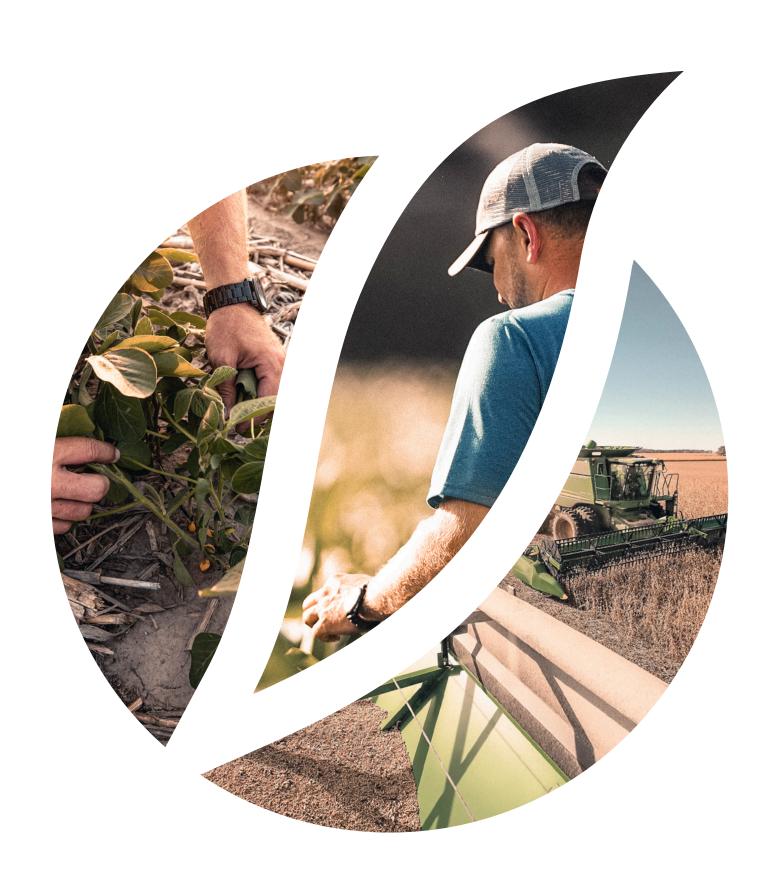




**SOYBEANS** 

CORN

**ENOGEN®** 



# WE'RE LISTENING

# **Our Promise**

To work and listen with intention, helping farmers find threats, opportunities and custom solutions for every acre.

# **Our Story**

We believe there is a better solution to be found in every field, and finding it starts with first listening to you—the farmer. We share the keen sense of detail it takes to understand every facet of an operation and make each season a success.

# Our Seed Guide is Just That – A Guide

Because the acres and conditions unique to each farmer are what determine the best placement and results. Consider this your best accessory to optimal yield potential, and consider Golden Harvest\* seeds the best choice for your fields now and, more importantly, your vision for the future.

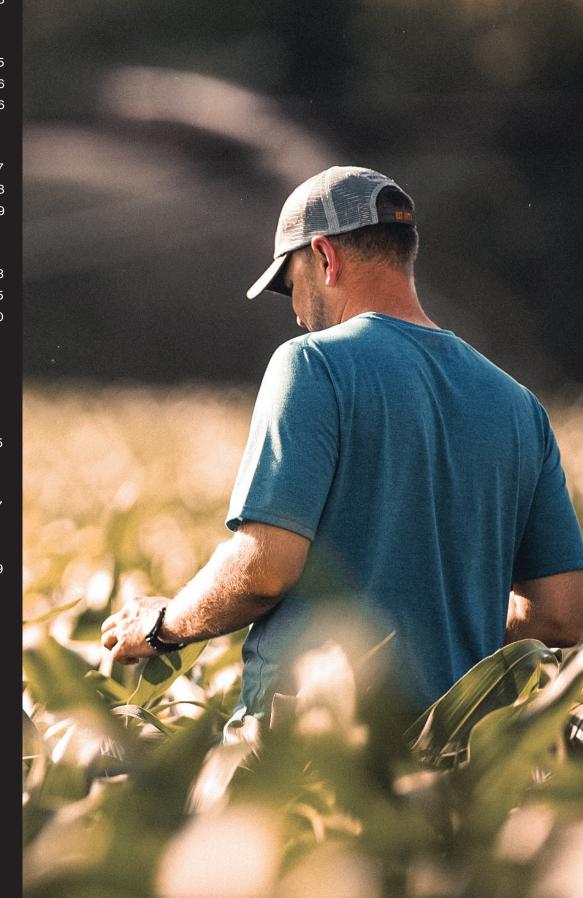
# **CONTENTS**

# **Our Story**

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44 MOST OF OUR SEED ADVISORS ARE FARMERS THEMSELVES. THIS GIVES US
A DIRECT CONDUIT TO WHAT IS HAPPENING IN THE FIELD FROM THOSE LIVING IT
EVERY DAY. BY LISTENING TO OUR SEED ADVISORS AND OUR FARMER CUSTOMERS
WE ARE ABLE TO ADAPT AND EVOLVE QUICKLY TO STAY RELEVANT IN A
FAST-CHANGING INDUSTRY. 97

-Dave Young, Head, Golden Harvest Marketing



# SERVICE 365

Service 365 is our year-round commitment to doing whatever it takes to optimize yields in each farmer's field conditions. From locally proven product recommendations to in-season advice to harvest insights, we deliver a service experience that yields results.

Our six-phase commitment below sets priorities and guides which agronomic insights, E-luminate technologies and field monitoring farmers may need to make the best data-driven decisions. But it all starts with listening, because Golden Harvest is here to tailor our recommendations and tools to you—not the other way around.



**44** GOLDEN HARVEST HAS VARIETIES TO FIT YOUR ACRES AND THE EXPERTISE TO PLACE THEM FOR SUCCESS. WE ARE PASSIONATE ABOUT HELPING FARMERS BE MORE PROFITABLE. 77

> -Andy Lee, Head, Golden Harvest East Commercial Unit

> > **Season Prep**

**Establishment** 

**Plant Growth** 

**Yield Potential** 

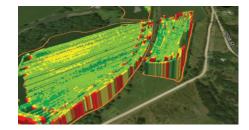
**Harvest Prep** 

Harvest-Post-Harvest



Experience insights on the go with E-luminate. Each feature within our digital agronomy platform is designed with intention, allowing greater visibility to see what you may need and when you need to see it in your fields. Our Seed Advisors make the difference in turning this data into yield potential by compiling, analyzing and uploading data and insights into E-luminate for you.





# **Planning**

# **GAME PLAN**

- > Field x Field Proposals
- > Auto Rate Assignments
- > Customized Product Information

# **RANGEFINDER**

> Variable Rate Scripts for Soy and Corn



# In-Season

# **E-LUMINATE DIGITAL AGRONOMY PLATFORM MOBILE APP**

- > Scouting
- > Weather Data

# **MACHINE DATA**

> Planting Data

### **GRAIN COUNT APP**

> Use your cell phone to take a photo of corn to get yield projections



# Harvest

# HARVEST PRIORITY

> Prioritizes fields by hybrid to help develop a pre-harvest plan

# **MACHINE DATA**

> Yield Data

44 THE 2022 LINEUP IS COMPLETELY FOCUSED ON OUR CUSTOMERS' NEEDS. YIELD. RETURN-ON-INVESTMENT. PERFORMANCE. AGRONOMICS. CHOICE AND EASE OF DOING BUSINESS. WE HEAR YOU. AND OUR CUSTOMER-OBSESSED APPROACH IS DEDICATED TO DELIVERING. 99

-Nick Frohardt, Head, Golden Harvest West Commercial Unit

02 01 **OUR STORY OUR STORY** 

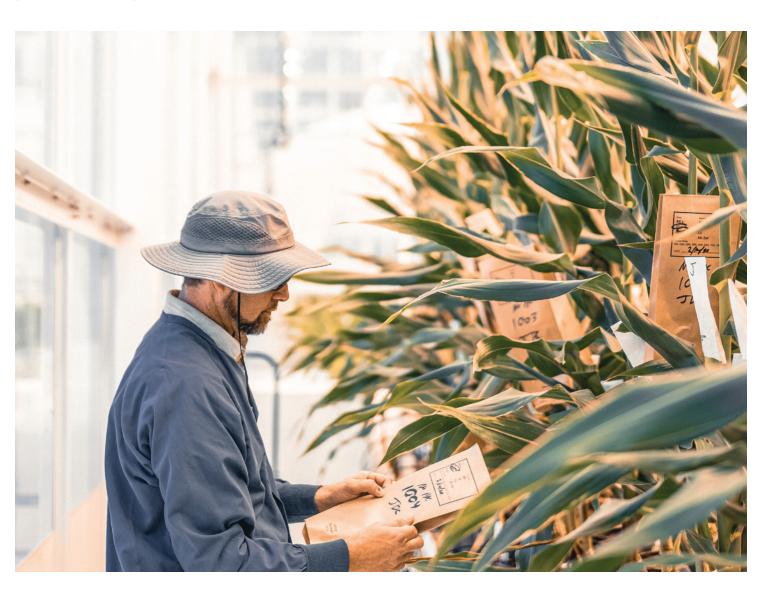
# OUR R&D COMMITMENT

From our expert-packed U.S. research centers to the more than \$1.4 billion we invest annually in research and development—No. 2 globally in R&D spend—we take everything our teams hear from farmers and see in the field to develop the solutions farmers need and commercialize them as quickly as possible. Syngenta is investing \$400 million in our North American Seeds business to drive the balanced synchronization of speed, precision and power.

\$1.4B

R&D Annual Investment

5K+
Global R&D Employees



# **More Speed**

### TRAIT INTROGRESSION ACCELERATION

- > New \$45 million corn-focused facility in Nampa, Idaho
- > Trait conversion accelerator infrastructure enables Syngenta to rapidly bring market-leading corn traits to market using controlled environment growth spaces and state-of-the-art processes
- > Soy-focused facility in Clinton, Illinois, is the industry's first large-scale facility of this type
- > Aims to get new traits into high-performing germplasm as rapidly as possible, moving to field trials in record time
- > Optimized seed testing and development to shorten the path to commercial varieties to as little as three years from the typical six- to-seven years
- > How we're able to bring options like Enlist E3® soybean varieties to market faster than almost anyone else in the industry without ever taking risks on product performance

# HI-EDIT™ TECHNOLOGY ■

- > Proprietary and revolutionary method will improve speed to market without sacrificing precision or quality, shortening the trait introgression process
- > Tim Kelliher, Ph.D., of Syngenta discovered the haploid inducer gene, H-I or HI gene, which makes the method possible
- > With HI-Edit Technology, we've blended both gene editing and doubled haploid breeding methods, allowing us to edit hundreds of hybrid lines faster and getting new traits into our strong, proprietary genetics even faster

# **More Precision**

# STALK CRUSHER

> Stalk Crusher tests the density of every corn stalk on every test plot at all 300+ of our research sites, collecting 20x more

- data compared to traditional testing, bringing stronger corn products—with greater predictability—to market faster
- Other seed companies manually count only downed corn, and in only a portion of their test plots
- > State-of-the-art sensors measure the force needed to take down stalks during harvest
- > This allows us to collect countless data points, leading to greater accuracy for genetic testing and the ability to bring stronger corn products to market faster

# **More Power**

- > Golden Harvest is committed to farmer collaboration in finding threats, opportunities, and custom solutions for every acre, leveraging the power of Syngenta Seeds R&D
- By inviting farmers to see and participate in the process at our labs, growing chambers and in-field trials, we're able to collaborate to fuel more timely and relevant innovations
- > Syngenta Innovation Center at Research Triangle Park (RTP), North Carolina
- Syngenta scientists stimulate various growing environments, including 50 acres of state-of-the-art greenhouses, to aid in the discovery and development of biotech seed technologies

# More to Come

- > R&D Innovation and Customer Experience Center in Malta, Illinois
- Brings together the best researchers, scientists and farmers from across the country for on-farm collaboration
- An ideation center that will test new decision science concepts that stem from the needs of our farmer customers
- > Syngenta's Farm of the Future in Ottawa, Illinois
- Serving as an incubator for concepts coming out of the Customer
   Experience Center, its sole purpose is to determine whether a concept
   can scale up to commercial level and bring farmers the value they are
   looking for (or vice versa) or needs to be pulled back for additional research
- 152 acres managed by Syngenta employees







O3 our story

Strong agronomics are at the core of the Golden Harvest brand. Our agronomists and Golden Harvest Seed Advisors listen and record actionable data and local insights to precisely place products for maximum performance in your fields. With a year-round commitment to taking in every facet of your farm and doing whatever it takes to optimize yield potential in your field conditions, our team helps you manage your corn and soybean crops throughout the season giving you the most out of every acre.



# Seeding Rate Online Tool ★

### YIELD ENVIRONMENT

> Optimum seeding rates increase as yield potential increases. The penalty associated with choosing the incorrect seeding rate also increases at higher yield environments.

# **HYBRID RESPONSE**

> The yield response to increasing or decreasing seeding rates differs considerably among hybrids. Golden Harvest evaluates each hybrid's seeding response at multiple trialing locations each year for two or more years to help fine-tune field recommendations by yield environments.

# **ECONOMIC FACTORS**

> The optimum seeding rate for maximizing return will be slightly lower than the highest yielding seeding rate. The optimum economic seeding rate will also go up or down with commodity prices. Increases in seed cost will reduce the economic optimum, although cost influences seeding rate much less than other factors.

COMMITTED TO YOU AND YOUR OPERATION'S
SUCCESS. WHETHER IT BE PRODUCT KNOWLEDGE AND
RECOMMENDATIONS OR BROAD BASED AGRONOMIC
ADVICE, WE STAND READY, WILLING AND ABLE TO HELP
YOU NAVIGATE THE UPCOMING GROWING SEASON AND
ENSURE OUR SUCCESS ON YOUR FARM. 77

-Steve Wilkens, Golden Harvest Agronomy Lead

# Agronomy Book Experts

The Golden Harvest Agronomy in Action Research Review offers expert insights and research on corn and soybean development, disease management and cultivating a better harvest in your fields. Our Agronomy Team experts specialize in listening to every cue and detail in your area and the industry, then recommending the best custom solutions for your fields and conditions.

44 GOLDEN HARVEST PROVIDES GROWERS WITH
INDUSTRY-LEADING AGRONOMIC INSIGHTS THROUGH OUR
INDUSTRY-LEADING AGRONOMY IN ACTION INFORMATION
AND RESEARCH. LOOK TO GOLDEN HARVEST FOR TIMELY
AND CUTTING-EDGE AGRONOMY INFORMATION.

-Dave Schlake, Golden Harvest Agronomy Lead





Seeding Rate Online Tool





Agronomy Book Experts

O5 AGRONOMY O6

**Golden Harvest Delivers High-Performing** Soybeans



Extensive testing leads to proven performance in our soybean varieties. We get new traits into high-performing soybean germplasm as quickly as possible, so that varieties can move to field trials in record time. It's how we brought Enlist E3 soybeans to market faster than almost anyone else in the industry and have accelerated our process to deliver new varieties three years faster than the typical six- to seven-year timeline, without sacrificing product performance. We specialize in speed, precision and testing, ensuring farmers get the performance they expect.

# Golden Harvest Gold Series™

Gold Series soybeans from Golden Harvest are specifically bred and selected for our soybean portfolio. We've taken the time to perfect our germplasm then combine it with in-demand Enlist E3 soybeans and XtendFlex® traits to bring products that give farmers the confidence in lasting performance. By combining our R&D innovation with new traits into our high-performing germplasm, we deliver a Gold Series portfolio of soybean solutions that put our farmers' yield potential first.





# Your choice of industry-leading traits for superior weed control



- > Elite genetics with strong yield potential and agronomics
- > The Enlist E3 soybean trait allows farmers to use Enlist® herbicides with confidence and better ontarget results than traditional 2,4-D products



- > The next generation of elite Golden Harvest soybean genetics
- > Provides tolerance to dicamba, glyphosate and glufosinate to help manage tough weeds and protect yield potential

**46** ENLIST E3 SOYBEAN WEED MANAGEMENT IS SECOND TO NONE. AT THE END OF THE DAY. IT IS A GREAT PROGRAM AND IT WORKS. IT FLAT-OUT KILLS WEEDS. 77

> -Mark Donnell, Golden Harvest Soybean Farmer, Mattoon, IL



> Broad portfolio of elite Golden Harvest soybean genetics combined with advanced trait technology that offers tolerance to both dicamba and glyphosate herbicides



- > Strong yield potential and agronomics
- glufosinate applications

**ROUNDUP READY 2** 

> In-season glyphosate and

# SOYBEAN SEED TREATMENTS

# **Helping Crops Reach Full Potential**

Your Seed Advisor is extremely knowledgeable on the entire Syngenta crop protection portfolio and can recommend the right products for your conditions. From herbicides and fungicides to insecticides and seed treatments, these products are designed to increase plant health and improve crop yield potential and performance in both corn and soybeans.

+4 BU/A
Yield Improvement



**Improved Disease Control** 





# Golden Harvest Preferred Seed Treatments

- > Delivers customized soybean seed protection with improved disease control and handling properties
- > Contains an enhanced rate of Apron XL® fungicide seed treatment for superior protection of seed- and soilborne diseases such as Pythium and early-season Phytophthora
- > With unique polymers that bind active ingredients to the seed coat, the seed treatment decreases dust-off and improves seed flow through treating and planting equipment
- > Powered by CruiserMaxx® Vibrance® seed treatment with an option to add Saltro® fungicide seed treatment, the leading protection against Sudden Death Syndrome (SDS) and Soybean Cyst Nematode (SCN)

# Powered by CruiserMaxx\*Vibrance\*

- > Delivers early season, broad-spectrum insect and disease control from day one
- > Delivers faster speed to canopy and more robust, vigorous plants for improved overall performance through the Cruiser\* Vigor Effect
- > Optimizes root health, nutrient uptake, water usage and stress tolerance for better emergence through the unique Rooting Power of Vibrance fungicide seed treatment

# Enhanced with (\*) Saltro\* (\*)

- > +4 bushels per acre (bu/A) yield improvement over ILEVO® under SDS pressure
- > Higher intrinsic activity than older technology to protect against the cause of SDS
- > Robust activity against Soybean Cyst, Root Knot, Reniform, Lesion and Lance Nematodes
- Superior protection from SDS without signs of plant stress, including phytotoxicity, stunting, reduced plant stands, susceptibility to pests or weather and reduced plant growth above- and below-ground





O9 soybeans 10

# SOYBEAN CHARACTERISTICS

PROD	DUCT								A	GRONG	OMIC/F	LANT	CHAR	ACTER	ISTIC	S*						
		<u>S</u>														Ada	aptatic	on to S	oil Typ	es/	Herb	icide
ø		y (R		ype							Color			ivity	ting	,	Yield E	Environ	ments		Resp	onses
Golden Harvest Soybean Brands	Herbicide Tolerant Traits	Relative Maturity (RM)	Emergence	Canopy/Plant Type	Plant Height	Growth Habit	Standability	Narrow Row	Wide Row	Flower Color	Pubescence Co	Pod Color	Hilum Color	Chloride Sensitivity	Green Stem Rating	Drought Prone	High pH	Highly Productive	Variable	Poorly Drained	Sulfentrazone	Metribuzin
GH00629X	RR2X	0.06	3	М	MS	IND	2	1	2	PUR	LTW	BR	BR	INC	1	F	F	В	G	G	В	В
GH00833E3	E3	0.08	3	MT	М	IND	4	1	2	PUR	GR	BR	BF	-	-	В	G	В	В	G	В	G
GH00982XF NEW •	XF	0.09	3	М	М	IND	2	1	2	PUR	LTW	TN	BL	INC	1	G	G	В	В	G	G	G
GH0145X	RR2X	0.1	3	М	MT	IND	3	1	2	PUR	LTW	TN	BL	INC	2	G	G	В	G	G	В	В
GH0294E3	E3	0.2	3	М	М	IND	3	1	2	PUR	GR	TN	BF	-	-	G	G	F	В	G	G	В
GH0272XF NEW ●	XF	0.2	3	М	MT	IND	2	1	2	PUR	LTW	TN	BL	INC	2	G	G	В	В	G		В
GH0325E3	E3	0.3	3	М	М	IND	4	2	2	WH	GR	TN	BF	-	-	G	G	G	В	G		В
GH0308X	RR2X	0.3	3	М	MS	IND	2	1	2	PUR	LTW	TN	IMY	INC	2	F		G	G	G	В	В
GH0452E3 NEW •	E3	0.4	3	MB	MS	IND	4	2	2	PUR	GR	BR	YEL	INC	-	В	В	Р	G	G	В	G
GH0443X	RR2X	0.4	3	М	MS	IND	2	1	2	PUR	LTW	TN	BL	EXC	2	В	В	G	G	G	В	G
GH0593E3	E3	0.5	3	М	М	IND	4	2	1	PUR	GR	TN	BF	-	-	F	G	F	G	G	G	G
GH0502XF NEW •	XF	0.5	3	М	М	IND	3	2	1	PUR	LTW	TN	IMY	INC	1	В		F	G	В	В	F
GH0543X	RR2X	0.5	2	М	MS	IND	2	1	3	PUR	LTW	TN	BR	INC	2	G		В	G	G	В	В
GH0715E3	E3	0.7	3	М	MS	IND	4	2	1	PUR	GR	BR	BF	-	-	В	G	В	G	G	В	В
GH0749X	RR2X	0.7	3	М	М	IND	2	2	2	PUR	LTW	TN	BL	INC	2	F	G	В	G	В	В	В
GH0842E3 NEW	E3	0.8	2	М	М	IND	2	1	2	PUR	GR	TN	BF	EXC	-	-	-	-	-	-	-	-
GH0822XF <i>NEW</i> •	XF	8.0	3	MB	MT	IND	3	2	1	PUR	LTW	TN	BR	INC	3	В	G	F	G	В	В	G
GH0936X	RR2X	0.9	3	М	MS	IND	4	1	2	PUR	LTW	TN	BR	INC	2	G	G	G	G	G	В	В
GH1012E3	E3	1.0	2	MB	М	IND	2	2	1	PUR	GR	BR	GR	EXC	3	F					В	F
GH1032XF <i>NEW</i> •	XF	1.0	3	М	М	IND	3	2	1	PUR	LTW	TN	IMY	INC	2	В	G	F	G	G	В	G
S12-R3	RR2Y	1.2	3	М	М	IND	2	3	2	PUR	LTW	TN	BL	EXC	3	G	В	В	G	G	В	В
GH1362E3	E3	1.3	3	MB	М	IND	3	2	1	PUR	GR	TN	IMB	INC	-	G	G	В	G	G	В	В
GH1317X	RR2X	1.3	3	М	М	IND	2	1	2	PUR	LTW	BR	BL	INC	3	G		В	G	В	G	G
GH1472E3 NEW •	E3	1.4	3	М	MS	IND	3	1	2	PUR	GR	TN	BF	EXC	1	G		В	В	В	В	В
GH1442XF NEW •	XF	1.4	3	М	MT	IND	2	1	2	PUR	LTW	BR	BR	INC	2	G	G	В	В	G	G	В
GH1414X	RR2X	1.4	3	MT	MT	IND	2	1	2	PUR	LTW	BR	BR	INC	2	G	G	В	G	G	В	В
GH1627LG	LL/GT27	1.6	3	М	М	IND	2	1	2	PUR	LTW	TN	BL	INC	-	G		G	G	G	В	В
GH1763E3	E3	1.7	3	М	М	IND	2	2	1	WH	LTW	TN	BL	INC	-	G		G	G	G	В	В
GH1762XF NEW •	XF	1.7	4	М	MT	IND	2	1	2	PUR	LTW	BR	BR	INC	2	G	G	В	В	G	G	G
GH1802E3 NEW •	E3	1.8	3	М	М	IND	3	1	1	PUR	GR	BR	IMB	INC	2	В		G	В	G	В	G
GH1922E3 NEW	E3	1.9	2	М	MT	IND	3	1	1	PUR	LTW	BR	BL	-	-	-	-	-	-	-	-	-

\*NOTE: A few product descriptions and ratings are sourced from the variety's generic supplier and may change as additional data is gathered

#### Herbicide Tolerant Traits

E3 = ENLIST E3® E3/STS = ENLIST E3® and STS® LL/GT27 = LibertyLink® and GT27™ LL/GT27/STS = LibertyLink®, GT27™ and STS® RR2X = Roundup Ready 2 Xtend® RR2X/STS = Roundup Ready 2 Xtend® and STS® XF = XtendFlex®

XF/STS = XtendFlex® and STS®

RR2Y = Roundup Ready 2 Yield®

GOLD Gold Series =

#### Canopy/Plant Type

T = Thin MT = Medium-Thin M = Medium MB = Medium-Bush

# B = Bush Plant Height

S = Short MS = Medium-Short M = Medium MT = Medium-Tall T = Tall

# **Growth Habit**

IND = Indeterminate DET = Determinate

# Protein and Oil Ratings are based

IMB = Imperfect Black on two-year averages. IMY = Imperfect Yellow except in cases where LTW = Light Tawny only one year of data PUR = Purple is available.

#### TN = Tan TW = Tawny WH = White YEL = Yellow

Color Abbreviations

BF = Buff

BL = Black

GR = Gray

BR = Brown

#### Chloride Sensitivity INC = Includer

EXC = Excluder

## Adaptation to Soil Types/ **Yield Environments**

B = Best G = Good

F = Fair

P = Poor - = Not Available

# Resistance Rating System

GRAIN

**QUALITY\*** 

34.6

33.7

34.4

34.7

34.7

34.9

33.9

34.7

38.1

35.5

33.9

35.3

33.7

34.2

36.1

34.5

33.9

36.3

35.4

36.1

35.2

34.0

34.4

34.7

34.9

33.3

348

34.6

34.7

Ö

19.1

18.8

18.4

18.0

17.9

18.3

18.2

18.1

17.1

18.4

18.5

17.4

18.6

18.8

18.1

17.2

19.1

17.4

17.5

18.3

17.9

19.4

18.2

181

18.6

194

18.8

18.7

18.4

Rps1c

Rps1a

Rps1c

Rps1c

Rps3a

Rps1c

S

Rps1c, Rps3a

Rps1c, Rps3a

Rps1c

Rps3a

Rps1c

Rps1c, Rps3a

Rps3a

Rps1c S

Rps1c

Rps1k, Rps3a

S

Rps1c

S

Rps1c

Rps1c, Rps3a

Rps1c, Rps3a

Rns1c

Rps1c

S

S

Rps1c

Rps1c

Rps1k

3

3

3

3

2

PI88788

PI88788

S

S

PI88788

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Pekina

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PI88788

Indicates when a variety is resistant to a specific disease or pest. For Soybean Cyst Nematode (SCN), the gene(s) conveying the resistance, race(s) the variety is resistant against, and degree of resistance are specified, when available. For Phytophthora, the gene(s) conveying the resistance and general field tolerance rating are listed.

#### Sovbean Cyst Nematode (SCN)

The PI88788, PI89772, and Peking genes confer varying resistances to certain races of SCN. Refer to the "Race Resistances" column for phenotypic (expressed) resistance ratings.

1, 3, 5, and/or 14 = SCN race(s) for which resistance is conferred

R = Resistant

MR = Moderately Resistant

S = Susceptible (no gene-specific resistance)

# Phytophthora Gene Resistance

DISEASE/PEST\*

S

MR3

MR3

S

S

MR3

MR3

S

S

MR3

MR3, MR14

MR3

S

MR3

MR3

R3, MR14

R3

S

R3, MR14

R3

R3, MR14

MR3, MR14

S

MR1, R3, MR5

MR3

MR3, MR14

MR3

MR3

MR3

R3

R3, MR14

The following genes confer resistance to the listed races of Phytophthora: Rps1a = Resistant to races 1, 2, 10, 11, 13-18, 24, 26, 27, 31, 32, 36, 38

Rps1c = Resistant to races 1-3, 6-11, 13, 15, 17, 21, 23, 24, 26, 28-30, 32, 34, 36, 38, 44

4

Rps1k = Resistant to races 1-11, 13-15, 17, 18, 21-24, 26, 36-38, 44

Rps3a = Resistant to races 1-5, 8, 9, 11, 13, 14, 16, 18, 23, 25, 28, 29, 31-35, 39, 44, 45 S = Susceptible (no gene-specific tolerance)

## Phytophthora Field Tolerance

Usually not as complete as race-specific resistance, but it offers general protection. Resistance is not expressed in early stages of plant development. Numerical rating scale of 1-9; 1 = Best.

## Disease/Pest Ratings

**PRODUCT** 

GH00629X

GH0145X

GH0294F3

GH0325E3

GH0308X

GH0443X

GH0543X

GH0715E3

GH1012E3

GH1362E3

GH1317X

GH1414X

GH1627LG

GH1763F3

S12-R3

GH1032XF NEW •

GH1472E3 NEW

GH1442XF NEW

GH1762XF NEW

GH1802E3 NEW

GH1922E3 NEW

GH00833E3

GH00982XF NEW •

GH0272XF NEW •

GH0452E3 NEW

GH0502XF NEW

Leaf Spot

eath (SDS)

Stem Blight

White

Soybean (SWM)

1 = Best 9 = Worst

- = Not Available

# SOYBEAN CHARACTERISTICS

PROI	DUCT								A	GRONG	OMIC/P	LANT	CHAR	ACTER	ISTIC	S*						
		Î														Ada	aptatio	on to S	oil Typ	es/	Herb	icide
		/ (R		/be							<u>o</u>			vity	Rating			Environ			Respo	onses
Golden Harvest Soybean Brands	Herbicide Tolerant Traits	Relative Maturity (RM)	Emergence	Canopy/Plant Type	Plant Height	Growth Habit	Standability	Narrow Row	Wide Row	Flower Color	Pubescence Color	Pod Color	Hilum Color	Chloride Sensitivity	Green Stem Rat	Drought Prone	High pH	Highly Productive	Variable	Poorly Drained	Sulfentrazone	Metribuzin
GH1944E3	E3	1.9	3	MT	М	IND	2	2	2	PUR	GR	TN	IMB	EXC	-	F	G	F	G	G	В	В
GH1932XF NEW •	XF	1.9	2	М	М	IND	3	2	1	PUR	LTW	BR	GR	INC	2	G	G	G	В	G	В	В
GH1915X	RR2X	1.9	3	М	MS	IND	2	1	2	WH	LTW	BR	BL	-	4	F		В	G	G	В	G
GH2011E3	E3	2.0	3	М	М	IND	2	1	1	PUR	GR	BR	BF	INC	2	G		G	В	G	G	В
GH2041X	RR2X	2.0	3	М	М	IND	2	1	2	WH	LTW	BR	BL	INC	3	G	G	В	В		В	В
GH2027LG	LL/GT27	2.0	3	М	MT	IND	2	2	2	WH	LTW	BR	BR	INC	2	G		G	В	G	В	В
GH2102XF <i>NEW</i> •	XF	2.1	3	М	М	IND	4	3	1	WH	LTW	BR	BL	INC	2	В	G	G	G	В	В	G
GH2292E3 NEW •	E3	2.2	3	М	М	IND	3	1	1	PUR	GR	BR	IMB	INC	3	G	F	В	В	В	В	В
GH2329X	RR2X	2.3	3	MB	М	IND	3	3	1	WH	LTW	BR	BL	INC	3	G		G	G	В	В	В
GH2442E3 NEW •	E3	2.4	2	MT	М	IND	2	2	2	WH	GR	TN	BF	INC	2	F	Р	F	G	G	В	В
GH2427LG	LL/GT27	2.4	2	MB	М	IND	3	3	1	PUR	LTW	BR	BL	INC	3	В	G	В	В	G	В	В
GH2505E3	E3	2.5	3	М	MT	IND	4	3	1	PUR	GR	BR	IMB	-	3	G	G	G	В	G	В	G
GH2562XF NEW •	XF	2.5	3	М	MT	IND	4	3	1	WH	LTW	BR	BL	INC	3	G	Р	G	G	В	В	В
GH2610E3	E3	2.6	2	М	М	IND	2	1	2	PUR	GR	TN	BF	INC	2	F	G	В	G	G	G	В
GH2722XF <i>NEW</i> •	XF	2.7	3	М	MT	IND	3	2	1	PUR	LTW	BR	BL	INC	3	G	Р	G	В	G	G	G
GH2788X	RR2X	2.7	3	М	MS	IND	2	1	1	PUR	GR	BR	IMB	INC	3	G	Р	В	G	В	F	F
GH2727LG	LL/GT27	2.7	2	MB	М	IND	3	2	1	PUR	LTW	TN	BR	INC	2	В	F	В	В	В	G	G
GH2818E3	E3	2.8	2	М	М	IND	3	1	1	WH	GR	TN	BF	INC	2	В	F	В	В	G	G	В
GH2872XF <i>NEW</i> •	XF	2.8	3	MB	MT	IND	3	2	1	PUR	LTW	TN	BL	INC	1	G		В	В	G	F	В
GH2922E3 NEW •	E3	2.9	3	MB	М	IND	2	1	1	WH	GR	TN	BF	INC	3	В	G	В	G	В	G	В
GH3088X	RR2X	3.0	2	MB	М	IND	3	1	1	PUR	LTW	BR	BL	INC	3	G	G	В	G	В	В	В
GH3132E3 NEW •	E3	3.1	2	MB	М	IND	3	2	1	WH	GR	TN	BF	INC	2	В	G	В	G	В	В	В
GH3192XF <i>NEW</i> •	XF	3.1	3	MT	Т	IND	4	2	2	PUR	LTW	TN	BL	INC	3	G		В	G	G	В	В
GH3195X	RR2X	3.1	3	М	М	IND	3	1	2	WH	LTW	BR	BL	INC	4	G	G	G	G	В	F	F
GH3380E3	E3	3.3	3	М	М	IND	3	2	1	PUR	LTW	BR	BR	-	2	F	G	G	G	G	В	G
GH3392E3 NEW	E3	3.3	2	М	MT	IND	3	1	1	PUR	LTW	BR	BL	-	-	-	-	-	-	-	-	-
GH3442XF NEW	XF	3.4	4	MB	М	IND	3	2	1	PUR	LTW	BR	BL	INC	3	В	G	В	В	В	В	G
GH3427LG	LL/GT27	3.4	3	М	М	IND	2	2	2	PUR	LTW	TN	BL	INC	2	G	G	G	G	G	В	В
GH3512E3S NEW •	E3/STS	3.5	2	MB	MT	IND	4	3	1	PUR	GR	TN	IMB	INC	3	В	F	В	В	G	В	G
GH3582E3	E3	3.5	2	М	М	IND	2	1	1	PUR	GR	TN	IMB	INC	2	В	Р	В	G	G	В	В
GH3546X	RR2X	3.5	2	М	MT	IND	3	1	1	PUR	LTW	BR	BL	INC	2	G	G	В	В	В	В	В

\*NOTE: A few product descriptions and ratings are sourced from the variety's generic supplier and may change as additional data is gathered

B = Bush

T = Tall

#### Herbicide Tolerant Traits

F3 = FNLIST F3® E3/STS = ENLIST E3® and STS® LL/GT27 = LibertyLink® and GT27™ LL/GT27/STS = LibertyLink®, GT27™ and STS® RR2X = Roundup Ready 2 Xtend® RR2X/STS = Roundup Ready 2 Xtend® and STS® XF = XtendFlex®

XF/STS = XtendFlex® and STS®

RR2Y = Roundup Ready 2 Yield®



GOLD Gold Series =

# Canopy/Plant Type

T = Thin MT = Medium-Thin M = Medium MB = Medium-Bush

# Plant Height

S = Short MS = Medium-Short M = Medium MT = Medium-Tall

# **Growth Habit**

IND = Indeterminate DET = Determinate

# Protein and Oil Ratings are based

is available.

IMB = Imperfect Black on two-year averages. IMY = Imperfect Yellow except in cases where LTW = Light Tawny only one year of data

PUR = Purple TN = Tan TW = Tawny

BF = Buff

BL = Black

GR = Gray

BR = Brown

# WH = White YEL = Yellow

Color Abbreviations

# Chloride Sensitivity

INC = Includer EXC = Excluder

## Adaptation to Soil Types/ **Yield Environments**

B = Best G = Good

F = Fair P = Poor

- = Not Available

#### Resistance Rating System

GRAIN

**QUALITY\*** 

33.7

36.2

34.4

35.5

35.2

33.6

33.9

34.9

34.5

36.1

32.5

32.8

32.4

33.8

34.8

36.0

34.2

31.8

34.4

33.9

34.3

32.8

35.2

33.3

31.2

35.9

32.1

33.7

34.3

Ö

19.9

17.5

19.7

18.5

18.9

18.8

184

19.2

18.9

19.7

20.6

19.4

20.5

19.6

19.5

20.2

20.0

19.5

18.2

19.8

18.5

19.6

19.1

194

19.8

19.3

19.8

20.0

19.2

Rps1c

Rps1c, Rps3a

Rps1c

Rps1c, Rps3a

Rps1c

S

Rps1c

Rps1c

Rps1c

Rps1c, Rps3a

S

S

Rps1c

Rps1k

Rps1c

Rps1c

S

Rps1k

S

Rps1k, Rps3a

Rps1c

Rps1k, Rps3a

Rps1k

Rps1c

S

S

Rps1c

S

Rps1c

S

S

2

3

4

3

Indicates when a variety is resistant to a specific disease or pest. For Soybean Cyst Nematode (SCN), the gene(s) conveying the resistance, race(s) the variety is resistant against, and degree of resistance are specified, when available. For Phytophthora, the gene(s) conveying the resistance and general field tolerance rating are listed.

#### Sovbean Cyst Nematode (SCN)

The PI88788, PI89772, and Peking genes confer varying resistances to certain races of SCN. Refer to the "Race Resistances" column for phenotypic (expressed) resistance ratings.

1, 3, 5, and/or 14 = SCN race(s) for which resistance is conferred

R = Resistant

MR = Moderately Resistant

S = Susceptible (no gene-specific resistance)

# Phytophthora Gene Resistance

5

3 4

3

DISEASE/PEST\*

PI88788

PI88788

PI88788

PI88788

PI88788

PI88788

PI88788

PI88788

PI89772

PI88788

PI88788

PI88788

PI88788

Peking

PI88788

MR3, MR14

MR3

R3, MR14

MR3

R3. MR14

MR3. MR14

MR3

MR3

MR1, MR3

R3. MR14

MR3

MR3

R3

MR3

R3, MR14

MR3

MR3

R3

R3

R3, MR14

R3

MR3

R3, MR14

MR3

R3, MR14

MR3

MR3

MR3

R3. MR14

The following genes confer resistance to the listed races of Phytophthora: Rps1a = Resistant to races 1, 2, 10, 11, 13-18, 24, 26, 27, 31, 32, 36, 38

3

3

Rps1c = Resistant to races 1-3, 6-11, 13, 15, 17, 21, 23, 24, 26, 28-30, 32, 34, 36, 38, 44

Rps1k = Resistant to races 1-11, 13-15, 17, 18, 21-24, 26, 36-38, 44 Rps3a = Resistant to races 1-5, 8, 9, 11, 13, 14, 16, 18, 23, 25, 28, 29, 31-35, 39, 44, 45

S = Susceptible (no gene-specific tolerance)

## Phytophthora Field Tolerance

Usually not as complete as race-specific resistance, but it offers general protection. Resistance is not expressed in early stages of plant development. Numerical rating scale of 1-9; 1 = Best.

# Disease/Pest Ratings

**PRODUCT** 

GH1944E3

GH1915X

GH2011E3

GH2041X

GH2027LG

GH2329X

GH2427LG

GH2505E3

GH2610E3

GH2788X

GH2727LG

GH2818E3

GH1932XF NEW •

GH2102XF NEW •

GH2292E3 NEW .

GH2442E3 NEW •

GH2562XF NEW

GH2722XF NEW •

GH2872XF NEW •

GH3132E3 NEW

GH3192XF NEW •

GH3392E3 NEW

GH3442XF NEW

GH3512F3S NEW

GH3195X

GH3380F3

GH3427LG

Leaf Spot

eath (SDS)

Stem Blight

White

Soybean (SWM)

1 = Best 9 = Worst

- = Not Available

# SOYBEAN CHARACTERISTICS

PROI	DUCT								A	GRONG	OMIC/F	LANT	CHAR	ACTER	ISTIC	S*						
		(Ms																on to S			Herb	oicide
t S		ty (F		Гуре							Color			tivity	Rating		Yield I	Environ	ments		Respo	onses
Golden Harvest Soybean Brands	Herbicide Tolerant Traits	Relative Maturity (RM)	Emergence	Canopy/Plant Type	Plant Height	Growth Habit	Standability	Narrow Row	Wide Row	Flower Color	Pubescence C	Pod Color	Hilum Color	Chloride Sensitivity	Green Stem Ra	Drought Prone	High pH	Highly Productive	Variable	Poorly Drained	Sulfentrazone	Metribuzin
GH3762E3S <i>NEW</i>	E3/STS	3.7	2	М	Т	IND	4	2	2	WH	GR	TN	BF	EXC	3	G	G	G	G	В	В	В
GH3732XF <i>NEW</i> •	XF	3.7	2	М	MT	IND	2	1	1	PUR	LTW	BR	BL	INC	3	В	G	В	В	G	В	В
GH3728X	RR2X	3.7	2	M	М	IND	2	1	1	PUR	GR	BR	IMB	INC	2	В	Р	G	G	В	F	В
GH3727LG	LL/GT27	3.7	2	M	М	IND	3	3	1	PUR	LTW	BR	BR	INC	3	В	Р	G	G	G	В	G
GH3902E3S <i>NEW</i>	E3/STS	3.9	2	MB	Т	IND	5	3	1	WH	GR	TN	BF	EXC	3	В	Р	F	В	G	В	В
GH3922E3	E3	3.9	2	MB	М	IND	2	1	1	WH	GR	BR	BF	INC	3	В		G	G	G	В	G
GH3952XF <i>NEW</i> •	XF	3.9	3	М	MT	IND	2	1	1	PUR	LTW	BR	BL	INC	3	G		В	В	В	F	G
GH3982X	RR2X	3.9	2	MB	MT	IND	3	1	1	PUR	LTW	TN	BL	INC	3	G	Р	G	В	F	В	G
GH3927LG	LL/GT27	3.9	3	M	MT	IND	2	2	1	WH	LTW	BR	BL	INC	-	G			В	G	В	В
GH4072E3 NEW •	E3	4.0	3	MB	М	IND	3	2	1	WH	GR	TN	BF	INC	-	G	Р	В	G	В	G	G
GH4155E3	E3	4.1	2	MB	MT	IND	2	1	1	PUR	LTW	TN	BR	INC	2	G	G	G		G	G	G
GH4201E3	E3	4.2	3	MB	М	IND	3	2	1	WH	LTW	BR	BR	INC	-	G			G	В	В	G
GH4222XF NEW •	XF	4.2	3	М	М	IND	2	1	2	PUR	LTW	BR	BL	INC	-	В	F	В	В	G	Р	В
GH4240XS	RR2X/STS	4.2	2	М	MT	IND	2	1	1	WH	GR	BR	BF	INC	3	G	Р	В	В	В	F	В
GH4362E3S NEW	E3/STS	4.3	2	М	MT	IND	2	1	1	PUR	GR	BR	IMB	INC	-	-	-	-	-	-	-	-
GH4392XF NEW •	XF	4.3	3	М	MT	IND	4	3	2	PUR	LTW	BR	BL	INC	-	В	G	В	G	G		В
GH4307X	RR2X	4.3	3	М	MT	IND	4	3	1	PUR	LTW	TN	BL	INC	4	В		В	В	В	G	G
GH4474E3	E3	4.4	3	MB	М	IND	3	1	1	PUR	GR	TN	IMB	INC	1	G	Р	F	G	G		F
GH4452XFS <i>NEW</i> •	XF/STS	4.4	2	М	MT	IND	3	1	2	WH	GR	BR	BF	INC	-	В	Р	В	В	В	F	В
GH4582E3 NEW •	E3	4.5	2	MB	MT	IND	4	4	1	WH	GR	BR	BF	INC	5	В	Р	Р	В	G	В	F
GH4512XF <i>NEW</i> •	XF	4.5	2	М	MT	IND	3	1	1	PUR	LTW	BR	BL	EXC	-		Р	G	G	G		В
GH4531XS	RR2X/STS	4.5	2	MB	MT	IND	3	2	1	PUR	GR	BR	BF	INC	2	В		В	G	G		G
GH4612E3S	E3/STS	4.6	1	М	Т	IND	3	3	1	PUR	GR	BR	IMB	EXC	1	В		G	В	G		G
GH4741X	RR2X	4.7	2	M	MT	IND	2	1	1	PUR	LTW	BR	BL	EXC	2	В	Р	В	G	G	Р	В
GH4838E3S	E3/STS	4.8	3	М	MT	IND	4	3	1	PUR	GR	BR	IMB	INC	2	Р	Р	G				F
GH4882XFS NEW •	XF/STS	4.8	2	M	MT	IND	2	1	2	WH	GR	BR	BF	INC	-	G	Р	В	G	В	Р	G
GH4823XS	RR2X/STS	4.8	2	MB	T	IND	3	2	2	WH	LTW	BR	BR	EXC	3	G	Р	G	G	G	F	G
GH4972E3S <i>NEW</i>	E3/STS	4.9	3	MB	MT	IND	3	2	1	WH	GR	BR	BF	EXC	-	-	-	-	-	-	-	-
GH4917XS	RR2X/STS	4.9	2	MB	Т	IND	5	4	1	PUR	LTW	TN	BL	INC	4	G	Р	F	G	В	F	G
GH5189E3	E3	5.1	3	MB	MT	IND	4	3	1	WH	GR	BR	BF	EXC	-	G	Р	F	G	G		F
GH5175XS	RR2X/STS	5.1	1	MB	MT	IND	4	3	1	WH	GR	TN	BF	INC	4		Р	В	G	G	F	G
GH5762XF <i>NEW</i> ●	XF	5.7	2	MB	М	DET	3	1	1	PUR	LTW	BR	BL	INC	-	F	F	В	G	G	Р	В

\*NOTE: A few product descriptions and ratings are sourced from the variety's generic supplier and may change as additional data is gathered

#### Herbicide Tolerant Traits

F3 = FNLIST F3® E3/STS = ENLIST E3® and STS® LL/GT27 = LibertyLink® and GT27™ LL/GT27/STS = LibertyLink®, GT27™ and STS® RR2X = Roundup Ready 2 Xtend® RR2X/STS = Roundup Ready 2 Xtend® and STS® XF = XtendFlex®

XF/STS = XtendFlex® and STS®

RR2Y = Roundup Ready 2 Yield®



GOLD Gold Series =

# Canopy/Plant Type

T = Thin MT = Medium-Thin M = Medium MB = Medium-Bush

# B = Bush Plant Height

S = Short MS = Medium-Short M = Medium MT = Medium-Tall

# **Growth Habit**

is available.

IND = Indeterminate DET = Determinate

# Protein and Oil

GR = Gray Ratings are based IMB = Imperfect Black on two-year averages. IMY = Imperfect Yellow except in cases where LTW = Light Tawny only one year of data

PUR = Purple TN = Tan TW = Tawny

BF = Buff

BL = Black

BR = Brown

# WH = White YEL = Yellow

Color Abbreviations

#### Chloride Sensitivity INC = Includer

EXC = Excluder

# Adaptation to Soil Types/ **Yield Environments**

B = Best G = Good

F = Fair P = Poor

- = Not Available

# Resistance Rating System

GRAIN

**QUALITY\*** 

32.1

31.4

35.5

37.4

31.7

34.4

32.3

34.5

36.9

32.1

35.1

33.7

32.9

34.5

33.6

33.7

33.9

33.3

33.2

34.4

36.8

35.5

34.9

346

33.1

35.0

34.9

35.5

35.0

36.1

Ö

20.0

18.7

19.0

19.1

20.1

19.4

18.8

19.5

19.5

18.5

19.0

19.5

18.1

19.0

18.0

19.7

18.2

17.9

18.6

18.0

20.7

19.0

19.2

18.0

18.2

20.8

21.4

18.0

20.0

16.2

Rps1c

Rps1c

Rps3a

Rns1c

Rps1a

Rps1c

S Rps1c, Rps3a

Rps3a

S

Rps1c

S

S

S

Rps1a

Rps1c

Rps1c, Rps3a

S

S

S

Rps1k

S

Rps1k

Rps1c

S

Rps1k

S

Rps1k

S

Indicates when a variety is resistant to a specific disease or pest. For Soybean Cyst Nematode (SCN), the gene(s) conveying the resistance, race(s) the variety is resistant against, and degree of resistance are specified, when available. For Phytophthora, the gene(s) conveying the resistance and general field tolerance rating are listed.

3

#### Sovbean Cyst Nematode (SCN)

The PI88788, PI89772, and Peking genes confer varying resistances to certain races of SCN. Refer to the "Race Resistances" column for phenotypic (expressed) resistance ratings.

1, 3, 5, and/or 14 = SCN race(s) for which resistance is conferred

R = Resistant

MR = Moderately Resistant

S = Susceptible (no gene-specific resistance)

# Phytophthora Gene Resistance

5

5

2

DISEASE/PEST\*

PI88788

PI88788 PI88788

PI88788

PI88788

PI88788

PI88788

PI88788

3

3

MR3

R3

R3, R14

MR3

R3

MR3

R3

R3 MR14

MR3

MR3

MR3

R3

MR3

R3

R3, MR14

MR3

R3, MR14

MR3

MR3

R3

R3

MR3, MR14

MR3

R3, MR14

MR3

MR3

R3 MR14

R3, MR14

MR3

MR3, MR14

R3

The following genes confer resistance to the listed races of Phytophthora: Rps1a = Resistant to races 1, 2, 10, 11, 13-18, 24, 26, 27, 31, 32, 36, 38

Rps1c = Resistant to races 1-3, 6-11, 13, 15, 17, 21, 23, 24, 26, 28-30, 32, 34, 36, 38, 44 Rps1k = Resistant to races 1-11, 13-15, 17, 18, 21-24, 26, 36-38, 44

Rps3a = Resistant to races 1-5, 8, 9, 11, 13, 14, 16, 18, 23, 25, 28, 29, 31-35, 39, 44, 45 S = Susceptible (no gene-specific tolerance)

## Phytophthora Field Tolerance

Usually not as complete as race-specific resistance, but it offers general protection. Resistance is not expressed in early stages of plant development, Numerical rating scale of 1-9; 1 = Best.

## Disease/Pest Ratings

**PRODUCT** 

GH3762E3SNEW •

GH3732XF NEW •

GH3902F3SNEW

GH3952XF NEW .

GH4072E3 NEW

GH4222XF NEW

GH4362E3S NEW

GH4392XF NEW •

GH4452XFS NEW •

GH4582E3 NEW •

GH4512XF NEW •

GH3728X

GH3727LG

GH3922E3

GH3982X

GH3927LG

GH4155F3

GH4201E3

GH4240XS

GH4474E3

GH4531XS

GH4741X

GH4612E3S

GH4838F3S

GH4823XS

GH4917XS

GH5189F3

GH5175XS

GH4882XFS NEW

GH4972E3S NEW

GH5762XF NEW

Leaf Spot

2

3

2

2

2

eath (SDS)

Stem Blight

White

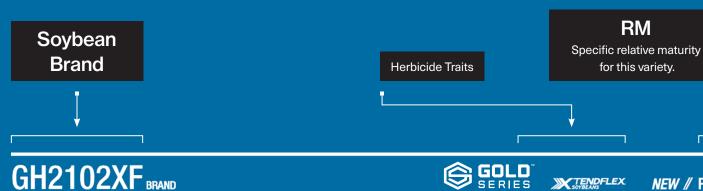
Soybean (SWM)

1 = Best 9 = Worst

- = Not Available

# SOYBEAN





GH2102XF BRAND

# **EXCELLENT YIELD POTENTIAL WITH STRONG DEFENSE**

- Widely adapted while excelling on poorly drained
- Very good tolerance to PRR, SDS, IDC, and Frogeye Leaf Spot
- Performs well South of zone



Ratings are based on field observations collected by Syngenta from multiple locations over multiple years. They represent comparisons with company products only.



TENDFLEX

RM

for this variety.

**NEW** // RM: 2.1

# Map

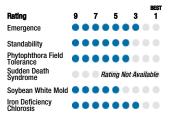
Primary (and secondary, where applicable) areas of adaptation for this variety series. Areas are suggested; performance may vary.

# GH0325E3 BRAND

# RM: 0.3

# **EXCELLENT YIELD POTENTIAL FOR MATURITY**

- Soybean Cyst Nematode protection in an early bean
- Adapted to all row widths
- Performed in and out of the Red River Valley





# GH0822XF BRAND

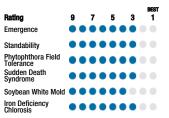
# SERIES





# **GREAT YIELD POTENTIAL WITH STRESS TOLERANCE**

- Large plant type performs well on both drought-stressed and poorly drained acres
- Good fit for the high pH acre where Soybean Cyst Nematode can be an issue
- Rps1c gene with strong tolerance to Phytophthora Root Rot





# GH1442XF BRAND

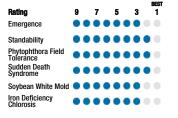






# PROVEN GENETICS WITH A COMPLETE DISEASE PACKAGE

- Consistent performance with broad adaptation across soil types
- Very strong Phytophthora tolerance allows for planting in poorly drained soils
- Excellent standability with strong tolerance to Soybean White Mold





# GH1802E3<sub>BRAND</sub>

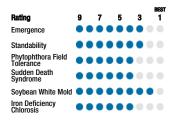
# SERIES





# **NEW GENETICS FOR THE ENLIST E3 TRAIT PLATFORM**

- Good stress tolerance for drought-prone acres
- Stands well with very strong tolerance to Soybean White Mold
- Performs well in high-yield environments





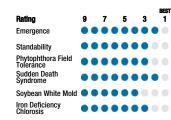
# GH1922E3<sub>BRAND</sub>



**NEW // RM: 1.9** 

# STEP-CHANGE IN PERFORMANCE

- Outstanding tolerance to SDS
- Rps1k gene with strong field tolerance to Phytophthora Root Rot
- Medium-tall plant type with good stress tolerance





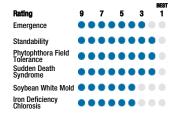
# GH2011E3<sub>BRAND</sub>



RM: 2.0

# GREAT DISEASE PACKAGE WITH STRONG PERFORMANCE ACROSS A WIDE GEOGRAPHY

- Excellent SDS tolerance
- Rps1c/3a stack with excellent field tolerance to Phytophthora Root Rot
- Great row spacing flexibility





# GH2102XF BRAND

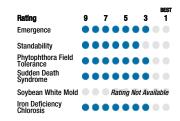






# **EXCELLENT YIELD POTENTIAL WITH STRONG DEFENSE**

- Widely adapted while excelling on poorly drained soils
- Very good tolerance to Phytophthora, Sudden Death Syndrome, Iron Deficiency Chlorosis, and Frogeye Leaf Spot
- Performs well south of zone





# GH2722XF BRAND

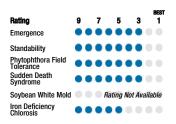




**NEW** // RM: 2.7

# PROVEN GENETICS THAT DELIVER TOP-END YIELD POTENTIAL

- Broadly adapted with strong Sudden Death Syndrome tolerance
- Rps1c and very good Phytophthora tolerance for heavier soils
- Dependable standability throughout the season





# GH2922E3 BRAND

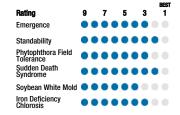






# **EXCITING YIELD POTENTIAL WITH A STELLAR DEFENSIVE PACKAGE**

- Broadly adapted with superb Sudden Death Syndrome tolerance
- Solid performance across soils excelling on Phytophthora-prone acres
- Strong Iron Deficiency Chlorosis tolerance for high pH soils





# GH3132E3 BRAND

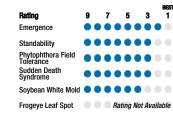
# SERIES





### WIDELY ADAPTED WITH SOLID DEFENSE

- Stacked Rps1k/3a genes to protect against Phytophthora
- Good performance in clay soils with high water holding capacity
- Flexible to move north or south of zone





# GH3442XF<sub>BRAND</sub>







# **EXCELLENT PERFORMANCE FOR ANY YIELD ENVIRONMENT**

- Performs well both north and south of zone
- Top-end yield potential protected by a solid defensive package
- Good performance across soil types





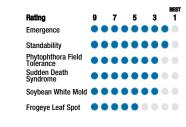
# GH3582E3 BRAND



RM: 3.5

# SUPERIOR PERFORMANCE ACROSS GEOGRAPHIES

- Very strong yields across multiple years
- Reliable SDS tolerance
- Exceptional Southern Stem Canker protection





19 soybeans 20

# 44 THE BIGGEST ADVANTAGE WITH GOLDEN HARVEST IS THEIR WIDE VARIETY OF TRAITS THAT THEY HAVE TO OFFER ME; DIFFERENT TRAITS FOR THE DIFFERENT FIELDS AND VARYING SOIL CONDITIONS THAT I FARM IN. HAVING THAT WIDE VARIETY HAS DEFINITELY **ALLOWED ME TO MAXIMIZE MY YIELDS. 77**

-Darrin Fisher, Golden Harvest Soybean Farmer, Lake Lillian, MN









# **EXCELLENT PERFORMER ACROSS REGIONS**

- Performs well both north and south of zone
- Handles droughty soils well
- Consistent potential at any yield level



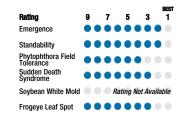
# GH3922E3 BRAND



RM: 3.9

# TOP YIELD POTENTIAL ACROSS ENVIRONMENTS

- Proven tolerance to Sudden Death Syndrome and Frogeye Leaf Spot
- Ability to handle drought stress
- Widely adapted for easy placement





# GH3952XF BRAND

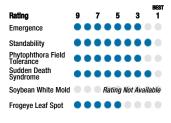






# **GREAT AGRONOMICS WITH EXCITING YIELD POTENTIAL**

- Superb Sudden Death Syndrome tolerance allows for early planting
- Moves south of zone well
- Great potential at any yield level





# GH4222XF BRAND

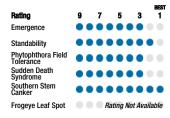
# SERIES



TENDFLEX NEW // RM: 4.2

# TOP-END YIELD POTENTIAL WITH BROAD ADAPTATION

- Solid tolerance to Sudden Death Syndrome with great standability
- Equally impressive on both dryland and irrigated acres
- Performs across all soil types





# GH4452XFS<sub>BRAND</sub>



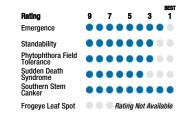






# FARMER-TRUSTED GENETICS WITH TOP-END PERFORMANCE

- Very good standability for an easy harvest
- Excellent choice for both first-crop and double-crop
- Wide area of adaptation with STS tolerance





# GH4612E3S BRAND

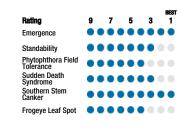






# TOP PERFORMANCE WITH STS TOLERANCE AND CHLORIDE EXCLUDER

- Well suited for either dryland or irrigated acres
- Excellent choice for clay soils
- Tremendous Southern Stem Canker tolerance





# 

Golden Harvest Brings You High-Performing Hybrids



Golden Harvest is committed to innovation to develop and deliver the right corn hybrids to perform in your fields. Thousands of corn traits are tested to find the one that's the safest, highest performing and most effective. Our Nampa, Idaho facility embodies a core pillar of our commitment to fueling a stronger corn lineup with first-in-line innovations available to farmers.

# **Proven Success**

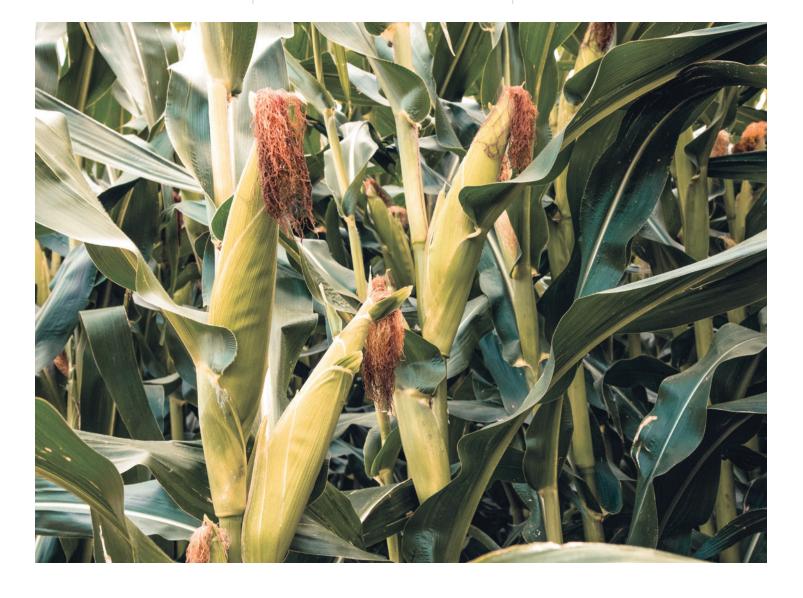
- > Golden Harvest performed successfully in the 2020 F.I.R.S.T. (Farmers' Independent Research of Seed Technologies) comparisons with the help of improved trait introgression
- > Speed and quality achieved with 100% temperature and environmental controls to help create more traited hybrids in elite germplasm
- > Including the power of Agrisure Duracade® trait for above- and below-ground control with Agrisure Viptera® trait for above-ground control providing premium protection



**Finishers** 

26
Top Three Finishers

Top Ten Finishers



corn 24

# **CORN TRAITS**

# **Agrisure Corn Traits**

Agrisure® corn traits offer the most complete above- and below-ground insect control solutions.

Control of these damaging pests provides:

### **ABOVE-GROUND**

- > Less damage from ear-, stalk- and leaf feeding insects resulting in:
- Less stand los
- · Noticeably healthier ears with less insect damage
- Reduced risk of mold and mycotoxin development for high-quality grain

#### **BELOW-GROUND**

- > Stronger, more robust root systems that lead to:
- · Healthier plants
- Fuller leaves that allow for increased photosynthesis and maximum grain fill
- · More robust stalks that stand tall



Increased Insect Control



**Stronger Root Systems** 



# AgrisureDuracade®

Agrisure Duracade trait stack controls 16 above- and below-ground insects—more than any other competitive trait stack on the market, making it the industry's most innovative solution for proactively protecting yield potential and field health against the devastating threat of above- and below-ground pests.

- > Features a unique mode of action for strong corn rootworm control
- > Provides new trait rotational option for a healthier field long-term
- Combines elite genetics for higher yield potential
- 4.1 bu/A average over products without Agrisure Duracade\*
- > When combined with Agrisure Viptera, farmers get the most complete above- and below- ground insect control

# **AgrisureViptera**

No other trait provides better or more complete above-ground insect control than Agrisure Viptera.

- > Agrisure Viptera controls up to 13 above-ground insects and is the only trait available today that effectively controls western bean cutworm
- > Delivers cleaner ears for superior grain quality
- > 7.3 bu/A\*\* yield advantage under ear-feeding insect pressure

# Agrisure Artesian

Agrisure Artesian® hybrids contain multiple genes for season-long drought protection. Agrisure Artesian traits combine with elite genetics, allowing plants to manage gaps in rainfall through the season and optimizes yield in good conditions, delivering nearly 12% higher yields\*\*\* compared to other hybrids in severe and extreme drought.

- \* Data summarized from 390 Syngenta trials in 2018
- \*\* Study results from Syngenta field trials in 33 locations
- \*\*\* Data is based on 7,613 Syngenta on-farm strip trials across
  the Corn Belt. 2010-2014 Syngenta defines a yield environment
  of 50-99 bu/A as savere and fewer than 50 bu/A as extreme



- The trait technology changes as new technologies are introduced.
- The Technology Series indicates herbicide tolerance.
   -Series 3 indicates glyphosate and glufosinate tolerance.
   -Series 5 indicates the Agrisure Duracade series plus glyphosate and glufosinate tolerance.
- The last three numerical identifiers represent the number of modes of action in each hybrid for broad lepidopteran, corn borer and corn rootworm control.
- The letter A indicates if the hybrid is a water-optimized Agrisure Artesian hybrid.
- The Refuge descriptor follows the trait stack numerical identifiers. E-Z Refuge\* hybrids are integrated, single-bag refuge products which contain 95 percent seed of a corn hybrid containing the trait stack and 5 percent seed of a hybrid without insect control traits.

Note: The naming system does not apply to Agrisure 3000GT.

\*All E-Z Refuge products meet the 5% refuge requirement for corn-growing regions. Be sure to check requirements for additional required refuge in cotton-growing regions.

# **Agrisure Traits Nomenclature**

To help farmers understand the competitive advantage of Agrisure traits, we developed a streamlined naming system that helps you identify the insect control you get with each trait. The system creates consistency for delivery of new technology and trait-stacking opportunities.

5 corn 26

# CHARACTERISTICS

PRODUCT			TRAIT OFFERS				IATURI <sup>T</sup> ORMAT	
	Above/Below-Ground Insect Protection with E-Z Refuge	Above-Ground Insect Protection with E-Z Refuge	Above/Below-Ground Insect Protection	Above-Ground Insect Protection	No Insect	RM)		/er
Golden Harvest Hybrid Series	Agrisure Duracade	Agrisure 3120	Agrisure 3000GT	Agrisure Viptera	Agrisure GT	Relative Maturity (RM)	Sii.	GDUs to Black Layer
Golden Harve: Hybrid Series	Agrisure 3122	Agrisure Viptera	Agrisure Viptera	Viptera 3110	Agrisure GT/LL	Relative I	GDUs to Silk	GDUs to
G78C29		3220				78	1150	1890
G80Q01		3220A			GTA/LL	80	1150	1810
G82M47		3220				82	1210	2075
G85Z56	5222	3220				85	1220	2140
G84J92		3120A			GTA, ConvA	86	1200	2140
G88F37		3120A-LL				88	1205	2280
G90S99 NEW	5222 NEW	3220 NEW				90	1240	2290
G91V51	5222A NEW			3110A		91	1240	2300
G90Y04	5222A	3220A			GTA/LL	92	1265	2325
G94P48	5122A-LL					94	1260	2400
G95D32		3220			GT/LL	95	1280	2400
G95M41	5122					95	1245	2365
G96R61	5222					96	1275	2400
G97N86	5222	3220				97	1275	2400
G98L17	5122					98	1295	2410
G98M44 NEW	5122 NEW					98	1310	2410
G99E68	5122					99	1300	2445
G00H12	5122				GT/LL	100	1315	2420
G02K39	5122	3120				102	1305	2475
G02W74			3000GT		Conv.	102	1300	2445
G03B96 NEW	5122 NEW					103	1315	2475
G03C84	5122	3120				103	1355	2475
G03J49			3000GT			103	1355	2550
G03R40	5222					103	1335	2445
G04G36			3111A			104	1320	2550
G04S19	3122					104	1385	2570
G05K08	5122A					105	1310	2555
G06K93					GT/LL	106	1385	2530
G06Q68	5222	3220				106	1355	2560
G07F23			3111		GT, Conv.	107	1375	2570
G07G73 NEW	5122 NEW	3120 NEW				107	1370	2550
G07V88			3000GT		GT	107	1375	2570

Flex hybrids adjust to growing conditions by changing ear length or kernel depth. Determinate/Fixed hybrids are less able to adjust ear size. Plant Population is considered more important for a determinate-ear hybrid than for a flex-ear hybrid.

Note: Disease and Insect Ratings

Ratings are not absolute; environmental conditions and certain cultural practices, such as continuous corn, play a critical role in disease development and insect infestation, which can, in turn, predispose plants to secondary disease such as stalk and ear rots. If conditions are severe, even hybrids rated as resistant can be adversely affected. Farmers should balance yield potential, hybrid maturity and cultural practices against the anticipated risk of disease or insect pressure.

Ratings are based on interpretation of statistically analyzed results of studies conducted by Syngenta.









**Rating Scale** 

1 = Best 9 = Worst

1 = High

9 = Low

- = Not Available

Ear Height Test Weight 1 = High

Plant Height

1 = Tall

9 = Short

AGRONOMIC

**CHARACTERISTICS** 

Root Type P = Penetrating M = Modified

PLANT

**CHARACTERISTICS** 

**DISEASE TOLERANCE** 

acnose Stalk

-usarium Crown

Leaf Blight

Leaf Blight

PRODUCT

G78C29 G80Q01 G82M47 G85Z56 G84J92 G88F37 G90S99 NEW G91V51 G90Y04 G94P48 G95D32 G95M41 G96R61 G97N86

G99E68

G02K39 G02W74 G03B96 NEW G03C84 G03J49 G03R40

G04G36 G04S19 5 G05K08 G06K93 4 G06Q68 G07F23

3

F = Fibrous Leaf Type

3 4 3 3 5 3 2 3 5 2 5 - 3 3 F U SF M Pi 5 3 3 4 3 5

> U = Upright S-U = Semi-Upright P = Pendulum

Ear Flex F = Flex

SF = Semi-Flex SD = Semi-Determinate D = Determinate

**Husk Cover** S = Short M = Medium L = Long

Drought Agrisure Artesian water-optimized hybrid

Cob Color

R = Red

Pi = Pink

W = White

1 = High

9 = Low

Disease Tolerance

- = Not Available

# CHARACTERISTICS

PRODUCT			TRAIT OFFERS				IATURI ORMAT	
	Above/Below-Ground Insect Protection with E-Z Refuge	Above-Ground Insect Protection with E-Z Refuge	Above/Below-Ground Insect Protection	Above-Ground Insect Protection	No Insect	(RM)		yer
Golden Harvest Hybrid Series	Agrisure Duracade	Agrisure 3120	Agrisure 3000GT	Agrisure Viptera	Agrisure GT	Maturity (	¥iis	Black La
Golden Harvee Hybrid Series	Agrisure 3122	Agrisure Viptera	Agrisure Viptera	Viptera 3110	Agrisure GT/LL	Relative Maturity (RM)	GDUs to Silk	GDUs to Black Layer
G08D29	5122A	3120A				108	1405	2560
G08M20	5122	3120				108	1365	2575
G08R52		3220				108	1370	2580
G07B39			3111A			109	1375	2570
G09A86		3330			GT/LL	109	1385	2580
G09T26 NEW		3120 NEW				109	1420	2620
G09Y24	5222A	3220A				109	1420	2570
G10C45	5122					110	1405	2570
G10D21	5332 NEW	3330				110	1410	2570
G10K03		3220				110	1440	2625
G10L16	5222A	3220A			ConvA	110	1395	2620
G10S30	5222					110	1405	2570
G11B63		3120A			GTA/LL	111	1425	2570
G11V76	5122	3120				111	1430	2600
G12S75	5122					112	1430	2630
G12U17	5122	3120				112	1425	2620
G13D55 NEW		3220 NEW				113	1420	2630
G13E90			3111			113	1405	2630
G13H15	5122	3120				113	1420	2640
G13M88				3110		113	1430	2680
G13N18			3111			113	1415	2630
G13P84 NEW		3120 NEW				113	1450	2700
G13T41	5122	3120				113	1435	2605
G13Z50	5222	3220				113	1435	2650
G14K50		3220				114	1455	2640
G14N11	5222					114	1425	2660
G14R38	3122	3120			GT, Conv.	114	1435	2630
G15J91		3220				115	1455	2665
G15L32	5222	3330				115	1455	2645
G16K01			3111		GT	116	1465	2690
G16Q82 NEW	5222A NEW	3120A <i>NEW</i>				116	1440	2700
G17E95 NEW				3110 <i>NEW</i>		117	1465	2650
G18D87			3111			118	1480	2700
G18H82			3111			118	1495	2690

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AGRONOMIC

**CHARACTERISTICS** 

Root Type P = Penetrating M = Modified F = Fibrous

Leaf Type U = Upright S-U = Semi-Upright P = Pendulum

Ear Flex F = Flex SF = Semi-Flex SD = Semi-Determinate D = Determinate

Cob Color

R = Red

Pi = Pink

W = White

1 = High

9 = Low

Disease Tolerance

- = Not Available

**Husk Cover** S = Short M = Medium L = Long

Drought Agrisure Artesian water-optimized hybrid

acnose Stalk Fusarium Crown S-U SD Pi R 3 Pi M R 5 4 G10L16 Pi G13D55 NEW G13H15 G13M88 G13N18 G13P84 NEW G13T41 G13Z50 G14K50 5 G14N11 5 G15L32 L R 3 4 4 4 3 4 5 5 3 3 - 2 3 M S-U SF M W 6 7 5 - 5 - 3

PLANT

**CHARACTERISTICS** 

**DISEASE TOLERANCE** 

Leaf Blig

Leaf Blight

**PRODUCT** 

# CORN AGRONOMIC MANAGEMENT

PRODUCT				Δ	GRONC	OMIC MA	NAGEN	MENT AI	ND PLAC	CEMENT	TRAIT	s			E	ND-USI	TRAIT	s
				Seeding	g Rate (>	k1000k)					otation to							
Golden Harvest Hybrid Series	Relative Maturity (RM)	120 bu	160 bu	200 bu	240 bu	280 bu	Root Strength	Stalk Strength	Continuous Corn	Drought Prone	High pH	Highly Productive	Variable	Poorly Drained	Starch	Protein	Oil	Beef Feed-to-Gain
G78C29	78	26.0	33.0	37.5	41.0	44.0	4	2	В	G	G	В	G	В	В	F	G	G
G80Q01	80	26.0	29.5	30.5	32.0	33.0	2	3	G	В	G	G	В	G	В	G	G	F
G82M47	82	26.0	33.0	37.5	41.0	44.0	2	4	G	F	G	В	F	G	В	Р		G
G85Z56	85	24.5	31.5	34.0	36.5	38.5	4	3	В	В	F	В	В	В	G	G		В
G84J92	86	26.0	33.0	37.5	41.0	44.0	3	2	G	В	F	В	В	В	В			G
G88F37	88	22.0	28.0	32.0	35.0	37.0	3	4		В	F	В	В		G	G		В
G90S99 NEW	90	22.0	28.0	32.0	35.0	37.0	4	3	G	В	F	В	В	G	G	В		В
G91V51	91	26.0	33.0	36.0	37.0	38.5	5	4		В	Р	В	В	G	G	F	G	В
G90Y04	92	26.0	32.5	34.0	35.5	37.0	4	2	В	В	G	В	В	G	В	G		G
G94P48	94	26.0	33.0	35.0	36.0	36.5	3	3	G	В	G	G	В	В	F	В	В	G
G95D32	95	26.0	31.0	34.0	36.5	39.5	3	2	G	В	G	В	В	В	В	F	F	G
G95M41	95	26.0	33.0	35.5	37.5	39.5	2	3		F	G	В	G	G	В			G
G96R61	96	26.0	33.0	37.5	40.5	43.5	3	2	G	В	F	G		В	G	В		F
G97N86	97	26.0	31.0	34.0	37.0	40.0	4	2	G	Р	G	В		G	G	В		В
G98L17	98	22.0	28.0	32.0	35.0	37.0	4	4	В	G	В	В	В	G	В	G		В
G98M44 NEW	98	25.5	29.5	33.0	36.5	40.0	4	4	F	В	G	F	G		G	G	В	G
G99E68	99	26.0	33.0	36.5	39.5	42.5	2	3	G	G	G	В	G	В	G	G	G	F
G00H12	100	24.5	31.5	33.5	36.0	38.5	2	4	G	G	В	В	G	G	G	G	В	F
G02K39	102	26.0	30.5	34.5	38.5	42.5	3	2	В	В	F	В	В	В	G	G	В	В
G02W74	102	26.0	33.0	34.5	35.0	35.5	2	2	G	В	F	В	G	G	G	G	F	G
G03B96 NEW	103	19.0	23.0	31.0	37.0	39.5	3	4	G	F	G	G	G	G	G	G		F
G03C84	103	23.5	27.0	29.5	33.5	37.0	3	4		В	F	В	В		G		В	G
G03J49	103	24.5	30.0	30.0	32.0	33.5	4	5	G	В	G	В	В	В	В		F	В
G03R40	103	22.5	28.5	34.5	40.5	44.0	2	2	В	G	G	В	G	В	G	G	В	F
G04G36	104	23.5	28.0	33.0	38.0	42.5	2	3	F	В	F	G	G	G	G		G	В
G04S19	104	22.0	28.0	32.0	35.0	37.0	4	3	G	G	Р	G	В		В			В
G05K08	105	22.5	27.0	30.0	34.5	39.0	4	3	G	В	G	В	В	G	G	G	В	В
G06K93	106	19.0	24.0	30.0	41.0	44.0	3	3	G	В	G	F	В		В		В	G
G06Q68	106	26.0	33.0	35.5	38.0	40.0	3	3	В	В	F	В	В	G	В		F	G
G07F23	107	24.0	28.0	32.0	36.0	40.0	3	2	G	В	Р	В	В	G	G		В	В
G07G73 NEW	107	22.0	28.0	32.0	35.0	37.0	3	3	G	В	G	В	G	G	G		В	G
G07V88	107	21.0	27.0	31.0	37.0	39.5	5	3	G	В	F	В	В	Р	В	G	В	В
G08D29	108	22.5	26.5	30.5	35.0	39.0	3	3	В	В	F	В	В	G	G		В	G

**Rating Scale** 

1 = Best 9 = Worst

G = Good - = Not available = Fair P = Poor

**Score Interpretation** B = Best

- = Not Available

Drought Agrisure Artesian water-optimized hybrid

Agronomy ratings are based on statistically analyzed results of studies conducted by Syngenta and are relative to other hybrids within the same maturity group.

(RM) Root Stre Str 240 bu 280 bu pq 120 Ö G08M20 108 32.0 37.0 3 3 22.0 28.0 35.0 G08R52 35.5 108 24.5 30.0 410 44.0 2 2 G07B39 109 24.5 34.0 39.5 37.0 4 G09A86 109 26.0 37.5 43.5 3 2 G09T26 NEW 109 34.5 43.5 2 2 G09Y24 109 23.0 38.0 4 G10C45 110 31.5 44.0 2 2 G10D21 110 37.0 44.0 3 3 G10K03 110 38.0 4 G10L16 110 22.0 38.5 G10S30 110 32.0 37.0 3 G11B63 111 27.5 39.5 19.0 G11V76 29.0 111 33.5 38.0 2 3 G12S75 112 26.0 33.0 39.5 3 2 G12U17 112 25.5 31.0 33.5 36.5 2 G13D55 NEW 113 20.0 25.5 31.5 37.0 42.5 3 2 G13E90 113 22.0 25.0 28.5 31.5 35.0 4 G13H15 113 26.0 33.0 35.0 38.5 3 2 36.5 G13M88 113 26.0 33.0 36.0 39.0 3 В 37.5 G13N18 113 26.0 30.0 31.5 4 113 G13P84 NEW 26.0 34.0 36.5 3 113 32.0 2 G13T41 20.0 26.0 44.0 2 113 22.0 32.0 37.0 4 G13Z50 114 26.0 31.0 34.0 2 G14K50 114 26.0 33.0 40.0 4 G14N11 114 32.0 37.0 3 G14R38 22.0 28.0 35.0 2 115 32.0 G15J91 26.0 38.5 G15L32 29.5 G16K01 116 26.0 3 G16Q82 NEW 22.0 G17E95 NEW 22.0 32.0 37.0 2 3 G18D87 118 26.0 34.5 38.0 3 G18H82 19.0 24.5 39.5

AGRONOMIC MANAGEMENT AND PLACEMENT TRAITS

**END-USE TRAITS** 

**Rating Scale** 1 = Best 9 = Worst

- = Not available

**PRODUCT** 

B = Best G = Good F = Fair P = Poor

= Not Available

Score Interpretation

Agronomy ratings are based on statistically Agrisure Artesian analyzed results of studies conducted by water-optimized hybrid Syngenta and are relative to other hybrids within the same maturity group.

Drought

# HYBRIDS

# **Hybrid Series**

All hybrids within this series were developed from the same base genetics.

> This two-digit number is the same as the last two digits of relative maturity.

> > The next letter and two-digit number are designated to uniquely identify each genetic family.

# Trait versions available in this hybrid series.

- "A" indicates the presence of Agrisure Artesian technology for water optimization in the hybrid.
- E-Z Refuge® Seed Blend: Products include integrated in-bag 5% refuge.
- The dash separates the genetic and trait
- The trait designator aligns with the Agrisure traits nomenclature system.
- NEW: Indicates hybrid series or hybrid trait versions new for 2021.

RM

Specific relative maturity for this hybrid series.

G91V51-5222A E-Z Refuge Brand NEW E092W5-5122A E-Z Refuge Brand NEW

Agrisure Agrisure Agrisure Duracade Viptera Artesian

RM: 91

# **DOMINATING PERFORMANCE WITH AGRISURE ARTESIAN TECHNOLOGY**

- Maximizes yield when it rains; increases yield when it doesn't
- Strong emergence and seedling vigor for a fast
- Broad adaptation across all soils and yield environments



Agrisure Artesian -



Map

Primary (and secondary, where applicable) areas of adaptation for this variety series. Areas are suggested; performance may vary.

G80001-GTA/LL Brand

G80Q01-3220A E-Z Refuge Brand E080Q1-5122A E-Z Refuge Brand

Agrisure Agrisure Agrisure Duracade Viptera Artesian

**RM: 80** 

### **CONSISTENT POTENTIAL ACROSS A WIDE RANGE OF YIELD ENVIRONMENTS**

- Maximizes yield when it rains, increases yield potential when it doesn't
- Very good root strength
- Excellent test weight





G90S99-5222 E-Z Refuge Brand NEW G90S99-3220 E-Z Refuge Brand NEW

- Great emergence and strong seedling vigor provide a fast start at planting

TOP-END YIELD POTENTIAL WITH BROAD ADAPTATION

- Outstanding stress tolerance reduces grower risk
- Strong performance across different soil types allows flexible placement





G91V51-5222A E-Z Refuge Brand NEW E092W5-5122A E-Z Refuge Brand NEW G91V51-3110A Brand

Agrisure Agrisure

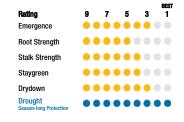
Agrisure Agrisure Agrisure

**RM: 91** 

**NEW** // RM: 90

# DOMINATING PERFORMANCE WITH AGRISURE ARTESIAN TECHNOLOGY

- Maximizes yield when it rains, increases yield potential when it doesn't
- Strong emergence and seedling vigor for a fast
- Broad adaptation across all soils and yield environments





G95D32-3220 E-Z Refuge Brand G95D32-GT/LL Brand

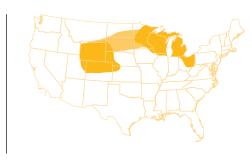
E095D3-5122 E-Z Refuge Brand

Agrisure Agrisure

# **DIVERSE GENETICS WITH EXCITING YIELD POTENTIAL**

- Broad adaptation across yield environments
- Superb stalks for season-long standability
- Solid agronomics for continuous corn acres

9 7 5 3 1 ...... ••••••• ••••••• Staygreen ••••••• Drydown ••••••



33 34 CORN

G96R61-5222 E-Z Refuge Brand

Agrisure Agrisure
Duracade Viptera

**RM: 96** 

G02K39-5122 E-Z Refuge Brand G02K39-3120 E-Z Refuge Brand

objectives

✓ Agrisur∈Duracade\*

### DEPENDABLE ROOTS AND STALKS FOR SEASON-LONG STANDABILITY

- Exceptional emergence for a fast start in all environments
- Broad adaptation across soils
- Outstanding grain quality with heavy test weight

9 7 5 3 1 ...... •••••• •••••• Drydown •••••• Drough



**G98M44**-5122 E-Z Refuge Brand *NEW* 

AgrisureDuracade

**NEW** // RM: 98

G03B96-5122 E-Z Refuge Brand NEW

YIELD STABILITY AND PLANT HEALTH FOR CONSISTENT PERFORMANCE

Broadly adapted across soil types and management

Excellent plant health and disease package

Good ear flex provides population flexibility

# AgrisureDuracade

**NEW** // RM: 103

## HEAT-DRIVEN HYBRID FOR WESTERN DRYLAND ENVIRONMENTS

- Outstanding ear flex for population flexibility
- Sound agronomics paired with very strong drought tolerance
- Excellent test weight and dependable drydown

9 7 5 3 1 Stalk Strength •••••• Staygreen •••••• Drydown •••••• Drought



G99E68-5122 E-Z Refuge Brand

AgrisureDuracade

TOP-END YIELD POTENTIAL WITH OUTSTANDING ROOTS AND SOLID STALKS

- Broad adaptation across soils
- Excellent late-season plant health for season-long standability
- Exceptional performance in poorly drained soils

9 7 5 3 1 •••••• ..... •••••• . . . . . . . . . .

•••••



G00H12-5122 E-Z Refuge Brand

AgrisureDuracade

G00H12-GT/LL Brand

E100H1-5122 E-Z Refuge Brand

# **GREAT YIELD STABILITY ACROSS ENVIRONMENTS**

- Shorter plant stature with medium ear placement
- Strong drought tolerance
- Solid stalks and roots for season-long standability

9 7 5 3 1 •••••• ••••••• •••••• Staygreen •••••• Drydown •••••• Drought



# **DEPENDABLE YIELD POTENTIAL ACROSS VARYING SOIL ENVIRONMENTS**

- Distinguishing test weight and grain quality
- Outstanding greensnap tolerance reduces risk
- · Positive response to in-season management

9 7 5 3 1 Root Strength Stalk Strength •••••• Staygreen •••••• Drydown ••••••

9 7 5 3 1

•••••

••••••

••••••

••••••

••••••

Drydown

Drought



G07G73-5122 E-Z Refuge Brand NEW

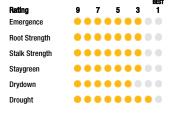
G07G73-3120 E-Z Refuge Brand NEW

# ✓ Agrisur∈Duracade¹

**NEW** // RM: 107

# **EXCELLENT TOP-END YIELD POTENTIAL WITH BROAD ADAPTATION**

- Outstanding heat and moisture stress tolerance for improved stability
- Robust plant stature with solid roots and stalks
- Semi-flex ear for variable planting populations

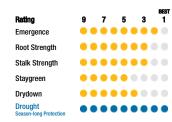




G08D29-5122A E-Z Refuge Brand G08D29-3120A E-Z Refuge Brand Agrisure Agrisure
Duracade Artesian

**EXCELLENT STALKS AND ROOTS FOR SEASON-LONG STANDABILITY** 

- Maximizes yield when it rains, increases yield potential when it doesn't
- Excellent emergence
- Performs well under a wide range of populations





G09T26-3120 E-Z Refuge Brand NEW

G12S75-5122 E-Z Refuge Brand E112S5-5122 E-Z Refuge Brand NEW

✓ Agrisur∈Duracade

**RM: 112** 

# **OUTSTANDING AGRONOMICS WITH BROAD ADAPTABILITY**

- Strongest performance in medium to high yield environments
- Brings a new level of root and stalk strength
- Very strong emergence for early planting

9 7 5 3 1 ...... •••••• •••••• •••••• Drough



G10D21-5332 E-Z Refuge Brand NEW G10D21-3330 E-Z Refuge Brand

Agrisure Agrisure
Duracade Viptera

RM: 110

**NEW** // RM: 109

# TOP-END YIELD POTENTIAL WITH PROVEN ROOTS AND STALKS FOR SEASON-LONG STANDABILITY

- Consistent high yield potential
- Broadly adapted with a great disease package
- Maximize yield potential and performance with higher populations

9 7 5 3 1 •••••• Root Strenath •••••• Stalk Strength •••••• Staygreen •••••• Drydown •••••• Drought



G10L16-5222A E-Z Refuge Brand G10L16-3220A E-Z Refuge Brand

G10L16-A Brand (Conv.)

Agrisure Agrisure Agrisure

**RM**: 110

### INDUSTRY-LEADING YIELD POTENTIAL ACROSS ALL ACRES

- Leading drought tolerance powered by Agrisure Artesian Technology
- Moderate plant structure for residue management
- Excellent drydown for an early harvest option

9 7 5 3 1 . . . . . . . . . . ••••• ••••• ...... ••••••



G11V76-5122 E-Z Refuge Brand G11V76-3120 E-Z Refuge Brand

E111V7-5122 E-Z Refuge Brand NEW

AgrisureDuracade

RM: 111

# VERSATILITY ACROSS SOIL TYPES COMBINED WITH STRONG DROUGHT TOLERANCE

- Moderate plant type with strong roots aids standability
- Fast drydown and good grain quality
- Dependable emergence in stress environments

9 7 5 3 1 ...... •••••• Staygreen •••••• Drydown •••••• Drought



# **OUTSTANDING STALKS FOR LATE-SEASON STANDABILITY**

- Very good staygreen and late-season intactness
- Strong disease tolerance to NCLB and GLS
- Good ear flex provides population flexibility





G13D55-3220 E-Z Refuge Brand NEW

Agrisure Viptera

**NEW** // RM: 113

# PROVEN DISEASE PACKAGE TO MAXIMIZE YIELD POTENTIAL

- Excellent ear flex to drive yield potential across populations
- Outstanding grain quality and stalk strength
- Excellent staygreen enhances late season intactness





G13H15-5122 E-Z Refuge Brand G13H15-3120 E-Z Refuge Brand

✓ Agrisur∈Duracade

# BROADLY ADAPTED HYBRID FOR EXCELLENT POTENTIAL ACROSS YIELD ENVIRONMENTS

- Very strong stalks for season-long standability
- Outstanding late-season plant health and intactness
- Strong performance under drought conditions





G13P84-3120 E-Z Refuge Brand NEW

**NEW** // RM: 113

# **OUTSTANDING ROOT STRENGTH WITH PROVEN STALKS FOR SEASON-LONG STANDABILITY**

- Solid agronomics with great test weight for the Central and Eastern Corn Belt
- Excellent choice for medium and high yield environments
- Maximum yield potential achieved at higher populations





G15J91

G15J91-3220 E-Z Refuge Brand Agrisure Viptera RM: 115

## **OUTSTANDING ROOTS AND PROVEN STALKS FOR SEASON-LONG STANDABILITY**

- Exceptional versatility on a wide range of soil types
- Good ear flex provides population flexibility
- Strong fit for drought-prone environments

# Rating 9 7 5 3 1 Emergence •



G16K01

G16K01-3111 Brand G16K01-GT Brand E116K4-3000GT Brand

✓ Agrisur∈Viptera

**RM: 116** 

#### **BROADLY ADAPTED PRODUCT WITH SUPERIOR YIELD POTENTIAL**

- Well adapted to drought-prone soils
- High yield potential in high-disease environments, despite average Gray Leaf Spot resistance
- Stable plant and ear height across rolling stress environments

# Rating 9 7 5 3 1 Emergence •



G16Q82

G16Q82-5222A E-Z Refuge Brand NEW G16Q82-3120A E-Z Refuge Brand NEW Agrisure A

Agrisure
Viptera

**NEW** // RM: 116

# OUTSTANDING COMBINATION OF YIELD AND AGRONOMICS

- Agrisure Artesian corn hybrid with excellent yield stability
- Dependable disease tolerance especially in poorly drained soils
- Superb root and stalk strength provides season-long peace of mind





G17F95

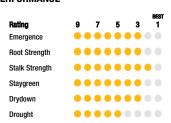
G17E95-3110 Brand NEW

✓ Agrisur∈Viptera

**NEW** // RM: 117

# STRONG AGRONOMICS AND DIVERSE GENETICS THAT OPTIMIZE PERFORMANCE

- Semi-flex ear type maximizes yield potential across populations
- Dependable root and stalk strength for season-long standability
- Positive response to increased management





# **CORN SEED TREATMENTS**

With novel active ingredients and cropspecific seed treatment recipes across all major crops, our goal is to improve germination, seedling vigor, plant stand and healthy root systems to get your crops off to a great start. We believe new technologies can change the way we grow and protect crops.



Introducing Vayantis® seed treatment, a novel, new mode of Pythium protection.

- > Most robust Pythium activity ever offered; higher intrinsic Pythium activity than any available seed treatment, including ethaboxam or metalaxyl
- > New mode of action; no cross resistance with existing oomycete chemistries
- > Effective against all Pythium species (over 35 species and 420+ isolates tested)
- > Excellent seed safety and compatibility with all other seed treatment products
- > Field performance (2015–2020; 25 locs) improvement by adding Vayantis Corn—Heavy Pythium (significant treatment effect locs)
- +5.2 bu/A over Base
- +3.9 bu/A over Acceleron® Standard
- +2.0 bu/A over INTEGO® Solo (ethaboxam) + Base Corn Broad Acre
- +1.6 bu/A over Base





# CruiserMaxx°Vibrance°

CruiserMaxx Vibrance seed treatment provides powerful protection for corn against early-season insects and seedborne and soilborne diseases, promoting optimal root health, stress tolerance and plant vigor for better emergence.



Avicta® Complete Corn 500 seed treatment offers triple protection against early-season nematodes, insects and disease.

CORN 40

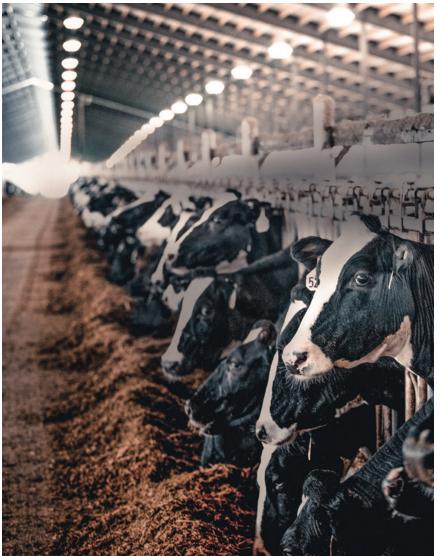
# 

With proven, potentially high-yielding hybrids across a variety of soil conditions, Enogen corn may help boost the bottom line for producers of livestock (beef and dairy) or grain for ethanol.



Golden Harvest Corn with More Profit Potential





# Efficiency and Performance in Beef Operations

Enogen corn hybrids in livestock production have been shown to increase feed efficiency by an average of 5% in stocker and finishing cattle, according to feeding trials at the University of Nebraska-Lincoln (UNL) and Kansas State University (KSU).

Enogen corn hybrids improve starch utilization, resulting in more available energy for your herd.
Enogen corn hybrids may be harvested as silage, grain or high-moisture corn, allowing for greater flexibility and ease of use with minimized management needs compared to alternative silage-specific hybrids for beef or dairy operations.
Farm-proven yields are equal to or better than non-Enogen hybrids.<sup>2,3</sup>

# **Efficiency and Performance** in Dairy Operations

Enogen corn hybrids increased feed efficiency by about 5%, fed as grain or silage, according to recent feeding trials at leading universities. These farm-proven results demonstrate excellent yield potential with elite genetics and production traits. Enogen Feed corn hybrids also offer ultimate flexibility, with the option to harvest as silage, grain or high-moisture corn. Silage quality and consistency are also shown to improve, making it less prone to spoilage, meaning it may last longer than other silage.

# **Ethanol Production**

Enogen hybrids offer the first biotech corn output trait designed for ethanol production with advantages that reach far beyond the field. Enogen hybrids feature a unique corn enzyme that is designed to increase potential throughput while reducing natural gas, water and electricity use. These highly desirable traits may command a premium for potentially increased return on investment.

enogen 42

<sup>&</sup>lt;sup>1</sup>University of Nebraska-Lincoln Research Studies, 2013-2017; Kansas State University

<sup>&</sup>lt;sup>2</sup> Syngenta production data 2012-201

<sup>&</sup>lt;sup>3</sup>Growers must comply with specific yet simple stewardship requirements.

<sup>&</sup>lt;sup>4</sup> University of Nebraska-Lincoln Research Studies, 2013-2017; Kansas State University Research Study, 2017, Pennsylvania State University, 2019.

# **ENOGEN HYBRID** CHARACTERISTICS

PRODUCT	TRAIT O	FFERS*		ATUR ORMA		A	GRC	NO	МІС	СН	ARA	СТІ	ERIS	STIC	s	(	CHA		LAN CTE		TICS	;			DI	SE/	SE	TOL	.ER/	ANC	E		
Enogen Hybrid Series	Above/Below-Ground Insect Protection E-Z Refuge A AgrisureDuracade	Above/Below-Ground Insect Protection Agrisure3000GT	Relative Maturity (RM)	GDUs to Silk	GDUs to Black Layer	Emergence	Seedling Vigor	Root Strength	Stalk Strength	Drought	Green Snap	Staygreen	Drydown	Test Weight	Blunt Ear	Plant Height	Ear Height	Root Type	Leaf Type	Ear Flex	Husk Cover	Cob Color	Gray Leaf Spot	Northern Corn Leaf Blight	Goss's Wilt	Bacterial Leaf Streak	Southern Corn Leaf Blight	Eyespot	Anthracnose Stalk Rot	Tar Spot	Fusarium Crown Rot	Common Rust	Southern Rust
E080Q1	5122A		80	1150	1810	3	3	2	3	1	3	1	4	2	-	5	4	М	U	SF	М	R	-	4	4	-	-	3	-	-	3	-	-
E086J9	5122A		86	1200	2140	3	3	3	2	1	4	3	4	2	1	3	5	М	S-U	SF	М	R	-	3	4	-	-	3	2	-	2	-	-
E092T4		3000GT	92	1265	2350	3	3	5	4	3	3	3	2	5	3	2	2	F	Р	F	М	R	5	3	6	-	-	3	4	-	5	2	-
E092W5 NEW	5122A NEW		92	1240	2300	3	3	5	4	1	3	4	3	3	6	3	4	M	U	SF	М	R	-	3	4	-	-	3	4	3	5	-	-
E095D3	5122		95	1280	2400	3	3	3	2	2	5	2	3	2	1	3	4	F	S-U	F	М	R	4	5	3	4	-	2	3	4	3	4	-
E100H1	5122		100	1315	2420	3	3	2	4	2	2	4	3	3	-	4	4	М	S-U	SF	М	R	3	5	5	3	-	3	-	2	4	-	-
E101P5		3011A	101	1335	2460	2	2	4	2	1	3	2	4	3	1	2	3	Р	U	SF	М	Pi	4	5	3	3	-	3	3	3	2	-	-
E105T1		3000GT	105	1355	2550	2	2	5	2	2	4	2	3	4	2	2	3	М	U	SF	М	Pi	4	5	3	4	4	4	2	3	2	3	-
E106Q6	5122		106	1355	2560	3	3	3	3	2	3	4	3	5	-	4	5	М	U	SF	М	R	5	2	4	4	3	5	-	4	4	-	4
E107C1 <i>NEW</i>	5122 <i>NEW</i>		107	1400	2500	3	4	2	3	3	5	3	4	3	-	1	4	M	S-U	SF	М	Pi	3	4	5	5	3	-	5	3	4	-	4
E108M2	5122		108	1365	2575	3	3	3	3	3	5	5	4	3	-	5	5	М	S-U	SF	L	R	3	3	4	4	4	4	-	6	5	7	5
E109R3		3000GT	109	1395	2570	3	2	5	2	2	4	2	4	2	-	2	3	M	U	SD	М	Pi	3	3	5	-	4	6	2	-	2	3	-
E109Y2	5122A		109	1420	2570	3	3	4	4	1	3	5	4	4	-	5	3	М	S-U	SF	М	R	5	2	4	4	4	3	-	4	5	-	5
E110F4 <i>NEW</i>	5122 <i>NEW</i>		110	1420	2620	3	3	4	4	3	2	4	2	4	-	4	3	М	S-U	F	М	R	4	3	3	2	4	-	6	2	4	-	3
E111C6	5122A		111	1425	2570	4	4	3	4	1	3	2	3	3	-	3	3	F	U	F	L	Pi	4	4	3	3	5	3	-	-	6	-	5
E111V7 <i>NEW</i>	5122 <i>NEW</i>		111	1430	2600	3	3	2	3	2	3	4	3	2	-	4	6	F	U	SF	L	Pi	4	3	6	4	6	-	3	3	3	7	4
E112S5 <i>NEW</i>	5122 <i>NEW</i>		112	1430	2630	3	2	3	2	3	5	2	4	4	-	2	4	М	U	SF	М	R	3	3	3	4	6	-	3	2	3	7	4
E113D3		3000GT	113	1405	2630	3	3	4	4	2	5	3	3	4	-	3	3	F	S-U	F	М	Pi	6	3	3	-	3	-	-	-	4	-	-
E113M8	5122		113	1430	2680	3	3	2	3	4	3	3	2	4	-	5	4	М	S-U	SD	М	R	3	3	3	4	3	5	-	-	3	4	4
E113N8		3000GT	113	1415	2630	3	4	5	4	3	4	5	3	6	-	4	5	F	S-U	F	М	W	6	4	4	5	2	6	4	-	4	3	6
E113Z5	5122		113	1435	2650	2	2	2	4	3	3	3	2	4	-	4	4	М	S-U	SD	М	R	4	3	3	3	4	4	-	-	4	7	5
E114H6	5122A		114	1455	2660	4	4	4	5	1	4	3	3	3	-	3	3	М	S-U	SF	М	R	3	2	3	-	5	4	5	-	5	2	4
E116K4		3000GT	116	1465	2690	4	3	5	3	2	3	3	2	4	-	4	4	М	Р	F	М	Pi	5	4	3	4	3	5	3	-	4	6	5
E118D8		3000GT	118	1480	2700	4	4	4	3	3	3	2	3	2	-	2	3	М	S-U	SF	L	R	3	3	4	3	3	5	-	-	4	3	3

Rating Scale

1 = Best 9 = Worst - = Not available

**Test Weight** 1 = High

9 = Low

Plant Height

9 = Short

Ear Height 1 = High 9 = Low

Root Type

P = Penetrating M = Modified F = Fibrous Leaf Type

U = Upright S-U = Semi-Upright P = Pendulum

F = Flex SF = Semi-Flex SD = Semi-Determinate D = Determinate

S = Short L = Long

Ear Flex

Husk Cover M = Medium Cob Color R = Red

Pi = Pink W = White

**Disease Tolerance** 

9 = Low - = Not Available

1 = High

Ratings are based on interpretation of statistically analyzed results of studies conducted by Syngenta.





Drought

Agrisure Artesian

water-optimized hybrid

# **PRODUCT**

**ENOGEN HYBRID** 

# AGRONOMIC MANAGEMENT AGRONOMIC MANAGEMENT AND PLACEMENT TRAITS **END-USE TRAITS**

Š	<u>\$</u>			Seedin	g Rate (x	(1000k)			Adap	tation to	Soil Typ	es/Yield	Environr				
Enogen Hybrid Series	Relative Maturity (RM)	120 bu	160 bu	200 bu	240 bu	280 bu	Root Strength	Stalk Strength	Continuous Corn	Drought Prone	High pH	Highly Productive	Variable	Poorly Drained	Starch	Protein	IIO
E080Q1	80	26.0	29.5	30.5	32.0	33.0	2	3	G	В	G	G	В	G	В	G	G
E086J9	86	26.0	33.0	37.5	41.0	44.0	3	2	G	В	F	В	В	В	В		
E092T4	92	26.0	30.5	28.0	29.5	31.5	5	4	G	G	G	В	G	В	G	G	
E092W5 NEW	92	26.0	33.0	36.0	37.0	38.5	5	4	F	В	Р	В	В	G	G		G
E095D3	95	26.0	31.0	34.0	36.5	39.5	3	2	G	В	G	В	В	В	В		
E100H1	100	24.5	31.5	33.5	36.0	38.5	2	4	G	G	В	В	G	G	G	G	В
E101P5	101	22.5	28.5	34.5	40.5	44.0	4	2	G	В	G	В	В	G	G	В	
E105T1	105	23.0	27.0	30.0	34.0	38.5	5	2	G	В	G	В	В	В	В		
E106Q6	106	26.0	33.0	35.5	38.0	40.0	3	3	В	В	F	В	В	G	В		
E107C1 <i>NEW</i>	107	26.0	32.0	33.5	35.5	37.5	2	3	G	G	Р		G	G	G		
E108M2	108	22.0	28.0	32.0	35.0	37.0	3	3	G	G	G	В	В	F	В		В
E109R3	109	19.0	24.0	31.0	41.0	44.0	5	2	G	В	F	В	В	В	В	G	
E109Y2	109	23.0	27.0	29.5	34.0	38.0	4	4	F	В	Р	В	В	G	G	G	В
E110F4 <i>NEW</i>	110	26.0	30.0	33.0	33.0	35.0	4	4	F		G	G	G	G	G		Р
E111C6	111	19.0	23.0	27.5	34.0	39.5	3	4	G	В	G	G		Р	В	G	
E111V7 <i>NEW</i>	111	19.5	24.5	29.0	33.5	38.0	2	3	G	G	G	G	G	G	G	G	
E112S5 NEW	112	26.0	30.0	33.0	36.0	39.5	3	2	В	F	F	В	В	В	G	G	
E113D3	113	22.0	25.0	28.5	31.5	35.0	4	4	В	В	G	В	В	F	G		
E113M8	113	26.0	33.0	36.0	37.5	39.0	2	3	G	G	G	В	G	G		В	В
E113N8	113	26.0	29.5	30.0	31.0	31.5	5	4	В	G	G	В	G	F		G	
E113Z5	113	22.0	28.0	32.0	35.0	37.0	2	4	G	G	G	В	В	В	G		
E114H6	114	26.0	29.0	31.0	33.5	36.0	4	5	G	В	F	В	В	F	G		G
E116K4	116	26.0	33.0	34.5	31.5	31.5	5	3	G	В	Р	В	В	F	G		G
E118D8	118	26.0	32.5	34.5	36.0	38.0	4	3	В	G	G	В	G	G	G	В	F

Rating Scale

- = Not available

1 = Best 9 = Worst

Score Interpretation B = Best G = Good

F = Fair P = Poor - = Not Available Drought

Agrisure Artesian water-optimized hybrid Agronomy ratings are based on statistically analyzed results of studies conducted by Syngenta and are relative to other hybrids within the same maturity group.

Flex hybrids adjust to growing conditions by changing ear length or kernel depth. Determinate/Fixed hybrids are less able to adjust ear size Plant Population is considered more important for a determinate-ear hybrid than for a flex-ear hybrid.

Note: Disease and Insect Ratings

Ratings are not absolute; environmental conditions and certain cultural practices, such as continuous corn, play a critical role in disease development and insect infestation, which can, in turn, predispose plants to secondary disease such as stalk and ear rots. If conditions are severe, even hybrids rated as resistant can be adversely affected. Farmers should balance yield potential, hybrid maturity and cultural practices against the anticipated risk of disease or insect pressure.



44 **ENOGEN ENOGEN** 

# SILAGE HYBRID CHARACTERISTICS

PRODUC	СТ				NOMIC ERIST			_	EASE RANCE				AGR	ОМОМ	IC RES	EARC	H RAT	INGS			
'	e																	Feed	d Effect	: On*	
Golden Harvest Hybrid Series	Relative Maturity (RM)	Emergence	Root Strength	Drought	Staygreen	Plant Height	Ear Height	Gray Leaf Spot	Goss's Wilt	Yield (lbs/Ac)	CP (% of DM)	NDF 48 hr (%)	NDF Dig. 48 hr (%)	Starch (% of DM)	Fat (% of DM)	TDN (% of DM)	NEL (Mcal/lb)	Milk (lbs/Ton)*	Milk (lbs/Ac)*	Beef (lbs/Ton)*	Beef (lbs/Ac)*
G78C29	78	3	4	2	2	4	3	-	4	G	G	В	В	В	-	В	В	В	В	В	G
G80Q01	80	3	2	1	1	5	4	-	4	G	G	G	G	В	-	G	-	G	G	G	G
G82M47	82	3	2	4	4	4	4	-	4	F			G			G		G		G	F
G85Z56	85	3	4	2	3	3	4	-	4	В	G		G		G	В	-	В	В	В	В
G84J92	86	3	3	1	3	3	5	-	4	G			G	G	В				G		G
G88F37	88	3	3	1	4	3	5	-	3	G	G	G	G	В	-	G	-	G		G	F
G90S99 <i>NEW</i>	90	2	4	2	3	2	2	-	5	F	G	G		G	G	G	G			G	F
G91V51	91	3	5	1	4	3	4	-	4	В	F	В	G	В	G	G	В	В	В	В	В
G90Y04	92	2	4	1	3	2	2	-	4	В	В	F	G	G	G	G	G	G	В	G	В
G94P48	94	3	3	1	3	3	2	-	3	G	В	В	G	G	В	В	В	G		В	F
G95D32	95	3	3	2	2	3	4	4	3	G				В	В	G	G	G	В	G	В
G95M41	95	3	2	3	3	3	4	-	5	F		G		В	-		-	F			F
G96R61	96	2	3	2	3	2	2	-	4	В	G	G	G		G	G	G	G	В	G	В
G97N86	97	2	4	3	3	3	2	4	4	G	G	G		G	В	G	G	G	G	G	G
G98L17	98	2	4	3	3	2	2	5	6	В	G			G		G	G	G	В	G	В
G98M44 <i>NEW</i>	98	3	4	2	5	4	4	5	4	G	G	В	F	В	В	G	-	G	В	G	В
G99E68	99	3	2	3	2	3	3	2	5	F	G	G		G	Р	G	G	G		G	F
G00H12	100	3	2	2	4	4	4	3	5	G	В	Р	G		В	F	G	F			F
G02K39	102	3	3	2	1	5	5	3	3	G	G	В	G	G	В	В	В	В	G	В	G
G02W74	102	3	2	2	3	5	6	3	6	F	G	В	В	G	G	G	G	G		G	F
G03B96 <i>NEW</i>	103	3	3	4	3	4	3	5	3	G	G			Р	F	G	G	G			F
G03C84	103	4	3	3	5	3	3	4	4	G	G	G	G	В	В	G	G		G	G	G
G03J49	103	3	4	2	3	2	3	4	2	G		G	G	В	F	G	G	G	G	G	В
G03R40	103	2	2	3	3	3	3	4	3	G	G	Р	G	F	В	F	F	F		F	F
G04G36	104	4	2	1	5	5	6	3	3	F	G	В	В	В	В	В	В	В	F	В	G
G04S19	104	4	4	3	4	2	2	4	3	В	F	G	G	G	G	G	G	G	В	G	В
G05K08	105	3	4	1	6	5	6	4	4	G	G	G		В	В	F	G	F		G	F
G06K93	106	3	3	2	4	3	3	5	3	G		G	G	В	В	В	G	В	G	В	G
G06Q68	106	3	3	2	4	4	5	5	4	F	G	G	В	G	В	G	G	G	F	G	F
G07F23	107	3	3	2	4	5	5	3	4	В	G	G	G	G	F	G	G	G	В	В	В

# Rating Scale

- 1 = Best 9 = Worst
- = Not available

### **Test Weight** 1 = High

9 = Low

#### Plant Height

1 = Tall 9 = Short

# Ear Height

1 = High 9 = Low

# U = Upright

# Root Type

P = Penetrating M = Modified F = Fibrous

# Leaf Type

S-U = Semi-Upright P = Pendulum

# Ear Flex

F = Flex SF = Semi-Flex SD = Semi-Determinate

# D = Determinate

**Husk Cover** S = Short M = Medium L = Long

R = Red Pi = Pink

# W = White

1 = High 9 = Low

# Disease Tolerance

Cob Color

- = Not Available

Drought

Agrisure Artesian

water-optimized hybrid

# **SILAGE PRODUCTS SELECTED TO PERFORM** FOR YOUR HERD.

Trust your Seed Advisor to understand the silage needs of your operation and offer product recommendations to help increase the productivity of your herd. In addition to choosing hybrids that fit your soil conditions and your grain quality requirements, your Seed Advisor can offer advice on:

- Soil testing to monitor fertility issues as a result of manure applications
- Timing of planting
- Harvest timing to ensure optimal moisture and higher quality silage
- How Enogen corn hybrids add value to your rations and can increase your return on investment potential

PRODUC	т			AGROI Aract					EASE RANCE				AGR	ОИОМ	IC RES	EARC	H RAT	INGS			
	Î																	Feed	l Effect	On*	
Golden Harvest Hybrid Series	Relative Maturity (RM)	Emergence	Root Strength	Drought	Staygreen	Plant Height	Ear Height	Gray Leaf Spot	Goss's Wilt	Yield/Tons/Ac	CP (% of DM)	NDF 48 hr (%)	NDF Dig. 48 hr (%)	Starch (% of DM)	Fat (% of DM)	TDN (% of DM)	NEL (Mcal/lb)	Milk (lbs/Ton)*	Milk (lbs/Ac)*	Beef (lbs/Ton)*	Beef (lbs/Ac)*
G07V88	107	3	5	2	5	3	3	5	3	G	F	G	G	В	G	G	В	В	В	В	G
G08D29	108	2	3	1	5	4	5	4	3	G	G	Р		F	G	G	F	F	F	F	F
G08M20	108	3	3	3	5	5	5	3	4	G	В	G	G	В	В		G				F
G08R52	108	3	2	2	4	5	5	5	4	G	G	G	G	G	G	-	G	G	G	G	G
G07B39	109	4	5	1	4	3	4	5	4	В	G	G	В	G	В	В	В	В	В	В	В
G09A86	109	3	3	3	4	3	4	2	4	В	В	G		G	G	G	G	G	G	G	В
G09Y24	109	3	4	1	5	5	3	5	4	G	G	G	В	G	G	G	G	G	G	В	G
G10C45	110	4	2	3	4	3	3	3	2	G	G	G	G	В	В	В	В	G	В	G	G
G10D21	110	3	3	3	3	3	2	2	3	G	G			G	G	G	G	G			G
G10K03	110	3	4	3	2	3	3	5	4		G	G	G	G	В	G	G	G		G	F
G10L16	110	2	4	1	5	5	6	4	3	G	G	В	G	В	В	G	В	G	G	G	G
G10S30	110	3	4	4	5	5	4	6	4		G		G	G	В	G	G	G		G	F
G11B63	111	4	3	1	2	3	3	4	3	В	G		G		F	G	G		В	G	В
G11V76	111	3	2	2	4	4	6	4	6	G	G	G	G	G		G	G	G	G	G	G
G12S75	112	3	3	3	2	2	4	3	3	В		Р			G	G	G	G	В		В
G12U17	112	3	4	4	2	3	3	4	5	G	G	В	В	В		G	G	G	G	G	G
G13E90	113	3	4	2	3	3	3	6	3	G	В	G	G		G	G	G	G	В	G	G
G13H15	113	3	3	2	3	3	3	3	3	В		G		В	Р	G	G	G	В	G	В
G13M88	113	3	2	4	3	5	4	3	3			G		В	G	G				G	F
G13N18	113	3	5	3	5	4	5	6	4	G	G		G	G	G	В	G	В	G	В	F
G13Z50	113	2	2	3	3	4	4	4	3	G		G	В	G	Р	G	G	G		G	F
G14K50	114	4	5	2	3	4	4	6	2	В		В	G	В	В	G	В	G	В	G	В
G14N11	114	2	2	3	3	3	2	5	4	G	G	В	G	В	F	G	G	G	G	G	G
G14R38	114	3	2	3	4	3	2	5	4	G		В	G	В	В	В	В	В	В	В	В
G15J91	115	4	2	3	4	3	5	4	4	G	G	F	G	G	Р	G	G	G	F	G	G
G15L32	115	2	3	4	2	4	5	3	4	В	G	G	G	В	В	G	G	G	G	G	G
G16K01	116	4	5	2	3	4	4	5	3	G		G	G	G	G	G	В	G	G	В	G
G17E95 <i>NEW</i>	117	3	3	5	3	2	3	3	2	G	G		G		-	G	-	G	В	G	G
G18D87	118	4	4	3	2	2	3	3	4	В	В		G		F	G	G	G	В	G	В
G18H82	118	4	4	4	5	2	3	6	5	F	G	В	В	В	G	G	G	G	G	G	G

# **Rating Scale**

1 = Best

9 = Worst

- = Not available

Score Interpretation B = Best G = Good F = Fair P = Poor

- = Not Available

Drought Agrisure Artesian water-optimized hybrid.

Agronomy ratings are based on statistically analyzed results of studies conducted by Syngenta and are relative to other hybrids within the same maturity group.

Flex hybrids adjust to growing conditions by changing ear length or kernel depth. Determinate/Fixed hybrids are less able to adjust ear size. Plant Population is considered more important for a determinate-ear hybrid than for a flex-ear hybrid.

# Note: Disease and Insect Ratings

Ratings are not absolute; environmental conditions and certain cultural practices, such as continuous corn, play a critical role in disease development and insect infestation, which can, in turn, predispose plants to secondary disease such as stalk and ear rots. If conditions are severe, even hybrids rated as resistant can be adversely affected. Farmers should balance yield potential, hybrid maturity and cultural practices against the anticipated risk of disease or insect pressure.

Ratings are based on interpretation of statistically analyzed results of studies conducted by Syngenta.





A strong stewardship program is essential for protecting and preserving the long-term value of insect-protected trait technology. Syngenta provides responsible agriculture programs and information regarding the safe handling and storage of product.

# **Grower Stewardship Agreement**

A strong stewardship program is essential for helping to protect and preserve the long-term value of Syngenta's trait technology. Embracing this responsibility provides growers with ongoing choices and helps to ensure they remain good stewards of the land. Prior to planting corn hybrids with Agrisure traits, you are required to sign a Syngenta Seeds, LLC Stewardship Agreement. This agreement outlines the terms and conditions of growing hybrids with Agrisure traits, including the terms of a limited license under Syngenta's intellectual property, compliance with Environmental Protection Agency (EPA)-mandated Insect Resistance Management (IRM) programs and grain channeling requirements. The deadline to have all completed agreements to Syngenta is June 30th, annually.

Agreements may be sent using one of the following four methods:

ONLINE	EMAIL
www.agcelerate.com	Agreement@agdata.com
ELECTRONIC	FAX
STATEMENT	1-704-919-5581
Electronic signatures will	
only be accepted through	MAIL
agcelerate.com. Any	AgCelerate
other forms of electronic	Attn: Stewardship
signatures will be rejected.	PO Box 221679

# **Best Management Practices**

Syngenta and other industry registrants have cooperatively developed the EPA mandated IRM Compliance Assurance Program. This program requires corn seed companies to evaluate the extent to which growers are adhering to the IRM requirements and ensure that those who do not are brought back into compliance.

# Resources

To read and understand the full stewardship requirements found in the Syngenta Stewardship Guide or receive further assistance use the resources below.

Stewardship Information www.syngentastewardship.com

**Take Action Education Platform** www.IWillTakeAction.com

Stewardship Support and IRM Tips Line 1-877-GRO-CORN (1-877-476-2676)

**Agreement Submission** Agreements@agdata.com

Charlotte, NC 28222-1678

Stewardship Support syngenta.stewardship@syngenta.com

Regulatory and Market Status of **Agricultural Biotechnology Products** www.biotradestatus.com

# **Corn Refuge Requirements**

It is important to recognize that different hybrid/trait packages may have different IRM requirements. On-farm mixing of any seed is not an approved method to comply with stewardship requirements. Before filling your planter, always check the bag tag to ensure you know the refuge size requirement.

	PRODUCT	SIZE REQUIREMENT (Corn-Growing Region)	SIZE REQUIREMENT (Cotton-Growing Region)	DISTANCE REQUIREMENTS
ABOVE- AND BELOW-GROUND TRAIT STACKS	AgrisureDuracade*  5332 E-Z Refuge*	No additional refuge required	20% supplemental refuge <sup>2</sup>	Within or adjacent <sup>1</sup>
	AgrisureDuracade° 5222 E-Z Refuge°	No additional refuge required	20% supplemental refuge <sup>2</sup>	Within or adjacent <sup>1</sup>
	AgrisureDuracade° 5122 E-Z Refuge°	No additional refuge required	20% supplemental refuge <sup>2</sup>	Within or adjacent <sup>1</sup>
	Agrisure 3122	No additional refuge required	20% supplemental refuge²	Within or adjacent <sup>1</sup>
	Agrisure Viptera	20%	20%	Within or adjacent <sup>2</sup>
	Agrisure Artesian	20%	50%	Within or adjacent <sup>2</sup>
	Agrisure3000GT	20%	50%	Within or adjacent <sup>2</sup>
ABOVE-GROUND TRAIT STACKS	AgrisureViptera* 3330 E.Z Refuge*	No additional refuge required	20% supplemental refuge	Within, adjacent, or up to 1/2 mile away <sup>1</sup>
	Agrisure Viptera	No additional refuge required	20% supplemental refuge	Within, adjacent, or up to 1/2 mile away¹
	Agrisure 3120	No additional refuge required	20% supplemental refuge	Within, adjacent, or up to 1/2 mile away <sup>1</sup>
ABOVE	Agrisure Viptera	20%	20%	Within, adjacent, or up to 1/2 mile away

Refuge size is calculated by applying the appropriate percentage (e.g., 20%, 50%) to the TOTAL CORN ACRES.

<sup>1</sup>Only applicable in the cotton-growing region where a supplemental 20% refuge is required for this product.

<sup>2</sup> Assumes a common corn borer and rootworm refuge. Alternatively, a separate rootworm refuge within or adjacent to the Bt field and a corn borer refuge up to 1/2 mile away could be planted.







Important: Always read and follow label and bag tag instructions; only those labeled as tolerant to glufosinate may be sprayed with glufosinate ammonium-based herbicides. LibertyLink®, Liberty® and the Water Droplet logo are registered trademarks of BASF Corporation. HERCULEX\* and the Water Scholars are registered trademarks of BASF Corporation. HERCULEX\* Shield are trademarks of Dow AgroSciences, LLC. HERCULEX Insect Protection technology by Dow AgroSciences. YieldGard VT Pro® is a registered trademark used under license from the Bayer Group. The Liberty Link® trait may be protected under numerous United States patents. More information about Agrisure Duracade is available at http://www.biotradestatus.com/

48 47 STEWARDSHIP **STEWARDSHIP** 



The Golden Advantage<sup>™</sup> is an extended terms offer with a 0% interest fee for farmers to purchase Golden Harvest seed products. Grow with Golden Advantage in three easy steps:

Step

01



TALK TO YOUR GOLDEN HARVEST SEED ADVISOR

Step

02



COMPLETE A SIMPLE ONLINE APPLICATION

Step

03



ORDER GOLDEN HARVEST
SEED FOR 2022 PLANTING

# **Corn Crop Planning**

Field Name:	Field Name:
Hybrid:	Hybrid:
Population:	Population:
Management Considerations:	Management Considerations:
Soybean Crop Planning	
Field Name:	Field Name:
Variety:	Variety:
Population:	Population:
Management Considerations:	Management Considerations:

# WE'RE LISTENING

Reach out to your local Golden Harvest Seed Advisor to discuss anything in this guide and how it pertains to your acres and yield goals.

Visit GoldenHarvestSeeds.com for more information and to find and contact your local Golden Harvest Seed Advisor.



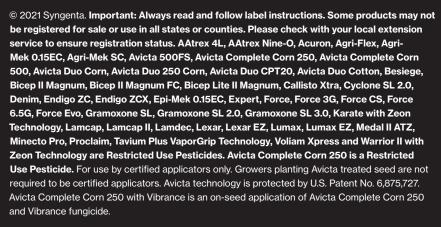












Some seed treatment offers are separately registered products applied to the seed as a combined slurry. Always read individual product labels and treater instructions before combining and applying component products. Orondis Gold may be sold as a formulated premix or as a combination of separately registered products: Orondis Gold 200 and Orondis Gold B.

Important: Always read and follow label and bag tag instructions; only those labeled as tolerant to glufosinate may be sprayed with glufosinate ammonium-based herbicides. LibertyLink®, Liberty® and the Water Droplet logo are registered trademarks of BASF. GT27® is a trademark of M.S. Technologies and BASF. HERCULEX® and the HERCULEX Shield are trademarks of Dow AgroSciences, LLC. HERCULEX Insect Protection technology by Dow AgroSciences. Under federal and local laws, only dicamba-containing herbicides registered for use on dicamba-tolerant varieties may be applied. See product labels for details and tank mix partners. Golden Harvest® and NK® Soybean varieties are protected under granted or pending U.S. variety patents and other intellectual property rights, regardless of the trait(s) within the seed. The Enlist E3® traits, LibertyLink®, Roundup Ready 2 Xtend®, Roundup Ready 2 Yield® and XtendFlex® traits may be protected under numerous United States patents. It is unlawful to save soybeans containing these traits for planting or transfer to others for use as a planting seed. Only dicamba formulations that employ VaporGrip® Technology are approved for use with Roundup Ready 2 Xtend® and XtendFlex® soybeans. Only 2,4-D choline formulations with Colex-D® Technology are approved for use with Enlist E3® soybeans. VaporGrip® is a trademark of, and used under license from, Monsanto Technology LLC. Roundup Ready 2 Yield®, Roundup Ready 2 Xtend®, XtendFlex® and YieldGard VT Pro® are registered trademarks used under license from the Bayer Group. ENLIST E3® sovbean technology is jointly developed with Dow AgroSciences LLC and MS Technologies LLC. The ENLIST trait and ENLIST Weed Control System are technologies owned and developed by Dow AgroSciences LLC. ENLIST® and ENLIST E3® are trademarks of Dow AgroSciences LLC. The trademarks or service marks displayed or otherwise used herein are the property of a Syngenta Group Company. All other trademarks are the property of their respective owners. More information about Agrisure Duracade® is available at http://www.biotradestatus.com/.

