stalk and root ratings
- Strong response to high yield environments

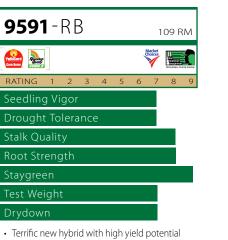


- Medium height hybrid that features excellent yield potential for maturity Good ratings for root and stalk strength
- Semi-flex ear, kernels rows 16-18
- Very good disease package
- Widely adapted hybrid across a broad range of environments





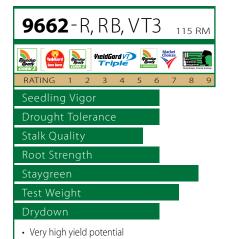
- - Produces an excellent semi-flex ear, 16-18 kernel rows Medium-tall plant with superior staygreen
- Very good root and stalk ratings



- · Widely adapted, performs well moving east



- · Top-end yield potential Medium-height hybrid produces large girthy ear
- Good root and stalk strength White cob, semi-flex ear
- Kernel rows 16-18
- Wide area of adaptation



- Improved staygreen over 9641
- Adapted over a wide range of geographies



9640-VT3 NEW _{113 RM}

RATING 1 2 3 4 5 6 7 8 9

VieldGard VT) Roody Roody

Seedling Vigor

Stalk Quality

Staygreen

Test Weight

environments

Race horse yield potential

Medium-short plant height

Semi-flex ear, 14-18 kernel rows

Best performance in high management

Wide area of adaptation

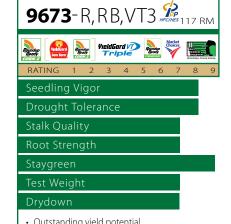
· Good early plant vigor

Excellent agronomics

Moderate semi-flex ear

· Deep 16-18 kernel rows

· Superb range across the south

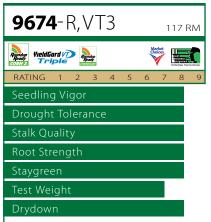




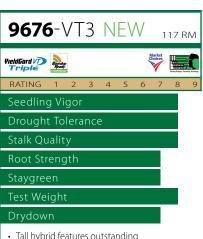
- Tremendous staygreer
- Exceptional ear flex
- Robust hybrid

0

Hybrid Corn • Relative Maturity 117-120 day



- Outstanding yield potential
- · Tremendous staygreen Exceptional ear flex
- Robust hybrid
- Improved stalk strength over 9673RB

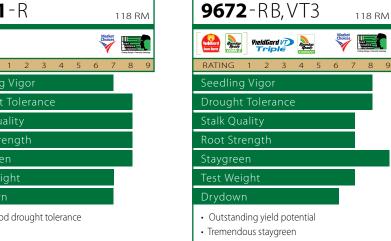


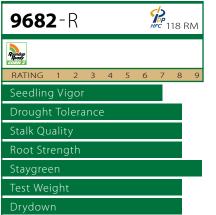
- Tall hybrid features outstanding yield potential
- Medium ear height

9690-VT3

- Semi-flex ear, 16-18 kernel rows
- Good late season health and intactness
- · Very good root for standability







- Excellent silage hybrid • Performs best under irrigation
- High quality, dual-type hybrid

VieldGard VI)

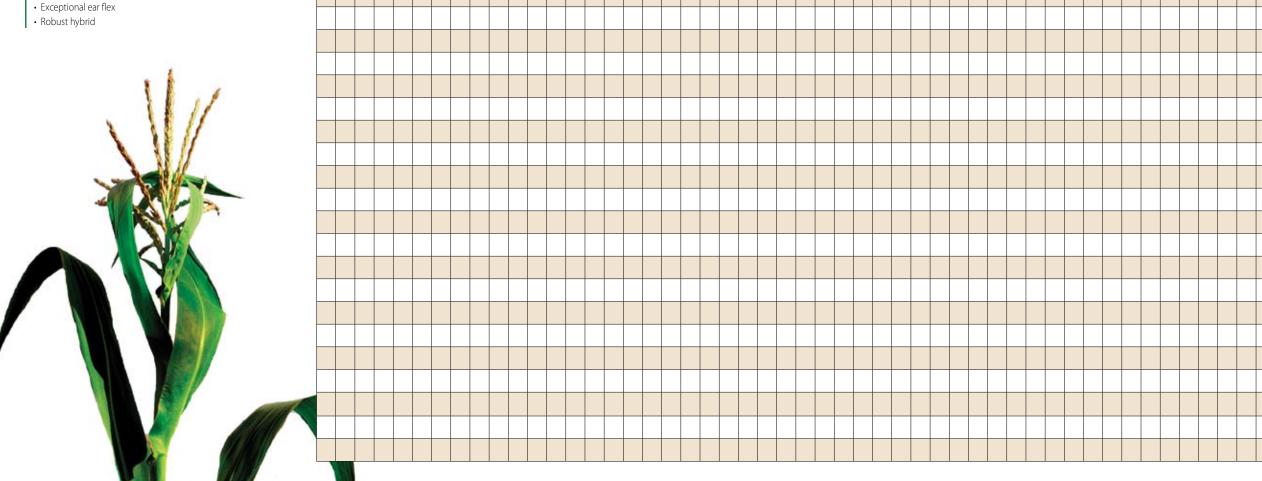
Triple

Ready RATING 1 2 3 4 5 6 7 8 9 Seedling Vigor Stalk Quality Test Weight Very good test weight Good silage potential

• Great staygreen



Staygreen Test Weight Drydown High yield potential Very good test weight Good stalk and root strength · Adapted to southern growing conditions



Field Notes



Additional hybrids featuring Herculex® will be offered as we evaluate the best fit for this technology.

119 RM

Plant Population

Row Width	Row Length = To 1/1000 Acre
15"	34′10″
20"	26′2″
22"	23′9″
24"	21′10″
30"	17′5″
32"	16′4″
36"	14'6"
38"	13′9″

Count the number of corn stalks in a length of row equal to 1/1000 of an acre. Make at least three counts at separate locations. Figure the average of the total counts then multiply by 1,000.



		Value-	added Trai	t Options				Plantin	g						Р	'lan	t Gro	wth			Har	vest	Ма	rket
Integra Hybrid Corn Base Genetics		Majories Possession Control Co	Separation of the separation o	WeldGard V7	WeldGard (17) (18) (18) (18) (18) (18) (18) (18) (18	RM	GDUs to Silk	GDUs to Black Layer	Yield High Pop.	Yield Low Pop.	Emergence	Seedling Vigor	Drought Tolerance	Stalk Quality	Root Strength	Staygreen	Plant Height	Ear Placement	Ear Type	Late Season Plant Health	Test Weight	Drydown	HFC 👬	HES SH
6780	R					80	1040	1930	9	7	8	7	8	7	8	7	М	ML	SF	7	9	9		
9311	R		RBC			81	1171	2080	9	7	7	7	7	7	7	7	М	М	FX	7	7	7		
6683	R	RB				83	1070	1955	8	6	7	7	7	7	7	9	MT	М	SF	8	9	7		
9332 NEW	R					83	1160	2040	7	8	7	7	8	7	7	8	М	М	SF	8	7	7		
6584	R	RB				84	1100	2040	8	7	7	7	7	8	9	8	MT	М	SF	8	7	8	✓	
65D85	R	RB			VT3	84	1130	2050	8	6	7	7	9	9	8	8	М	М	SF	8	8	7		
6385	R				VT3	85	1090	2060	8	8	8	8	8	9	8	8	MT	М	SF	8	7	8	✓	
9361	R	RB			VT3	86	1200	2185	7	8	7	7	7	8	8	7	М	М	SF	7	7	7		
9381	R	RB			VT3	88	1160	2170	7	8	8	8	8	8	8	7	MT	М	SF	7	7	7		
6390	R					90	1165	2180	7	8	7	7	8	8	7	8	М	М	FL	7	8	7	✓	✓
9422 NEW					VT3	92	1239	2335	7	9	7	7	7	7	7	7	Т	МН	SF	7	7	7		
63F90		RB				92	1165	2185	7	8	7	7	8	8	7	8	М	М	FL	7	8	7	✓	✓
6193		RB				92	1180	2195	8	9	9	9	8	9	9	7	М	М	FL	8	8	9	✓	
9453 NEW					VT3	95	1235	2360	7	8	7	7	7	7	6	6	М	М	SF	6	7	8		
6395	R	RB			VT3	95	1210	2275	9	8	8	7	9	7	9	7	МТ	МН	SF	8	7	8	✓	✓
9470 NEW					VT3	97	1237	2455	7	8	7	7	7	8	8	6	М	М	SF	7	7	7		
9472 NEW	R				VT3	97	1245	2450	7	8	7	7	7	8	7	7	М	М	FX	7	7	7		
9480	R				VT3	98	1274	2464	7	8	9	8	8	8	7	7	М	М	SF	7	8	7		
9511		RB			VT3	101	1286	2509	7	8	7	7	7	9	9	9	М	М	SF	9	7	7		
6602		RB				101	1265	2400	6	8	7	8	9	8	9	8	МТ	М	SF	7	8	8		
9520			RBC			102	1299	2554	8	6	7	7	7	7	7	7	Т	Н	FX	7	7	7		
9521 NEW					VT3	102	1238	-	8	7	7	7	7	8	7	8	М	М	SF	8	7	7		
9530	R				VT3	103	1305	2576	6	8	7	7	8	8	8	8	М	М	SF	7	7	7		

All agronomic characteristics and ratings may vary with growing conditions and environment. Ratings are approximate and should not be considered as absolute. Ratings on new hybrids are based on limited data and may change as more data are collected. Extreme conditions may adversely affect hybrid performance. The relative maturity of one hybrid to another remains reasonably constant; however, the actual number of calendar days from seeding to physiological maturity varies with date of planting, planting rate, temperature, day length, soil fertility and other environmental factors.







M = Medium L = LatePlant Height T = Tall

M = Medium

Ear Placement H = High

M = Medium

L = LowEar Type

FL = FlexSF = Semi-flex

FX = Fixed

S = Short

(EY				H	/brid C	orn /	\gr <u>c</u>	nor	mic	Ch	nar <u>a</u>	act	er	ist	ics								
alue-added Trait Technology			Value	-added Trai					Plantin							nt Gro	owth			Harves		Marl	(e
oundup Ready* Corn 2			Market	Choices	Obdices C Obdices	Narket Choices			iantin	9					- Iui	lear	JVV (11			i iai v		Ividir	
В			≥6/	26/		Tomal a			_										aft				
oundup Ready® Corn 2 vith YieldGard® Corn Borer	Integra Hybrid			Many figure from the	Agendy Agendy	Market Franch Police (Person Police)			:k Laye	Pop.	<u>م</u>	or	erance		<u></u>		Jt		lant He				
ВС	Corn		d Second	a de la companya de l	₩.Ee	<u> </u>		Silk	Blac	h P	A P	Vig	일	ality.	ngt n	ght	me		on F	ght	_	1	
oundup Ready® Corn 2	Base	Powerly Powerly	Varidand Om berr	The state of the s	VieldGard V7 Rootworm/RRZ	VieldGard VT) Triple		GDUs to	GDUs to Black Layer	Yield High I	Yield Low Pop.	Seedling Vigor	Drought Tolerance	Stalk Quality	Koot Strength Stavareen	Plant Height	Ear Placement	Ear Type	Late Season Plant Health	Test Weight			HE
T VieldGard 🗥 🛼	Genetics			ت ا	% %	5	RM				-											I	_
eldGard®VT Rootworm/RR2	9591		RB				109	1319	2630		8 7	7		-	8 9		М	SF	8	7	7		
S VieldGard 🗥	9602	R	RB			VT3	110	1328	2780		6 8	8		8	8 8	М	М	FX	-	6	6		
VieldGard 🕜 🚂	9612	R				VT3	111	1298	2730	6	8 7	7	7	8	8 7	Т	Н	FX	7	7	7		
ket Options	9640 NEW					VT3	113	1358	2770	7	8 7	7	7	6	7 6	MS	М	SF	6	7	7		
P HFC	9641	R	RB				114	1335	NR	8	8 7	8	7	7	8 7	Т	М	FL	-	6	8		
essor Preferred High Fermentable Corn	9650 NEW					VT3	115	1374	2850	7	8 7	7	7	7	7 6	М	М	SF	7	7	7		
	9651 NEW					VT3	116	1400	-	8	7 7	7	7	7	7 7	MT	МН	SF	7	7	7		
SP HES	9662	R	RB			VT3	115	1318	2820	8	6 6	6	6	5	6 8	М	М	FL	-	7	6		Ī
cessor Preferred High Extractable Starch	9673	R	RB			VT3	117	1347	NR	8	8 7	8	8	7	7 9	MT	М	FL	-	7	7		~
wardship Requirements	9674	R				VT3	117	1347	NR	8	8 8	8	8	8	8 8	MT	М	FL	-	7	8		Ī
ket Choice	9676 NEW					VT3	117	1345	_	8	8 7	7		7	8 7	Т							Ī
Total and the state of the stat	9671	R					118	1396	NR	8		7			8 8	Т	MT	SF	-	7	7		-
ings	9672		RB			VT3	118	1347	NR		7 7	8			7 9		М	FL	-	7	6		
= Excellent	9682	R					118	1441	NR	8	6 7	7	8	8	8 9	Т	MT	FL	-	8	8		Ī
= Very Good	9690					VT3	119	1372	2940	7	5 6	6			8 8	MT	М	FL	-	6	7		
= Good = Fair	9701					VT3	120	1450	2980	6	8 7	8	7	8	8 8	Т	MT	FL	-	8	7		f
Poor	All agronomic cha	racteristic	s and ratings ma	y vary with growi	ng conditions and										_				e base		ited da	ata and	m
wer Date	change as more da from seeding to pl	ta are coll	ected. Extreme	conditions may a	dversely affect hy	brid performa	nce. The r	elative ma	aturity of o	ne hyb	orid to a	nother	remai	ins rea									





	Popu					
Average Plant Spacing in	Pla		Acre By thousar		dth	Average Plants Per
Inches	20"	22"	30"	36"	38"	50' Row
5.5	57.0	51.8	38.0	31.7	30.0	109
5.7	55.0	50.0	36.7	30.6	29.0	105
6.0	52.3	47.5	34.8	29.0	27.5	100
6.2	50.6	46.0	33.7	28.1	26.6	97
6.5	48.3	43.9	32.2	26.8	25.4	92
6.8	46.1	41.9	30.7	25.6	24.3	88
7.0	44.8	40.7	29.9	24.9	23.6	86
7.3	43.0	39.1	28.6	23.9	22.6	82
7.5	41.8	38.0	27.9	23.2	22.0	80
7.8	40.2	36.6	26.8	22.3	21.2	77
8.0	39.2	35.6	26.1	21.8	20.6	75
8.3	37.8	34.4	25.2	21.0	19.9	72
8.5	36.9	33.5	24.6	20.5	19.4	71
8.8	35.6	32.4	23.8	19.8	18.8	68
9.0	34.8	31.7	23.2	19.4	18.3	67
9.3	33.7	30.7	22.5	18.7	17.7	65
9.5	33.0	30.0	22.0	18.3	17.4	63
10.0	31.4	28.5	20.9	17.4	16.5	60
10.3	30.4	27.7	20.3	16.9	16.0	58
10.5	29.9	27.2	19.9	16.6	15.7	57
10.7	29.3	26.6	19.5	16.3	15.4	56
11.0	28.5	25.9	19.0	15.8	15.0	55
11.5	27.3	24.8	18.2	15.2	14.4	52
12.0	26.1	23.8	17.4	14.5	13.8	50
12.5	25.1	22.8	16.7	13.9	13.2	48
13.0	24.1	21.9	16.1	13.4	12.7	46
13.5	23.2	21.1	15.5	12.9	12.2	44
14.0	22.4	20.4	14.9	12.4	11.8	43

Hybrid Corn Plant

ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS.

15.0

Growers should refer to the Technology Use Guide for information on crop stewardship regarding the potential movement of pollen to neighboring crops. Follow IRM and Grain Marketing Requirements.

20.9 19.0 13.9 11.6 11.0 40

"-" (insufficient data) NR (not rated)

STP Leafy Silage Hybrid Advantage

Integra's STP leafy silage hybrids are bred for high quality forage tonnage and whole plant digestibility of stalks and leaves. STP hybrids have tall, flexible stalks, thinner stalk rinds, wider leaves, increased number of leaves (9-12) above the ear and lower ear placement for better standability. Integra's STP leafy silage hybrids have softer kernels and greater levels of digestible starch for increased milk production, compared to dual-type grain hybrids. Selected STP hybrids have a soft, white cob trait for greater palatability and digestibility. STP leafy silage corn hybrids have slow grain filling periods, allowing the producer a longer opportunity to harvest at optimum moisture levels. Trials have shown that STP leafy hybrids have a 2 1/2 times longer window of harvest compared to dual-purpose hybrids. STP hybrids are highly adaptable across soil types and have an excellent agronomic package; drought tolerance, staygreen and root strength. Compared to grain hybrids, STP leafy hybrids produce twice the amount of carbohydrates above the ear.

What's the difference?

Grain (dual-type) Hybrids

- Hard kernel texture and high test weight
- Strong stalks for standability
- High ear placement for easy grain harvest
- STP Leafy Silage Hybrids
- Soft kernel with moderate test weight
- Flexible stalks with thinner stalk rinds
- Medium ear placement
- Fast kernel dry down for early grain harvest Slow grain filling period to open harvest window

Leafy Silage • Relative Maturity 85-108 day



Vhole Plant Digestibility

ilage Quality

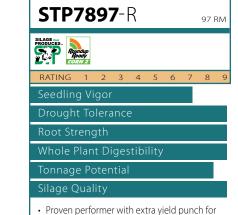
- Smart choice for dairy and beef producers that demand quality and tonnage
- Excellent whole plant digestability Moderate flex ear, 16-18 kernel rows
- Tall plant height, 10 leaves above the ear
- Retains kernel softness for a very long harvest window
- Performs well across soil types
- Recommended harvest populations 26,000 to 28,000 plants per acre



- with 9-10 leaves above the ear 16-18 rows of soft textured kernels with
- exceptional whole plant digestibility Very good NDF digestibility ratings
- Extremely good stress tolerance
- Delivers the STP characteristic of slow drydown for an extended harvest window
- Very good choice for dairy silage producers



- Tall for maturity with high tonnage potential Excellent drought tolerance
- Flex ear, that produces 9-10 leaves above
- Very good standability
- · Medium-low ear placement



High NDF scores

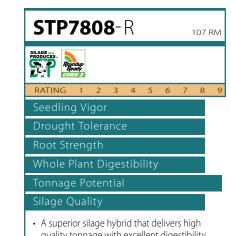
high quality tonnage and excellent whole

plant digestibility

- Medium-tall dark green leafy hybrid with flex ear type 9-10 leaves above the ear
- Performs best at harvest populations of 28,000 plants per acre
- Unbeatable drought tolerance and superior root strength



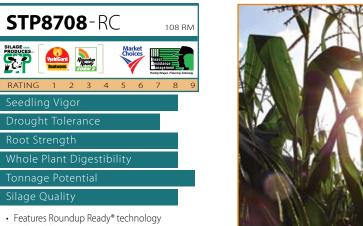
- Great drought-stress tolerance
- Good staygreen and slow stalk drydown extends window of harvest



- quality tonnage with excellent digestibility Robust, tall dark green foliage, 10-11 leaves
- above the ear; flex ear type Features a premium white cob for increased
- palatability and digestibility Outstanding root strength and desirable
- standability

28,000 plants per acre

Slow drydown extends harvest window Adapts best to harvest populations of



RATING 1 2 3 4 5 6 7 8 edling Vigor

ilage Quality

- with YieldGard® Root Worm protection
- Tall leafy hybrid that produces excellent tonnage with high digestibility
- Excellent staygreen that extends harvest window
- Medium ear height
- · Good ear flex with 18-20 kernels
- Very good root strength
- Adapts best to harvest populations of 28,000-30,000 plants per acre

	Т	raits	/ Plant	4gr	afy on	Sila om	age nic C	hara	acte	Corn ristic	S			Po	erforma	nco
	- 11	aits	Fiall	1119				Plant Growth						1 CHOITIAN		
Leafy Silage Hybrid Base Genetics	Section of the sectio	Model es.	Relative Maturity	Seedling Vigor	Drought Tolerance	Root Strength	Plant Height	Ear Placement	Ear Type	Leaves Above Ear	Kernel Texture	Cob Color	Kernel Rows	Whole Plant Digestibility	Tonnage Potential (for Maturity)	Silage Quality (for leafy silage hybrids)
STP8785	R		85	9	8	8	Т	ML	FL	9-10	2	Р	16-18	8	9	9
STP78D88	R		88	8	9	8	MT	ML	SF	9-10	1	R	16-18	8	8	8
STP7888 NEW	Conv	entional	88	8	9	8	MT	ML	FL	9-10	1	R	16-18	8	8	8
STP7897	R		97	7	9	9	MT	ML	FL	9-10	1	W	16-18	9	8	9
STP8705 NEW	R		105	7	8	8	Т	ML	FL	10-11	1	W	18-20	8	9	9
STP7808	R		107	8	8	8	Т	М	FL	10-11	1	W	14	8	9	8
STP8708		RC	108	8	7	8	Т	М	FL	9-11	1	Р	18-20	8	9	8

All agronomic characteristics and ratings may vary with growing conditions and environment. Ratings are approximate and should not be considered as absolute. Ratings on new hybrids are based on limited data and may change as more data are collected. Extreme conditions may adversely affect hybrid performance. The relative maturity of one hybrid to another remains reasonably constant; however, the actual number of calendar days from seeding to physiological maturity varies with date of planting, planting rate, temperature, day length, soil fertility and other environmental factors.





Value-added Trait Technology SILAGE PRODUCES. Silage that ProducesTM Roundup Ready® Corn 2 VieldGard Roundup Rootworm CORN 2 YieldGard® Rootworm Stewardship Requirements Market Choice Ratings 8-9 = Excellent 6-7 = Very Good 4-5 = Good2-3 = Fair1 = PoorPlant Height T = TallM = MediumS = Short**Ear Placement** H = HighM = MediumL = LowEar Type FL = FlexSF = Semi-flexFX = Fixed**Kernel Texture** 1 = Excellent (Soft) 5 = Poor (Hard) Cob Color

W= White P= Pink

R= Red

Number of 80,000 Kernel Units Needed Acres Per **Total Acres Planted** Unit 80,000 15,000 16,000 20 25 17,000 18,000 19,000 32 20,000 21,000 35 22,000 23,000 38 24,000 25,000 27,000 53 29,000



Since the STP silage hybrids have a high yield potential, make sure you select your best fields for STP hybrids to generate the highest potential yields.

50

60

63

69

82

88

94

107

98

109

128

149

53

60

90

90

100

88

100

125

8800 RATING 1 2 3 4 5 6 7 8 ersistence (regrowth)

Fall Dormancy 8.0

Our Integra brand alfalfas are protected with one of the most effective and reliable seed treatment products available. The protection is provided by Apron® XL LS (mefenoxam) and

The Influence of Manifest™

In addition to Apron® XL LS, a clay based pre-inoculant (Dormal®) containing the Rhizobium Sinorhizobium meliloti is utilized as a seed treatment to promote establishment of nitrogen fixing nodules.

The Manifest™ Seed Treatment System found on our Integra brand alfalfas includes the addition of a proprietary and patented plant extract that can promote plant health and growth, especially when the plants are under stress such as temperature extremes, soil moisture, soil strength, and soil chemistry.

Field tests have demonstrated that a stronger, healthier seedling will have a better opportunity to achieve maximum yield potential.

The components of the Manifest™ Seed Treatment System were selected with the intention of providing the best protection and value for the Integra brand seed in most crop situations.

Due to different cropping practices the Mainifest™ Treatment System may vary as described above to meet the needs of our customers.

Alfalfa • Fall Dormancy 3.0-9.0

830	0				Fall Dormancy 3.0 Winter Survival 1.3									
RATING	1	2	3	4	5	6	7	8	9					
Tonnag	e Po	oter	ntia	I										
Persistence (regrowth)														
Forage	Qua	ality	/											
Plant Di	isea	se f	Resi	staı	nce									
Insect Resistance														
High to:	nnao	e co	mhi	ned :	with	exce	llent							

- winter hardiness 8300 sets the standard for persistence and
- fast recovery after cutting Highly resistant to all six major alfalfa diseases;
- Wisconsin DRI of 30 out of 30 Reach your peak with outstanding relative forage quality and milk lbs./acre
- A superior alfalfa for the serious dairyman

840	0			Fall Dormancy 4.0 Winter Survival 2.2									
RATING	1	2	3	4	5	6	7	8	9				
Tonnag	e Po	oter	ntia	l									
Persistence (regrowth)													
Forage Quality													
Plant Disease Resistance													
Insect Resistance													

- 8400 delivers yield, persistence and quality in one alfalfa variety
- Excellent yield performance
- Ideal choice for maximum tonnage and rapid regrowth after cutting
- Highly resistant to all six major alfalfa diseases; Wisconsin DRI of 30 out of 30
- · Maintains high forage quality under aggressive harvest schedules

				Fa	all Do	orma	incy	6.0
	2	3	4	5	6	7	8	9
٥,	oter	ntia						
:6	e (re	gro	wth	1)				
ةد	ality	/						
. 1	املمئي	ام ما ما		ما الأما			ta	

- Exceptional yield and good forage quality Exceptional stand persistence
- Excellent choice for forage production in semi-dormant regions of the U.S.
- Fast recovery after cutting • Excellent leaf retention

8600

• Excellent early seedling vigor

	Plant Disease Resistance
	Insect Resistance
	· High resistance to spotted alfalfa aphid and blue alfalfa aphid, plus numerous other ins
L	 Multifoliate trait for very good forage quali
	Excellent stand persistence and early

Excellent leaf retention

seedling vigor

8900			Fa	II Do	rma	incy	9.0				
RATING 1	2 3	4	5	6	7	8	9				
Persistence (regrowth)											
Forage Quality											
Plant Diseas	se Resi	star	nce								
Insect Resis	tance										
Good resistarGood plant dExcellent starseedling vigo	lisease re	sista	nce		ly						

- Fast recovery after cutting
- Excellent choice for forage production
- in the non-dormant regions in the U.S.



	Alfalfa Agronomic Characteristics														
							Majo		lfa Di: stanc	sease e			Ins Resist	ect tance	
Variety	Fall Dormancy	Winter Survival	Tonnage Potential	Persistence	Forage Quality	Bacterial Wilt	Verticillium Wilt	Fusarium Wilt	Anthracnose	Phytophthora Root Rot	Aphanomyces Root Rot	Pea Aphid	Spotted Alfalfa Aphid	Potato Leafhopper	Stem Nematode
8300	3.0	1.3	9	8.8	8.3	HR	HR	HR	HR	HR	HR	R	R	S	-
8400	4.0	2.2	9	8.8	8.0	HR	HR	HR	HR	HR	HR	R	-	-	R
8600	6.0	-	9	9.0	7.0	-	MR	R	R	R	HR	R	HR	-	R
8800	8.0	-	-	9.0	7.0	HR	HR	HR	HR	HR	HR	HR	R	-	R
8900	9.0	-	-	9.0	9.0	R	R	HR	HR	MR	HR	HR	HR	-	R

All agronomic characteristics and ratings may vary with growing conditions and environment. Ratings are approximate and should not be considered as absolute.

NE Y	
Ratings	
8-9 = Excel	llent
6-7 = Very	Good
4-5 = Good	d
2-3 = Fair	
1 = Poor	
Fall Dorm	ancy & Winter Survival
1 = Most	
9 = Least	

Level of Resistance

0-5% S = Susceptible

6-14% LR = Low Resistance 15-30% MR = Moderate Resistance

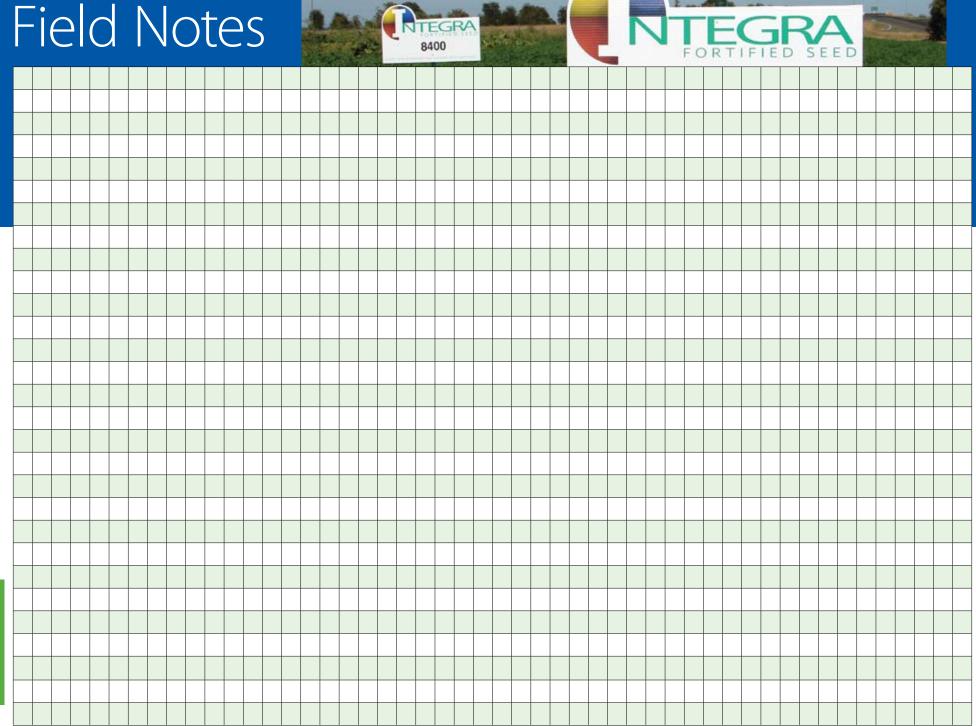
31-50% R = Resistance > 50% HR = High Resistance

Insufficient data (-)

A word about Roundup Ready® Alfalfa:

Integra[™] also has a great lineup of Roundup Ready® varieties. We look forward to offering you these products as soon as this valuable technology is once again made available to farmers and dairymen in the United States.





SOYBEANS



Integra™ Soybeans

The Manifest™ Seed Treatment System found on our Integra brand soybeans includes the addition of a proprietary and patented plant extract that can promote plant health and growth, especially when the plants are under stress such as temperature extremes, soil moisture, soil strength, and soil chemistry.

Field tests have demonstrated that a stronger, healthier seedling will have a better opportunity to

Intentional Selection

The components of the Manifest™ Seed Treatment System were selected with the intention of providing the best protection and value for the Integra brand seed in most crop situations.

Due to different cropping practices the Mainifest™ Treatment System may vary as described above to meet the needs of our customers.

No-Till Soybean Varieties



Integra's No-Till logo identifies soybean varieties that are proven to excel in reduced tillage systems. These varieties have strong agronomics that are suited to no-till situations.

Integra Brand Soybean Numbering System

77100F

"7" denotes soybean Note: For varieties introduced prior to 2007 an "8" indicates conventional and "9" a soybean with trait options

These numbers denote relative maturity*. In this example, the relative maturity is 1.00

This number denotes the first commerical year, e.g.: "7" introduced in 2007

Denotes trait R = Roundup Ready®

S = STSN = SCN

*The relative maturity ratings on new varieties are based on limited data and may change as more data are collected. However, the variety name will stay the same.

97001-R 0.03 RM RATING 1 2 3 4 5 6 7 8 9

SOYBEANS • Relative Maturity 0.03-0.20

0.09 RM

Brown Stem Rot (not rated)

- Great emergence, solid or rows
- · Bushy canopy with medium plant height
- Good SWM scores
- Excellent IDC and standability

7700)2-	R				0.0)4 R	M
Roundup Roady SOTHEAMS								
RATING	1 2	2 3	4	5	6	7	8	9
Emerger	nce							
Standab	illity							
Iron Def	icien	cy Ch	llor	osis				
Dhytanh	A 14	- D	± D.					

Brown Stem Rot (not rated)

• Excellent high yielding bean for the valley

- Features excellent IDC and WM tolerance
- Rps1k resistance to PRR
- Very good drought and stress tolerance

7900)4-	R	NE	- - -	/	0.	04 F	RM
Roundup Roady							NO	
RATING	1 2	3	4	5	6	7	8	9
Emergei	nce							
Standab	illity							
Iron Def	icienc	y Ch	nlor	osis				
Phytoph	nthora	Roc	ot Ro	ot				

- · Fantastic Yield for Maturity
- Out yielded ALL early varieties in northern trials

Brown Stem Rot (not rated)

- Small seed for great value
- Excellent IDC scores
- · Visible heavy pod clusters
- Shows strong branching that closes rows quickly
- · Can go east or west of I-29 corridor

Roundup Ready SOYSEANS								NO				
rating	1	2	3	4	5	6	7	8	9			
Emergence												
Standabillity												
Iron Deficiency Chlorosis												
Phytophthora Root Rot												
Brown Stem Rot												
Sclerotinia White Mold												
One of the contract of	goo							1S				

0.07 RM

97007-RS

- Strong IDC, WM and BSR scores
- Very good field tolerance to Phytophthora

ROUNDUP READY 2 YIELD:

TAKING SOYBEAN YIELD TO A HIGHER LEVEL

Roundup Ready 2 Yield™ is taking soybeans to a whole new level through advanced technology and breeding:

- The next generation of Roundup Ready® delivering top-end yield potential
- Four years of research demonstrates a 7-11% yield increase over Roundup Ready*
- Same simple, dependable weed control you expect from Roundup Ready soybeans



*Roundup Ready 2 Yield soybeans yield 7% to 11% higher than Roundup Ready soybeans based on 73 Monsanto field trials (17-20 per year) from 2004-2007. Four-year average advantage for Roundup Ready 2 Yield = 8.63%, with a 95% confidence interval that growers should experience between 6.8% and 10.5% advantage from Roundup Ready 2 Yield Individual results may vary, and performance may vary from location to location and from year to year.

Roundup Ready 2 Yield is not approved or available for sale or use, and Monsanto Company does not promote or authorize promotion of sale or use. Any product produced from a Roundup Ready 2 Yield soybean crop or seed may only be used, exported to, processed or sold in countries where regulatory approvals have been granted. It is a violation of national and international law to move material containing biotech traits across boundaries into nation where import is not permitted

Roundup Ready® Soybean Technology



Get more profit potential from every bean. The Roundup Ready® Soybean system offers a 2.6 bu/ac yield advantage compared to conventional herbicide programs. Plus, WeatherMAX™ herbicide backed by Roundup Ready Rewards® adds value over other programs. That all adds up to the potential to make over \$20/ac more with Roundup Ready®.

REAP THE BENEFITS OF PLANTING NEW SOYBEAN SEED:

- Highest quality and highest yielding product vs. bin-run
- Access to the most elite germplasm
- Average loss of 10 to 15 percent at harvest for bin-run seed
- Bin-run planting rates are generally 15 percent higher than new certified seed
- Dealer agronomic support before and after the sale
- Risk management benefits of Roundup Rewards® (over \$600 million paid to growers since 1997)
- Royalties provide research and development of new traits and higher yielding germplasm
- Seed companies and Monsanto are committed to our customers' success.

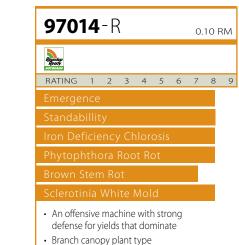
97009-R NFW RATING 1 2 3 4 5 6 7 8 9

- High yield potential and excellent emergence
- Medium-tall in height
- Good defensive package including field tolerance to PRR, excellent standability. BSR and SWM scores
- Replacement for 95009R

95009-R 0.09 RM RATING 1 2 3 4 5 6 7 8 9 Brown Stem Rot (not rated)

Medium –tall offensive/defensive early bean

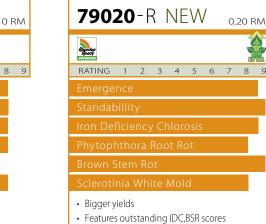
- Great emergence and IDC score • Rps1k PRR resistancePRR
- To be replaced with 97009R



Strong emergence

Impressive IDC

Rps1c multi-race PRR resistance



- Excellent field tolerance to PRR
- · Tailor made for Grand Forks area
- Moves south easily for early beet
- campaign

Brown Stem Rot (not rated)

- Great all season standabilty
- Moves east to west
- Not recommended for high pH soils Lateral branches on lower 1/3 of plant

79080-R NEW

- Rps1k PRR resistance
- Not suited for solid seeding keep 14"rows or greater



- · Consistent high yielder for maturity
- Very good IDC
- Outvielded NK06-L6 +5.4 Bushels
- Better defense than 96062R
- Lateral branching points upward for narrow row adaptability
- · Goes east of I-29 extremely well

79060-RN NEW 060 RM Roundup Ready sorecus

RATING 1 2 3 4 5 6 7 8 9

Brown Stem Rot (not rated)

- Features the complete package.. SCN, Phytopthora, IDC, and Powdery Mildew tolerance
- Very good IDC
- Highest yielding SCN in maturity
- High protein and oil

96062-R 0.62 RM Roundup Ready sorezaus RATING 1 2 3 4 5 6 7 8 9

Brown Stem Rot (not rated)

- · Very high yielding bean with proven performance
- Banana pod, good clustering
- Excellent IDC
- · Tall canopy type

SOYBEANS • Relative Maturity 1.20-1.90



Brown Stem Rot (not rated)

- "Dominator" in SE North Dakota
- Requires 14" rows and greater in high moisture environments
- Upright type plant
- Out yielded PI 91M13 by +5.3 bushels and NK 12-B9 by +7 bushels
- Goes north and south well in 1.0 to 1.5 zone

7914	ŀO	- F	RN	١	٧E	W	1.4	40 F	RM
Roundup Ready SOTECANS								NO.	
rating	1	2	3	4	5	6	7	8	ç
Emerger	nce								
Standab	illit	у							

Brown Stem Rot (not rated)

- · Very... Very good yields with extremely good cyst protection
- Med to upright bush plant type
- Excellent IDC tolerance and Rps1k PRR resistance
- Performs well north and south in 1.0 to 1.5 zones



Brown Stem Rot (not rated)

Strong visual yield expression

productive environments

uniformity across the top

Very good SWM tolerance

and Watertown, SD • +8.1 Bushel over PI 91M60

Good IDC

Delivers top-end yields in high

Terrific lateral branching, excellent

Outstanding performance in Brookings

Roundup Ready

• Features high yield potential with cyst nematode resistance

97160-RN

1.60 RM

Excellent emergence and standability

RATING 1 2 3 4 5 6 7 8 9

 Strong defensive package including Rps1k PRR resistance

Brown Stem Rot (not rated)

Tall plant with bushy canopy

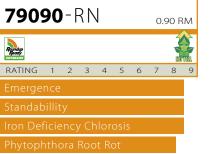


- Tough and rugged with YIELD
- Blows Pioneer 90M91 out of the picture, COMPLETELY!
- True 0.8 maturity with 1.0 yields!
- Less than 14" rows for best standabilty Best in class for IDC tolerance
- Very good north to south movement through the zone
- · Solid lateral branching



Brown Stem Rot (not rated)

- Impressive yield performance
- Position north and south, Carrington to Aberdeen
- Emergence and standability are excellent
- Provides both Rps1k gene and field tolerance to PRR
- Good IDC score, handles stress well



- High yielding late group 0 with Cyst
- Very attractive plant type throughout growing season
- Good white mold and downy mildew resistance
- Excellent standability Outstanding IDC
- Adapts to a wide range of soil types

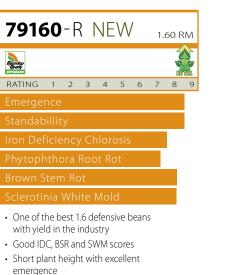


IDC is comparable to AG 1102

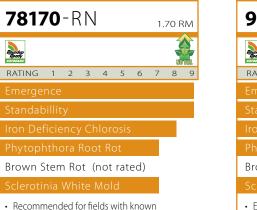
· Replacement for 96110R

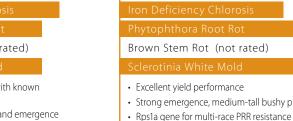
Not adapted for narrow row seeding

• Out yielded PI 90M92 by +3.0 bushels



- Extreme lateral branching
- Rps1k PRR protection · Position I-29 and east

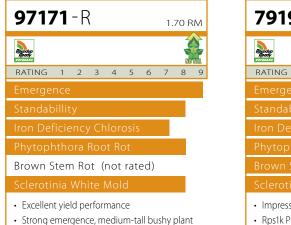




- · Excellent standability, IDC and emergence • Highest yielding cyst bean in its maturity
- · Superb bean for growers in South Dakota

SCN problems

and southern Minnesota





Good BSR and SWM tolerance

• Burns the competition in yields

- Strong performance against soybean cyst nematode
- Exhibits strong lateral branching
- Rps1c PRR resistance
- Smokes NKS19-L7
- · Moves west and east
- Replaces 95200RN





· Super cyst resistance

· Good no-till candidate

death syndrome

- Rps1k PRR resistance • Exceptional IDC score 8.5

nematode resistance

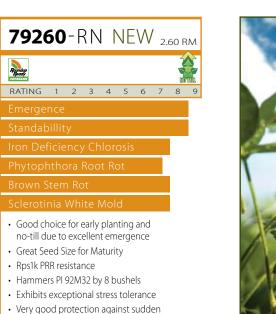
Tall and bushy



Brown Stem Rot (not rated) Sclerotinia White Mold (not rated)

 Position on best ground for extremely good yields

- Upright intermediate bushy plant
- Very good IDC score for maturity
- Rps1k PRR resistance coupled with resistance to cyst nematode
- Handles stress well





79220 -RN			
79220 NN	2.	.20 R	M
Roundup Ready			
SOYBLAHS	6 7	8	9
Emergence			
Standabillity			
Iron Deficiency Chlorosis			
Phytophthora Root Rot			•
Brown Stem Rot			
Sclerotinia White Mold			
 Features high yields with cyst 			

	Height for Maturity
	U = Upright
	I = Intermediate
	B = Bushy
	MB = Medium-Bushy
	M = Medium
 SWM and BSR scores are very good 	MT = Medium-Tall
Exceptional IDC score 8.5	T = Tall

2-3 = Fair

Canopy Type

1 = Poor

o = oprignt
Height for Maturity
S = Short SM = Short to Medium M = Medium MT = Medium T = Tall
Level of Resistance
S = Susceptible MS = Moderately Susceptible MT = Moderately Tolerant MR = Moderate Resistance R = Resistance HR = High Resistance
Insufficient data (-) Not Available (n/a)

	Soybean Agronomic Characteristics													
				Pla	nting			Diseas	se & Pest	Resista	nce			
IntegraSeed Brand Soybeans		Relative Maturity	Emergence	Canopy Type	Height for Maturity	Standability	Iron Deficiency Chlorosis	Phytophthora Root Rot - Gene	Phytophthora Root Rot - Tolerance	Brown Stem Rot	Sclerotinia White Mold			
97001R		0.03	8	В	М	8	8	-	8	n/a	7			
77002R		0.04	8	Т	М	8	9	Rps1k	7	n/a	9			
79004R	NEW	0.04	8	MB	М	8	8.5	-	7.8	n/a	8.5			
97007RS		0.07	8	I	MT	8	8	-	7	7	8			
97009R	NEW	0.09	8	MB	MT	8	7	-	8	8	8			
95009R		0.09	9	М	MT	8	9	Rps1k	7	n/a	8			
97014R		0.10	8	В	MT	8	8	Rps1c	8	7	8			
79020R	NEW	0.20	8.5	MB	М	9	8.5	-	8	9	8			
79031R	NEW	0.30	8.5	MB	М	8.5	7.5	Rps1k	7	n/a	7.5			
79060R	NEW	0.60	8.5	М	MT	8.5	8	-	8	8	7.5			
79060RN	NEW	0.60	8.5	М	MT	7.5	7.5	Rps1c	7	n/a	8			
96062R		0.62	7	Т	Т	7	8	-	7	n/a	7			
79080R	NEW	0.80	8.5	MT	MT	7.5	8.5	Rps1k	7	7.5	7.5			
96081R		0.81	9	В	MT	8	6	Rps1k	8	n/a	7			
79090RN		0.90	8.5	MB	MT	8.5	8.5	-	8	8.5	8			
79100R	NEW	1.00	8.5	MB	М	8	7.5	-	8	7	7			
79110R	NEW	1.20	8	М	MT	7.5	7.5	-	8	n/a	7.5			
79140RN	NEW	1.40	8	М	MT	7.5	8	Rps1k	7	n/a	7			
79150R	NEW	1.50	8	М	MT	8	8	-	7.5	n/a	6.5			
97160RN		1.60	9	IB	Т	8	8	Rps1k	8	n/a	8			
79160R	NEW	1.60	8.5	М	S	8.5	7.5	Rps1k	7	8	8			
78170RN		1.70	9	В	MT	9	8	-	7	n/a	7			
97171R		1.70	9	В	MT	8	7	Rps1a	8	n/a	8			
79190R	NEW	1.90	8.5	М	М	8	7.5	Rps1k	7	8	7.5			
79200RN	NEW	2.00	8.5	М	М	8	7.5	Rps1c	7	7.5	7.5			
78202RN	NEW	2.00	8.5	В	М	8	7.5	-	7	n/a	7			
79220RN		2.20	8.5	MB	М	8.5	8.5	Rps1k	7	8.5	8.5			
79250RN	NEW	2.50	8.5	MB	М	7.5	7.5	Rps1k	7	n/a	n/a			
79260RN	NEW	2.60	8.5	MB	MT	8.5	7.5	Rps1k	7	7.5	7.5			

All agronomic characteristics and ratings may vary with growing conditions and environment. Ratings are approximate and should not be considered as absolute. Ratings on new varieties are based on limited data and may change as more data are collected. Extreme conditions may adversely affect variety performance. The relative maturity of one variety to another remains reasonably constant; however, the actual number of calendar days from seeding to physiological maturity varies with date of planting, planting rate, temperature, day length, soil fertility and other environmental factors.

	Soybean Planting Guide									
Seeds	Seeds Per Acre 125,000 150,000 165,000 180,000 185,000 210,000									
	Seeds Per Foot of Row									
	7	1.7	2.0	2.2	2.4	2.5	2.8	3.0		
dth	15	3.6	4.3	4.7	5.2	5.6	6.0	6.5		
Row Width	22	5.2	6.3	6.9	7.8	8.2	8.8	9.5		
Row	30	7.2	8.6	9.5	10.3	11.2	12.1	12.9		
	38	9.0	10.9	12.0	13.1	14.2	15.3	16.4		
				Pounds	of Seed Per	Acre				
	2,000	62	76	83	90	98	105	113		
	2,100	60	71	78	86	93	100	107		
	2,200	57	68	75	82	89	95	102		
	2,300	54	65	72	78	85	91	98		
	2,400	52	63	69	75	81	88	94		
	2,500	50	60	66	72	78	84	90		
	2,600	48	58	63	69	75	81	87		
pu	2,700	46	56	61	67	72	78	83		
Pou	2,800	45	54	59	64	70	75	80		
Seeds Per Pound	2,900	43	52	57	62	67	72	78		
eds	3,000	42	50	55	60	65	70	75		
Se	3,100	40	48	53	58	63	68	73		
	3,200	39	47	52	56	61	66	70		
	3,300	38	45	50	55	59	64	68		
	3,400	37	44	49	53	57	62	66		
	3,500	35	43	47	51	56	60	64		
	3,600	34	42	46	50	54	58	63		
	3,700	33	41	45	49	53	57	61		
	3,800	32	39	43	47	51	56	59		

Calculations and measurements should only be considered as a general guide. Variations in data values may occur depending on growing and field conditions, seeding rates, and management practices.

For information on the STS™ Soybean seed/herbicide system visit: http://www.dupont.com/ag/products/ or call 1-800-515-7333.

ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS.

Growers should refer to the Technology Use Guide for information on crop stewardship regarding the potential movement of pollen to neighboring crops. Follow IRM and Grain Marketing Requirements.







Integra™ Sorghum

Our Integra brand sorghum varieties are protected with the most effective and reliable seed

treatment products available. The active ingredients used in the Manifest™ Seed Treatment

Protection for the Extremist

Protection begins with Apron® XL LS (mefenoxam) that guards against damping-off caused by Pythium. Additionally, the seed is protected from seed-borne and soil-borne fungi such as Fusarium, Rhizoctonia Solani, and Helminthosporium through the use of Maxim® 4FS (Fludioxonil) fungicide.

An added option to the Integra brand sorghum is the ability to add the seed dressing product Concep® III (Fluxofenin) that protects grain and forage sorghum from phytotoxic effects of S-metolachlor containing herbicides.

The Manifest™ Seed Treatment System found on our Integra brand sorghum includes the addition of a proprietary and patented plant extract that can promote plant health and growth, especially when the plants are under stress such as temperature extremes, soil moisture, soil strength, and soil chemistry. Field tests have demonstrated that a stronger, healthier seedling will have a better opportunity to achieve maximum yield potential.

The components of the Manifest™ Seed Treatment System were selected with the intention of providing the best protection and value for the Integra brand seed in most crop situations.

Due to different cropping practices the Mainifest™ Treatment System may vary as described above to meet the needs of our customers.

in protein

 Integra's Cadan continues to outperform its competitors in tonnage, stress tolerance, regrowth and palatability Mid-season hybrid, performs exceptionally

Forage Sorghum Sudan Hybrid

RATING 1 2 3 4 5 6 7 8 9

- well under adverse conditions and produces abundant tonnage with adequate water and fertility
- Supplies abundant grazing, after being cut 2-3 times

Broad dark green leaves, very leafy

Triple cross, red seeded hybrid, high

SweetStem, WMR®

Forage Sorghum Sudan Hybrid RATING 1 2 3 4 5 6 7 8 9

Early Growth Rate

rought Tolerance

- White midrib® sorghum sudan hybrid
- High energy with excellent total digestible nutrients (TDN/ton)
- Sweet, juicy stalks, very high sugar content
- Best choice for dairy operations
- Exceptional leaf-to-stem ratio
- Developed for faster regrowth · Seedling vigor, palatability, persistence

and standability are all rated excellent

NK300

Forage Sorghum Hybrid

RATING 1 2 3 4 5 6 7 8 9

Early Growth Rate

Yield (Tonnage)

Prought Tolerance

- High quality dairy silage
- High grain-to-forage ratio Excellent standability with good drought tolerance
- 6' 7' tall
- · Medium-early maturity

Hikane II

Forage Sorghum Hybrid

RATING 1 2 3 4 5 6 7 8 9

Early Growth Rate

Drought Tolerance

/ield (Tonnage)

· Economical quality hay and forage

- Sweet stalk, good for double crop
- Good standability and drought tolerance
- 9' 10' tall

Hybrid Forage Sorghum

Trudan Headless

Forage Sorghum Sudangrass Hybrid RATING 1 2 3 4 5 6 7 8 9

Early Growth Rate

Drought Tolerance

- Photo sensitive headless
- Extended harvest window
- Best for hay, haylage and grazing
- Tolerates high cutting frequencies
- Adapts well to intensive grazing
- · Fine stemmed and leafy

Millex 32

Forage Sorghum Pearl Millet Hybrid RATING 1 2 3 4 5 6 7 8 9

Early Growth Rate

Yield (Tonnage)

- Drought Tolerance • Dependable summer forage
- Grows in droughty conditions
- Quality horse feed no prussic acid · Works in light, sandy soils
- · Best for grazing and pasture
- · Lush, leafy forage

Hybrid Grain Sorghum

SP3303 NEW

Grain Sorghum RATING 1 2 3 4 5 6 7 8 9

MDMV Tolerance

· Good drought tolerance

- High Yield Potential
- Good standability Uniform plant type
- · Tan plant
- · Cream color grain
 - Good threshability

251

Grain Sorghum RATING 1 2 3 4 5 6 7 8 9

Yield for Maturity

Prought Tolerance

MDMV Tolerance

- · Very early grain sorghum
- Excellent standability
- Excellent drought tolerance
- Early planting for double crop
- Red grain weathers well · Late planting or double crop
- · Increase planting rate on late planting

Sucrosorgo 405

Forage Sorghum Hybrid RATING 1 2 3 4 5 6 7 8 9

Prought Tolerance

- High tonnage and sugar content
- · Sweet, juicy stalks
- 10' 12' tall
- · Good drought tolerance · Very good standability

Sordan 79

Forage Sorghum X Sudangrass Hybrid RATING 1 2 3 4 5 6 7 8 9

Standability rought Tolerance

- Dependable summer forage
- · Good for late summer planting
- Greenchop, hay and haylage
- · Can be grazed Very good leaf-to-stem ratio
- · Good forage quality

Sordan Headless

Forage Sorghum X Sudangrass Hybrid RATING 1 2 3 4 5 6 7 8 9

Drought Tolerance

- Headless photo sensitive
- Dual purpose silage or hay
- Extended harvest window
- Greenchop, hay and haylage Good leaf-to-stem ratio
- High quality forage

Forage Sorghum Sudangrass Hybrid

- Very good leaf-to-stem ratio
- · Best for hay, haylage and grazing
- Adapts well to intensive grazing

Trudan 8

RATING 1 2 3 4 5 6 7 8 9

Drought Tolerance

- Exceptional quality summer forage
- · Tolerates high cutting frequencies
- Excellent forage quality

Hybrid Grain Sorghum

Grain Sorghum

RATING 1 2 3 4 5 6 7 8 9

performance

KS310

Drought Tolerance MDMV Tolerance

- Excellent yielding early sorghum
- Excellent emergence
- Good choice for shorter growing seasons Very good for double crop and late planting
- Very good threshability for easier harvest Very good drought tolerance for consistent
- Susceptible to growth regulating herbicides

K35-Y5

Grain Sorghum RATING 1 2 3 4 5 6 7 8 9

Emergence

Drought Tolerance

MDMV Tolerance

- Excellent yield for maturity
- Very good standability · Uniform, short plant
- · Consistent maturity · Cream colored grain
- Biotype E Greenbug resistance • Very good for double crop and late plantings
- Well adapted for Western High Plains

NK5418

Grain Sorghum RATING 1 2 3 4 5 6 7 8 9

MDMV Tolerance Good yield potential

- Shorter plant KS585 Good insect resistance
- Bronze grain color Excellent standability
- Good uniformity
- Semi-open uniform heads Good companion to KS585

KS585

Grain Sorghum RATING 1 2 3 4 5 6 7 8

MDMV Tolerance

- · High yield for maturity
- Excellent emergence · Excellent early growth in cool soils
- Plant from central Texas to the valley Good standability
- Very uniform and easy harvesting

U

rought Tolerance

- Consistent high yields
- Excellent disease resistance to Downy Mildew, Pathotypes 1 and 3
- Good standability
- · Open head for fast drydown
- · Brilliant bronze grain color
- Good threshability

NK6638

Grain Sorghum

RATING 1 2 3 4 5 6 7 8 9

Yield for Maturity

Drought Tolerance

MDMV Tolerance

- Excellent disease resistance to Downy Mildew, Pathotypes 1, 3 and P6
- Excellent Anthracnose Resistance
- · High yield potential
- Good standability
- Open head for fast drydown
- Bronze seed color
- Good threshability
- · Uniform plant type

NK6673

Grain Sorghum

RATING 1 2 3 4 5 6 7 8 9

Prought Tolerance MDMV Tolerance

- High yield potential
- Good standability and early threshability
- High plains irrigated
- Drought tolerant in central Texas
- High starch for ethanol production
- Bronze grain color

NK7633

Grain Sorghum

RATING 1 2 3 4 5 6 7 8 9

Yield for Maturity

Drought Tolerance MDMV Tolerance

High yield

- Outstanding standability
- Staygreen and disease resistance
- Adapted for narrow rows

KS711Y NEW

· Very Good Drought Tolerance

· Companion to K59-Y2

- Works well under irrigation
- Bronze grain color and uniform plant type

Hybrid Grain Sorghum

NK8831

Grain Sorghum RATING 1 2 3 4 5 6 7 8 9

Yield for Maturity

Drought Tolerance

MDMV Tolerance • Excellent yield for maturity

- Uniform plant type
- General leaf disease resistance
- Easy threshability
- Adapted to Rio Grande Valley
- Good drought tolerance
- · Bronze grain color

NK8	82	28	}				
irain So	orgl	hun	1				
ATING	1	2	3	4	5	6	Ī

Drought Tolerance

MDMV Tolerance High yield for maturity

- · Downy Mildew resistance
- Anthracnose resistance
- · Uniform plant type
- Open head for fast drydown
- · Good standability
- · Bronze grain color

Sorghum	Forag	e Agro	non	nic (Chai	acte	erist	ics
'ariety	Maturity	Seeds/lb (000)	Early Growth Rate	Yield (Tonnage)	Leafiness	Standability	Drought Tolerance	Resistance to Downy Mildew (Races 1&2)
orage Sorghum								
adan	М	22	8	9	9	9	8	6
weetStem, WMR®	М	18-20	8	9	9	9	7	7
IK300	M-E	13	8	7	7	8	7	-
IIKANE II	М	19	8	7	7	6	7	-
ucrosorgo 405	F	14.5	8	8	7	6	7	9
ordan 79	-	14	8	7	7	6	7	9
ordan Headless	-	16.5	8	8	8	6	7	9
rudan 8	-	22.5	8	7	8	7	7	9
rudan Headless	-	25	8	8	9	7	7	9
Nillex 32	-	47	5	6	9	7	9	9

All agronomic characteristics and ratings may vary with growing conditions and environment. Ratings are approximate and should not be considered as absolute.

Variety	Maturity	Seeds/Ib (000)	Emergence	Yield for Maturity	Yield Stability	Standability	Drought Tolerance	Threshability	MDMV Tolerance	Relative Height
Grain Sorghum										
SP3303 NEW	Е	-	5	8	8	8	8	8	8	SM
251	Е	18	8	7	8	9	9	9	7	S
KS310	Е	11.5	9	9	8	7	7	7	6	М
K35-Y5	M-E	17.5	5	8	8	6	7	6	5	S
NK5418	М	12.5	8	8	8	8	7	8	7	SM
KS585	М	12	9	9	8	7	7	7	6	М
NK6638	М	14	8	8	8	8	7	9	6	MT
NK6641	М	12	8	8	8	8	7	9	8	MT
NK6673	М	11.5	8	8	8	8	7	8	8	М
NK7633	M-F	13.5	8	8	8	8	8	6	7	MT
NK7655	M-F	13.5	7	7	8	7	7	7	6	М
K73-J6	M-F	13.5	8	8	8	8	8	5	8	MT
KS735	M-F	16	8	8	8	6	6	9	6	MT
KS711Y NEW	M-F	16	6	8	7	9	7	9	4	М
NK8831	F	15	8	8	8	6	7	8	7	MT
NK8828	F	16.5	7	8	8	6	7	7	7	МТ

Sorghum Grain Agronomic Characteristics

All agronomic characteristics and ratings may vary with growing conditions and environment. Ratings are approximate and should not be considered as absolute.

KEY

Ratings	Maturity	Relative Height
8-9 = Excellent	E = Early	S = Short
6-7 = Very Good	M = Medium	SM = Short to Medium
4-5 = Good	F = Full	M = Medium
2-3 = Fair		MT = Medium to Tall
1 = Poor		T = Tall

Insufficient data (-)



MDMV Tolerance

- Cream grain color
- Excellent field uniformity

Excellent staygreen Mildew, Pathotypes 1 and 3 Excellent standability Same maturity as KS711Y

K73-J6 Grain Sorghum

RATING 1 2 3 4 5 6 7 8 9

NK7655

Grain Sorghum

rought Tolerance

Very good yield potential

Adapted to both irrigation and dryland

Excellent yield potential

- Well-adapted for irrigation or dryland

Very uniform plant type

KS735

RATING 1 2 3 4 5 6 7 8 9

MDMV Tolerance

- Excellent disease resistance to Downy
- · Biotype C and E Greenbug resistance

Grain Sorghum RATING 1 2 3 4 5 6 7 8 9

Prought Tolerance MDMV Tolerance

- Downy Mildew resistant Consistent performance
- Companion to K73-J6 and NK7633 Excellent threshability and very
- good standability Medium-tall height
- Good drought tolerance

Grain Sorghum RATING 1 2 3 4 5 6 7 8 9 Relative Maturity Medium-Full Creamed Colored Grain Avg. Days to 50% Bloom 70-74 Matures Similar to KS735 Avg. Days Compared to: KS585 +5, K73-J6-1 Improved Standability & Field Uniformity • For High Plains & Great Plains Areas · Irrigated to Dryland Moisture Conditions Medium Height, Very Good Standability

Field Notes







Integra™ Sunflowers

Our Integra brand sunflower varieties are protected with a proven and effective seed treatment system that includes the CruiserMaxx™ Sunflower Package, (Thiamethoxam, Mefenoxam, Fludioxonil). These active ingredients are a combination

Stress... No Problem

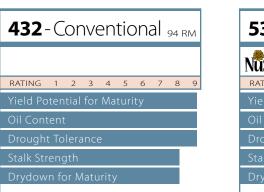
Completing the Manifest™ Seed Treatment System is the addition of a proprietary and patented plant extract that can promote plant health and growth, especially when the plants are under

Field tests have demonstrated that a stronger, healthier seedling will have a better opportunity to achieve maximum yield potential.

Each component of the Manifest™ Seed Treatment System was selected with the intention of providing the best protection and value for the Integra brand seed in most crop situations.

Due to different cropping practices the Mainifest™ Treatment System may vary as described above to meet the needs of our customers.

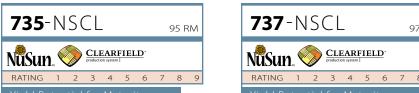
SUNFLOWERS • Relative Maturity 94-97 day



- Early season hybrid with superior seed and oil yield means more income per acre
- Attractive large, plump seed with very high oil content, 46%-53%
- Rated excellent for hulling provides opportunities in the oil and hulling markets
- Impressive agronomic package
- Short in height with superior drought tolerance
- Excellent hybrid for early to mid-season growing areas



- · Early season favorite
- · Short stature with consistent high yields
- · Unbeatable stalk strength with very good disease resistance to Sclerotinia Head Rot and Phoma
- Multi-race Downy Mildew resistance
- Widely adapted across the Dakotas and Western High Plains



- NuSun™ Clearfield* hvbrid, tolerant to Beyond® herbicide
- Medium-early hybrid with very good yield for maturity
- Solid oil content (43-46%), 2-3% higher than Cg270
- Drydown is very good to excellent
- Standability is rated excellent
- Multi-race Downy Mildew resistance
- · Broadly adapted for production in the Dakotas and the Western High Plains



- NuSun™ Clearfield* hvbrid, tolerant to Beyond® herbicide
- Offers excellent yield along with desirable hulling characteristics
- Oil content 43-45%
- Performs well in both conventional and no-till management systems
- Very good standability and disease resistance
- · Suggested harvest populations 23,000 - 25,000 plants per acre



All agronomic characteristics and ratings may vary with growing conditions and environment. Ratings are approximate and should not be considered as absolute. Ratings on new hybrids are based on limited data and may change as more data are collected. Extreme conditions may adversely affect hybrid performance. The relative maturity of one hybrid to another remains reasonably constant; however, the actual number of calendar days from seeding to physiological maturity varies with date of planting, planting rate, temperature, day length, soil fertility and other environmental factors.

NS | CL | 95 | 8 | SM | 8 | 7 | 7 | 8 | 8 | 7 | 7 NS CL 97 8 M 8 8 8 7 9 7 8

94 8 5 8 8 9 9 9 8 8

Ratings

8-9 = Excellent

4-5 = Good

2-3 = Fair1 = Poor

Hybrid Sunflower

Agronomic Characteristics

6-7 = Very Good

Plant Height

M = Medium

SM = Short to Medium

MT = Medium to Tall

9 = Very Fast 1 = Slow

S = Short

T = Tall

Drydown



Value-added Trait Technology

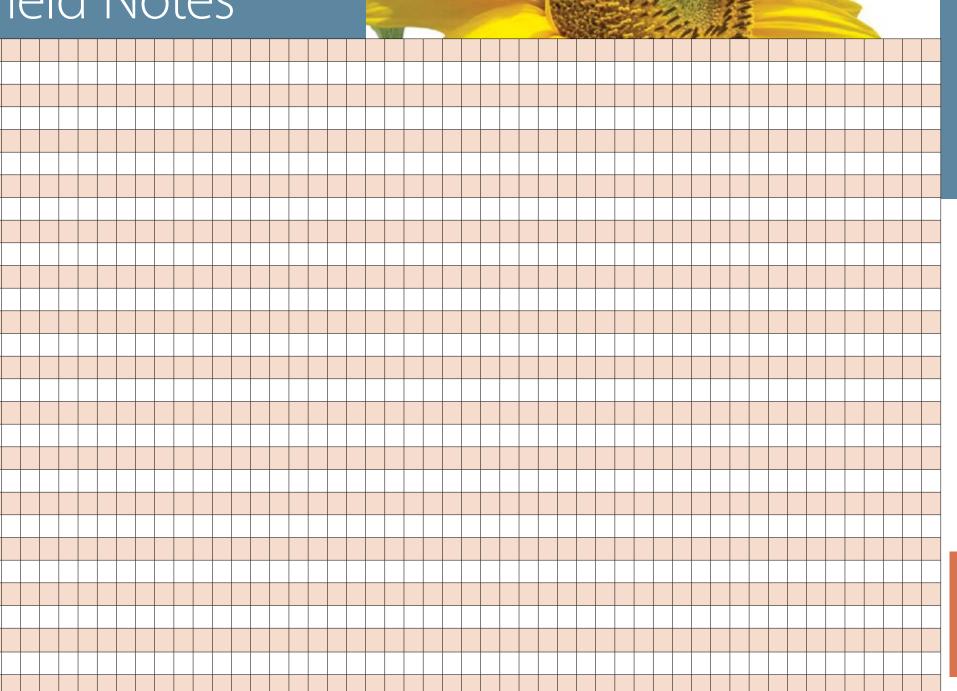
CLEARFIELD.

NS - NuSun™ Sunflower Hybrid

Clearfield* Sunflower

The CLEARFIELD* Production System for sunflower is a unique system comprised of herbicide-resistant hybrids and Beyond™ herbicide to manage green foxtail (pigeon grass), other foxtail species, marshelder, wild mustard, cocklebur, and other tough grasses and broadleaf weeds. Beyond is the only post-emergence herbicide that provides contact and residual control of a wide range of both broadleaf and grass weeds in sunflowers.

Field Notes



Integra™ Canola

Our Integra brand canola varieties are protected with effective and proven seed treatment

chemistry. The active ingredients found in the Manifest™ Seed Treatment System are a combination of contact and systemic fungicides with a powerful systemic insecticide.

Target Your Seedlings

The protection starts with the use of a pre-mix of active ingredients (Prosper™ FX) that contains Poncho™ (Clothianidin) a systemic insecticide, and fungicide seed treatments (Metalaxyl, Trifloxystrobin, and Carboxin) for the control of seed rot, damping-off, seedling blight, and early season root rot caused by Pythium, Rhizoctonia, Fusarium, and Alternaria. This combination also controls seed-borne Blackleg. The protection provided is targeted at the seed and emerging seedlings.

Completing the Manifest™ Seed Treatment System is the addition of a proprietary and patented plant extract that can promote plant health and growth, especially when the plants are under stress such as temperature extremes, soil moisture, soil strength, and soil chemistry.

Field tests have demonstrated that a stronger, healthier seedling will have a better opportunity to achieve maximum yield potential.

Each component of the Manifest™ Seed Treatment System was selected with the intention of providing the best protection and value for the Integra brand seed in most crop situations.

Due to different cropping practices the Mainifest™ Treatment System may vary as described above to meet the needs of our customers.

CANOLA

Range - RR Synthetic Hybrid - Spring SW RATING 1 2 3 4 5 6 7 8 Seedling Vigor

Yield Potential Blackleg Resistance

- Early maturing Roundup Ready® synthetic hybrid
- Offers unsurpassed yield potential
- Impressive early season emergence and vigor, flowers early
- Short in height, allows for ease of swathing
- Excellent standability, uniform in appearance
- Strong disease package, rated R-MR for Blackleg and R for Fusarium Wilt

7121 - RR NEW						
Hybrid - Spring						
Roundup Roundup Chitosia	SW					
RATING 1 2 3 4 5 6	7 8 9					
Seedling Vigor						
Standability						
Yield Potential						

- NEW high performing genetics with Roundup Ready technology
- Very high yield potential
- Excellent early vigor, and stand establishment
- Medium-short plant height with excellent standability and ease of harvest
- Good oil content
- Strong disease package; R rated for blackleg

NEW	GROWERS WHO CHOOSE TO PURCHASE ROUNDUP READY® CANOLA MUST FOLLOW THESE STEPS:
3 4 5 6 7 8 9	 Sign a Monsanto Technology/Stewardship Agreement. This agreement allows growers to purchase all current and new Roundup Ready® technologies. Growers who sign agreements receive a Technology Card and Monsanto Technology I.D. number. Sign up for Roundup Ready® Canola acres.

This requires growers to purchase a CUA. Separate CUAs must be signed for spring and fall plantings.

· Purchase the seed.

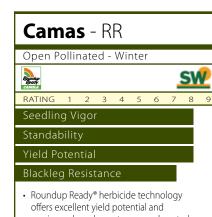
To purchase Roundup Ready® Canola seed, growers must provide a copy of their CUA to an authorized Wilbur-Ellis dealer in order to receive seed.

Reconcile actual seeded acres.

A Monsanto Authorized Retailer will visit each farm and complete the legal description of the final planted acres on the CUA form. Monsanto randomly audits retailers for compliance with this reconciliation requirement through on-farm visits by a Canola Stewardship Representative.

ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS. Growers should refer to the Technology Use Guide for information on crop stewardship regarding the potential movement of pollen to neighboring crops.

Roundup® agricultural herbicides will kill crops that do not contain the Roundup Ready® gene. Roundup® refers to Monsanto's Roundup® agricultural herbicides. Roundup®and Roundup Ready® are trademarks used under license from Monsanto Company LLC. SW logo is a trademark of Svalof Weibull AB, Sweden.



- maximum broad-spectrum weed control the entire season
- Excellent yield performance in PNW locations
- Excellent winter hardiness
- Good standability, great harvestability
- Brings fields with problem weeds back into production

Value-added Trait Technology Roundup Ready® Canola SW Svalof Weibull Ratings 8-9 = Excellent, 6-7 = Very Good 4-5 = Good, 2-3 = Fair, 1 = Poor

Plant Height

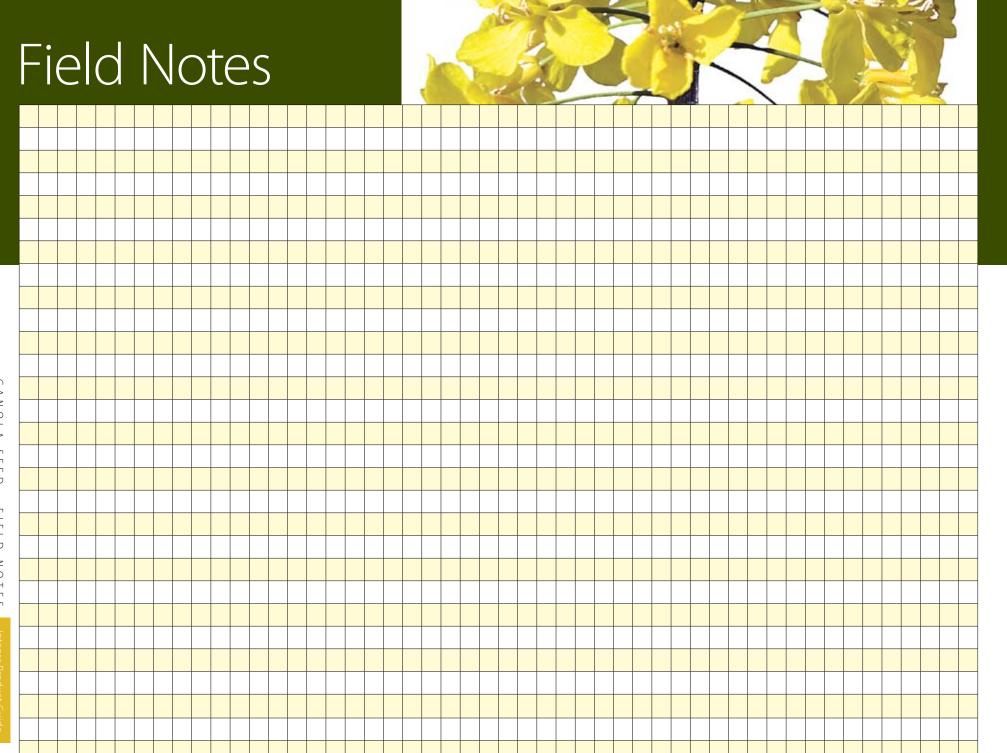
1 = Tall 5 = Short(Rating of 5 is desirable)

Physiological Maturity 1 = Late 9 = Early

Level of Resistance MR = Moderate Resistance R = Resistance

Insufficient data (-)

All agronomic characteristics and ratings may vary with growing conditions and environment. Ratings are approximate and should not be considered as absolute.



Notes		

Technology Stewardship

Growing biotech trait seed requires sound stewardship to preserve the technology for years to come.

GROWERS DO THEIR PART

Growers who choose to use seed with a Monsanto biotech trait seed must:

- Sign a Monsanto Technology Stewardship Agreement.
- Comply with Environmental Protection Agency (EPA) regulations by following Insect Resistance Management (IRM) practices for specific biotech traits.
- Plant patented seed only to produce a single, commercial crop, without saving progeny seed for planting a subsequent crop.
- Sell harvested corn with biotech traits not yet approved by the European Union to grain handlers that confirm their acceptance, or use the corn on-farm.
- Failure to follow IRM guidelines and properly plant a refuge may result in the revocation of the grower's Monsanto Technology Agreement and loss of access to insect-protected technologies.
- Do your part to ensure these technologies are preserved by following the IRM Stewardship quidelines.



SAVING TO REPLANT IMPORTANT INFORMATION FOR INDIVIDUALS SAVING SOYBEAN SEED FOR REPLANTING: Seed containing the Roundup Ready® gene

cannot be saved for replanting. All seeds containing the Roundup Ready® trait are protected under numerous United States patents, including Patent No. 5,352,605. In addition, the germplasm in conventional and Roundup Ready® soybean varieties may also be protected under one or more United States patents. Replanting saved seed of Roundup Ready® soybeans or patented conventional soybeans, or transferring patent-protected seed to others for

Seed piracy also hinders the development of future technologies and their benefits for the soybean industry.

planting is unauthorized and constitutes patent

infringement.

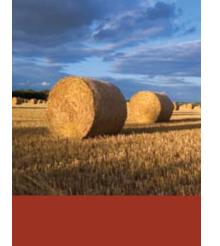
GROWER NOTIFICATION: Samples of cleaned or conditioned soybean seed batches may be retained to identify the seed.





Planting Refuges, Preserving Technology

Before opening a bag of seed, be sure to read and understand 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 Agreement that you sign. By opening and using a bag of seed, you are reaffirming your obligation to comply with those stewardship requirements.



Grain harvested from products that bear this mark is fully approved for food and feed use in the United States and Japan, but is not approved in the European Union. You must find a market for this crop that will not ship this grain or its processed products to Europe. Appropriate markets for this grain include: domestic feed use or grain handlers that specifically agree to accept this grain and handle it appropriately. For more information on your grain market options, go to the American Seed Trade Association's website at www.amseed.org or call your seed supplier.

MARKET CHOICES® is a registered certification mark used under license from ASTA.

Know Before You Grow®, an information service provided by National Corn Growers Association



YIELDGARD® & HERCULEX®

Planting a corn refuge maintains a

exposed to the B.t. protein.

to control corn borers.

preferred, in each strip.

Herculex™ I corn.

population of corn borers that are not

Plant at least 20% of your acres on each

refuge should not contain B.t. technology

Plant the refuge within half a mile (one-

quarter mile preferred) of the YieldGard®

(four consecutive rows minimum, six rows

Planting a refuge is an EPA requirement

Refuge can be a block or in-field strip

Corn Borer or Herculex™ I corn.

for YieldGard® Corn Borer and

farm as a refuge. Corn planted in the

Insect Resistance Management Requirements



YIELDGARD® ROOTWORM &

YIELDGARD VT® ROOTWORM

Insect Resistance Management Requirements



YIELDGARD® PLUS &

• Plant up to 80% of your corn acres with YieldGard® Rootworm or YieldGard® Rootworm VT corn.

- Plant at least 20% of your acres on each farm as a corn refuge.
- Plant the refuge within or adjacent to the YieldGard® Rootworm or YieldGard® Rootworm VT fields.
- Refuge can be a block or in-field strip (six consecutive rows minimum, 12 rows preferred, in each strip).
- Planting a refuge is an EPA requirement for YieldGard® Rootworm corn and YieldGard® VT Rootworm

YIELDGARD VT® TRIPLE

Insect Resistance Management Requirements

Growers have two choices when planning VT Triple corn hybrids:

- serve as the refuge for both corn borers and corn rootworms.
- Separate refuge: Plant a separate refuge for corn borers and a separate refuge for corn rootworms. The corn rootworm refuge can be planted with YGCB, RR/YGCB, YGVT or conventional corn. The corn borer refuge can be RR corn or conventional corn.

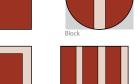
their refuge for YieldGard® Plus or YieldGard® • Common refuge: Plant a refuge that will

Planting a refuge is an EPA re-guirement for YieldGard® Plus and YieldGard® VT Triple corn.

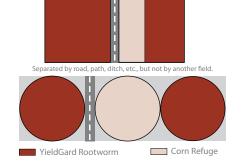
YieldGard Corn Borer or Herculex I Corn Corn Refuge

Refuge Configuration Options





Examples of Adjacent-Field Configurations



For complete IRM details, please consult the 2009 Monsanto Technology Use Guide or the YieldGard® Rootworm IRM Guide, YieldGard® Corn Borer IRM Guide, YieldGard® VT IRM Guide or the Product Use Guide for Herculex® I.

Comparison of Key Refuge Requirements in Corn Growing Areas							
	VieldGard Or MERGULEX: 1	VieldGard V7 Cortworm/RR2 V1 Or VieldGard Rootworm.	VieldGord Vi Or Line Vi Or Line Vi				
% Refuge	20% non-B.t. corn borer protected corn	20% non-B.t. rootworm protected corn	20% non-B.t. corn (common refuge plan only)				
Configurations	Separate Field, Block, Perimeter, Split Planter	Block, Split Planter, Perimeter, Adjacent Field	Block, Split Planter, Perimeter, Adjacent Field				
Refuge within a 1/2 mile (1/4 mile preferred)		Refuge adjacent or within YieldGard Rootworm field	Refuge adjacent to or within YieldGard Plus field				
Consecutive Row Planted in Strips	Split Planter four rows	Split Planter four rows	Split Planter four rows				

LEGAL NOTICES

IMPORTANT: The following information is current as of July 2007: YieldGard Plus, YieldGard Rootworm with Roundup Ready Corn 2 and YieldGard Corn Borer with Roundup Ready Corn 2 are grandfathered for import and use in processed feed in the E.U. YieldGard Plus with Roundup Ready Corn 2, YieldGard VT Rootworm/ RR2 and YieldGard VT Triple are neither approved nor grandfathered and there is zero tolerance for these traits in processed feed imported in the E.U. Growers of all products bearing the Market Choices mark must talk to their grain handler to confirm the handler's buying position for grain from these products. It is a violation of national and international law to move material containing biotech traits across boundaries into nations where import is not permitted.

Always Read and Follow Pesticide Label Directions. Roundup Ready® crops contain genes that confer tolerance to glyphosate, the active ingredient in Roundup® agricultural herbicides. Roundup® agricultural herbicides will kill crops that are not tolerant to glyphosate.

Bullet*, Degree*, Degree Xtra*, Field Master*, Harness*, INT RRO*, Lariat* and Micro-Tech* are restricted use pesticides and are not registered in all states. The distribution, sale or use of an unregistered pesticide is a violation of federal and/or state law and is strictly prohibited. Check with your local Monsanto dealer or Monsanto representative for the product registration status in your state.

The purchase/bailment/transfer of these seeds conveys no license under said patents to use these seeds or perform any of the methods covered by these patents. A license must first be obtained before these seeds can be used in any way. See your seed dealer to sign a Monsanto Technology/ Stewardship Agreement. Progeny of these seeds cannot be cleaned or used as planting seed or transferred to others for planting.

TRADEMARK OWNERSHIP and NOTIFICATIONS

All trademarks are the property of their respective owners

Apron, Concep and Maxim are registered trademark of Syngenta Crop Protection.

*CLEARFIELD, the UNIQUE CLEARFIELD SYMBOL, and Beyond™ are trademarks of BASF Corporation. This herbicide resistance gene will NOT safeguard this hybrid against herbicides other than the imidazolinone family of herbicides.

Dormal is a trademark of Becker Underwood.

[™]Herculex and the Herculex Shield Logo are trademarks of Dow AgroSciences LLC. Herculex corn contains a gene that makes it tolerant ONLY to glufosinate ammonium herbicides such as Liberty herbicide. This herbicide-resistant gene will NOT safeguard this hybrid against application of other herbicides. Accidental application of other herbicides to this hybrid could results in total crop loss.

NuSun™ is a certified trademark of the National Sunflower Association.

Roundup Ready® crops contain genes that confer tolerance to glyphosate, the active ingredient in Roundup® agricultural herbicides. Roundup® agricultural herbicides will kill crops that are not tolerant to glyphosate. Roundup® refers to Monsanto's Roundup® agricultural herbicides. Roundup®, Roundup Ready®, Roundup Rewards® Roundup WeatherMAX®, TranSorb®, Cleaner Fields, Higher Yields®, YieldGard® Corn Borer and Design, YieldGard Rootworm and Design, YieldGard Plus and Design, YieldGard®, YieldGard® VT and Design, YieldGard® Triple, YieldGard® VT Rootworm/RR2 and Processor Preferred® are registered trademarks of Monsanto Technology LLC. Market Choices® and Design is a registered certification mark used under license from ASTA.

STS™ soybeans are tolerant to DuPont™ Synchrony® STS™ soybean herbicide. Harmony®, Synchrony® and STS™ are trademarks or registered trademarks of DuPont or its affiliates.

SW logo is a trademark of Svalof Weibull AB, Sweden.

Trilex, Prosper, LIBERTY and the LibertyLink Logo are registered trademarks of Bayer. Liberty® and the LibertyLink® logo are registered trademarks of Bayer Crop Science. This herbicide resistance gene will NOT safeguard this hybrid against herbicides other than glufosinate ammonium herbicides.

WILBUR-ELLIS Logo, IDEAS TO GROW WITH and Manifest, Integra Logo, Every Seed Fortified for Success with Manifest and Silage that Produces are trademarks of Wilbur-Ellis Company.

Herculex Insect Protection by Dow AgroSciences and Pioneer Hi-Bred.



Planting Refuges, Preserving Technology

Before opening a bag

of seed, be sure to read and understand 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 Agreement** that you sign. By opening and using a bag of seed, you are reaffirming your obligation to comply with those stewardship requirements.

NOTICE TO BUYER:

WARRANTY, DISCLAIMER, AND LIMITATION OF LIABILITY

WARRANTY. The seller hereby warrants that the seed purchased under this label will comply with the description on the bag label (within recognized tolerances) for a period of six (6) months from date of purchase, as required by any applicable federal and state seed laws. DISCLAIMER OF WARRANTIES. EXCEPT FOR THE FOREGOING EXPRESS WARRANTY, THE SEED IS FURNISHED "AS-IS," AND SELLER MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, WITH RESPECT TO THE SELECTION, PURCHASE OR USE OF THIS PRODUCT: SELLER SPECIFICALLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR THAT THIS SEED IS FREE OF ANY PHENOTYPIC AND/OR GENOTYPIC (BIOTECH) TRAITS, INCLUDING TRACE AMOUNTS THEREOF.

LIMITATION OF LIABILITY. To the extent permitted by law, Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product. THE EXCLUSIVE REMEDY OF THE BUYER OR USER, AND THE EXCLUSIVE LIABILITY OF SELLER, FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THIS PRODUCT, OR, AT THE ELECTION OF SELLER, THE REPLACEMENT OF THE PRODUCT.

These terms and conditions shall be interpreted in accordance with the laws of the State of California, excluding its conflicts of laws rules, and may not be amended by any oral or written agreement.

WILBUR-ELLIS COMPANY
P.O. Box 16458, Fresno, CA 93755

Making Seed Quality a Priority

"Many of our customers take Integra's quality for granted — and we are perfectly fine with that."

INTEGRA™ IS COMMITTED

Integra has made a significant commitment to ensuring that only the highest quality material goes into every bag of seed. This is accomplished by adopting the most advanced equipment and techniques available during handling, screening and processing.

An example of this is the use of optical sorting technology. This process allows consistent removal of discolored, cracked or otherwise damaged seed during conditioning. Although the process is expensive and increases the amount of screen outs and discards, the result is more uniformity and a higher quality product.



Integra also verifies our customers receive the highest quality seed through third party verification. Some seed companies rely on their own internal laboratories, but we use independent certified seed labs to measure physical and genetic seed quality. Further, we promise you will see the seed that fails to meet our strict standards. Seed production and processing is an area where many seed companies cut corners. They are tempted to do this because it saves money. But quality differences make a real difference in performance — especially when you incur a cold or unusually wet spring.

Integra's customers can be assured that no corners were cut and that their seed was delivered only after meeting or exceeding the highest standards. As stated by Integra's Operations Manager: "Many of our customers take Integra's quality for granted - and we are perfectly fine with that."



•

Growers should refer to Monsanto's Technology Use Guide for information on crop stewardship regarding the potential movement of pollen to neighboring crops. ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS. Know Before You Grow's a registered service mark of National Corn Growers Association. For more information call 1-866-SELL CORN.

Association's website at www.amseed.org or call your seed supplier.

Know Before You Grow®, an information service provided by National Corn Growers Association

Grain harvested from products that bear this mark is fully approved for food and feed

use in the United States and Japan, but is not approved in the European Union. You

must find a market for this crop that will not ship this grain or its processed products

to Europe. Appropriate markets for this grain include: domestic feed use or grain

more information on your grain market options, go to the American Seed Trade

handlers that specifically agree to accept this grain and handle it appropriately. For

MARKET CHOICES® is a registered certification mark used under license from ASTA.

Visit Integra™at www.FortifiedSeed.com

The new Integra™ website is a great source of information to assist you in selecting the best seed technology for your farm.

You will find a variety of helpful tools

- Information on new product releases and the latest biotechnology offerings
- Detailed profile sheets of each of the Integra products
- Planting and product management information
- The latest news and developments regarding the seed industry,

Integra and Wilbur-Ellis Company

- Links to other valuable agricultural web sites
- Contact information for the Integra Seed Team

corn • leafy silage • soybeans sunflowers • alfalfa • sorghum • canola





REGIONAL CONTACTS AREA

Max Crittenden

China Spring, Texas 76633 Phone: 254-836-0169

Derek Winn

841 W. Elkhorn Blvd Rio Linda, California 95673 Phone: 916-991-4451

Brett Dunn

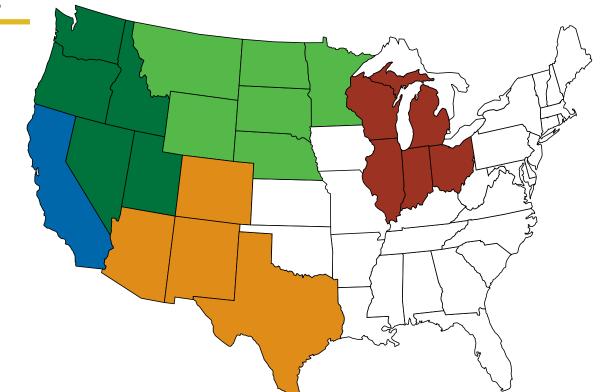
30665 SW Highway 34 Albany, Oregon 97321 Phone: 541-926-1200

Jim Habernicht

PO Box 40 Bozeman, Montana 59771 Phone: 406-582-8375

Bernie Roossinck

4160 10 Mile Road Sparta, Michigan 49345 Phone: 231-834-5689





EVERY SEED FORTIFIED FOR SUCCESS WITH MANIFEST'

1-800-500-1698 www.FortifiedSeed.com

09



